The effect of financial crisis and global recession on climate change policy as explained by ecopolitical theory

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Abstract

My research concerns the effect of the 2008 global financial crisis on climate change policy decisions. The objective is to discover how the crisis influenced elite discourses as the ideas and thinking behind the discourses would have been influential on decisions taken at this time. The research includes three case country studies and uses three ecopolitical theories to provide a focus for the analysis of the data.

The global financial crisis occurred at the same time as concern about global warming was peaking around the world. The dominance of market economics in the world provides a challenge for introducing effective measures to prevent global warming and highlights the need to understand how action can be incorporated into national governments' policy decisions. The severity of the crisis brought into sharp focus the difference between stated government intentions on climate change action and actual policy decisions taken. To discover the discourses that developed during this period elites were interviewed in three countries: Australia, New Zealand, and Spain. The comparative design used was complemented by the examination of a media event in each country and data from public opinion surveys. Including the three ecopolitical theories (ecological modernisation, postmaterialism, and consumer and citizen preferences) in the research design strengthened the comparative approach by reducing the effect of too many intervening variables.

Ecopolitical theory is relatively new so there have been limited opportunities for empirical study. The speed with which climate change is occurring and the seriousness of the consequences create urgency to understand how effective decision-making can be incorporated in the political arena. This study contributes to such research by examining what happens under adverse economic conditions. The findings showed that although progress has been made in introducing policy to counter climate change, the economic imperative of governments during the global financial crisis dominated government attention. Climate change policy was regarded as just another issue on the agenda that has to be dealt with as pressure, money and time permit. Consistent with this most saw the crisis as having little effect on climate change decision-making and regarded other factors as having a greater impact on outcomes.

My Declaration of Originality

I, Lorraine Adele MacIntosh, certify that this PhD thesis, entitled 'The effect of financial crisis and global recession on climate change policy as explained by ecopolitical theory', does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief, it does not contain any material previously published or written by another person, except where due reference is made in the text. This thesis is less than 90,000 words in length, exclusive of footnotes, tables, bibliographies, and appendices.

Signature:

Date:

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My journey to academia has been an unusual one with all my degrees done at distance. The vagaries of life have meant this was not a well-planned process and a passion for learning and lucky choices eventually put me in the path of my favourite Master's lecturer, Cassandra Star. This project would never have happened without her or her considerable skill as a supervisor. Her calm, encouraging, coaxing manner helped me get through what felt like an insurmountable task for much of the time. Therefore my heartfelt thanks to Cassandra for helping me realise my dream. I am also grateful to Haydon Manning for his time and support as a supervisor and regret that distance did not permit time for what I am sure would have been very stimulating discussions.

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List of Abbreviations

AES	Australian Election Study
ALP	Australian Labor Party
CBA	cost benefit analysis
CDM	Clean Development Mechanism
CDP	Carbon Disclosure Project
CIS	Centro de Investigaciones Sociológicas
СОР	Conference of the Parties
CPRS	Carbon Pollution Reduction Scheme
CVM	contingent valuation method
EBS	Special Eurobarometer
EC	European Commission
EPI	Environmental Performance Index
ETS	emissions trading scheme
EU	European Union
GDP	gross domestic product
GFC	global financial crisis
GHG	greenhouse gas
IEA	International Energy Agency
ISSP	International Social Survey Programme
MMP	mixed member proportional voting system
NGO	non-government organisation
NSM	new social movements
OECD	Organisation for Economic Co-operation and Development
OPEC	Organisation of the Petroleum Exporting Countries
PP	Partido Popular

PSOE	Partido Socialista Obrero Español
PV	photo voltaic
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USA	United States of America
WTP	willingness-to-pay
WVS	World Values Survey

1 INTRODUCTION TO THE THESIS

1.1 Introduction

This thesis sets out to examine the effect the 2008 global financial crisis (GFC) and the subsequent global recession had on climate change policy. The GFC coincided with a period when interest in international emission reducing agreements was high on the political agenda and this was widely supported by citizens.

This chapter sets out the reasons for pursuing this research by establishing the overall context so that the importance of such study can be appreciated. The chapter begins with an outline of the GFC and related ecological concerns at the time. This background leads to identifying the research problem from which the research questions arise. These questions are then identified and presented. An overview of the methodology used to answer the questions is included and the structure of the thesis is outlined before concluding comments for the chapter are made.

1.2 Global financial crisis while facing an ecological crisis

For the fifteen years before 2008 many countries around the world had been riding high on economic boom times they thought were never going to end. Emerging nations were embracing the same economic model creating improved living standards for vast numbers of their citizens, especially in China and India (Flavin & Engelman 2009, p.7). Optimism was such that even with the mounting evidence that such growth was causing environmental damage on a global scale, there was confidence that the international community would be able to manage this unfortunate side effect. The economic wealth and the speed with which technology was developing gave many people the hope that solutions to problems like global warming could be found.

Then onto this scene came a crisis of the international financial markets so severe that it resulted in a global recession, the worst since the Great Depression of the 1930s (Wolf 2009). Deregulation of domestic financial markets, the liberalisation of international capital flows, powerful computers and telecommunications, and rapid financial innovation had resulted in a massive global capital market. The vulnerability of this

interconnectedness was realised when the housing bubble in the United States of America (USA) began to burst in 2007. As the extent of financial products in the market without any securities or guarantees behind them became known, financial institutions began failing and most governments moved to limit damage by injecting public money into these institutions. By the end of 2008 governments found themselves in crisis management mode trying to maintain confidence in the financial system and stimulate their economies through public spending measures (Gamble 2009).

While many countries were experiencing the buoyant economic times the environment was developing as a political issue. During the seventies and eighties the environment became an international issue as evidenced by the United Nations World Commission on Environment and Development producing the Brundtland Report in 1987 (WCED 1987). This was followed by the adoption of Agenda 21 at the United Nation 1992 Earth Summit in Rio de Janeiro. By 2005 the Kyoto Protocol, established in 1997 to control greenhouse gas emissions (GHG), had entered into force and pressure was mounting for further international action. Such action seemed painstakingly slow but there was hope that temperature increases could be limited to levels that would not endanger life on the planet (Hare 2009, p.29). The global financial crisis of 2008 put pressure on governments to urgently concentrate on their economic growth imperative which inevitably affected other policies, including climate change policies (Egenhofer 2008). That the issue of climate change should lose political saliency when most scientists believed action to control GHG emissions was urgently needed to limit temperature increases on the planet, could have far reaching consequences (IPPC 2007).

Crises are events when ideas that have become established as the wisdom of the time are found to be fallible (Gamble 2009, p.166). The result is that all the ideas, knowledge, theories and information available have to be reassessed to try and make decisions about how to resolve the crisis and proceed. At the end of 2008 the world was dealing with two crises: one involving the health of the world's financial system, the other involving the welfare of life on the planet. The effects of modern financial crises can cover extended periods of time and Reinhart and Rogoffs' (2009) findings indicate that a crisis as severe and global as the 2008 GFC is likely to have effects lasting well over five years. The global nature of the GFC has also compounded problems of recovery as liberal market economies rely on increasing exports or foreign borrowing for recovery (Reinhart & Rogoff 2009, p.472). In support of Reinhart and Rogoffs' claim, many Western countries continued to face difficult economic conditions and recessionary periods through to 2014 and beyond. That the crisis in the predominant economic system of the world and the environmental crisis of global warming coincided, created an extraordinary challenge for governments around the world. The GFC presented governments with immediate concerns about revenue sources and about maintaining economic growth: imperatives which form the core of a state (Dryzek, Downes et al. 2003, p.1). In contrast, the consequences of global warming will be gradual and extreme changes only realised in the longer term (IPPC 2007). The long-term nature of global warming, and the ability of Western nations to manage the consequences of climate change policy could push the issue down the political agenda in times of economic crisis.

Combined with pressure from productive sectors to decrease regulatory costs, governments have accrued enormous debt from lost revenue, and from measures to rescue financial institutions and stimulate their economies (Reinhart & Rogoff 2009). States with large fiscal deficits have been obliged to take strong cost-cutting measures to restore deficits in line with requirements of those financing the debts and other supranational pressures (Barber 2010; Mallaby 2012). Such pressure on international resources can make it more difficult for states to meet international environmental commitments and lead to postponed decisions and actions (Jordan, Huitema et al. 2010, p.40). Political action also depends on public response and concerns. If citizens' concern about global warming is high and they consider it a priority issue, governments would be unwise to let it drop down the political agenda. It is clear that as a crisis global warming has not inspired the level of urgency that the GFC has. Reasons for slow global response range from the complexity of the causes and solutions to many of the problems; pressure from economic self-interest; the long-term nature of the effects; the unwillingness of citizens to change lifestyles and make sacrifices to achieve improvements; political will within and between states; to inequity between developed and developing states (Garnaut 2008; Hamilton 2010; Dryzek, Norgaard et al. 2011; Wolf 2013). The relative newness of global warming as a political issue has an important influence on the debate as traditionally new issues are subject to much contestation and development. With modern environmentalism only coming into existence in the late 1960s the body of ideas and theory that form the ideology and support action have been developed in a short political timeframe.

Given periods of crisis are times of re-evaluation of dominant ideas and thinking that have been found to be wrong, the GFC presents an opportunity to examine environmental theory in the light of political actions and the response of citizens. This forms part of the knowledge and understanding that arises from such events which enable societies to recover and move forward. As such, it forms part of the progress of civilisation. Whatever the outcomes are from this period, they will be pivotal for what happens in the future, both in regard to economic systems and for anthropogenically induced climate change. This thesis is concerned with the evaluation of what happens in this period of twin crises.

1.3 The research problem presented

The financial crisis focused attention on economic issues and accentuated the understanding that economic growth needs to be maintained if people are to preserve the lifestyles to which they have become accustomed. At the same time, people in many developed country were calling for their governments to take stronger action to prevent the planet's climate warming to levels that would also threaten their lifestyles. Such concern had reached a high in 2007 and many governments were reacting to international pressure and citizens' demands for action.

Although evaluation of the GFC has predominantly focused on economic consequences some commentary related to the threat that countries will be driven to taking insufficient action to move to low carbon economies can be found (Gamble 2009; Kahn & Kotchen 2010; Saad 2010). This study seeks to investigate the threat the GFC presents to making effective and timely climate change policy expecting that the focus on economic growth will decrease attention and time spent on climate change decisions and implementation of policy. To investigate this hypothesis the study focuses on how these issues were discursively constructed. What issues are on the political agenda and what decisions are taken is influenced by the way the issues are discursively constructed (Hajer 1995; Dryzek 2005; Backstrand & Lovbrand 2007; Gergen 2009). Dryzek argues that the way people talk about things reflects the way they perceive them and that "discourses are bound up with political power" (Dryzek 2005, p.9). A focus on discourse allows investigation of why elites think things happened and how they perceive the events of the period and for this study the focus is on understanding how climate change policy

was affected.

Three ecological, political theories¹ are used for focus in the research as they are related to both economic condition and climate change as an environmental issue. The GFC provides the context within which discourses emerge and the relationship of the three ecopolitical theories with these discourses is used to help examine outcomes. The theories in question are: ecological modernisation, postmaterialism and consumer preferences and citizen preferences (Inglehart 1971; Hajer 1995; Sagoff 2005). The GFC was the most severe financial crisis since the Great Depression and therefore presents the most extreme economic conditions since ecopolitical theory was developed. In this way it provides an important opportunity to assess how robust these theories are and to use their explanatory power in these circumstances. These theories are not treated as competing and instead help to examine different aspects of the discourses that are used. Ecological modernisation speaks directly to the dominant economic paradigm which includes a powerful energy discourse that exists globally. Postmaterialism, and consumer and citizen preferences speak to public discourses and allow examination of how public discourse is affected by the GFC. This helps with understanding the norms and ideas that people use to establish meaning and therefore how these influence policy makers in decisions they take in the climate change debate. While each theory is treated separately, the information they reveal is combined to help reach the conclusions of the study.

Ecological modernisation emerged in the late 70s as an alternative response to more radical environmental theories (Mol, Spaargaren et al. 2009). The theory allows advanced industrial societies to deal with their environmental problems without fundamental change (Andersen & Massa 2000; Blühdorn 2001). According to the theory, changes can be made to lessen or prevent environmental damage within the existing institutions of society. There are many criticisms of the theory (Andersen & Massa 2000; York & Rosa 2003; Warner 2010) but it makes important progress in recognising the economic costs of environmental problems and, even in its softest form, has transformational potential (Curran 2009). The theory centres on a win-win concept where what is good for the environment is also considered good for business. Greater production efficiency, lower energy usage, and reduced waste costs help businesses be

¹ Ecopolitical is used from here on

more competitive at the same time that they are reducing adverse effects on the environment. Many Western states have adopted a related discourse to manage environmental problems and the difficult economic conditions make it an interesting time to examine how strongly embedded ecological modernisation actually is in policy making. While ecological modernisation focuses on the production side of environmental reform, postmaterialism looks at value change in people.

Ronald Inglehart's theory of intergenerational value change, postmaterialism, has been prominent in the field of value change study since he first posited the theory in 1971 (Inglehart 1971; Inglehart 2008). Values form part of the beliefs of what society should represent to people (Dalton 2008) and will therefore be influential in what politics people support and what political action they will take. The theory helps understand how citizens reacted to the crisis and how their support for climate change policy action is influenced. The enduring nature of values suggests they should not change a great deal during this time and, although Inglehart and Abramson (1994) have shown temporary drops in postmaterialism during financial crises, they maintain this period effect disappears with economic recovery. The severity of the study event will add further understanding to this contention. Studying the discourses allows detailed examination of postmaterialist theory which helps determine its efficacy and relationship with what actually happened.

The theory of consumer preferences and citizen preferences provides another focus for studying the relationship of peoples' reaction to the GFC with the discourses found. The central role of preferences in contemporary democracies has resulted in a considerable literature on the topic (Sen 1977; Sunstein 1991; Slovic 1995; Hitlin & Piliavin 2004). One author who has challenged the unqualified use of individual preferences in policy decisions is Mark Sagoff. Sagoff (2005) maintained that decisions an individual makes as a consumer may be different to those they make as a citizen. During times of employment insecurity people worry about maintaining their lifestyles, and their consumer preferences may be prioritized over their citizen preferences. As with the other theories this extreme economic period provided an opportunity to examine the theory of preferences' relationship with the discourses found. Analysing the discourses used during this period builds understanding about how language and communication influences what happens, both politically and socially (Burnham, Gilland Lutz et al. 2008, p.248). The three ecopolitical theories are used to provide a focus for the

examination of the discourses used during this real world situation and are used in combination to understand how climate change policy was influenced.

The general question that guides this research is therefore:

How did the financial crisis of 2008 and the subsequent economic crisis affect climate change discourses and what have been the policy implications of this?

1.4 Research questions, objectives and intended contribution

To answer this general question the more specific questions that arise from reviewing the relevant literature on social constructive discourse and the three ecopolitical theories are:

- 1. How are climate change discourses affected by the GFC and how was the GFC seen to influence climate change policy decisions at this time?
- 2. How does ecological modernisation help explain the stories that emerge during the GFC and recession? If ecological modernisation theory informed policymakers prior to the GFC and was established in discourses, did this change during the crisis?
- 3. How does postmaterialism help explain the stories that emerge during the GFC and recession? Did the discourse used become more materialistic?
- 4. How does the dichotomy of consumer and citizen preferences help explain the stories that emerge during the GFC and recession? Did the discourse used show consumer preferences being favoured over citizen preferences?

These questions help frame and guide this study and the objectives of the study can be identified as:

- 1. To gain insight into the processes that shape the actions of policy makers and influence climate change policy making.
 - To identify the discourses used during a severe global financial crisis and subsequent economic downturn.

- To gain insight into how discourse influences what issues get onto the political agenda.
- To gain insight into the three ecopolitical theories of ecological modernisation, postmaterialism, and consumer and citizen preferences and how these help explain the stories that emerge.
- 2. To identify the climate change policy implications of the study.
- 3. To inform the advancement of the three ecopolitical theories studied.

In meeting these objectives the study intends to contribute to the field of environmental politics through the use of the explanatory power of ecopolitical theories during an economic event more severe and challenging of established ideology than any that has occurred since these theories were conceived. The application of these theories advances knowledge for each theory by examining what happens to the discourses during the GFC. One could expect an embedded ecological discourse to influence remedial measures taken to restore business confidence and economic growth. Postmaterialism is related to values which are deeply held and should not change because of the crisis, while preferences are more changeable and could be influenced by economic hardship and a reduced appetite to pay extra costs for climate change action. The research also provides a broader opportunity to build understanding of how the three countries studied responded to their economic and legitimation imperatives under such extreme conditions. This knowledge is of importance to environmentalism and the associated literature as part of understanding how to politically advance action on global issues like climate change. In this way, the study will help understand the relationship between the dominant economic paradigm of neoliberalism and global environmental problems. Whether environmental protection can be incorporated successfully within the growth focused, fossil fuel supported economies of the world or whether there can only be one winner is widely debated (Hoffman, Gillespie et al. 1999; AEA/CDP 2009; Saad 2010). Understanding from this project will help assess how strongly the idea that environment protection is in the interests of an economy is supported, or if in fact a dichotomy between economy and environment persists.

Next the methodology used to answer the research questions and achieve the objectives of the study is outlined.

1.5 Research methodology

In studying how climate change policy issues are discursively constructed during the GFC this study takes an interpretist position. This position is consistent with the belief that "the impact of ideas and discourses in social action" is related to socially constructed realities (Roberts 2006, p.705). A discursive approach is chosen to answer the research questions by discovering the meanings people attach to the study event. This approach demonstrates the importance of communication and discourse in shaping political response. To strengthen the conclusions that can be reached, data from three countries were collected to allow comparison. A multiple case study design helps strengthen findings and, as Hopkin (2002, p.249) argues this brings a "sense of perspective to a familiar environment and discourages parochial responses to political issues". Three advanced Western states were chosen: New Zealand, Australia and Spain. These countries vary significantly in the severity with which they experienced the GFC and in their commitment to climate change action.

To discover the discourses that emerged during this period and their relationship with the three ecopolitical theories, the qualitative methods used were elite interviews, analysis of media reports, and public survey data. Elite interviews were conducted with politicians, senior public servants, business leaders, academic experts, media commentators and experts from non-governmental organisations. The transcribed interviews were coded and analysed using NVivo Version 10. The media reports were related to a specific climate change policy event in each country. Public survey data were used to investigate longitudinal changes in values and preferences. Multi-method research is valuable in small number case research as the findings of one method can be validated by comparing with the other methods (Read & Marsh 2002, p.237). This strategy also serves to increase understanding of the findings and issues. A more detailed discussion of the methods is undertaken in Chapter 3 and the structure of the thesis is now outlined.

1.6 Structure of the thesis

The thesis is presented in eight chapters. The current chapter serves as the introduction to the key elements that guide the study. Chapter 2 follows with a critical appraisal of

the literature relating to crises, climate change policy, climate change discourse research and the three ecopolitical theories. This constitutes an important part of the understanding of what work has been done in these fields and where further research is needed.

Chapter 3 is the third background chapter and describes the rationale behind the choice of approach and methodology used. A discursive approach with qualitative methodology is advanced and justified. The chapter also covers the case study design and the use of the specific methods of elite interviews, media analysis, and the use of data from public opinion surveys. Chapters 4, 5, and 6 are concerned with each of the study countries. Each chapter covers the context in the three domestic settings in terms of both the global financial crisis and climate change policy. The empirical findings from each method used are examined in relation to the research questions asked.

Chapter 7 brings the findings of each case together in a comparative discussion which forms the basis of the conclusions reached. A discussion of the limitations of the study is included in this chapter. Chapter 8 follows to present the conclusions of the research and answers to the research questions. This chapter also covers a discussion of the implications of the research and suggestions for further research.

1.7 Summary

The severity of the 2008 financial crisis and the global nature of the event created the necessary conditions for a re-evaluation of dominant ideology: from which new knowledge on societal development emerges. The coincidence of the GFC with heightened concern and political movement on climate change provides the opportunity to learn more about how societies manage to deal with multiple issues that threaten established societal conditions. The GFC was not restricted to financial institutions as governments, by rescuing these institutions and choosing Keynesian style spending to stimulate economies, put the cost of the problem onto their business sectors and their citizens.

What happens during this period of financial and economic crises is pivotal for the future. How concern for maintaining economic growth and lifestyles interact with concern about preventing dangerous global warming helps understand what future

scenarios are likely and how countries need to react in the future. Discourse analysis was chosen to show how elites perceived what happened during this time. This also allowed an examination of the efficacy of the three ecopolitical theories through their relationship to the discourses and what actually happened. As well as contributing to understanding of what happens this also helps test and develop these theories. Having been posited in the last 40 years there has been limited opportunity for empirical testing of the theories especially under extreme economic conditions.

This introductory chapter has outlined the background to this study and from this the research problem was identified. The research questions, study objectives and intended contribution were explained along with an outline of the methodology used. Finally the structure of the thesis was outlined. From this chapter, the thesis moves to the second chapter where the literature for the three ecopolitical theories is reviewed. The understanding of what research has been done in relation to these theories forms an important part of justifying the research that is undertaken in this project.

2 LITERATURE REVIEW

2.1 Introduction

The previous chapter introduced how this study sets out to build understanding related to a specific research problem. The research problem was identified as understanding how the global financial crisis and recession affected climate change policy decisions. A general question and four specific research questions were identified to guide this study and the examination of the discourses that emerge during this time are used to answer the questions. Three ecopolitical theories related to economic circumstances: ecological modernisation, postmaterialism, and the dichotomy between consumer and citizen preferences, were identified as being relevant for examining the stories that emerge under the adverse economic conditions.

Firstly, in this chapter the literature is critically reviewed for; financial crises and their potential to create change; for the challenges facing climate change policy making; for climate change discourses; and the relationship between the GFC and environmental policy. This is followed by the literature review for each of the three ecopolitical theories. The review establishes the context of the research and why the research questions are important. Environmental theory is relatively new and as such needs time, research and critique for development. The review helps demonstrate how the understanding achieved by this study will contribute to advancing development of these theories as well as the wider issue of environmental policy making in contemporary societies. The severity of the crisis provides a unique opportunity for empirical study of these ecopolitical theories.

The aims of the chapter are achieved by organising the review into seven sections. The first two sections provide a critical review of the literature related to financial crises, climate change discourse and policy. The following three sections review the literature for each of the ecopolitical theories. The chapter concludes with a summary of what has been achieved and introduces the next chapter on methodology. The review begins by examining the literature on financial crises in the twentieth century to understand what changes have occurred in crises previous to the GFC. This is followed by looking at the literature on the GFC in particular, and then at change processes associated with crises.

2.2 Financial crises and the GFC

Since the modern system of finance developed over 200 years ago crises of the system have become a well-known phenomenon. These crises have considerable negative effects on economies, investors and people in general, but it is in the aftermath of such periods that changes to the system occur. The Economist (2014, online source), in an essay on the crises that have shaped modern finance, stated: "institutions that enhance people's lives, such as central banks, deposit insurance and stock exchanges, are not the products of careful design in calm times, but are cobbled together at the bottom of financial cliffs." As well as changes occurring as a result of financial crises they have become increasingly associated with state intervention which occurs to maintain confidence in financial institutions, reduce bankruptcies, and lessen unemployment. In their study of crises since the turn of the twentieth century, Reinhart and Rogoff (2009, p.466) stressed that "financial crises are protracted affairs" demonstrating that the effects on market prices, employment and government debt can take years to correct. After the 2008 financial crisis the potential for change in the wider economic and political arena attracted much attention. Economists, as well as those concerned with issues such as population growth, food shortages, energy issues, and climate change, tried to ensure that the financial and economic controls introduced took account of their concerns (AEA/CDP 2009; Gamble 2009; OECD 2009b; Stiglitz 2010; Mirowski 2013).

Given their consequences, it is no surprise that economists show considerable interest in studying crises of finance and markets, and positing theories to explain them. If crises can be explained then this can help to prevent, or at least control them. Detzer and Herr (2014) provided an overview of such research where they classified financial crisis models into three related groups: the neoclassical paradigm, the Keynes/Minsky school of thought, and those using isolated explanations. The neoclassical paradigm theories consider that the monetary sphere can operate independently of the real sphere: the real sphere being the one that dominates economic development. The monetary sphere has to adjust to what is happening in the real sphere sooner or later and, in severe situations, this can result in financial crisis. Keynes's model differed as he based his theory on a monetary production economy where "money plays a key role and penetrates all spheres of the economy" and it is within this framework that crises occur (Detzer & Herr 2014,

p.1-2). During the 70s and 80s Minsky used Keynesian theory to develop an actual model of financial crisis. In doing so he considered a financial system where changing attitudes to risk and debt relate to fragility, where interest rate movements can push the system to crisis, where there can be vulnerability to "not usual" surprise event, and where crisis can result in a debt-deflation spiral (Wolfson 2002). In 2002 Wolfson applied Minsky's domestic context theory to a global context using the Asian Financial Crisis of 1997 as an example. He posited that lending and investment across country boundaries added additional fragility to the system, that exchange rate effects could push the system towards crisis, and that the absence of a global bank and coordinated macroeconomic policy could make debt-deflation spirals worse. Published five years before the GFC, Wolfson concluded: "Ultimately, then, the implication of Minsky's theory in a global context is that financial crises and debt-deflations will be the continuing legacy of the attempt to eliminate all restrictions on the free market." (2002). The GFC became a text book example of Minsky's theory from the "not usual" surprise event of the failure of Lehman Brothers to the debt-deflation spirals that countries like Spain and Greece have experienced.

2.2.1 The global financial crisis

The severity and global consequences of the 2008 financial crisis led economists to question if this was in fact a crisis of capitalism, such as had occurred during the 1930s depression and the 1970s and early 1980s period of stagflation (Gamble 2009, p.6). In Gamble's (2009, p.37) opinion, crises of capitalism trigger "a crisis which concerns both the legitimacy of the political and economic order, the presumed social contract that underlies it and the distribution of power, both within national political systems and between them in the international state system". Pilling (2012, online source) also claimed that the GFC had caused much questioning of capitalism as an economic system, both in the west and in Asian countries which have increasingly adopted freemarket capitalism. Others felt that although the GFC did not result in depression or the end of capitalism, it had accelerated changes in the economic system that would have happened in the future anyway (Wolf 2011, online source). Wolf claims that the global balance of economic power shifted to Asia sooner than it would have without the GFC and that this has shifted responsibilities associated with such power. This has implications for dealing with issues such as climate change, global stability and a host

of other issues. Schuman (2012, online source) argues that the GFC has accentuated populist concern that capitalism is not providing the "economic opportunity and a better future for all" that it promised. Social inequality has steadily grown since 1970 (Johnson & Jacobs 2012), and with the GFC the ability of governments to help the poor through social-welfare spending was restricted by the increased debt and deficits they accumulated as they rescued financial institutions and stimulated their economies. Issues relating to the power of the global financial system, the control exerted by large corporations, the obligation imposed on citizens to pay for the failure of the financial system through public funding, and changes in international economic power have been prominent since the GFC began.

2.2.2 Crises and change

If crises present an opportunity for economic change, the questions concern how do changes come about and how it can be ensured that the changes made are in the interests of society as a whole. Although Mirowski (2013) titles his book on outcomes of the GFC "Never Let a Serious Crisis Go to Waste", his main premise is that nothing much changed. He argues that it is neoliberalism that was adept at turning what happened into an advantage for liberalism. He maintains that this happened because neoliberal ideas have become so established in all walks of life that alternative ideas were not able to challenge established thinking successfully. As a result, the economic changes induced by the GFC contrast with the profound economic changes that occurred during the Depression and during the period of stagflation in the late 70s and early 80s. Blyth (2002) extended an argument posited by Karl Polanyi that a double movement within modern capitalism exists: social and worker protection and that of capitalists protecting their interests. Whereas Polanyi thought the worker protection movement that resulted in the embedding of new state institutions after the Depression would be the end of changes, Blyth argued it was logical that those most affected by such changes, the capitalists, would eventually react against this new state of affairs. Blyth points to the 70s and 80s stagflation as the time that this reaction occurred and neoliberal economic order was established. An important contribution that Blyth (2002, p.6) makes is exploring the role that ideas, specifically economic ideas, have in making such change occur and how these ideas are used to protect the new order from losing precedence as appears to be happening after the GFC. Both Mirowski and Blyth argue that neoliberal ideas have been effectively embedded in society at all levels due to the use of think tanks and corporate sponsorship of politics. Blyth (2002, p.201) argues that labour have lost sight of what they are defending making it difficult to attack the dominance of neoliberal economics. Mirowski (2013, p.15) adds that neoliberalism is difficult to dislodge despite the GFC because it encompasses a strategy to deal with such a crisis. Within the above arguments the role of ideas is central to the changes that occur. For Blyth (2002, p.11) economic ideas are central to understanding what has happened in the twentieth century. Johnson and Jacobs (2012) also argue that ideas are central to necessary societal change to find coordinated strategies to deal with the multiple crises that face the world. The ecology, finance, food, poverty and security crises are interdependent, anthropogenic, and related to the same base causes. They look to ideas as the way to make change "ideas possess a transformative power. Social evolution is propelled by the perception of new possibilities, the formulation of new ideas and the adoption of new values" (Johnson & Jacobs 2012, p.13). Ideas are social constructs not necessarily reflecting the real world but they have a central role in how problems are understood and how they are dealt with.

The question for this study is whether the GFC was sufficiently severe to change the economic paradigm which underpins climate policy throughout the world. It could be that people arrive to a position where they see that what is happening in business, finance and politics is simply not acceptable anymore. If this happens it could foster the development of a counter movement by labour as described by Blyth.

2.3 Climate change policy, discourses and crisis

Studying the challenges of making effective climate change policy interests many scholars especially given the limited success of such policies to date (Giddens 2009; Harrison & McIntosh Sundstrom 2010; Dryzek, Norgaard et al. 2011; Stevenson 2012; Harrison & Mikler 2014). Steffen (2011, p.26) points out that the although the core science that warming is occurring is well established for most, the uncertainties in predicted effects and rates of change make it very difficult for policy-makers to base policy on scientifically established data. The global nature of climate change means that policy needs to be based on international agreements and, because of the long-term nature and irreversibility of change, coupled with the uncertainty of what will happen

governments have been pushed to base policy on the precautionary principle. Steffen argues that because of the dynamics of climate change to date and the amount of research being done, the rate of scientific knowledge generated means that the "IPCC reports - the 'gold standard' of scientific information - need to be updated soon after they are published" (Steffen 2011, p.27). While the science and policy on climate change needs to be coordinated through agreements at the international level, it is at the national and local level that most policy will be implemented. Therefore it is also important to understand the restrictions and challenges of making policy and implementation at this level. National interests, national discourses and institutions affect decisions taken both internationally and nationally (Harrison & McIntosh Sundstrom 2010, p.2). Studying policy decisions at national level is often used to understand outcomes in the international arena, for example why the USA and Australia chose not to ratify the Kyoto agreement. The challenges facing climate change policymakers led the economist Ross Garnaut to famously label the policy issue a diabolical international policy problem (Garnaut 2009, p.199) especially because the global nature of the problem means that those who do nothing can benefit from the efforts that others make.

Aiming to address how policy-makers should face the challenges, Giddens (2009, p.12-13) dealt with four themes that he felt they would be advised to consider to advance policy capable of effectively addressing climate change issues. Firstly, he advocates actively promoting political and economic convergence in environmental policy to encourage innovation and entrepreneurship. This would "maximize the economic advantages of enlightened environmental policy" (2009, p.12). This has similarities with ecological modernisation theory's win-win approach to environmental policy. Secondly he highlights the need to "embed a concern with climate change into people's everyday lives" (p.12). What people are thinking and saying has a significant impact on what policies can be made. A majority of people in many developed countries say they support taking action but policies need to be introduced they allow them to act on this even if this is done indirectly such as through promoting energy efficiency. The third and fourth themes relate to instilling genuine concern throughout institutions without using climate change for political mileage, and to plan longer-term to develop renewable energy sources and manage risks.

2.3.1 Reconciling economic and environmental imperatives

If policy to address climate change increases the costs of essential services or imposes taxes, it will be vigorously opposed by citizens and business alike, a situation democratically elected government prefer to avoid and hence their preference for technological solutions (Harrison & Mikler 2014, p.1). Giddens's first theme focuses attention on the importance of economic growth in capitalist economics and policies to address climate change are often seen as threatening or impeding this growth. The desire to avoid policies that increase costs contributes to a dichotomy between economic and environmental imperatives. As protection of the environment has gained political saliency the debate about how to maintain economic competitiveness while adding protection costs has also grown (Hoffman, Gillespie et al. 1999). For those trying to ensure success of policy Dryzek et al. (2003, p.3) identify five imperatives which form the core of a state: the core "constitutes an area of activity that the state must carry out". They argue that unless environmental issues can be linked to one of these imperatives they will have limited success. While climate change can be linked to the fifth imperative of domestic order, more effective policies have been introduced when they are linked to the revenue imperative of ensuring economic growth (Giddens 2009, p.88). Others push for the recognition that the economy is environmentally based and you cannot develop without ensuring the sustainability of the environment (Costa Climent 2010). A 2009 study carried out for the Carbon Disclosure Project (AEA/CDP 2009, p.4) to assess the views of some of the largest companies in the world found that most of those questioned felt that the crisis would not sideline climate change as an issue. The report highlighted that companies saw the crisis mostly as a short-term issue and climate change as a long-term issue and established activities would continue. On the public front, Gallup polling (Saad 2010) showed that after the negative economic experience of the GFC Americans began to prioritize the economy over the environment, the first time in the last 25 years.

Mirowski (2013, p.334) takes the argument to another level when he argues that neoliberalism, by giving primacy to markets to solve problems, has little room for the inherent complexity and chaos of evolving nature. The prescription for market failures or problems like climate change is "to impose more markets, since nothing else can ever cope with the complexity of evolution" (p.334). He argues that a key success of

neoliberal ideology over other ideologies has been a strategy of plural approaches to a problem that, while generally seen as separate political approaches, actually combine in their effect to ensure the market becomes the final solution. He sees the promotion of climate change denial delaying political action to buy time, carbon permit trading moving the market agenda, and geoengineering ready as a backup if the other options fail to promote a market solution (p.336). The failure of states to introduce effective polices to combat climate change is also addressed by Stevenson (2012, p.6) who argues that global norms are absorbed into existing unsustainable domestic social, political and economic systems rather than acting to transform them: hence institutionalizing unsustainability. She reminds us that the domestic conditions constraining state actors "are almost entirely constituted by ideas and meanings, which are of course not directly observable and measurable" (p.6). If we are to understand how norms, ideas and meaning are established it is useful to examine the discourses of climate change.

2.3.2 Research on climate change discourses

If ideas and meanings are not directly measurable then discourse analysis provides a way to bring understanding to the environmental policy processes. Burnham et al. (2008, p.253) argue that the reason discourse analysis is so attractive to political scientists is related to the nature of politics itself: "politics can easily be described as a struggle to control the dominant political language". Both Dryzek (2005) and Sharp and Richardson (2001, p.194) explain that the complexity of the issues and the interactions in environmental policy decision making can explain why the use of discourse analysis and a social construction approach appeal to researchers. Seminal works in the field include the contributions of Litfin (1994), Hajer (1995) and Dryzek (2005), all of whom examine the role of discourse in environmental policy making. Dryzek stresses the role that the definition of a problem has in shaping a discourse and the part this plays in finding solutions. In contrasting the different environmental discourses that have developed, he argues that "each discourse rests on assumptions, judgements, and contentions that provide the basic terms for analysis, debates, agreements and disagreements" and that in this way a discourse becomes a shared way of comprehending the world (2005, p.9). While Dryzek contrasted competing discourses in a general sense, Maarten Hajer (1995) based his well-known discursive study on a specific issue: acid rain in the Netherlands and the United Kingdom in the late 1980s and early 1990s. Hajer (1995, p.44) defines discourse "as a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities".

With a specific focus on climate change discourses, Christoff and Eckersley (2011, p.443) when comparing state responses argue that "national climate discourses are anchored in, and, to a significant extent produced by, the particular configuration of actors, interests, institutions, and local circumstances." Pettenger (2007) used a discourse perspective to help explore the social construction of climate change. Studying dominant discourses is seen as necessary for understanding how problems are framed and what solutions are arrived at. Pettenger and Cass (2007, p.236) stress that although this appears obvious, much scholarship does not take the role of discourses and norms seriously in understanding the evolution of the political response to the problem. Dominant political discourses are supported or endorsed by public discourses which in turn raises questions about how information related to climate change is communicated to different publics (Nerlich, Koteyko et al. 2010, p.97). Nerlich et al. argue that climate change communication has grown in salience as a research topic as interest in understanding the effectiveness of such communication is questioned when limited responses are taken into account. In democratic societies people need to prioritize climate change as an issue as well as integrate concern in the way they live if public opinion is going to have a positive effect on policy making (Nisbet 2011, p.357). The role of mental models, values, frames and knowledge in shaping the perceptions people hold about climate change and research in this field "offers valuable insight into the dynamics that drive the trajectory of the climate change debate in society" (p.365). Scrase and Ockwell (2010, p.2232) emphasise that even if technological and economic solutions can be found to move to low carbon societies it will still be necessary to reframe the problems and their solutions in a way that they speak to the powerful discourses that shape energy policy today. Their recommendations concur with Dryzek et al. (2003) in needing to align problems and solutions with government imperatives and that researchers in the energy field would be advised to move away from the traditional linear way of looking at the policy process to consider the interplay of "values, beliefs, entrenched interests and institutional structures" that interact in the framing of problems and solutions (Scrase & Ockwell 2010, p.2232).

The review if the literature on discourses and climate change demonstrate a growing interest in understanding the role of discourse in informing the climate change policy making process. This requires study of norms, values and framing at both public and policy making levels.

2.3.3 The relationship between the GFC and environmental policy

The literature related to the GFC and the environment is still a work in progress, evolving as data emerges and the consequences of the crisis continue. Concern and calls for action to limit climate change had reached new heights globally in 2007 (Rootes 2008; Mol, Spaargaren et al. 2009; Saad 2010). As the financial crisis unfolded, calls were made to include climate change consideration in the solutions and measures agreed internationally (Christie 2008; Tuxworth 2008; AEA/CDP 2009; Ban 2009). At the beginning of the crisis Egenhofer (2008) predicted a shift within the EU away from expecting private funding of carbon reducing measures, to governments being able to use their stimulus spending programmes to encourage consumption consistent with EU climate change ambitions. Later, by 2010 Chaffin (2010, online source) noted that the EU discourse had shifted from one of presenting climate change as a moral issue to one where saving money with energy efficiency and innovation were dominant: a change more in line with economic crisis. Within Spain an assessment of the implication of the economic crisis and the trajectory of climate change policies was carried out by Del Río and Labandeira (2009). They noted that although the crisis had reduced emissions through lowered demand, there would be longer-term negative effects from the drop in investment in low-carbon technologies.

Written accounts of the GFC have frequently refer to an anticipated detrimental influence of the crisis on environmental policy and especially on climate change policy action (AEA/CDP 2009; Gamble 2009; Garnaut 2009; Giddens 2009; Kevin 2009; Kahn & Kotchen 2010; Manne & McKnight 2010). As the longer term consequences of the GFC developed into a general economic slowdown or economic crisis the literature, as this research does, began the process of assessing what has happened in relation to climate change policy. In 2010 Kahn and Kotchen (2010, title) reported "the chilling effect of recession" on environmental concern in the USA. They used internet searches to show that searches for global warming dropped while those for unemployment rose, and used survey data to show that rising unemployment correlated with a decrease in

those that thought climate change was happening. They claimed their work was the first empirical estimate of how unemployment affected environmental concern (p.17). An area of study attracting attention as data has emerged is the influence of the GFC on public concern and perceptions of climate change (Nordhaus & Shellenberger 2009; Saad 2010; Brechin & Bhandari 2011; Ratter, Philipp et al. 2012; Scruggs & Benegal 2012). While attention fatigue was also considered to be a factor, most of these researchers believed the recession had been a factor in observed declines in climate change concern. Brechin and Bhandari (2011, p.884) found that recent studies showed people had remained more concerned about general environmental problems than climate change as a problem. They stressed that as the studies they used were in the midst of the recession more research would reveal the longer-term association of concern with the economic conditions.

Overall the contemporary nature of the economic problems associated with climate change policy has meant that research in this field is still forthcoming. The literature review of the process of making climate change policy establishes where the three theories that form part of this study can make a contribution to advancing knowledge. The three theories are treated in a complimentary manner where each speaks to different aspects of political discourse: ecological modernisation to the powerful energy and economic discourses, postmaterialism and consumer and citizen preferences to how the public establishes meaning. The current research will contribute to the assessment of what effect the GFC has had on climate change policy making.

2.4 Ecological modernisation

Ecological modernisation has become embedded in the discourse of environmental policy elites (Barry 2005, p.310) although whether considered as theory or as a mechanism for ecopolitical change, it is subject to much critique. The key premise of this ecopolitical theory is that it provides a reform process to reduce environmental damage where an economic growth strategy can be continued within existing institutional structures using technological changes. As such, it constitutes a pragmatic approach to deal with environmental problems as it suggests that the problems can be resolved without radical change in contemporary industrial societies (Mol & Sonnenfeld 2000, p.3). Fisher and Freudenburg (2001, p.702) describe those adhering to this theory

seeing it as the best option for reform with the lynchpin for continued economic growth being technological innovation. To understand how ecological modernisation is interpreted, and the contemporary state of the arguments, it is necessary to look at the development of the theory.

2.4.1 Historical development of ecological modernisation

Ecological modernisation as a concept made its first appearance in Germany in 1982 (Mol & Jänicke 2009, p.17). It constituted an important change from demands for radical societal change and the failure of earlier pollution control initiatives to a process of environmental reform (Milanez & Bührs 2007; Mol, Spaargaren et al. 2009, p.4). Hajer (1995, p.73) attributes the interaction between the state, the environmental movement, and key expert organisations as leading to an increased awareness that consensus was needed for action to be taken and that this helped the emergence and acceptance of ecological modernisation. German social scientists, Joseph Huber and Martin Jänicke introduced the concept of making industry more environmentally sound through technological change: Jänicke in the German policy debate and Huber in the social scientific debate (Mol & Jänicke 2009). These early pioneers of ecological modernisation recognised that the answer lay in finding a solution that operated within the market-based, growth economy paradigm.

Although the concept began in Germany, it was not until it was published in English and constructed as a theory of social change by Spaargaren and Mol (1992) that the debate about ecological modernisation truly got underway. Weale (1992, p.76) saw the theory as "reconceptualising the relationship between economy and environment" and argued that where 1970's politics had been concerned with end-of-pipe regulation, this theory moved to regarding environmental protection as a precondition of long-term economic growth. Weale illustrated that the application of this reform varied across countries using the British and German approaches to acid rain as an example where the Germans managed a "synthesis" between economic and environmental interests and the British did not (Seippel 2000, p. 288). The sizable debate on ecological modernisation that developed after this early period resulted in a widening and strengthening of the concept, and its development as a theory. The theory has passed through various stages of development of over time (Mol & Sonnenfeld 2000; Milanez & Bührs 2007; Mol, Spaargaren et al. 2009) and four or five strands have emerged from studies (Mol &

Sonnenfeld 2000; Milanez & Bührs 2007).

The themes or strands of development that have emerged are important to know the current state of the debate and to know where this study can make a contribution. Milanez and Bührs (2007, p.566-572) identify four main ecological modernisation schools of thought: a technological strand, a policy strand, a social strand, and an economic strand. Mol and Sonnenfeld (2000, p.5-6) suggest a similar set of core themes: the changing role of science and technology; increasing importance of market dynamics and economic agents; transformations in the role of the nation-state; modification in the position, role and ideology of social movements; and changing discursive practices and emerging new ideology. Several schools of thought have developed demonstrating the fragmentation in the development of the theory that has occurred and confusion that can arise over definitions of what ecological modernisation stands for. At the same time that it serves a purpose to look at ecological modernisation from different perspectives as a way of building the theory, there needs to be a way to consider all these perspectives together if a coherent theory is to emerge. Milanez and Bührs (2007) have attempted this by proposing an integrative framework for analysing ecological modernisation that includes a more circumscribed definition. Their argument to provide an encompassing framework for empirical research and lessen confusion from broad, vague definitions is compelling.

Milanez and Bührs (2007, p.573) looked back to early development of the theory and "the crucial role of production processes and technology as sources of environmental pressure" when they posited the following definition: "the implementation of preventive innovation in production systems (processes and products) that simultaneously produces environmental and economic benefits". Along with this technologically based definition they place within their framework "policy, social and economic perspectives, clustered around actors, contexts and outcomes", stressing that the latter three elements are essential for understanding why ecological modernisation works or does not work in different countries. By defining ecological modernisation in this specific fashion they mean to preclude the use of the term for all factors or development that may reduce environmental pressure (Milanez & Bührs 2007, p.573). Their definition is consistent with Fisher and Freudenburg's (2001, p.702) recognition of technological innovation and reformism being the lynchpins of the ecological modernisation argument. The value of the framework proposed by Milanez and Bührs (2007) is that it provides order to the

diverging schools on ecological modernisation theory, and to empirical outcomes. This helps identify contributions that relate to the use of ecological modernisation in answering the research questions in this study. Next the strengths and weaknesses of relevant contributions to the theory are reviewed to discover where empirical work is able to make a contribution to the continued development of this theory.

2.4.2 Critiques and development of ecological modernisation theory

Buttel (2009, p.132-3) argues that because ecological modernisation arose from a desire to move away from radical reform and the failure of environmental protection measures in the 1970s, it still has some way to go before it can be considered a fully supportable theory. He concludes that it is still more a "political-sociological perspective" than a clearly codified theory. Seippel (2000, p.300) also makes a detailed analysis of ecological modernisation as a theoretical device and concludes, like Buttel, that when compared with specific requirements of what constitutes a theory, ecological modernisation hardly justifies being referred to as one theory. Buttel (2009) cites this lack of strong social-theoretical foundation as the reason it has been used in so many different ways by social scientists. This problem leads many researchers to refer to this theoretical broadening in their studies and to offer interpretations of the meaning of ecological modernisation to demonstrate how their work relates to that of others (Andersen & Massa 2000; Mol & Sonnenfeld 2000; Seippel 2000; Baker 2007; Milanez & Bührs 2007; Buttel 2009).

But as Mol and Sonnenfeld (2000, p.5) argue, from the beginning of the development of ecological modernisation, the aim has been to analyse how modern industrial societies can manage environmental degradation. Studies therefore look at how environmental concerns can be integrated which includes studying how social actors and institutions are adapting to include these concerns in their everyday functioning and relationships with others (Mol, Spaargaren et al. 2009, p.4). Mol, Spaargaren and Sonnenfeld go on to point out this has an important role in the increasing incorporation of environmental consideration in social relations and institutions which in turn has an influence on human values, culture and everyday life. In the same vein, Hajer (1995) has made a significant contribution to the development of the theory arguing that the interaction between actors, and the context they operate in, plays a crucial role in how issues arrive on the policy agenda. He used discourse analysis to demonstrate that the arguments

constructed by various actors and their interaction with each other will result in how a problem is defined and therefore what political solutions will be found.

Buttel (2003, p.308-9) argues that there are only four basic ways to achieve the reform necessary for environmental consideration in modern societies and ecological modernisation is one of these. The other three he lists are social movement mobilisation, regulation by governments, and management by international means. In his assessment of the views of those supporting ecological modernisation reforms, he notes that it can be observed that core features necessary for a more environmentally sound future "are already emerging or are already in place" (Buttel 2003, p.323). Mol and Spaargaren (2000, p.22) concur that environmental consideration is more institutionalised than radical ecologists acknowledge and that it will "no longer wither away with the first economic crisis or depression". This observation is based on changes that have already occurred in production processes and in consumption practices. This is supported by van Koppen and Mol (2009, p.295) in their discussion of the role of ecological modernisation in advancing industrial ecology. This type of industrial development has shown considerable development in recent years where "flows between the natural environment and various units of the production consumption system" are studied.

However there is mounting criticism that the pace of reform is too slow. Warner (2010, p.553) criticises the theory for being out of sync with the rate the environment is changing and that the core premises of the theory have not been changed in response to this. Warner (2010, p.538) also identifies the GFC as an opportunity for questioning "the role and nature of change in industrialised societies" given the severity of the financial and economic crises has raised many questions about the supremacy of the economic growth model. York and Rosa (2003) made a much stronger attack on the theory arguing that is not possible to measure the claims made by the theory. They put forward four basic challenges they feel need to be addressed before other approaches can be dismissed. These challenges relate to: it needing to be shown that modifying societal institutions does in fact lead to the ecological improvement; that at latter stages of the modernisation process transformation of production and consumption must be at a sufficiently high rate; that one industry's improvements do not have flow-on effects that result in moving problems to other sectors; that economies need to show they are more resource efficient and that the pace of efficiency is greater than the pace of production overall (York & Rosa 2003, p.282-3). York and Rosa are sceptical about the success of ecological modernisation if these concerns cannot be addressed and express the concern that other viable options may be excluded by placing too much faith in the project.

The arguments that see state and industry working together to build environmental consideration into production without radical change are part of what has led to the criticism of ecological modernisation as being overly optimistic about effecting adequate social change. Technological optimism is identifiable in ecological modernisation discourses such as win-win solutions, pollution prevention pays, getting the price right, and green growth, and has been criticised for perpetuating business as usual (Andersen & Massa 2000). Andersen and Massa (2000, p.343) stress that a change from the efficiency rhetoric that has become common is needed as they feel business and industry are hardly likely to go beyond the easy pickings of "low-hanging £10 notes" on their own. In their opinion the state needs to play a role in necessary, associated activities such as investment in research and development, and that state support and incentives for technological change are necessary. Need for structural change is also cited as necessary to overcome the techno-optimism that has developed (Jänicke 2008; Szarka 2012). Szarka describes that structural change is also subject to various interpretations and for his own study adopts what he refers to as a mid-range explanation. In this he refers to environmental changes needing to be made in relevant sectors such as energy and transport which will in turn influence the industrial sector by affecting their internal processes, products and associated infrastructure (Szarka 2012, p.91).

Criticism of the techno-optimism of ecological modernisation appears to cause some frustration for key proponents of the theory. Mol and Jänicke (2009, p.20) stress that authors criticising this optimism often do not take into account that "ecological modernisation as a broad and still-evolving school-of-thought, has moved to a more balanced understanding of the role of technology in environmental reform". Jänicke (2008, p.564) has looked to address such criticisms in more recent times and identifies two important limits to the current reform process. These are that eco-efficiency gains need to be greater than economic growth and that resistance from "modernisation-losers"² often results in less than adequate environmental policy. Szarka (2012, p.103)

² Those in industrial sectors that would lose profits if consumption of natural resources is reduced.

demonstrates that modernisation-losers have significant influence on the ability of governments to introduce effective policy to accelerate technological innovation. He argues that "incumbents" invest in developing political skills to resist regulation ahead of investing in technological innovation. As Jänicke (2008) does, Szarka also proposes that finding ways for effective policy to be introduced will have to include finding ways to overcome resistance from modernisation-losers.

The interest in understanding how effective ecological modernisation is a process of reform for societies to manage environmental problems has led some scholars to propose classifications based on the degree it has been incorporated into policy making. Hajer identifies a techno-corporatist and a reflexive variant of reform (Mol & Jänicke 2009, p.20) but perhaps the best known classifications is that of Peter Christoff (1996). Christoff describes a continuum of change possible ranging from weak economic and technically supported reform to strong institutional and democratically supported reform. Christoff bases this continuum on the degree of durability and the sustainability of the change achieved. To date, many authors consider that most ecological modernisation change has been weak reform (Christoff 1996; Dryzek 2005; Backstrand & Lovbrand 2007). Dryzek (2005, p.177) states that only in Germany has he observed "glimpses" of the strong form. Spaargaren, Mol and Sonnenfeld (2009, p.509-10) claim that some scholars see radical reform as the only way to achieve sufficient changes and do not value the pragmatic approach of ecological modernisation sufficiently. They include Barry (2005), Eckersley (2005a), and Dryzek (2005) as political science authors who put forward alternatives that support more "ideal, arguably utopian green futures" without sufficient consideration of how change can be achieved. Dryzek (2005, p.168) claims there are those who treat ecological modernisation from a merely technical point of view and thus it becomes "a re-tooling of industry and agriculture along more environmentally sensitive but still profitable lines". Dryzek advocates stronger reform by arguing that the role of human interactions with ecosystems is a necessary part of ecological modernisation as it speaks to reform of society and not just of industry.

Fisher & Freudenburg (2001, p.706) stress the need to "devote a significantly larger fraction of our effort to studying more specific factors upon which it depends" and that this should be done at national level. This argument relates to criticisms of ecological modernisation's north-western European centrism and its focus on advanced industrial states. Addressing such criticism and demonstrating the state-of-the-art, Mol,

Spaargaren and Sonnenfeld (2009) included a complete section devoted to studies from Asian and other emerging economies when compiling *The Ecological Modernisation Reader*. Although authors who have studied non-European economies criticise the theory for being less applicable to economies reliant on commodity products or primary resources, or without large industrial sectors, such as Australia (Howes, McKenzie et al. 2009) and New Zealand (Jay & Morad 2007). In these cases the problem of applicability of ecological modernisation appears more concerned with internal factors that are considered necessary to facilitate its introduction. This issue was addressed by Howes et al. (2009, p.4) who found a lack of suitable conditions for the adoption of ecological modernisation making it a challenge for this type of reform in Australia. They identified five core themes, closely related to those of Mol and Sonnenfeld (2000, p.5-6), within a country's society that influence a programme of ecological modernisation and participation in governance, and economic base of a country, societal mobilisation and participation in governance, and economic and environmental discourses.

The issue of what conditions make it possible for ecological modernisation to emerge and how to create the necessary conditions has attracted considerable attention (Hajer 1995; Cohen 1998; Weidner 2002; Dryzek 2005; Milanez & Bührs 2007). Weidner (2002) makes an important contribution to understanding the importance of such processes in studies he conducted with Jänicke across thirty nations. Related to this field of study Cohen (1998, p.149) argues that cultural aspects are often overlooked and offers an assessment of their importance in this context. He concludes that "a strong public commitment to science and a robust environmental consciousness" are especially important. Dryzek (2005, p.162) identified the "cleanest and greenest" countries and examined their experience to identify factors that could be associated with successful environmental policy reform. He postulates that the necessary condition is consensual relationships amongst key actors in similar political-economic systems (p.166). Buttel (2003, p.324) identifies a move to more collaboration with industry rather than command and control governance as being important for progress: a finding similar to that of Dryzek.

2.4.3 Transformational potential and the role of consumption

The focus on necessary conditions and capacity for the development of ecological modernisation highlights an aspect that is overlooked by some authors, that of transformative potential. Howes, McKenzie et al. (2009) suggest this as a reason Australian governments have proceeded cautiously with climate change policy reform. Curran (2009, p.201) is more emphatic on the point stressing that "even weak ecological modernisation may trigger ecological restructuring" and feels that making a classification from weak to strong forms can obscure this important aspect of creating change. Baker (2007) contributes to this discussion when she argues that the EU adopts a symbolic commitment to sustainable development while policy and discourse are based on an ecological modernisation framework. She contends that this still holds significant transformative potential as it forms an important part of the European integration project and this strengthens the use of ecological modernisation discourse and the process of ecological policy reform in Europe.

The role of consumerism within ecological modernisation theory has received more attention in recent years from scholars such as Carolan (2004), Spaargaren & Cohen (2009), and Barry and Doran (2006). Carolan (2004, p.248) argues that in the past a dominant focus on production has resulted in consumerism being a non-issue, or at best, implicitly included in the theory. He promotes a more explicit role for consumption in ecological modernisation theory giving the reasons for this as: the consequences of over-consumption in advanced economies, increasing consumption in emerging economies such as China and India, the influence governments are able to exert on consumption, and the influence consumers themselves can have on production. But the scholar who has probably contributed most to this field is Gert Spaargaren, who Carolan (2004, p.254) credits with having been "instrumental" in developing the consideration of consumption within ecological modernisation theory by "analysing the role of the citizen-consumer in the context of production-consumption cycles". Spaargaren and Cohen (2009, p.261) state that policy makers have regarded dealing with "the diverse and often contradictory lifestyles of individual consumers" as too difficult compared to dealing with "more predictable and manageable" producers. They cite war-time and emergency changes in consumption as evidence that governments can manage such changes. Carolan (2004, p.256) also illustrates the role government can play whether through tax cuts to stimulate consumption in times of financial crisis or by using regulation to limit consumption of what are considered harmful products such as cigarettes and alcohol. In the present study the influence of depressed economic conditions, especially as the economic downturn has been prolonged in many countries, supports the contention that people are able to respond and change their consumption habits when circumstances dictate.

Implicit in ecological modernisation theory is the tenet that competitive advantage can be achieved by making innovative green technological changes ahead of competitors to produce products that consumers will value and buy. Schlosberg and Rinfret (2008, p.266) examined the influence of the "fashionable American consumer". They argue that American citizens wanting to express their environmental values do this by buying green products, terming them "life-style greens". In a country where materialist lifestyles are an established way of life it makes sense to place an emphasis on trying to "green" consumption practices. Barry and Doran (2006, p.252) take a pragmatic approach when proposing a version of a green political economy when they argue that it must be accepted that "consumption and materialist lifestyles are here to stay" and, like it or not, one must move on and look for a way forward from that point. By incorporating the existing systems of production, the institutions of society, and the culture and habits of the citizens, ecological modernisation recognises the actual starting point. Incorporating consumerism in the production-consumption cycle recognises the influence citizens can have in the adoption of more sustainable practices by their preference for green consumption, support for fair trade, and investment in companies supporting sustainable development.

2.4.4 National security and risk societies

Another driver of ecological modernisation reform that Schlosberg and Rinfret (2008) expound is the influence that can come from linking reform to the national security imperative of governments. Whereas, until quite recently the security imperative often explicitly overrode consideration of environmental protection, this has begun to change with the recognition that global warming can cause pressures from human migration, and disputes, at worst wars, over increasingly scarce resources such as water. This means that now environmentalists can relate environmental protection to issues of national security, particularly energy security, they can have an influence that results in

policy more attuned to ecological modernisation (Schlosberg & Rinfret 2008, p.262). Throughout the Western world the desire of energy importing countries to lessen the impacts of rising oil prices and insecurity of supply has driven many innovative, production efficiency projects. A lot of oil comes from Arab countries which are often hostile to Western countries or from countries with unstable government.

A final argument that challenges ecological modernisation that is important in the context of this study, both as theory and as a process of social change, is Ulrich Beck's theory of risk societies (Beck 1999; 2009). A widespread paradigm is that the development of human society is a relentless march forward (Cohen 1997, p.107). Given human mastery of the world, technological development, and the advances in material wealth that have taken place since the industrial revolution, this is an understandable belief. But along with this advancement has come the development of many technologically related hazards. Beck (2009) argues that the risks that are being produced in this way are creating societies where risk is changing traditional societal class structures as well as the policies made to contain such risk. While the two theories can be viewed as opposing each other with ecological modernisation postulating that technology can achieve appropriate changes, and the other arguing that hazardous technology is creating a destabilising culture of risk, they both share a need for scientific rationality (Cohen 1997). Cohen uses this point of commonality to produce a typology that connects the two theories in a common framework. He does not see ecological modernisation as a continuous process but rather as one that, at a certain point in development, is triggered to "switch" by means of a concerted restructuring process to a path of ecological modernity. This recognises the substantial institutional restructuring and policy that is needed for sufficient change to technologicalenvironmental security. The value of Cohen's framework is that it demonstrates a relationship with a route of social development which he argues many advanced economies appear to be taking at present and in doing so are becoming risk societies. Cohen characterises this undesirable development as one of "erratic economic development and increasing lay insecurity" which relates to "social preoccupation with the threats of technology" (Cohen 1997, p.113-4). Cohen argues that it is still possible for a society to make the "switch" necessary to become an ecologically modern society although evidence to date from advanced economies is not encouraging. Studying what occurs during the GFC provides some insight into the trajectories societies are likely to

take according to Cohen's model.

The last two sections have addressed the relationship of ecological modernisation with other theories which adds to perspectives, both as theory and as a process of social change that are guiding future research in this arena. Some concluding comments on the review of the literature for ecological modernisation follow.

2.4.5 Concluding comments for ecological modernisation

The wide array of interpretations and critiques of ecological modernisation support the claims that, as a normative social theory, there is still considerable testing and development needed. Ecological modernisation has come to dominate the discourse of how climate change is interpreted and conceptualised in advanced liberal economies (Backstrand & Lovbrand 2007, p.131) and in this way the discourse becomes central to defining the problems and deciding what actions are taken. This study takes the stance that if those close to the policy making process are informed by ecological modernisation theory, they will use a related discourse and embrace particular types of policies. The 2008 financial crisis had a strong influence on many countries and has led to changes that will shape the future. By studying how elite discourses were affected by the GFC builds understanding which will help predict future directions in environmental protection and societal change. The pressing need for ecological reform and understanding influences on the debate, highlight the value of more empirical studies.

This review now moves to consider the literature on the second ecopolitical theory, that of postmaterialism. This theory moves the focus from economics and technological development to focusing on the role of the citizen.

2.5 Postmaterialism

There is no shortage of studies that shows that socioeconomic development is related to major social, cultural and political change (Inglehart & Welzel 2005). In modern democratic states citizen values play an important part in such change. Dalton states that "values identify what people feel are – or should be – the goals of society and the political system" (Dalton 2008, p.79). He goes on to assert that value change is important in the political process as it increases the diversity of issues that are important to people, it affects the patterns of political participation, and it shifts the issues of

public debate. Beginning in the 1960s there was a significant shift away from traditional forms of political activity by younger people to collective social protest which gave rise to the new social movements (Inglehart 1981, p.885).

2.5.1 Development of postmaterial theory

What made the collective protests of this period different to "old" social movements such as trade unions was that:

- i. they operated independently of any political party aiming to mobilise civil society,
- ii. they worked to defend civil society from "excessive political power (particularly from the state) and seek cultural change to values and lifestyles",
- iii. NSMs generally shunned hierarchical structure preferring informal, decentralised and participatory organisation, and
- iv. protest often involved new forms of political activity which included confrontation and direct action (Carter 2001, p.87).

With such dramatic change many researchers turned their attention to explaining why this change had occurred. An influential theory related to changing values was posited by Ronald Inglehart when he published his paper "The Silent Revolution in Europe: Intergenerational Change in Post-Industrial Societies" in 1971. Inglehart attributed the change as arising from postmaterial values that developed in new generations because of different influences in formative years. He proposed a hierarchical order of needs where people value most the things that are in short supply. Once these needs are satisfied they will then value the next things level of things in short supply. First order needs are food, shelter and clothing which relate to basic economic security and once met, people begin to develop values "relating to the need for belonging and to aesthetic and intellectual needs" (Inglehart 1971, p.991-2). His prediction of intergenerational value change was confirmed as longitudinal studies extended over time: a significant achievement given there have been few successful predictions made in political science (Abramson 2011, p.31).

By 1981 Inglehart (1981) had expanded the theoretical framework to give a more complete explanation for the effect of scarcity on behaviour. The two hypotheses he proposed at this time were:

- 1. "A *Scarcity Hypothesis*. An individual's priorities reflect the socioeconomic environment: one places the greatest subjective value on those things that are in short supply.
- A Socialization Hypothesis. The relationship between socioeconomic environment and value priorities is not one of immediate adjustment: a substantial time lag is involved, for, to a large extent, one's basic values reflect the conditions that prevailed during one's pre-adult years." (Inglehart 1981, p.881)

Data showed new cohorts did have increasing measures of postmaterial values, with measurement based on a four-item battery, or a later twelve item battery. The original four-item battery was:

If you had to choose among the following things, which are the two that seem most desirable to you?

Maintaining order in the nation. Giving the people more say in important political decisions. Fighting rising prices. Protecting freedom of speech.

(Inglehart 1971, p.994)

The first and third items represent materialist values as they relate to protecting property and acquiring goods. The second and third items are considered "post-bourgeois" where political liberties were valued (Inglehart 1971, p.995-6). The four-item battery has been used extensively in international surveys on values or social change (Kroh 2009, p.604). This provides nearly forty years of data which provides essential information for a theory based on the gradual process of generational replacement. In Inglehart's own words, if change through generational replacement is the main way change occurs in society's basic values then one would expect it to proceed at a "glacial pace" (Inglehart 1981, p.880).

2.5.2 Research contributing to development of the theory

Gary Marks (1997) accepted the basic premise of Inglehart's theory and made various

recommendations to advance the theory. He identified what he considered were the five main influences on the formation of materialist and postmaterialist values. These were: "parental socialization, formative security in the family of origin, societal (or economic) formative security on reaching adulthood, education, and contemporary influences" (Marks 1997, p.52). In studying the effects of these five influences he found it was not reasonable to consider any as more important than the other and they should all be included in an improved model of the theory. Another author, Kroh (2009, p.599), conducted a study in sibling preferences over two decades testing Inglehart's two hypotheses against the social learning hypothesis of value formation. He conducted this study because he felt that one cannot ignore parental influences in a theory about value formation in young people. While he worked within the assumptions of Inglehart's theory, he suggests the possibility of a dampening effect on postmaterial generational value change due to the tendency of young people to adopt, rather than reject the preferences of their parents (Kroh 2009, p.616-7).

Díez Nicolas (1996), who has studied postmaterial value development in Spain for over thirty years, investigated the development of postmaterial values in relation to social position based on the centre-periphery theory posited by Galtung (1964). Galtung argues that new ideas, and therefore change, flow from the social centre to the periphery of society due to the centre's higher exposure to information, higher level of social participation, and closeness to society's decision-making processes. Díez Nicolas claims the high correlation he finds between the two theories occurs due to exposure to information, and that those closer to the social centre are the initiators of new social values as they see the need for a new "collective adaptive response to a situation" (Díez Nicolas 1996, p.163). Díez Nicolas' findings confirm Inglehart's theory in regard to age and postmaterialist values, but his finding that one's social position is a significant indicator of postmaterialism leaves some questions open in relation. Social position suggests a different causal relationship as it implies these values could be acquired at any stage of adulthood. Díez Nicolas (1996, p.164) extends his findings to argue that the development of postmaterialism as a response to societal problems by those at the social centre indicates value formation that is more complex than the traditional left-right political alignment.

This section has discussed authors who have explored or extended Inglehart's theory but, as well as those that see merit in the theory, there are a considerable number of critics. The critiques of Inglehart's theory are reviewed in the next section.

2.5.3 Criticisms of postmaterialist theory

Key areas of criticism relate to whether intergenerational value change induced by affluence is in fact taking place, and to the means of measuring postmaterialism. As the debate on the theory has progressed, Inglehart and others, notably Paul Abramson, have responded to the criticisms by qualifying and expanding the original concepts (Abramson 2011). Early criticism that Inglehart's original study showed nothing more than change amongst adults came from Ike (1973) who studied Japanese social survey data over fifteen years. At that time, Japan had experienced extremely rapid economic growth with an accompanying rapid improvement in personal economic security following the devastation experienced at the end of World War II. Ike, and later Flanagan (1979), used survey data that began in 1953 to criticise Inglehart's theory. Inglehart and Abramson challenged their criticisms (Abramson 2011) arguing that there were very different societal traditions between Japan and Western Europe, and that the items used to measure postmaterialism were different. Later, when more study of intergenerational value change was able to be done in Japan, Inglehart and Abramson (1994, p.349) labelled Japan an "underachiever" for the smaller intergenerational value differences that occurred compared to the economic growth the country had experienced. Flanagan's criticisms led to Abramson (2011, p.4) later labelling "Flanagan is the most persistent of Inglehart's critiques" with critiques spanning a period from 1979 to 2003. Abramson went on to claim that Flanagan's basic criticism during all this time was that the materialism/postmaterialism construct did not capture the difference between traditional and liberal values: value change that he considered the most important in modern societies. Inglehart's response was that Flanagan measured values as if they were issues of importance at the time rather than as ranked, basic goals (Abramson 2011, p.5). The relationship of intergenerational value change in countries with rapid economic growth remained an important issue to Inglehart and Abramson (1994, p.336) and they continued to argue that large intergenerational differences tend to be found in such countries while the differences were "negligible in societies that have little or no growth".

Perhaps the "the farthest-reaching objections to Inglehart's thesis" (Inglehart & Abramson 1994, p.336) came from Clarke and Dutt (1991, p.905) who claimed the

measure used was seriously flawed. They argued that by not including a statement about unemployment in the four-item battery, more postmaterialists are measured than there really are, making the measure sensitive to short-term economic changes. They argued that there had not been a significant trend to postmaterialist values in some European countries using Eurobarometer survey data that included the four-item battery from 1976 to 1986. Inglehart and Abramson (1994, p.336) responded showing that even when controlled for inflation and unemployment there was still a statistically significant shift in postmaterial values driven by intergenerational change in all eight western European countries studied. The period from the mid-1970s to the early 1980s became an important period of testing and expanding the theory because of the economic recessions experienced during this time. Inglehart and Abramson (1994) introduced the concept of period effects to account for the suppression of postmaterialist values recorded during recessionary times. They explained that the item *fighting rising prices* would more likely be chosen during times of rising inflation and recession. With the longitudinal data that has become available over time, period effects are very evident but it is clear that the overall trend of postmaterialist values has been an upward one, at least until 2000 (Abramson 2011, p.29).

Other critics, Duch and Taylor (1993), dispute the fact that economic security in the politically formative years of a young person's life can result in long lasting postmaterialist values. They argue that education and economic condition at the time of the survey explain the results more accurately. Duch and Taylor are scathing in their attack of both the methods of analysis Inglehart uses and the conclusions he arrives at. Inglehart and Abramson (Abramson 2011, p.17) are not convinced by Duch and Taylor and "maintain that levels of education are best viewed as a proxy for economic security during the respondent's youth": children from families that are economically secure are more likely to have a better education. Abramson responded to the criticism that Duch and Taylor raised about how multivariate analyses should have been applied to the data by suggesting one can reduce data to nonsense if sufficient variables are applied. He stressed that the graph that shows increasing postmaterial values for six European countries over thirty six years speaks for itself.

Another researcher making a strong critique on the role of education on the formation of postmaterialist values is Warwick (1998). Warwick (1998, p.603) argues that education plays a causative role in the development of postmaterial values and is not simply

evidence of economic security in formative years. He also criticises items in the four measure battery for representing a measure of support for democracy and that living in a democratic state helps inculcate these values especially through the education system (Warwick 1998, p.603). Abramson (2011, p.25) observes that Warwick only deals with the effects of education but not "*how* education affects values". Similarly, James Davis (1996, p.327) includes in his arguments that education should be considered as a cause of value formation and not merely a proxy. In response to these arguments Abramson and Inglehart (1996) wrote an article to specifically refute the arguments of Davis. On the issue of education they reiterate that their findings more than adequately support the role of formative security in the development of postmaterialist values (Abramson & Inglehart 1996, p.453).

Beyond the critiques of how postmaterial values are measured and whether intergenerational change is actually taking place, there are arguments about whether the theory is able to explain the development of NSMs and specifically environmentalism. Brooks and Manza (1994) tested the proposition that value change could explain the new politics related to the NSMs. They also studied whether postmaterialist value development was distinctive from general value change and whether having postmaterialist values led to less support for traditional political institutions (Brooks & Manza 1994, p.543). They make a critique of the measurement of postmaterialism pointing out that designating the categories of materialists and postmaterialist imply discrete, homogenous groups that are quite separate. They argue that people's values tend to be more mixed using the term "value pluralism". In general they contend that Inglehart's theory deals with measuring values that express what "ends" people think are important but that it does not deal with how these "ends" will be achieved. Therefore it does not explain how far people will support the realization of goals or the means by which they are achieved (Brooks & Manza 1994, p.561).

Dunlap and Mertig (1997) take up the argument that concern for the environment in non-industrialised countries does not fit with the theory of postmaterialism. They argue that for Inglehart, environmental concern is part of the lifestyle values that postmaterialists hold, and therefore the higher postmaterialism is in a country, the higher environmental concern should be. Using World Values Survey (WVS) data they argue that this reasoning does not account for high levels of environmental concern in poor nations (Dunlap & Mertig 1997, p.25). They point out that people's perceptions

and reaction to environmental degradation are affected by a wider range of factors than postmaterialism suggests. On the basis of their reasoning they caution that there appears to be a tendency to make whatever data is obtained fit the theory, ignoring other explanations and that the way this is done ends up making the theory "non-falsifiable" (Dunlap & Mertig 1997, p.28). Other authors who question what they see as a tendency by Inglehart to make data fit the theory are Tranter and Western (2003). They critique Inglehart and Abramson's inclusion of Australia in their study (1999) of 28 high income countries that have a high correlation between postmaterial values and income when compared to the United States (Tranter & Western 2003, p.243). They argued that the WVS survey result used for this comparison was anomalously high when compared with long-term data from other survey data for postmaterialism in Australia.

While postmaterialism is one of the few political theories for which there is longitudinal data showing that what was postulated has in fact occurred, there is still active debate about the measurement technique and about other influences on value change. With the beginning of the twenty-first century a levelling off of postmaterialist values has been observed and the current challenge is how to explain this. Inglehart has extended his arguments on value change (Inglehart & Welzel 2005) and others are looking for more data and empirical studies to help determine what if anything is changing. These current debates are now reviewed.

2.5.4 Relevance of postmaterialism to societal and political change

Although postmaterialism has been variously criticised, the theory makes a considerable contribution to the study of value change in modern societies. Postmaterial values manifest when people become more concerned about autonomy, self-expression, and quality of life which relate to what Inglehart (2008, p.131) argues are postmaterialist goals: the sense of belonging, esteem, and aesthetic and intellectual satisfaction. He continues the argument that as more people develop these values this influences the issues that get onto the political agenda, and the political action that people take. Although value change takes place due to both of Inglehart's hypotheses, the change with the security hypothesis occurs very slowly through generational replacement of those socialised in secure economic circumstances. Inglehart (2008, p.132) stresses that this is a subjective sense of security that can be related to social welfare support, per capita income levels, and the general sense of security in a society. He goes on to argue

that this would imply that during periods of economic hardship, or other societal insecurity, people would become more materialistic and has supported this demonstrating a period effect in postmaterial value development.

These arguments are relevant when trying to assess trends in postmaterialist development after 2000. A levelling off of postmaterial values has been observed in western European countries in the Eurobarometer data to 2006 (Inglehart 2008; Díez Nicolás 2008a). Inglehart argues that a lack of real income increase for most of the population in the last two decades and a cutting back on welfare support services may explain why recent cohorts appear to be slightly less postmaterialist than previous cohorts. Díez Nicolas (2008b, p.15-16) notes a drop in the growth of postmaterialism in Spain, arguing that growing social insecurity may account for the change. He cites increasing concerns about terrorism, organised crime, delinquency, perceived insecurity from increased migration, economic insecurity from uncertainty about retirement support, and changing employment prospects with globalisation and technology, as all contributing to a sense of insecurity in the society. These observations were made pre-GFC so economic crisis, recession, and high unemployment can now be added to the list. Both Inglehart and Díez Nicolas argue that the reason for this slowing in the growth of postmaterialist values only has tentative explanations to date and more research is needed to explain this change.

As Inglehart's value change study advanced he began to explore issues of broader cultural and societal change (Inglehart 1997; Inglehart & Welzel 2005; Inglehart 2008). In these later studies he argues that postmaterialist values do not stand alone. Postmaterialism forms part of broader cultural change that is occurring: one that is especially related to industrialisation. He includes postmaterialist values within a wider concept of self-expression value change. He contrasts self-expression values against survival values based on data collected from a study to identify global cultural variation (Inglehart & Baker 2000). In this study two significant polar dimensions emerged: one between traditional and secular-rational values, and the other between survival and self-expression values. Traditional values were defined as those where people placed a strong emphasis on "religion, respect for authority, and have relatively low levels of tolerance for abortion and divorce and have relatively high levels of national pride" (Inglehart 2008, p.139). Secular-rational values are the opposite of these. In the other polar dimension, self-expression values include those values held by postmaterialists

but also those held for other issues such as gender equity and racial tolerance. "Self-expression values give high priority to environmental protection, tolerance of diversity and rising demand for participation in decision making in economic and political life" (Inglehart 2008, p.140). Inglehart and Baker (2000, p.49) go so far as to say that "protracted economic collapse can reverse the effects of modernization, resulting in a return to traditional values". The converse to this is that in secure, prosperous times the development of self-expression values helps lead to greater tolerance of diversity and stronger democracy (Inglehart 2008, p.140). Inglehart and Baker make the interesting observation that the influence of traditional values endures despite modernisation which provides a compelling argument that the process of modernisation will not mean all cultures eventually converge, at least in the foreseeable future (Inglehart & Baker 2000, p.49-50).

2.5.5 Concluding comments for postmaterialism

Industrialisation has produced major social and cultural changes in modern societies and what and how change takes place are the subjects of many studies. Inglehart's theory of intergenerational value change makes a valuable contribution to this field of study. The development of postmaterialism in advanced economies contributes to understanding of the development of new social movements and wider changes in political action. The political implications of postmaterial value change are strengthening for democracy. This occurs through greater freedom of speech, greater political participation, support for new political parties such as green parties, influence on the issues that get onto the political agenda, and less hierarchical institutions. With the start of the twenty-first century there appears to have been a levelling off or decrease in postmaterial value development which so far only has tentative explanations. This constitutes a new period in the development of the theory and in value change in general. Perhaps the theory is specific to one period in societal development or perhaps it can continue to help explain societal change as countries and the globalised economy face the challenges of the new century. Arguably the two biggest global challenges that have arisen since 2000 have been the global financial crisis and the ecological crisis, especially related to global warming. With new questions being raised about the validity of postmaterialism in the twenty-first century the use of postmaterialism in this study aims to contribute to further understanding of the theory by examining policy outcomes through this lens.

While postmaterialism helps explain modern value change and the political consequences of this change, preferences play a more central role in this process. The third theory of citizen preferences and consumer preferences is related to value change as measuring preferences is often used to understand people's values. Next the literature on this theory is reviewed.

2.6 Consumer preferences versus citizen preferences

Preferences are important because political decision making in liberal democracies is strongly influenced by individual preferences and the formation of collective preferences from individual preferences, usually via voting. The classical concept of politics was based on collective, civic virtue but in modern politics this has been replaced by respect for private preferences. The drafting of the USA Constitution is considered as instrumental in forging this change where the intention was to create a democracy which would operate between political equals rather than deciding collective interests based on the concept of homogeneity of the people (Sunstein 1997, p.3-4). In many Western democracies individual preferences now form the base of what is used for political deliberations. As a result of this importance to contemporary democracy much discussion has arisen about the nature of individual preferences, how they can be measured, and their role in political decision-making. Forming a part of this discussion is the relationship between preferences people express as consumers and those they express when making choices as citizens.

2.6.1 Background to the theory of consumer and citizen preferences

Mark Sagoff (2005) argues that people may hold a different set of preferences when they are acting in their own interests as a consumer to those they express when making choices as a citizen. Sagoff illustrated his argument by recounting a class he taught about the opinion of the American Supreme Court in *Sierra Club v. Morton*. This case dealt with a proposed ski resort development in a quasi-wilderness area in the Sequoia National Park in California. When putting it to the students in the context of enjoying a new ski resort and all the amenities it would offer, the students could all think of ways they would like to go and enjoy themselves there: their consumer preferences. But when asked about whether they would vote to allow the project in this wilderness area, in a place that they were never likely to personally visit, they all said they would vote against the proposal as it violated public trust and what national parks had been created to protect: their citizen preference (Sagoff 2005, p.147-8). The implication is that the decisions we make as self-interested individuals are not necessarily the same as those we make when we think about what is best for society.

While Sagoff provided a descriptive example in the context of environmental protection, the idea that there is a dichotomy between preferences as self-interested individuals and as civic minded citizens is not new. In 1975 Goodin and Roberts (1975) wrote about the ethical voter. They argued "that individuals have both egoistic and ethical preferences" and centred their discussion on the relationship between these two preferences when a person votes in an election (1975, p.927). They pointed out that their argument was not so different to one put forward in 1739 by David Hume in *A Treatise of Human Nature*. Hume wrote of individuals being capable of displaying benevolence when their own interests were not threatened. John Harsanyi (1955, p.315) also argued for a distinction between an individual's social welfare function which he suggested calling "ethical" preferences and their utility function that he called their "subjective" preferences.

It is useful here to clarify the difference between values and preferences because in this study they are considered under different ecopolitical theories although they are closely related. Hitlin and Piliavin (2004, p.395) suggest the most influential definition of values is that of Kluckhohn in 1951: "A value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable, which influences the selection from available modes, means, and ends of action." As discussed in the section on postmaterialism, values are stable and endure over time (Inglehart 1971; 2008). A specific definition of the term preference is more elusive with the word being used in various ways depending on the field of study. When considering the literature on preferences and the means of measuring the choices one makes, a preference assumes a more complex nature. Warren, McGraw et al. (2011, p.193) state that the relationship between values and preferences in classic economic study and behavioural value study, is that values are inferred from preferences: a relationship that results in the two concepts often being used interchangeably. They differentiate between the concept of "expressed preferences", that they argue is used by economists and behavioural decision theorists, and the concept of "underlying preferences" that is used by psychologists. Expressed preferences are typically measured with market instruments like willingness-to-pay (WTP) analysis. In contrast, underlying preferences that "denote a latent tendency to consider something desirable or undesirable" (Warren, McGraw et al. 2011, p.194) are best revealed through voting in elections, in political debates, and in public opinion surveys and polls. In the latter concept, preferences become more like attitudes which can be both positive and negative. This contrasts with values which are inherently positive (Hitlin & Piliavin 2004, p.363). In 1977 Sen (1977, p.324) observed that in relation to the study of preferences: "The complex psychological issues underlying choice have recently been forcefully brought out by a number of penetrating studies dealing with consumer decisions". With the widening of the debate by psychologists, preferences have come to be seen as relating to the context in which they are expressed, and to the time at which they are expressed. In summary, values are regarded as relatively stable and positive, while preferences are context and time dependent with both positive and negative components.

2.6.2 Challenges to the theory of consumer and citizen preferences

With Kluckhohn's value definition in mind, values influence the preferences people have when making decisions and choices in their lives. Given the difficulty of measuring values, and the importance of people's choices for both the economic market and democratic politics, considerable attention has been given to trying to understand how and why people make choices. One of the main developments in preference research in recent decades has been the move away from regarding preferences as being expressed rationally. That is, that a preference revealed as a particular choice is assumed to always hold in relation to all associated choices: if a person choses X over Y and Z, they will always choose X over Y and Z. This approach formed, and still does to a large extent, the basis of economic accounts of preference ordering (Slovic 1995, p.365). When studies were done that showed preferences could be changed by changing the mode of asking a question, referred to as preference reversals, focus moved to how preferences were constructed. The concept of preferences not being fixed across all choices moved study in a different direction to one where people are considered to be problem solvers when making choices as opposed to economists view of people as maximisers of expected utility or where "they choose what they most prefer" (Slovic 1995, p.365).

An important challenge to the economist's view of people making rational choices

based on consistent personal preferences was made by Amartya Sen (1977). He argued that if people made choices based on economic theory's explanation they would be "close to a social moron" (1977, p.336). Sen (p.317) based his critique on the 1881 work of Edgeworth whom he quotes as stating: "The first principle of Economics is that every agent is actuated only by self-interest". To Sen the relevance of using this historical account is that Edgeworth's view of man "survives more or less intact in much of modern theory" (1977, p.321). The implications of this are far reaching in economics and policy decision-making as the methods used to measure people's preferences, especially with the allocation of public goods, are usually market based. As Sen developed his analysis he argued that two concepts needed to be introduced, that of sympathy and the other of commitment. Sympathy refers to cases where the concern one has for others actually affects one's own welfare, and commitment, when it does not affect one but one is still prepared to do something about it because one thinks it is wrong (Sen 1977, p.326). Moral judgements form part of the concept of commitment, while sympathy is more concerned with egoism as one is personally pleased with others' pleasure and pained by others' pain. Sen moved the argument in this direction to "drive a wedge" between how people make choices and the welfare that is achieved as "much of traditional economic theory relies on the identity of the two" (Sen 1977, p.329). The importance of this becomes evident, and relevant for this present study, when he discusses public goods and their allocation. The point he argues is that the correct revelation of preferences becomes more important when dealing with public good allocation as it becomes much more questionable that people only act on selfinterest or that they only have one preference ordering. Sen (1977, p.337) moves beyond Harsanyi's (1955, p.315) dual ordering of "ethical" and "subjective", mentioned earlier, seeing this as still too limited and proposes a system of meta-ranking. His basic argument is for a richer structure for studying preferences to yield greater understanding of the preferences people have and the actual choices they make.

Cass Sunstein (1991, p.5) specifically examines the role of preferences in politics, and he agrees with the arguments that preferences are not fixed and stable, and that they are influenced by the context within which they are expressed. He terms preferences with these characteristics "endogenous preferences". His examination led him to question whether, because of these characteristics, preferences should have such a privileged position in political decision-making. His ideas support Sen's arguments that self-

interest predominates in modern economic theory: "Politics is typically, if not always, an effort to aggregate private interest" (Sunstein 1991, p.4). The main purpose of his study was to identify cases where government should override private preferences due to the influence of context. He identified three categories where preferences expressed as consumer choices may not be appropriate and government intervention would be appropriate. The first category he related to issues concerning collective goals such as for altruistic concerns and social justice. The second category he relates to what he argues is a tendency of industrialised nations to "push towards homogeneity and uniformity" which can be observed in broadcasting and the arts. Intervention by providing support for less popular and more diverse options helps provide the opportunity for diversity of preference formation. The third category is when long-term behaviour may negatively influence preferences as would be the case in addictive practices such as smoking or drinking (Sunstein 1991, p.5). The first category refers to a similar classification as Sagoff's especially when Sunstein states: "the choices people make as political participants are different from those they make as consumers" (Sunstein 1991, p.14) and that in this way democracy "intrudes" on markets. Sunstein makes the observation that responses to willingness-to-pay surveys used to measure consumption decisions can be influenced by a person's actual ability to pay. This adds a further question to the appropriateness of using market instruments to measure preferences concerned with altruistic goals. In general Sunstein argues against using existing preferences for governmental decisions and that a wider form of deliberation is desirable (Sunstein 1991, p.34).

The studies reviewed in this section form the base for contemporary discussions. The influence of preferences in modern democracies cannot be overstated and it has special relevance for understanding the policy decision-making process related to global warming.

2.6.3 The provision of public goods

Twenty years after Sen wrote his seminal essay challenging economic theory's rational man making choices based on a single preference ordering, Daphna Lewinsohn-Zamir (1998, p.377) wrote an essay where she focused on the "market failure known as public goods" and further challenged the single intransitive preference set of economic theory. When making the decisions about which public goods to provide, regulators often use

the market based measures willingness-to-pay (WTP) and cost-benefit analysis (CBA) to determine people's preferences for the supply of a particular good. She explained that public goods do not function in a market economy, in part, because their use is non-competitive and because people cannot be excluded from using or benefiting from them. This particularly applies to the provision of public goods related to environmental protection, for example if air pollution is prevented, no one is excluded from benefiting from benefiting from benefiting better quality air.

While Lewinsohn-Zamir (1998, p.378) objects to economic theory's view of rational actors she also objects to classifying people into what appears to be a Dr Jekyll and Mr Hyde personality that the separation into consumer preferences and citizen preferences would suggest. She argues that the two are not that distinct and that people also demonstrate other-regarding preferences in their consumption practices. She argues that the reason the two appear to be different can be related to people not being able to achieve their other-regarding preferences as consumers, what Lewinsohn-Zamir refers to as a perceived sense of "hopelessness". This sense of hopelessness arises from a concern that one's contribution could be miniscule and make no difference, and to the concern that although you choose to do something, others may not. In contrast, people do not experience this sense of "hopelessness" in the political setting. She also argues that it is the nature of the public good that encourages the expression of other-regarding preferences whereas the nature of the goods one buys in the market do not produce the same other regarding concerns (1998, p.399). Her main argument against a dichotomy of consumer preferences and citizen preferences is that by attributing virtuous preferences to the citizen classification presumes they do not value virtuous attributes in their private lives. She argues that the difference between the two sets of preferences is not as great as those supporting such a dichotomy assume. People's perceptions of a good and its actual nature can explain why different preferences are revealed in the different settings. Another reason is that they may be frustrated and have the previously described sense of "hopelessness" in their daily lives with regard to being able to achieve their other-regarding, highest-ranking preferences. She claims that the implication of her work is to support the case for using preferences expressed as citizens and that governments have a necessary role in the process of providing public goods. This understanding also endorses the careful use of economic instruments for helping make decisions in the regulatory process. At the same time her reasoning gives hope for the possibility of reduced regulation for the supply of public goods if feelings of "hopelessness" in expressing consumer preferences can be overcome (Lewinsohn-Zamir 1998, p.406).

2.6.4 Consumers and society

In recent years attention has shifted to studying consumers and their role in society. This is related to the new style of governance that emerged after the neoliberal reforms of the 1970s and 1980s. As markets became the dominant economic system the public sector was also reformed along market lines with less hierarchical bureaucracy especially in the provision of public services (McDonald 2006). With the use of market mechanisms within the public service sector the concepts of customer and choice became more prominent. This increased the focus on the relationship between citizen preferences and consumer preferences, and their relationship with governance. Malpass et al. (2007, p.231) argue the changes have resulted in "the consumer" becoming a privileged figure in policy discourse and that the assumption underlying this "is that consumerism has transformed people's expectations, so that public services must now be restructured in line with the demands of the citizen-consumer who demand efficiency, responsiveness, choice and flexibility." This has led to much greater focus on what motivates people as consumers, and to accounting for their preferences. Bevir and Trentmann (2007, p.14) argue against the view of the consumer as a person with distinct, separate components who participates in the market to maximise the satisfaction of their preferences. They stress that people increasingly use choice, their possessions, and life-style to influence change in everyday practices and, in this way, their social and political commitments. In fact, as consumers they often find they have more opportunity to express their preferences in a greater variety of ways than they can by electing representatives (Bevir & Trentmann 2007, p.19-20). This would suggest that the central role the consumer has been given in society leads to consumers having considerable transformative potential through their everyday lives.

Malpass, Barnett et al. (2007) extend Bevir and Trentmann's arguments on the importance of consumer behaviour in everyday life. They take up the issue of empowerment of individuals through state-led initiatives and the subsequent "problematization" of everyday consumption. The empowerment of individuals is seen as part of a rebalancing of responsibility between the state and the citizens where

governments provide citizens with information with which they can make informed choices (Malpass, Barnett et al. 2007, p.231). An example they use to illustrate this is related to the health industry where people are made aware of risks from poor diet, dangerous dietary ingredients, and the need for exercise, and are expected to self-monitor against these risks. Malpass et al. (2007, p. 235) also argue that choice has become "problematized", for example, by promoting discourses that discourage making individual choices that do not coincide with public interest in matters of environmental protection and sustainability. Malpass et al. show in their analysis that a distinction between citizen and consumer does not reflect the reality of modern society. People, through making responsible consumption choices without conflict with public issue goals, can be regarded more as consumer-citizens. They criticise researchers for not being able "to imagine people as citizens in anything other than the most perfunctory sense" (Malpass, Barnett et al. 2007, p.253) when they argue that more attention should be given to how the people themselves conceive their roles as consumers.

The authors reviewed here have concentrated their studies and critique on the nature of preferences and how these are expressed. The importance of this for the political process is that preferences form the basis of the measurement instruments used to aid policy decision-making, especially with regard to public goods, and these are subject to intense criticism. It is also important to understand the role of individual preferences in societal development. These are discussed in the next section.

2.6.5 Measurement of individual preferences

The nature of preferences is of interest to researchers but there is also a considerable literature about the measurements techniques used to aid the policy decision-making process. By the end of the twentieth century CBA was well established in Western economies as a tool for assessing if gains in an investment project or proposed policy outweighed the losses that could be expected. The basis of measurement is defining losses and gains in terms of human wellbeing (or welfare or utility). The measurements used to do this are: "individuals' willingness-to-pay for a gain or willingness-to-pay to avoid a loss; or individuals' willingness to accept compensation to tolerate a loss or to go without a benefit" (Pearce 1998, p.84). A major challenge for the use of this type of measurement for public goods is being able to assign monetary values to the goods. This is done by concentrating on indirect costs, such as transport and housing, which

would be used or affected by the project under investigation. Choices made in this way are termed 'revealed preferences' (Pearce 1998, p.86) and are closely related to consumer preferences. Questionnaire surveys that are used to directly ask individuals to put a monetary value on the good are referred to as 'stated preference' techniques or contingent valuation method (CVM). Both CBA and CVM methods remain contested in many ways, one of which is the preference ordering an individual holds and how these preferences are expressed. The use of these market instruments goes some way to explain why economic theory still holds to the concept of a rational individual with a set preference ordering. Pearce argues that although CBA is widely used there is still a great deal of ambivalence to them by policy makers, a view shared by Nyborg (2014). His suggested reasons for this ambivalence are: that using CBA could make decisions open to legal challenge; a discomfort at environmental assets being monetized; stakeholders can introduce policy influencing challenges that run counter to CBA; flexibility of decision making is reduced with CBA; other policy goals like employment creation are often not included; and the estimation techniques are changing rapidly and need to be done well or people lose confidence in them (Pearce 1998, p.94-5). Although he offers all these suggestions for the resistance of government and regulatory agents to CBA, Pearce (1998, p.97) concludes his analysis by conceding that it is currently "the best game in town" and that it still has an important role in informing decision-making, Brown et al. also agree (Brown, Kingsley et al. 2008).

Blamey, Common et al. (1995, p.285) criticise the use of CVM as an input to CBA for pure public goods unless the questions can be constructed in such a way that consumer preferences can be separated from citizen judgements. They suggest the surveys should be used as a type of referendum to measure price sensitivity to public policy proposals. Nyborg (2000) also examines the expression of citizen preferences when making environmental evaluations. She compares mixing personal and social values to mixing apples and oranges, and states that the result is not meaningful (Nyborg 2000, p.319). The challenge then becomes one of ensuring that all respondents are persuaded to use a similar kind of response. At the same time she questions whether aggregate social values are appropriate in trying to assess WTP for public goods. Nyborg (2000, p.320) labelled roles people take as Homo Economicus and Homo Politicus adding that: "social norms and traditions presumably suggest one role or the other, and my unqualified guess would be that many of these norms are closely related to whether the situation has to do with the individual's behaviour in markets or not."

The ordering of preferences, determining how they are expressed, and how they are measured will continue to receive a lot of attention due to the benefits that can be gained for aiding political and regulatory decision making. With the role of the consumer so central to market economies, the way consumer preferences are influenced through government and expert discourses, and information campaigns, deserves more empirical study. This is especially the case for the allocation of public goods where the distinction between citizen preferences and consumer preferences is not clear. The implications of this for decisions on preventing global warming are significant.

The review of the literature on consumer and citizens preferences completes the review of the three theories used in this study. An overview discussion of each theory and a summary follows.

2.7 Summary of the literature review

This chapter set out to review the relevant literature for financial crises, climate change policy making, climate change discourses and the relationship of climate change policy making with the GFC, as well as the literature relating to each of the three theories included in this study. Studying the climate change discourses that are used by the elites in the context of the GFC with a focus on the ecopolitical theories helps reveal any relationships that exist and to understand policy outcomes during this time. For each of the theories the literature was explored with regard to the research questions to identify where knowledge can be added to each theory.

The interest in financial crises focuses on the resulting instability and period of change that occurs. The opportunity for change gives rise to the possibility of climate change concern being able to be incorporated into the changes made. Free-market capitalism is strongly established in all walks of life creating considerable challenges for climate change issues to be addressed within this paradigm. Climate change action is often related with increasing costs which is more vigorously opposed during a crisis, and economic advantages need to be associated with environmental protection: the premise of ecological modernisation. While capitalism may have come through the crisis with little change it has led to more questioning of the system, and accentuated populist concern about outcomes of the system in society. With the process of change induced by a crisis the importance of norms and ideas has been stressed. How problems are framed by actors and interests influences the trajectory of the debate on climate change. Discourse analysis is attractive as a way to understand the ideas and meaning actors give to the issue especially given the complexity and multiply interactions involved with climate change. Research on what happened as a result of the GFC is a work in progress and still unfolding as the resulting economic problems continue.

The first ecopolitical theory ecological modernisation, as both a theory and a mechanism of reform, is relevant to this study and both these aspects have been reviewed in the literature. Since it was originally introduced to deal with the inadequacy of pollution regulation it has been variously criticised. Criticism has centred on issues such as: the optimistic view that technology will be able to provide a solution to increasing environmental damage from economic growth, that economic growth is occurring faster than technology can be applied to prevent damage, to the lack of inclusion of issues of social justice, and lack of recognition of limits to growth. As feasible alternatives to manage environmental damage have not materialised, ecological modernisation practically stands alone promoting a pragmatic reform process. Although it is still far from being a convincing, or provable theory, it has been developed considerably since its inception in the early 1980s. Currently the role of consumption, capacity of states in terms of culture, attitude to science, respect for the environment, trust in the political process, and the discourses used to define problems, are all considered as playing a necessary role in the ecological reform of a state. Such consideration provides a more definable view of ecological modernisation but with technological reform remaining central to the theory. This study focuses on the role of actors and tests how strongly they are informed by ecological modernisation by examining their discourses. The GFC introduced a strong economic challenge to governments, businesses, and consumers and understanding the impact of this will contribute to the knowledge and development of ecological modernisation. As in any crisis, issues are brought into sharper focus and how they are dealt with can be used to better understand how societies deal with their problems.

In a similar way the literature on postmaterialism has been reviewed to assess what is relevant to this project. Inglehart's theory of postmaterialism incorporates two hypotheses: a scarcity hypothesis and a socialisation hypothesis. The former covers the effect that lack of scarcity and being able to take material and security well-being for granted have on value formation. The second hypothesis looks at the influence of conditions on value formation during one's politically formative years. With 30 years of data available the proponents of the theory claim that there is ample evidence that generational replacement has resulted in a change of values in modern societies. Criticisms of the theory centre on the measurement technique and on whether the change can in fact be attributed to generational change. Persistent amongst these criticisms are that the measure used does not account for the effects of unemployment and education. Financial crises have been shown to cause a period effect when respondents answer the measurement items differently but when the crisis passes, they revert to selecting the postmaterial items. Since 2000 a tapering off of postmaterialist value development has been noted for which there are only tentative explanations to date. In the last fifteen years Inglehart has moved to including postmaterial values in a wider consideration of value development that he terms self-expression values. This advancement in the theory could help explain what is happening with postmaterial value development in many advanced economies. The implications of value change in society are far-reaching as values reflect what citizens feel should be the goals of society and this in turn "helps define the norms of a political and social system" (Dalton 2008, p.79). The 2008 GFC added a new challenge to an already dynamic period in societal development but at the same time it provides an opportunity to further examine the development of intergenerational value change and the political significance of these values.

The third theory of citizen preferences versus consumer preferences reviewed the arguments of key contributors to the debate about the importance of preferences and their relationship to the political process. A major point of divergence occurs when researchers disagree with economic theory's view of individuals as self-interested, egoistic, self-maximising beings with a single ordering of preferences. Equally there are strong arguments against the dichotomous preference ordering of citizen and consumer as Sagoff proposed. Currently it is widely accepted that the context in which preferences are expressed is important, and the question concerning the role governments play in overriding individual preferences is addressed by some authors. The allocation of public goods has been influential in the debate on how preferences are expressed and how they are measured. Another issue that has developed considerably in recent years is the role

of the consumer in market economies. Consumption plays a central role in people's lives which has led to individuals being seen more often as consumer-citizens. Governments have contributed to this development by increasingly moving responsibility for choices to the citizens through extolling individuals to live healthy lives, care for others, recycle household waste, and so on. Measurement of preferences is strongly debated for many of the reasons examined but given the importance of measuring values for investment decisions, new policy proposals, and, in some countries, for valuations in legal disputes, this debate will continue to evolve.

The GFC and resulting economic problems provide a unique opportunity to investigate the discourses that dominate in relation to climate change policy at this time. Empirical research plays an important part of theory development which is especially relevant for the ecopolitical theories used in the study. These have only existed for a relatively short time and the GFC is the most severe economic situation since their inception. If ecological modernisation is to provide an achievable programme of reform there should be evidence of the discourse embedded in policy decision-making especially as it can be linked to economic recovery from the GFC. The other two theories approach climate change policy decisions with consideration of the role that citizens play in the policy arena. Understanding how people act politically and what policy decisions they support during difficult financial times helps understanding about how climate change policy can be progressed as well as further developing these theories. This literature review has included theory on financial crises and examined how they are able to result in change to established practices, addressed climate change policy making and the value of discourse analysis to understand ideas and meaning, and finally established the current state of the ecopolitical theories to understand where they can be tested and developed. The next step is to determine the appropriate methodological approach for analysing and assessing what occurs during this difficult period. The next chapter therefore sets out the framework for the study approach taken with a rationale for the choices made and a description of the methods used.

3 METHODOLOGY AND RESEARCH METHOD

3.1 Introduction

The preceding chapters laid out the research questions that this project aims to answer and reviewed the literature to establish the context within which these questions are posed. The GFC provides an important opportunity to progress knowledge of each of the ecopolitical theories as well as contribute to understanding of political actions during this period. Having established the research questions and the context in which they are derived, it is now appropriate to explain how the questions will be answered.

This chapter sets out the methodological underpinnings, the methodological approach, the justification and limitations of the methods chosen to analyse the data. The ontological and epistemological links with the methods are established because in the social sciences, the stance the researcher takes is relevant to the approach that will be used (Marsh & Furlong 2002). The questions to be answered locate this work in a particular tradition of political science and the implications of this are explored. This leads to the explanation and justification of the approach and methods chosen to answer the research questions.

To achieve these aims the chapter is structurally organised into seven main sections. After this introduction the rationale behind the choice of research methods is discussed. Following this, the distinction between quantitative methods and qualitative methods is examined in relation to the discourse approach chosen. This leads to a section which gives an explanation and justification of the use of discourse analysis. It is then explained how the comparative method is situated within the chosen approach. The section covering the comparative method also includes a description of the cases selected and the specific methods used. Ethical considerations are discussed and explained in a separate section. Finally the summary provides an overview of what has been achieved in this chapter and leads on to the next chapters where these analytic tools are applied to each of the case countries.

3.2 Methodological considerations

Methodology is concerned with the particular stance a researcher takes which is

especially relevant to a social scientist (Evans, Gruba et al. 2011, p.127) because a researcher's ontological and epistemological positions affect the way the researcher approaches a research task (Burnham, Gilland Lutz et al. 2008, p.17). These positions are therefore discussed to help explain the rationale for the approach and methods chosen for this research project.

Ontology refers to one's view on the nature of the world. To understand one's ontological position Marsh and Furlong (2002, p.18) recommend answering the question of whether the researcher believes there is a real social world out there independent of our knowledge of it. A real world, for example, would have real differences between race and gender. Believing there is a real world independent of our knowledge of it is termed a foundationalist position. The counter view to this is that a real world does not exist independent of our knowledge of it or the meaning we attach to it. This is an anti-foundationalist, or interpretist position (Wendt 1992; Weldes 1996; Adler 1997; Marsh & Furlong 2002). The researcher of this project holds an antifoundationalist or interpretist position and believes that societies are social constructs. Social constructs, for example, "money, sovereignty, and rights, which have no material reality, but exist only because people collectively believe they exist and act accordingly" (Finnemore & Sikkink 2001, p.393). In this way values, culture, and norms make up society. The tools typically used to discover these social constructs include "a variety of tools to capture inter-subjective meanings, including discourse analysis, process tracing, genealogy, structured focused comparisons, interviews, participant observation, and content analysis" (Finnemore & Sikkink 2001, p.395).

If the interpretist position that the world is socially constructed is taken, then the next step is to understand what can be known about the world and how it can be known: the answers to these questions form the epistemological underpinnings of the research. If there is "no real world, which exists independently of the meaning which actors attach" then this current project is concerned with discovering and examining these meanings (Marsh & Furlong 2002, p.19). This interpretist position explains why a social constructivist approach is applied because the researcher is concerned with understanding how social meanings change and the influence this has on political decision making. In Finnemore and Sikkinks' (2001, p.393) words, "understanding how social facts change and the ways these influence politics is the major concern of constructivist analysis".

While the ontological and epistemological underpinnings to the research approach used in this study are based on an understanding taken from the theoretical interpretation of Marsh and Furlong (2002), there are others who challenge the rigidity between ontology and epistemology, and methods selection that Marsh and Furlong argue for. Smith (2006, p.286-287) objects to the analogy of these being "skins" we cannot change and in a similar vein argues "they are not religions or football teams that we are committed to for life...the methods and the philosophy of the social sciences are a means, not an end. Good research needs to be driven by substantive problems not epistemology". So while understanding one's methodological underpinnings is important for building a robust methodological framework, as Smith suggests it should not be seen as restricting the methods applied to answer the research questions. Smith (2006, p.286) argues that using a range of epistemologies can allow us to see the world through different lenses and introduces an element of plurality in political science. Punch (1998) discusses that there is a tendency through teaching programmes to overstress research methods at the expense of ensuring that the research questions drive method selection. Read and Marsh (2002) also argue for good research design driving method selection, and that greater methodological pluralism can add power and insight to research although they still stress the importance of taking ontological and epistemological issues seriously.

For this study an interpretist position is taken establishing the ontological and epistemological positions of the researcher. The researcher, in believing we construct the "social" through the meanings we give to things, and that these meanings are based on our ideas, beliefs and values, takes a social constructivist position. This position and its implications for method selection and the wider research project are now discussed.

3.3 Quantitative or qualitative methods

To understand the implications of a constructivist position in relation to the methods chosen it helps to contrast this anti-foundationalist position with that of a foundationalist understanding of the world. Foundationalists, or positivists, in believing there is a real world to be discovered, take an approach to research similar to natural scientists. They believe they can objectively identify causes of social behaviour through empirical observations and establish theories and hypotheses for social behaviour which will hold across time and space (Marsh & Furlong 2002, p.19; Stoker & Marsh 2002,

p.11). As in the natural sciences this is usually associated with collecting large amounts of data and using statistical analysis to look for repeated patterns. In contrast to this, for the interpretist it is the understanding or interpretation of social phenomena that affects outcomes (Marsh & Furlong 2002, p.26). In interpretist study it is the beliefs, ideas and discourses that are studied to understand the meanings that shape actions and institutions. This difference in ontological and epistemological underpinning gives rise to the common distinction that has often been made between the use of quantitative and qualitative methods. Quantitative methods yield the large amount of data the positivists needs "to test generalising theories" and qualitative methods the data that will "reveal the meanings and understandings that people attach to politics" (Stoker & Marsh 2002, p.15). During much of the twentieth century social scientists endeavoured to find general truths for social action and the positivist position, usually employing quantitative methods, was the dominant position. This has changed considerably with increasing acknowledgment of the role of both quantitative and qualitative methods in being able to contribute valuable insight to social science studies (Read & Marsh 2002, p.231).

Although in the past it was common that a researcher would use either quantitative or qualitative methods it has become acceptable to use a combination of the two (Read & Marsh 2002, p.231). The relationship is still complex but a growing number of researchers believe the historical dichotomy should not exist anymore and they promote a considered use of combination when this is appropriate to the research (Denzin 1970; Read & Marsh 2002; Creswell 2009). Although these authors discuss the modes of combination, Read and Marsh (2002) highlight that there are various problems associated with a combined approach which the researcher has to address. The principal problem relates to the researcher's basic ontological and epistemological position. This will influence the research questions they ask and the type of answer they are looking for, as well as influencing the type of claims they can make about their results. Therefore, in most cases where a combination is used, one method type, quantitative or qualitative, is likely to be dominant and the other used as an ancillary (Read & Marsh 2002, p.241).

In this research qualitative methods are principally used, consistent with a social constructivist approach. This being the case, it is relevant to consider the criticisms that are made of qualitative methods to allow these to be addressed. Criticisms mainly come

from those using the previously dominant positivist tradition in political research. Qualitative methods that focus on understanding the meanings given to things come under attack for being too subjective and for doing little more than merely offering opinions. Consistent with this complaint, results from these methods are criticised for lacking validity, not being repeatable, nor generalizable (Devine 2002, p.204; Marsh & Furlong 2002, p.27). These criticisms are refuted by those using qualitative methods on epistemological grounds. This refutation is based on the different view of what social science is about and how it can be discovered. Devine (2002) considers criticisms of qualitative methods under four categories: representativeness and reliability; objectivity and bias; interpretation; and generalizability. She rejects positivist criticisms in general on the grounds that "what is a valid method depends on the aims and objectives of a research project" (Devine 2002, p.205). How a researcher decides and justifies their sampling methods is equally important in both qualitative and quantitative methods. The issue of objectivity and bias is of special consideration for a constructivist as they acknowledge they work within the social world they are observing and do not have an objective position outside of what they are studying. This is referred to as the double hermeneutic where on one level the actors interpret their world, and on another where the researcher is interpreting their interpretations (Marsh & Stoker 2002, p.19). Although this presents a challenge for the qualitative researcher and something they must allow for in their description or explanation, they can still establish the consistency of their work against other work. In this way "they judge an interpretation of evidence by comparing it with alternative explanations" (Finnemore & Sikkink 2001, p.395). The focus therefore centres on making an interpretation of the data "as explicit as possible in the development of an argument using systematically gathered data" (Devine 2002, p.207). Devine's fourth criticism is concerned with the difficulty of making generalisations from qualitative findings. The use of a small number of cases presents a challenge for extending the findings to a wider population. In addressing this criticism Devine argues that qualitative research still helps understand other situations and it helps with understanding how social facts change. As Finnemore and Sikkink (2001, p.393) argue "it offers a framework for thinking about the nature of social life and social interaction, but makes no claims about their specific content." Devine (2002, p.207) summarises of her appraisal of the criticisms of qualitative methods with the following statement: "Its advantages, however, are clear where the goal of a piece of research is to explore people's experiences, practices, values and attitudes in depth and to establish

their meaning for those concerned". The importance of the epistemological underpinnings is again highlighted with the interpretist's desire to discover meaning and understanding rather than finding a truth for a phenomenon or for predicting outcomes (Myers 2000). With an interpretist approach there can be multiple realities depending on the beliefs of the researcher and the researcher needs to establish their ontological and epistemological underpinnings so the meanings they explain can be examined against other explanations (Bevir & Rhodes 2002, p.131).

For this study within the interpretist position, a discourse approach is chosen to understand the meanings that are constructed during the global financial crisis and how these shape political actions during this time. The next section considers the implications of this choice.

3.4 Discourse analysis

Taking into account the ontological and epistemological position established, the aim of this study is to explain how meaning related to the issue being studied is discursively constructed. To answer the questions posed, discourse analysis is used to look for meaning within the data collected. There are authors who consider discourse analysis as a methodology in itself as well as a specific method (Phillips & Hardy 2002) but here it is situated within the social constructivist methodological framework already discussed. Sharp and Richardson (2001, p.195) argue that in most cases when a researcher uses "the term 'discourse' they are making an explicit bid to ground their understanding of policy processes in a social constructionist epistemology." Taking this stance acknowledges the important contribution discourse analysis plays in understanding the meanings people attribute to the social world. According to Phillips and Hardy (2002, p.2): "Without discourse, there is no social reality, and without understanding discourse, we cannot understand our own reality, our experiences, or ourselves." They also argue that the most important contribution discourse analysis makes is to uncover the way social reality is produced, as opposed to other qualitative methods that provide understanding or interpretations of social reality (p.6). In this way, it is used to explore the relationships between text, discourse, and context. Phillips and Hardy (2002, p.20) distinguish four discourse approaches based on the degree of focus on text or content, and the degree of emphasis on a constructivist approach compared to a critical

constructivist approach. The value of their typology is that each dimension is a continuum and therefore does not set each classification apart from the other. This helps appreciate that there are common elements between different approaches to discourse analysis. This better reflects that any approach based on constructivism and context, still has an interest in power. This present study is interested in understanding the broader discursive context of the GFC and what influences this had on political decisions but without direct concern with power. Whereas with a critical constructivist approach the focus would be more "explicitly on the dynamics of power, knowledge, and ideology that surround discursive processes" (p.20).

In contemplating definitions of discourse the importance of understanding how they develop, how they are transferred, and how some become dominant, becomes central to understanding how some issues get onto the political agenda when others do not, and what final policy outcomes are achieved. Burnham et al. (2008) provide a valuable explanation of why discourse analysis is so important in the political arena which is worth reproducing here in its entirety:

"A recurrent theme in the literature on discourse analysis is that discourses reproduce the everyday assumptions of society and that these common perceptions and understandings are encouraged and reinforced by those with access to the media, for example as politicians, journalists, and academic experts. Discourses therefore frame and constrain given courses of action, some of which are promoted as sensible, moral, and legitimate, thus commanding wide levels of support, whilst others are discouraged as stupid, immoral and illegitimate. The general public and policymakers are thus guided and constrained as to how they should respond to particular events or crises. It is one of the functions of discourse analysis to reveal the bases of these common assumptions and to show how they are related to different interests in society."

(Burnham, Gilland Lutz et al. 2008, p.250)

While there is plenty of explanation of what constitutes a discourse analysis approach there is less information or clear guidelines on how discourse analysis should be carried out (Burnham, Gilland Lutz et al. 2008, p.255). Researchers using discourse analysis still want to produce credible research that contributes understanding to their field of research which is accepted by other researchers. The "emergent aspect" that goes with using discourse analysis makes it difficult to have a prescribed procedure for analysing data (Phillips & Hardy 2002, p.75). The focus for using discourse analysis as a method

therefore rests heavily on a well-planned and justified analytic framework.

This research project uses discourse within a comparative framework to understand influences on climate change policy decisions taken in the three case countries during the GFC. The aim is to show how meaning was constructed during this time in relation to climate change policy. The research informs and enhances the reader's understanding of this event, and builds knowledge of the three ecopolitical theories used. Having established the rationale for using discourse analysis it is appropriate to move to an explanation of the comparative framework, and the methods used. The analytic framework is explained with justification and limitations of the choices made in the next section.

3.5 Comparative method

While comparison is employed implicitly or explicitly across all political science the purpose here is to apply comparison across three nations to gain a greater understanding of the effects of the GFC on climate change policy. When studying specific events in political science the challenge is to find sufficient comparable cases and this invariably results in small number, or small-n, research. This contrasts with quantitative research where large-*n* research is used. Collier (1993, p.105) claims that the term "comparative method" in political science, and more broadly in social sciences, refers to methodological issues related to small-n research. Burnham et al. (2008, p.88) argue that small-*n* research designs produce data that is too rich and complex to allow the study of many cases for practical reasons. With comparison so widely applied in political science there is much discussion in the literature about the application of the comparative method, how to manage the associated challenges, and the development of various perspectives in the field (Lijphart 1971; Teune 1975; Skocpal & Somers 1980; Collier 1993; Burnham, Gilland Lutz et al. 2008). A useful contribution was made by Skocpal and Somers (1980, p.188) when they differentiated three separate, but interacting goals of comparative studies. The first goal is to make causal inferences when large numbers of cases are available with quantitative data. The second concerns the parallel demonstration of theory by showing theories operate in different settings and conditions. The third goal contrasts contexts between cases where themes or questions may be used as a framework to point out the differences that emerge.

Establishing differences enables interpretation of the different way things happen in the different contexts (Collier 1993, p.108). For this latter goal, which relates to this study, clear differences between the cases are important in this more interpretist approach. The emphasis on context moves attention away from strict control of variables and generalizability of findings but it provides a better contextual understanding for those who do wish to make casual inferences (Skocpal & Somers 1980, p.181).

In this study comparison is explicit with the three cases chosen being systematically compared. Burnham et al. (2008, p.72) explain that "the comparative method is about observing and comparing carefully selected cases on the basis of some stimulus being absent or present". They argue that this method is based on positivist experimental method logic in that there is an attempt to produce order and control the conditions of the comparison. Clearly the rigor with which research can be carried out can vary considerably and this work moves beyond the classical type of quantitative comparative study by taking the social constructionist approach. Hopkin (2002, p.267) considers that given the "flaws and drawbacks" of both quantitative and qualitative comparative methods neither should be seen as having a dominant position although the quantitative method is generally still considered the "default setting". Collier (1993, p.111) argues that quantitative large-n has not become as dominant as some expected and that this could be due to limitations related to the time-consuming effort required and results that were often not commensurate to the effort. Coupled with this has been interest in more context-based, interpretist studies. In this study a qualitative, context related approach is applied: an approach which Hopkin (2002, p.251) argues has developed since the 1970s related to "the so-called 'Third Wave' of democratisation" where similar countries and limited scope have been characteristics. This has led to work that considers a larger number of independent variables, and to studying how the variables interact as well as their influence on the dependent variable.

In this section it has been explained that the comparative method is used qualitatively with regard to the context of the event studied. The discussion now moves to considering the rationale for case selection and the selection of variables used for comparison.

3.5.1 Comparative method design

Liphart (1971, p.682) stresses that the comparative method should not be seen as a specific technique but rather as a "broad-gauge general method" and that the researcher uses comparative method to look for empirical relationships between variables. Small-*n* research poses several problems for the researcher. Liphart (1971, p.685) states the principal problem as "many variables, small number of cases". To minimise this problem his suggested remedies are increasing the number of cases, combining variables where possible, and choosing comparable cases. But twenty years after Liphart's study Collier (1993, p.111-112) explained that there have been considerable innovations in the comparative method and refinement of Liphart's three solutions. To reduce the number of variables a combination of variables can be made or a theoretical perspective used to allow a smaller set of explanatory factors. The selection of three ecopolitical theories in this study helps in this manner by focusing on a set of explanatory factors. The other refinement to manage the problem of too many variables is to choose the cases on the basis of what has been labelled a most similar design or a most different design in relation to the non-dependent variables. This type of design was first proposed in the seminal work System of Logic by J. S. Mills in 1843. The basic idea is to isolate the effect being investigated to enhance the ability to compare the cases. The variables used are: the dependent variable which represents the phenomena to be explained: the independent variable(s) which are what is thought to influence the dependent variable: and all other variables (social, economic and political) that may have an influence on the dependent and independent variable(s) (Burnham, Gilland Lutz et al. 2008, p.75). A most similar design selects cases as different as possible in the independent variables and as similar as possible in all the other variables and a most different design is the reverse. The most different design is used in this study applying the logic that if the independent variable has an effect on the dependent variable it should be the same despite the wide variation in the other variables (Burnham, Gilland Lutz et al. 2008, p.77). In other words, if what is thought to influence the outcome being explained can be demonstrated, it does so across a wide variety of settings. Hopkin (2002, p.255) concurs with this concept of difference where the aim is to "seek out the similarities" between cases which provides "stronger grounds for arguing there is a causal link between the variables".

Another point that Burnham et al. stress is that the cases should not be chosen on the dependent variable because if they are all the same across the dependent variable it is not possible to reveal anything about the research question. In accordance with the most different design chosen the variables chosen for the research design are now explained.

3.5.2 Most different comparative research design

The variables chosen for comparative design arise from the research questions. The general question that guides this research is stated as:

How did the financial crisis of 2008 and the subsequent economic crisis affect climate change discourses and what have been the policy implications of this?

The specific research questions share the dependent and independent variables chosen based on this general question.

•	Dependent variable:	Decreased attention and commitment to climate		
		change policy decisions and implementation,		
•	Independent variable:	: The GFC focused attention on growth promoting		
	economic policy settings,			
•	Other variables:	Type of economy,		
		Political culture,		
		Strength of democracy,		
		Kyoto Protocol and national climate change policy.		

Other variables are defined as those that "intervene" by having some bearing on the dependent and independent variables, or are "spurious" appearing to have an influence when they do not (Burnham, Gilland Lutz et al. 2008, p.74). Variables are chosen to maximise the possibility of finding something interesting about the research question using the most different comparative design as described by Burnham et al. (2008, p.77).

3.5.3 Case selection with regard to the research design variables

The three case countries chosen are Spain, Australia and New Zealand. While it does need to be acknowledged that pragmatic reasons related to accessibility have influenced the choice, the countries fit the requirements related to a most different research design. All are advanced industrialised countries where the global financial crisis focused policy attention on economic growth strategies which constitutes the similar independent variable. The most widely varying other-variable related to the position taken by each country to control GHG emissions in relation to the Kyoto Protocol. The economic base, strength of democracy, and the political culture is different in each country. A brief overview explaining the relationship with the variables in each case follows.

3.5.3.1 New Zealand

New Zealand is a nation that has always considered itself a good international citizen. In keeping with this consideration they signed the Kyoto Protocol in 1998, ratified in 2002, and it entered into force in the country on 16 February 2005. New Zealand has an unusual emissions profile compared to the other two cases related to the agricultural base of its economy and renewable energy production, mostly from hydroelectric generation, accounts for over 70 per cent of energy production. Increasing GHG emissions have come from increasing road transport use and rapid expansion of the dairy industry (MfE 2013). Democracy and the political culture of the country are influenced by an electoral system based on proportional representation, a unicameral parliamentary system, an adversarial political model, an open economy, and the country's dependence on international trade.

3.5.3.2 Australia

Australia took a very different stand from New Zealand on the Kyoto Protocol. Although Australia originally signed the Protocol it did not ratify the Protocol in 2001. This was related to USA and Australian objections about exemptions given to China, India, and other developing countries, and concerns about jobs and damage to their own economies not being allowed for (Crowley 2010). This position under the Liberal-National Coalition continued until close to the federal election of 2007 when it became evident the issue would be an important electoral issue. The Labor Party won the election and, as promised, promptly ratified the Kyoto Protocol in December 2007. The position Australia had taken in relation to the Protocol was influenced by the economy's reliance on fossil fuels as a cheap source of energy to improve export competitiveness, and to coal being a major export to emerging economies in Asia. In 2009 extractive industry exports made up 39.3 per cent of export earnings followed by 32.5 per cent from manufacturing (Australian Government 2009). With regard to political institutions, Australia is a federal state with a bicameral parliamentary system. While there is proportional representation for the Senate vote, the House of Representatives uses a system of preferential voting although a utilitarian outlook welds a historical level of political bipartisanship between the major political parties. Voting is compulsory and an adversarial political model has been adopted in which a strong political lobby sector plays a major role (Kevin 2009, p.19).

3.5.3.3 Spain

Spain, as a member state of the European Union, is part of the group of countries that are regarded as world leaders with regard to the Kyoto Protocol and climate change policy. As an EU member state they signed the Protocol in 1998, ratified it in 2002 and it entered into force in the country in February 2005. The country has been characterised by rapid industrialisation to catch up with other EU economies after the isolationism of the Franco dictatorship. The manufacturing based economy is heavily reliant on imported fossil fuels for energy. The desire to reduce this reliance is the driver of an expanding renewable energy sector based on feed-in tariffs. Although the EU made concessions in their burden-sharing arrangements for rising GHG emissions related to Spain's rapid growth, it soon became evident Spain would exceed the limit (Stevenson 2012, p.187). Since the transition to democracy the country has become federally organised with a system of autonomous states. There is a bicameral parliamentary system with proportional representation in the Senate, and the lower house, the Congress, elected by a majority voting system which favours a two party dominance. The Spanish political culture since the transition to democracy has been notable for a high level of consensus attributable to the recent history of a brutal civil war which resulted from polarised political views (Magone 2009). There is a history of political corruption and lack of trust in politicians and in general there is a big gap between the political elite and the citizens (Chislett 2013a).

3.5.4 Data collection and analysis

With the research framework and design established it remains to explain the specific methods used to collect the data necessary to answer the research questions.

3.5.4.1 Elite interviews

Elite interviews were chosen as the main source of data for comparing the case countries. The researcher accepts that "the basic assumption of discourse analysis is that language profoundly shapes one's view of the world and reality, instead of being only a neutral medium mirroring it" (Hajer & Versteeg 2005, p.176). Examining the discourses of those closest to the climate change policy decision-making process provides important insight into what, why and how things happen during the study event. The study was conducted as events were still unfolding and the use of interviews helps study the evolution of discourses especially when compared with media discourses at a specific point of time. For these reasons elite interviews were chosen to provide the principal source of data for analysis. Politicians, bureaucrats, business leaders, expert journalists, academic experts and non-government organisation (NGO) representatives in each case country were selected for semi-structured interviews.

Unlike survey style interviewing where correspondents are usually of equal importance, elites vary in their closeness to the political process. Also elites have a high level of knowledge and ability to express themselves which makes the standardisation sought in survey interviewing difficult to achieve (Burnham, Gilland Lutz et al. 2008, p.231). For the study a total of 48 elites were interviewed: eighteen in New Zealand, seventeen in Australia and thirteen in Spain. In each of the countries the selection of interviewees was as wide as possible although in Spain this was somewhat restricted by difficulties with gaining access to business leaders and politicians. Richards (1996, p.200) lists this difficulty as a problem of elite interviewing and that it needs to acknowledged by the researcher. Climate change policy was a sensitive issue for politicians in the case countries at the time of the interviews and, in at least two situations, this was the off-the-record reason given for declining to participate in the research. In each country at least two to three people in each of the categories were interviewed. The numbers and categories of interviewees in each country are shown in the following table.

Category of interviewees	New Zealand	Australia	Spain
Government	8	4	3
Academic	2	5	4
Media/commentator	2	2	2
Business leader	4	3	3
Environmental NGO	2	3	2

Table 3.1. Interviewees in each country by category

Table 3.1. Interviewees in each country by category.

The semi-structured interview style was chosen to allow interviewees to express their ideas and opinions freely about the topic under investigation. When arranging the interview information about the research topic and questions about the ecopolitical theories which were intended as a frame for the interview, were provided. The questions provided in this way were used more as an interview guide without a preordained order. All interviews began with what Leech referred to as "grand tour questions" because interviewees "give a verbal tour of something they know well" which functions to get them talking while maintaining focus on the general topic (Leech 2002, p.667). This open-ended question related to asking how they saw the GFC influencing environmental policy decisions and in particular climate change policy. This allowed the respondents to discuss the issues raised within their own frameworks which was more appropriate for discovering the meaning they attached to the issues although, as Aberbach and Rockman (2002, p.674) point out, this "makes coding and the analysis more difficult". As the interview progressed questions were used to ask for opinions on relationships they saw between the crisis and policy decisions and the ecopolitical theories being studied. As these theories were not well known in many cases some explanation was provided, which increased the risk of producing primed responses. Primed responses are those where the interviewee is made more receptive to certain arguments and will be different to those arising from spontaneous responses and where the content is supplied by the interviewee. Awareness of this problem led the interviewer to take care to let the interviewee express ideas within their own understanding of the theories and to use prompt questions based on broader concepts related to the theories when necessary.

Most interviews were conducted in person, in the country where the interviewee resided but several were conducted using Skype with a webcam when personal interview was not possible. Richards (Richards 1996, p.200) maintains that the strength of doing the interviews in person is that it provides greater knowledge of context, access to other individuals, and creates greater interest in the subject which is reflected in the writingup of the research. The majority of interviews were conducted in English although in Spain, five were conducted in Spanish and translated to English by the researcher. All interviews were recorded with the permission of the interviewee and later transcribed by the researcher. Analysis of the data was made with the aid of QSR's NVivo (version 10) software for qualitative data analysis. Themes were chosen and information coded to aid identification of particular discursive practices consistent with a Template Analysis framework (Waring & Wainwright 2008). The value of using this framework stems from providing a systematic way to approach the large quantity of rich data generated in the semi-structured interviews.

3.5.4.2 Triangulation

Burnham et al. (2008, p.200) stress that with elite interviews, because of the less structured nature of the interview and the characteristics of those interviewed, more than one method should be used. This leads to the use of multiple methods to collect data to study a social phenomenon (Burnham, Gilland Lutz et al. 2008, p.232). Based on a land surveying technique of using three points to make accurate measurements, the concept has been adopted in social science research to represent the use of at least two different methods to check each against the other to improve credibility and achieve greater validity of the results. The term used for such combination is method triangulation. The technique is used to overcome the weaknesses or bias associated with single method and single observer research. Combinations can be made within methods, and between methods where it is possible to combine quantitative and qualitative methods (Read & Marsh 2002).

In this study two additional methods have been chosen to corroborate the findings from the elite interviews. A particular event in each case country related to climate change policy during the GFC has been chosen to examine the discourse in related texts. This principally concerns print media but also includes parliamentary texts where relevant. The purpose of this analysis is to see if the ideas and views expressed privately match what is said in the public arena. The other method chosen uses data from public opinion surveys and polls in each country. The purpose is to look for consistencies between statistical data, data from the interviews and from media events (Finnemore & Sikkink 2001, p.395). Using method triangulation is important for validation but it also serves to increase understanding of what happens. A discussion and description of the text and survey data methods follows.

3.5.4.3 Text analysis of a climate change policy related event

The elite interviews provide a source of data that is concerned with what elite actors say in a particular setting about a particular issue. Problems with elite interviews can relate to the interviewee saying what they think the interviewer wants to hear, what they think is the correct thing to say when they actually think something else, when their objectives may be different, or a variety of other reasons (Lilleker 2003). By analysing text from the public sphere it is possible to check for consistency in the way ideas or perceptions are expressed. In each case a climate change policy action reported in the media during the GFC or economic crisis was chosen for study. Newspaper articles and political documents provide sources that are examined for the discourse that is being used in relation to the events chosen. While this constitutes a type of content analysis it is not done in the sense of mechanical counting, but rather in an interpretist manner looking for the way the issues are constructed and the discourses that are emerging. Therefore, reliability and accuracy are not the key aspects being investigated rather the manner in which information is present in the public arena. For example the political leanings of journalists, editors and newspaper owners can create a bias which needs to be taken into account. Even though this may be the case the media is an important source of demonstrating dominant discourses and this has been shown to play an influential role in the social construction of news topics (Welch, Fenwick et al. 1998). Phillips and Hardy (2002, p.10) argue that "what makes a research technique discursive is not the method itself but the use of that method" and that applies to the use of the text sources from the political events. As with the elite interviews, the text sources were

analysed with the aid of NVivo 10 software using the same Template Analysis framework.

3.5.4.4 Social surveys and opinion polls

Surveys and polls have become part of everyday life. Public opinion surveys provide information that plays a central role in modern democracies and therefore to the social scientist. Surveys are systematic attempts to obtain results from representative sampling that can be generalised to the whole population, while polls are "snapshot surveys" that provide opinions on topical or electoral issues (Burnham, Gilland Lutz et al. 2008, p.97). Nowadays politicians react to surveys and polls using them to gauge support for issues and may amend policy decisions or their approach to the presentation of an issue on their basis. As well as using public surveys and polls many political parties conduct their own polls to keep better informed of what issues are prioritized, their own popularity, and how well their party is performing (Burnham, Gilland Lutz et al. 2008, p.136). While political or elite discourse has an influence on what people think, is also important for politicians to be aware of shifts in public opinion if they want to maintain popular support and to be re-elected.

Two of the ecopolitical theories being used to examine what discourses emerge during this time are related to values and preferences, both of which are regularly measured in opinion surveys. In this research, results from specialist survey institutions were used for parameters relevant to the project. These parameters were mainly concerned with measurements of postmaterialist values, support for and willingness-to-pay for action against climate change, and what issues citizens prioritized during the GFC. The main institutions used were the World Values Survey (WVS), International Social Science Programme (ISSP), the EU Eurobarometer (EB), Centro de Investigaciones Sociologicas (CIS), and the Australian Election Study (AES). The information used is taken from collated surveys and is used for illustrative, comparative and corroborative purposes. This provides a valuable source of information to strengthen and test the findings of the research, in a manner consistent with method triangulation.

The next section deals with moral considerations within the research project especially as human subjects were involved in the interviewing process.

3.6 Ethical considerations and confidentiality

This section provides an explanation of how ethical consideration in the study has been addressed. Ethical concerns in research relate to the ethical obligations of the institution overseeing the research, to the researcher, and to the subject of the research. In recent years ethical consideration has become an important issue in the research community (Burnham, Gilland Lutz et al. 2008, p.303). A societal concern, that animals and human beings should be treated with respect and in accordance with the rights that are deemed appropriate has led to formal ethics procedures being established by universities in many countries. Here it is appropriate to remember that as well as concern for the subjects of the research, the researchers themselves have a moral obligation to conduct honest research for the benefit of the community. The sheer size of the research community compared to fifty or sixty years ago, combined with modern technology provides unscrupulous researchers with many tools to exploit to enhancement their study outputs. While technology also provides tools for detection of plagiarism and fraud, researchers are required to make a personal declaration of originality and are expected to conduct their research in a manner that honours the integrity of the research community (Burnham, Gilland Lutz et al. 2008, p.297).

With regard to ethical consideration of the subjects in the research, this comprised the elite interviewees. In elite interviews the social research interviewer is aiming to gain the confidence of an interviewee so that discussions can take place in an open, non-threatening setting. In political science the interviewees are commonly people close to the policy making process and as such these "elites" form a very different group to many other social study groups where the interviewer is often the person in the privileged or controlling position. Elites are generally experienced, confident, intelligent people who are experts in their field. While they are unlikely to be placed in a disadvantaged position, confidentiality can be an important issue. Many of the issues the political scientists explore are politically sensitive and the interviewee needs to be assured that what they say will remain confidential if they desire this (Burnham, Gilland Lutz et al. 2008, p.286-7).

The Australian Government (2014) issued the *National Statement on Ethical Conduct in Human Research* 2007 with which the National Health and Medical Research Council, the Australian Research Council and Universities Australia have agreed to comply. The ethical consideration of the human subjects in this research is therefore guided by the requirements of this document under the direction of the Flinders University Social and Behavioural Research Ethics Committee. Approval for the project was given by this committee and allocated the Project Number 4832. Flinders University guidelines were used to prepare the following for interviewees:

- an introduction letter,
- a supporting introduction letter from the supervisor,
- an information sheet explaining the aims of the research and providing an outline of the research problem being investigated,
- a list of the key questions used to guide the interview,
- a consent form which included a request for permission to record the interview and gave a commitment of confidentiality.

English and Spanish versions of each form were prepared. Transcripts of the interviews were sent to the interviewees when they were finished giving interviewees the opportunity to redact any information and they were free to withdraw from the project any time they wished to. No participant chose to redact information or withdraw from the project. At all times during the interviewing process the principle supervisor was available for guidance and her contact details were provided to interviewees if they wished to contact her directly. Details for contact with the Flinders University ethics committee were also included on all forms. All participants have been coded to preserve confidentiality by preventing identification. Data and recording from the interviews are securely stored with access only available to the project supervisors and the researcher. All data is held in computer files including the NVivo programme used and will be deleted five years after successful completion of the project or associated publications.

As intended by Flinders' ethics procedures, the interviewees were well informed about the project and the research procedure. The same procedures were followed in Spain where there are no formal ethical requirements for carrying out elite interviews. At all times the researcher endeavoured to treat interviewees with respect and the researcher is personally committed to presenting an honest account of what is learnt from the research.

3.7 Summary for methodology

The purpose of this chapter has been to describe the theoretical framework used to answer the research questions. This informs the research approach used to interpret the data and building on this, justifies the selection of methods. It therefore forms an essential part of the study explaining how the research was done and why it was done that way.

In the social sciences it is important that the researcher establishes their ontological and epistemological standing because these affect the way the research tasks are approached. It is explained that an interpretist position is appropriate for this research project as the researcher believes the world is socially constructed through people's knowledge of it. In this way, the meaning that policy actors attach to issues is central to what decisions are made. The position taken places the researcher within the social world being studied which helps explain the importance of careful consideration of this relationship through the methodological approach and qualitative methods used. A discourse approach is used to uncover the meanings people give to issues related to the research questions and this allows discovering how social reality is produced. It is the understanding of how social facts change and how this influences the politics of climate change during the GFC that concerns this research (Finnemore & Sikkink 2001, p.393). The complexity of climate change as an issue compounds how it is framed as a policy problem and understanding how this process occurs is important for advancing action to prevent dangerous global warming. With a discourse approach there is no set way to proceed with analysis and comparative method using three case countries is chosen to address issues of validity and generalizability of the findings. A most different comparative study design is chosen where the independent variable is as similar as possible across the cases while the intervening variables are as different as possible. The ecopolitical theories included in the study provide a set of explanatory factors which helps manage the problems associated with small-n research. Data are collected from elite interviews, a specific political event, and from social opinion surveys. This allows for triangulation of the findings to further address issues of validity. While criticism of the constructivist approach and the use of qualitative methods come from researchers who are often informed by a positivist position, the value of this type of research is now more widely appreciated. This research does not pretend to make specific predictions

and is concerned with building understanding of the social life and social change. Consistent with this stand the three case countries, Australia, New Zealand and Spain, provide an opportunity to contribute to knowledge of the process of climate change policy.

The next three chapters build the case for each of the selected countries based on the research position that has been described and uses the chosen methods to answer the research questions. This moves the study to examining the variables and analysing the data on a case by case basis before making the between case comparison. The first case country examined is New Zealand.

4 THE NEW ZEALAND CASE

4.1 Introduction

The preceding chapters have explained the aims of this research project, the context within which the research questions arise and how the questions will be answered. As such these chapters form the background to the study. In Chapter 3 it was explained that an interpretist position is taken and discourse analysis chosen to understanding how the GFC has influenced the stories told during this time. The study centres on a comparative framework for studying the discourses in three countries. The countries selected were all influenced by the global financial crisis where they focused on economic growth so this constitutes the shared independent variable. Climate change policy, the economy, and the political culture are differing, intervening variables which is consistent with the most-different comparative research design. The methods used to gather data and how the data has been analysed were also explained in the chapter.

This chapter establishes the relevant New Zealand background prior to and existing during the GFC which helps to identify dominant discourses. The data obtained from elite interviews, a media event and social surveys are examined using the three ecopolitical theories to provide a focus to understanding the discourses used. As such this chapter presents a within-case analysis that is subsequently used to compare with the other case countries. By explaining the relationship of the variables and the dominant discourses related to climate change policy outcomes, the findings from the New Zealand case assist with answering the research questions.

The chapter is presented in eight sections. Following this introduction Sections Two, Three, and Four deal with the background information on the economy, the political culture, and climate change policy. Section Five explains the background for the three ecopolitical theories in New Zealand. Public opinion surveys form a part of the data used and as they measure values and preferences their analyses are included within this section. Section Six presents the findings from the elite interviews and the dominant discourses identified during the GFC are presented. Section Seven presents an examination of the discourse used in a specific political media event. Finally, Section Eight provides a summary and concluding comment for the chapter before the discussion moves to the Australian chapter.

4.2 The New Zealand economy and the GFC

New Zealand has a population of approximately 4.5 million with a small open economy. Although the country is geographically situated at considerable distance from its main trading partners, it competes strongly in the international trade arena. The country has a lifestyle admired by many coming near the top of surveys based on quality of life issues like; the best cities to live (Mercer 2012); one of the three the least corrupt countries in the world in 2012 (Transparency International 2012); and 5th in the world in 2011 for its quality of democracy (Economist Intelligence Unit 2011). In the mid-eighties the Labour Government faced a financial crisis related to foreign borrowing that had been used to offset the effects of the 1970s oil crisis and elected a course of radical, liberalmarket reform (Lattimore & Eaqub 2011, p.3-4). The unitary system of government in New Zealand, which has the potential for a concentration of power with limited constraints, made it possible for a relatively small elite group to control the reform agenda. "Reform was deliberately swift, decisive, radical, and relentless" (Lewis & Moran 1998, p.141) and it was not until 1993 that real gross domestic product (GDP) per capita began to grow again. The result of this reform has been an economy able to compete internationally, with flexible labour conditions, and with low subsidisation in all sectors: a model liberal market economy (Lattimore & Eaqub 2011, p.4).

Major export earnings come from the primary sector: agriculture, forestry, mining and fisheries. In the year ending March 2010 the top export earners were dairy 23 per cent, meat 13 per cent, and forestry 6 per cent (Lattimore & Eaqub 2011, p.85). Unemployment has only ever reached as high as 10 per cent twice, first during the Great Depression, and later in 1991 during the market reform process. Prior to the GFC, unemployment was low and New Zealanders were spending freely enjoying the benefits of readily available cheap finance. This helped fuel a property market bubble and increased household debt from 58 per cent as a ratio of household disposable income in 1991, to 147 per cent by 2007 (RBNZ 2012). 2008 saw this situation come to an abrupt end as New Zealand was hit by recession and the flow-on effects of the GFC: banks stopped lending and households stopped spending.

A drought in the main dairy regions, a general slowing in GDP growth, and correction in the property market contributed to the early onset of recession in the third quarter of 2008. Unemployment rose during the crisis to approximately 7 per cent as uncertainty in trade conditions affected exporters, and concerned households began spending less and paid off mortgage and credit card debt (Bollard & Gaitanos 2010, p.179). The New Zealand Government introduced financial stimulus measures to lessen recessionary effects and to promote economic recovery. Important advantages for New Zealand were entering the crisis with a low level of government debt and with little exposure to troublesome financial products although the government had to introduce temporary guarantee measures to maintain confidence in lending institutions. All this helped the country manage better than many others during the crisis. The GFC was short lived in the important Asian export market and once demand from this region resumed it helped the New Zealand recovery. By late 2009 the situation had improved but once out of recession GDP growth remained relatively flat. Ongoing international effects on business confidence, trade conditions, and government policy resulted in an increase in government debt in 2010 that was expected to continue until at least 2015 (Lattimore & Eaqub 2011, p.116). To further establish the New Zealand background related to events during the GFC, the political culture of the country is now discussed.

4.3 Political culture in New Zealand

New Zealand is a constitutional monarchy with a one chamber parliament, the House of Representatives, which has approximately 120 seats. The electoral system is based on the German proportional representation model which results in a greater number of parties being able to have an influence in the political arena than under the previous first-past-the-post electoral system. The political system of New Zealand constitutes an important difference between the other two countries in this study, both of which have bicameral parliaments and two dominant political parties.

Dissatisfaction arising from the economic reform period, adversarial politics, and contradictory election outcomes where the party with the most votes did not necessarily win an election resulted in referendums in 1992 and 1993 on the choice of electoral system. Voters chose the mixed member proportional system (MMP) which "marks a radical break from Westminster-style, plurality-based politics, a change equivalent to not merely altering the rules of the game, but to switching codes" (Vowles, Aimer et al. 1995, p.8). This historic vote marked a major change in New Zealand politics and to

that of most other Anglo-Saxon countries where simple majorities are preferred. The overall result has been a more diverse parliament with minor parties able to gain more seats and influence. Since the electoral system change governments have been formed by one of the main parties making coalitions, alliances, or agreements with smaller parties. For example in 1999 the Labour Party led by Helen Clark was able to form a government in coalition with the Alliance Party and a support agreement with the Green Party. Labour stayed in power for nine years until November 2008 and much of the environmental and climate change policy that is relevant to this project was introduced during this period. In the November 2008 election National won sufficient seats to form a government with agreements with three of the smaller parties. In the following election in 2011 National almost won an outright majority but formed a government continuing their agreements with the minor parties. New Zealanders have appeared to be ambivalent about the proportional voting system (Kelly 2010) but when the National Government ran a referendum in the 2011 election asking if voters wanted to keep the system or not, there was an increase from the original vote in favour of retaining the system (MMP Review 2011).

Vowles et al. (1995, p.61) argue that the quality of a democracy can be measured by the relationship between the citizens and its leaders and in New Zealand this relationship is close when compared with many other democracies. In what Vowles et al. (1995, p.61) label a robust type of democracy, public preferences are central and governments need to stay responsive to the electorate once they are elected. They also argue that in contrast to this, thin democracy is where elected governments believe they have the mandate to make whatever decisions they consider necessary for the country and only have to account to the electorate at the next elections. They point out that when New Zealand moved to a proportional representation this helped to move the political culture to one that rates highly on international democracy measures. This change is relevant when it comes to studying climate change policy decision making.

4.4 Climate change policy in New Zealand

New Zealand is a sparsely settled country with a temperate climate, surrounded by oceans in the Southern Hemisphere, well away from the northern air pollution belt. Over 70 per cent of the population lives in sixteen urban centres and the main natural

resource is productive farmland (Kelly 2010, p.279). New Zealand rates highly on international measures of general environmental performance. On the Yale University's Environmental Performance Index (EPI) New Zealand was ranked 14th out of 132 countries in 2012 (EPI 2012). But while they rank highly on the aggregate measures of air and water quality, the country only has a rank of 66th for climate change. GHGs per capita are high at 17.65 carbon dioxide equivalents, the 10th highest in the world in 2008 (UNFCCC 2010). New Zealand supported the Kyoto Protocol since its inception and Kelly (2010) argues that the ability to use carbon sinks and trade carbon were relevant to how New Zealand planned to meet its commitments under the Protocol. Since New Zealand signed the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 emissions have continued to grow with little evidence of effective reduction policy (Kelly 2010, p. 279-280). Between 1990 and 2013 energy sector emissions have risen approximately 31 per cent with the biggest increase coming from transport. Domestic road transport emissions in New Zealand have increased by 69.7 per cent from 1990 to 2013 (MfE 2013). The increases recorded in this sector in recent years make it "one of the largest levels of growth in energy sector emissions amongst Annex 1 countries since 1990" (Ministry of Economic Development 2011, p.6). The second biggest increase has come from a 12.1% increase in agricultural emissions by 2013 most of which is attributable to rapid expansion in the dairy sector (MfE 2013). The large increase in the energy sector is attributed to the growth of private car use and road transport for moving freight (Ministry of Economic Development 2011). The high use of private cars is related to New Zealand being a country where the rural population is widely dispersed, and cities and towns are designed around large, individual sections for housing with sprawling suburbs: all of which embodies the lifestyle choices of many New Zealanders (Kelly 2010, p.280).

Policy attempts to deal with emissions reduction have not been very effective in New Zealand (Chapman & Boston 2007, p.113). In 1997, and later in 2002, the governments of the time announced intentions to introduce a carbon tax but in both cases this did not eventuate (Kelly 2010). It was not until September 2008 that an ETS was legislated by the Labour Government. After winning the election two months later the National announced a review and delay of the scheme which eventually saw the ETS entering into force for most sectors in July 2010. While it appeared that there was consensus between the two main parties on having an ETS the whole process was highly contested

especially by influential lobby groups, businesses, and farmers. Public concern about climate change was high before economic conditions began to change in 2008 and remained high throughout the worst of the GFC and recession (ShapeNZ 2007a; ShapeNZ 2009a; Stuart 2010).

Other policy initiatives aimed at reducing emissions include a national energy efficiency strategy which began in 2002 and was remodelled in 2007. Kelly (2010, p282) argues that of thirteen items listed by the International Energy Agency (IEA) as constituting New Zealand's effort to reduce emissions in 2009, only the ETS and the energy efficiency strategy would have any substantive impact and that this would be modest. The increase on 1990 emission levels for the first Kyoto commitment period could have incurred a cost but by being able to use forestry resources as carbon sinks the government predicted they would complete the commitment period with a surplus of assigned units (MfE 2013). A problem with using commercial forest as sinks is that when they are cut down they become a source of carbon emissions. Therefore the timing of planting and harvesting of exotic forests, which have an average life of 25 to 35 years, have a significant influence on New Zealand's emissions inventory. This goes some way to explaining the National Government's decision to withdraw from making binding reduction targets in the second commitment period of the Kyoto Protocol at the 2012 Conference of the Parties 18 (COP18). In doing so they joined outliers Japan and Russia (Fallow 2012; Trevett 2012) although the country remains bound by its UNFCCC commitments.

The next section establishes the New Zealand context in relation to the three ecopolitical theories being used to examine the outcomes.

4.5 Ecopolitical theories in the New Zealand context

New Zealand is not always included in international social surveys or studies that can provide information about the ecopolitical theories used in this study. All the same, the country provides an interesting case because of its different political and economic background: notably the high reliance on agriculture for export earnings and the parliamentary system. The open market economy New Zealand has established suggests it would favour market mechanisms for dealing with GHG emissions; the support of anti-nuclear policy and environmental issues supports the development of postmaterialist values; and the proportional voting system gives more opportunity for the expression of citizen preferences. Each of the theories is discussed in the New Zealand context to build understanding of how each one relates to the discourses that are used during the GFC and economic downturn.

4.5.1 Ecological modernisation in New Zealand

The dominance of market economics in New Zealand makes it logical for market-based instruments to be the preferred choice for managing GHG emissions. Supporting this an IEA Energy Policies report (2010, p.33) states: "Since the election of the present government, the NZ ETS is now seen as the principal policy tool". In New Zealand, while the term ecological modernisation is not officially adopted, the principles of the theory could be expected to be embedded in the discourse of environmental policy elites (Barry 2005, p.310). The concept that lessening environmental damage at the same time as: increasing energy and production efficiencies, reducing costs, finding technological solutions to deal with waste flows, and improving competitiveness, are all accepted as sensible business practices.

Dealing with emissions from agriculture presents a challenge for ecological modernisation reform because innovative technological solutions are more difficult to find when dealing with diffuse sources of emissions from animals and farmland. Jay and Morad (2007) studied ecological modernisation's applicability to the dairy sector in New Zealand in light of the pressure the industry faces to reduce environmental damage from intensive dairy farming. They argue in general that managing environmental issues across some 11,000 individual milk suppliers results in major practical and political problems. Although emissions from agriculture have increased since 1990 and the sector is the largest GHG emitter, the increase in the sector is much less in comparative and absolute terms than the emission increase in the land transport component of the energy sector. It is largely the failure of successive governments to deal with that aspect of emissions that leads to doubt about the sincerity of government to act on emission reduction. For example New Zealand still has some of the lowest petrol costs in the OECD, being sixth lowest in 2013 with only Mexico, the USA, Canada, Australia and Japan having lower prices (AIP 2013). IEA in their 2010 report (2010, p.37) recommend that New Zealand needs to pay more attention to rising transport emissions and needs to set explicit targets to address reduction with appropriate policy tools and plans. "Overall the picture which emerges of New Zealand's climate (and more generally, environmental) policy development is one of stated good intentions, with a major policy implementation deficit" (Kelly 2010, p.282).

A number of authors argue that ecological modernisation reform depends on the capacity of a country for its adoption (Weidner 2002; Dryzek 2005; Howes, McKenzie et al. 2009). Howes et al. (2009) use five themes to examine capacity for reform and these are used here to assess the situation in New Zealand. The themes are politics; the role of science; the economic base of a country; societal mobilisation and participation in governance; and economic and environmental discourse.

- Politically New Zealand lacks a corporatist approach which is considered to be important for this type of reform and which is used to explain why reform has been more successful in countries like Germany (Howes, McKenzie et al. 2009, p.10). The New Zealand proportional representation electoral system has enabled greater influence from the smaller parties but an adversarial style of debate hinders cooperation on policy decisions between government, business and labour representatives: a characteristic of a corporatist approach.
- The second theme relates to the role of science in the country. New Zealand has been criticised for under-investing in science, research and technology and is considered a technology taker, a situation which is understandable given the small population size and geographical location (OECD 2007). From 2006 to 2011 spending on research and development only increased slightly to 1.27 per cent of GDP against the OECD 2011 benchmark of 2.38 per cent (Chapman-Smith 2013). A key reason for this lower level is low investment by businesses. The lack of determination to bring New Zealand in line with other OECD countries is not encouraging for building scientific capacity that supports ecological modernisation.
- The third theme concerns the type of economy a country has. It is generally considered difficult to apply this reform to an agricultural economy although Jay and Morad (2007) argue that ecological modernisation could provide a new way to assess solutions for agricultural problems. A Global Research Alliance established through a New Zealand initiative at the 2009 COP15 coordinates research related to livestock, cropping and paddy rice production systems which

supports this contention.

- The fourth theme proposed by Howes et al. is that of societal mobilisation and participation in governance. The proportional representation electoral system has enabled greater influence from smaller parties. The Green Party Aotearoa/New Zealand gained more than 10 per cent of the vote in the 2011 national elections, a significant milestone for a minor party. New Zealanders have shown themselves ready to mobilise on social and environmental issues and have influenced government decisions through such action (Farquhar 2006). Related to this theme New Zealand performs well.
- The final theme is having an economic and political discourse which reflects that taking care of the environment is an accepted part of the way things are done. Kelly (2010, p.285) argues that neoliberal thought has become institutionalised in New Zealand and, with an associated strong belief in individual self-interest, has become "common sense" in politics and for the public. With market interests given such supremacy one would expect a stronger expectation that the market can solve problems such as climate change. Ecological modernisation would fit with such an agenda although at the same time New Zealand has seen a rise of support for the green party and the environment is important to the people as an issue.

Overall the capacity for New Zealand to effectively adopt ecological modernisation reform to deal with environmental problems appears limited. Supporting this conclusion, the main financial stimulus measure the government used during the crisis was tax cuts which aimed at stimulating spending (OECD 2009a). This response is consistent with neoliberal ideology supporting the idea that spending is necessary for the economy and little effort was made to use stimulus money to move to a lower carbon economy. Later, in the 2009 May budget, a home insulation scheme originally introduced by Labour and the Green Party in 2008 was reinstated and counted as part of the economic stimulus package. It is interesting to note that rather than promoting energy saving characteristics and emission reducing aspects of the project, the government discourse for this spending focused on creating jobs and improving health (Tait 2009). If the discourse of managing climate change policy has taken place within the parameters of ecological modernisation, it needs further study to understand the impact this has on policy decisions. The discourse related to the ETS legislation during

the crisis is particularly relevant as such schemes aim to reduce GHG emissions by providing incentives for innovation and technologically improved production. The discussion now moves to consider postmaterialism in the New Zealand context.

4.5.2 Postmaterialism in the New Zealand context

In the 1960s and 1970s new issues were added to political debate when the influence of the new social movements swept through Western Europe (Carter 2001). New Zealand also experienced political change which was influenced by the student, anti-nuclear, peace, women, human rights, and environmental movements. Notable events were vociferous protests against Vietnam War involvement, worldwide recognition for the country's anti-nuclear stand when US nuclear carrying warships were banned entry in the 1980s, and the country was divided by one of the strongest protests the country has experienced when the rugby team from apartheid-controlled South Africa was invited to tour the country in 1981. Inglehart's theory of intergenerational value change gives an explanation for the rise of NSMs with the theory holding that young people growing up in relative economic and personal security are more likely to form values with more other-regarding and lifestyle concerns (Inglehart 1981). The theory has received much attention in research on political change and the rise of "new" politics including within New Zealand (Vowles, Aimer et al. 1995).

Postmaterial values are measured in social surveys although in New Zealand this is limited as there have been fewer surveys including the measure than in the other two countries studied. The first systematic work was done between 1988 and 1990: a period that coincided with the economic upheaval and uncertainty caused by the major market-based economic reforms (Vowles, Aimer et al. 1995, p.73). Vowles et al. (1995) argue that the low level of 9 measured in 1990 (see Fig.1) would be consistent with Inglehart and Abramsons' (1994) period effect from economic insecurity because of the long period of slow economic growth the country experienced since the sixties. On the other hand, this would not support the observation that postmaterialist values, as judged by support and action relating to NSMs, had a significant impact on New Zealand politics during the same period. Vowles et al. relate the rising result of 14 in the 1993 survey (see Fig. 4.1) to the improving economic outlook by that time. Their research also showed a weak link with age as postmaterialism increased in all age groups. Interestingly in their studies, they showed the Labour Party political elites had a level of

26 per cent compared to the public level of 9 per cent in a 1988 study of party conference delegates (Vowles, Aimer et al. 1995, p.73). For the first time in 1998, and later in 2004 and 2011, New Zealand was included in the WVS. The "National Conjuncture" of the 2005 WVS report attributed the high level of postmaterialists to the buoyant economic conditions of the time, 5 per cent GDP growth and decreased unemployment down to a level of 3.6 per cent, reportedly gave the country a sense of "riding high" (WVS 2004, NZ report p.4). In the buoyant economic times an increase in postmaterialism would be expected but there was a levelling off in postmaterialism between 1998 and 2004 with a large drop in 2011 (WVS 2011b).

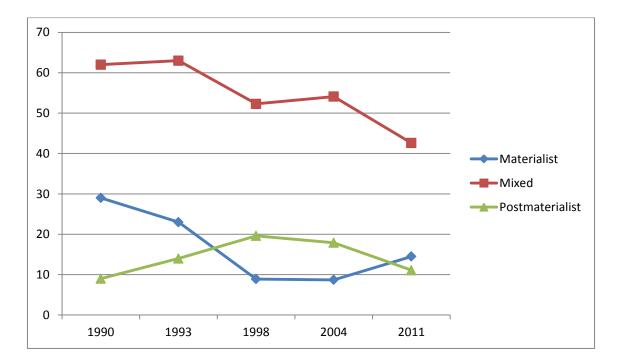


Figure 4.1. New Zealand 4-item battery measure of postmaterial values

Sources: 1990 & 1993 Vowles, Aimer et al. (1995, p.74)

1998, 2004 & 2011 WVS (WVS 1998; WVS 2004; WVS 2011b)

The change to a proportional representation electoral system after 1993 opened the door to the greater participation of smaller parties as evidenced by the Green Party reaching the five per cent vote threshold and their growing presence in the parliament since then. Inglehart and Abramson (1994) identified a period effect during times of financial insecurity where people temporarily select different answers to the questions but that once economic recovery occurs, people revert to answering the questions as postmaterialists. New Zealand did not appear to be strongly affected by the GFC, but people had borrowed large amounts of cheap, readily available money and incurred high levels of private debt (Bollard & Gaitanos 2010). The deteriorating economic situation in New Zealand therefore hit many New Zealand households. These people were often the same well-educated, middle-class households where environmental and NSM support have been shown to be strongest (Carter 2001, p.88). New Zealanders have shown a willingness to mobilise against unpopular environmental decisions, and as a country with a high level of democratisation one would expect governments to be mindful of this when making climate change policy decisions and this aspect is explored in this study. Before discussing these findings the background related to consumer and citizens' preferences is presented.

4.5.3 Consumer preferences and citizen preferences

The discussion of the New Zealand case moves from the influence of values in the political arena to the influence of preferences. In Chapter 2 it was explained that the nature of values is relatively stable and positive when compared to preferences which tend to be context and time dependent, with positive and negative components. Similarly to other Anglo-Saxon countries, individual preferences constitute the basis for political deliberations in New Zealand politics. Although at times, with the dominance of neoliberalism in the country it could appear that they are predominantly based on economic theory's view of the individual as a self-interested maximiser. Post-war New Zealand followed a political course of the state providing social welfare with an egalitarian ethic and consensual policymaking (Lewis & Moran 1998). But Britain's membership of the European Economic Community weakened the colonial advantage the country enjoyed and the resulting period of economic and political upheaval eventually led to the radical reforms of 1984. The restructuring discourse used to legitimise the reform project emphasised the individual "as enterprising and opportunistic selves" and contained "the assumption that the pursuit of self-interest will correspond with national interest" (Lewis & Moran 1998, p.138). As Lewis and Moran (1998, p.142) argue this resulted in a populist common sense developing in New Zealand with "a concept of national interest which is constructed as the outcome of the sum of individual self-interests". Over ten years later Kelly (2010, p.284) argues that this concept remains dominant and therefore forms an integral part of preference expression.

Public opinion surveys in New Zealand

Other regarding, citizen preferences are best discovered through public opinion surveys and voting and here these are discussed. Before the recession and the GFC began to influence the economy, climate change action was widely regarded as a priority issue. In a 2007 survey 74 per cent of respondents felt climate change was a problem to be dealt with now, or to be dealt with urgently (ShapeNZ 2007a). The National Party's own polling showed that climate change was third as a priority issue in 2007 (Smith 2010). As the recession and economic uncertainty continued after 2008 the issue dropped as a priority as did most indicators surveyed in relation to climate change. Both the government and business regarded this as a softening of attitudes to climate change. One survey stated: "so again we see a softening since late 2009 in the level of concern about climate change" (Stuart 2010, Section 2 Slide 8). The National Party's own polling showed the issue had dropped to twelfth by 2010 (Smith 2010). In a survey conducted in February of 2009, climate change was shown as sixth on a list of priority issues respondents were asked to rate although some typically high priority issues like education were not on the list (ShapeNZ 2009a, p.5). This same survey showed 43 per cent of respondents felt it was "necessary to take major steps very soon" on climate change and 44 per cent that is was "necessary to take modest steps in the coming years". In March 2010 ShapeNZ (2010, p.2) still showed a majority of 64 per cent believing climate change should be dealt with now or urgently although this was a drop of 10 per cent on 2007 figures. A Greenhouse Policy Coalition survey of 2009 showed 20.2 per cent agreed that climate change was "extremely serious, the world faces real problems" and in 2010 this dropped to 15.7 per cent (Stuart 2010).

A feature of survey responses in New Zealand is a discourse suggestive of climate change being natural and something that always happens: "the climate is always changing" became a catchphrase when climate change is discussed (Duffy 2013). This could be related to the prominence of farming in the economy and daily focus on weather conditions in a temperate climate. Although surveys show a majority of New Zealanders support taking climate change action the country still appears in international surveys as one of the least concerned countries in the world. An international survey in 2009 showed that of New Zealand respondents only 17 per cent were "very concerned" about climate change compared to a global average of 37 per cent (Nielsen 2009). A related survey showed New Zealand with 34 per cent of

respondents thinking climate change was solely caused by human activities, 53 per cent that it was caused by both humans and natural changes, and 12 per cent thought it was caused by natural changes (ACNielsen Australia 2007). The percentage for natural change was significantly higher than most other countries, and the percentage for solely human causes one of the lowest, which suggests the discourse about naturally occurring climate change has been persuasive. A 2010 New Zealand survey also showed that 53.1 per cent of people still felt there was either no proof, or no clear evidence that climate change is caused by human activity (Stuart 2010, Section 3 Slide 4). In the same survey, the level of those who "say the climate change problem effectively doesn't exist" rose from 17.5 per cent in 2009 to 19.3 per cent in 2010.

Interestingly, when asked about concern for the environment this often scores higher than climate change concern with 20 and 17 per cent respectively recorded in one survey (Stuart 2010, Section 2 p.7-8). This raises the question of whether the two should be conflated or regarded as separate policy issues. The environment has long been regarded as an important part of what makes New Zealand special. The "clean, green image" is used to promote commodity exports and for tourism (Kelly 2010, p.278). Regular surveys on the public's perception of the environment are carried out and include a question about the perception of New Zealand being "clean and green" with around 50 per cent responding that they agree with this (Hughey, Kerr et al. 2010, p.11). The environment is seen as forming a part of the lifestyle of New Zealanders and probably explains the higher priority related to the environment as an issue. This response could also be related to the lack of urgency the government gives to the issue of climate change. Also reflecting issues of national identity the 2007 ShapeNZ (2007a) survey showed 63 per cent of respondents would prefer the country to follow a course of world leading action. The desire to be a world leader formed part of the climate change action discourse under the Labour Government. In October 2009, although the figure had dropped considerably, 44 per cent of respondents still wanted New Zealand to lead on climate change (ShapeNZ 2009b). The desire to be a leader was noted in one survey as "NZers frame the debate in moral terms -along the same template as the antinuclear debate where the same hallmarks of leadership (irrespective of other nations) were shown" (Stuart 2010, Slide 4 Conclusion). The discussion now moves to look at measurements that reflect consumer preferences in the country.

Consumer preferences in New Zealand

Consumer, or more self-regarding, preferences are revealed using market based measurements such as willingness-to-pay (WTP) and cost-benefit-analysis (CBA). A similar downward trend was evident when questions were asked about WTP for environmental protection. At the turn of the twenty-first century New Zealanders showed reasonably high levels of WTP. In a 2000 International Social Survey Program survey conducted in New Zealand, 46 per cent of respondents said they were willing or fairly willing, to pay higher prices in order to protect the environment but there were lower numbers prepared to pay higher taxes or reducing living standards to do so, 31.1 and 32.1 per cent respectively (ISSP 2000). In this same survey 52.3 per cent of respondents agreed that economic growth was needed if the country was to protect the environment. In 1998, 2004 and 2011 WVSs respondents were asked whether protecting the environment, or economic growth, should be given priority even if it was to the detriment of the other. In 1998 the result was 50.4 versus 49.6 per cent in favour of the environment and in 2004 this increased to 65.0 to 35.0 per cent. By 2011 it dropped to 42.6 to 38.5 per cent in favour of environmental protection with 16.2 per cent saying they did not know (WVS 1998; WVS 2004; WVS 2011b). In the 1998 and 2004 surveys, respondents were also asked if they would agree to increased taxes if the extra money was used to prevent environmental pollution. In 1998 54.9 per cent agreed with this and in 2004 there was a slight drop to 50.1 per cent. In 2004 respondents were asked if they would give part of their income if they were certain that it would be used for the environment with 38.4 per cent agreeing with this. These questions were not asked in the 2011 survey.

Two years after the onset of recession and the GFC, climate change preferences were changing and a reduction in WTP for action was found in surveys. In the Greenhouse Policy Coalition's survey conducted in 2010, 23.0 per cent of respondents felt New Zealand should reduce its emissions even if it meant reducing the standard of living whereas this had been 34.8 per cent in 2009 (Stuart 2010, Section 9 Slide 4). Also, those agreeing that emissions should be cut if it cost jobs dropped from 24.3 per cent in 2009 to 18.8 per cent in 2010. The Executive Director of the Greenhouse Policy Coalition summed up the findings of the survey saying "across the board people seem less committed to climate change as an issue and are certainly less interested in doing something about it if it costs them" (Venables 2010). New Zealanders were made aware

of what it costs them under the ETS and with energy entering the ETS in July 2010 there was a lot of commentary about increasing electricity prices (George 2010). The October 2009 ShapeNZ report (2009b) showed awareness of who was initially paying much of the ETS costs and that people were not happy about paying them with 82 per cent wanting emitters to pay and only 3 per cent wanting the taxpayer to pay. Consistent with results found in international opinion surveys, New Zealand rated poorly on climate change concern against other countries in consumer surveys: "Poland and New Zealand consumers, who were among the top 10 least concerned about climate change/global warming in 2011, show the sharpest declines in concern since 2007, dropping 27 and 18 percentages points, respectively" (Nielsen 2011, p.5).

Citizen preferences expressed in elections

Voting in elections also reflects citizen preferences. The MMP system has been in place since the 1996 elections but between them, the Labour Party and the National Party still gain around 90 of the approximately 120 seats in parliament. MMP enabled the Green Party of New Zealand to present for the elections in their own right without having to be in coalition with other parties. By the 2008 elections they had become the third party biggest in the parliament. After the 2002 election they became a supply and confidence partner with the Labour Party Government although they lost this position of influence in 2005. This occurred despite having campaigned as an alliance partner because in Labour's efforts to form a government they could only gain the required support from New Zealand First Party on the condition that the Green Party was excluded (Vowles 2006, p.1218).

The 2008 election was held during a completely different economic climate to that of 2005. Economic conditions in the country began deteriorating at the beginning of 2008 with the failure of financial institutions and drought in the main dairy farming regions. The country was officially in recession during the electoral campaign before the November election. In the campaign the environment, especially meeting Kyoto Protocol commitments, formed a strong part of the political debate for both Labour and National, and the Green party "struggled to retain "ownership" of environmental issues" (Edwards 2009, p.1058). Labour pushed through the legislation for an ETS just before the election to improve their environmental credentials with National agreeing to the basics of the scheme but said they would amend the costing structure if elected

(Edwards 2009, p.1058). Edwards (2009, p.1059) described the election campaign as "one of the least dynamic and policy-orientated in living memory" with very little to distinguish between the two main parties. Both main parties played on fears of the GFC and both had to rewrite election strategy as the GFC developed by reducing the cost of election promises and including plans for financial stimulus. The Green Party expected to do well in the election with the electorate tiring of Labour, and environmental issues in the headlines so they were disappointed to only win nine seats. The National Party won a majority of seats and formed confidence and supply agreements with the Act Party and the United Future Party. This was unfortunate for climate change policy as the right-wing Act Party were outspoken deniers of climate change and won a delay to the ETS and an inquiry into climate change issues (Edwards 2009, p.1065).

Continuing a trend lamented by political commentators, the 2011 campaign was increasingly professionalised with parties relying "on professional campaign tactics and strategy": an "Americanisation of New Zealand politics" (Edwards 2011, online source). This professionalization is criticised for removing the debate of issues, policy, and ideas from the campaign and making it meaningless to the voters. Edwards (2011, online source) quotes Matthew Jansen from Metro Magazine as writing "we are now consumers rather than producers of our politics, spectators rather than players". Edwards predicted this sidelining of the voter and the disinterest it was producing would result in the lowest voting turnout for 100 years at about 74 per cent. The prediction was realised with a 73.8 per cent turn out, down from 79.5 per cent in 2005 and the lowest since 1887 (New Zealand Parliament 2011). The election outcome gave the National Party a sound majority with 59 seats compared to Labour's 34. Although two seats short of an outright majority they were in a strong position but still chose to keep the same confidence and supply agreements they already had. The Green Party made it past 10 per cent of the vote for the first time and won 14 seats in the parliament. While they made gains due to Labour's losses, the Green Party also received votes from those concerned with National's poor environmental policy record in office. The context of each election campaign illuminates changes within the political arena in New Zealand. A trend of greater professionalism in election is consistent with the argument that Malpass et al. (2007) present that people are increasingly regarded as consumers and this influences people's expectations and how they define what they expect from politicians.

This section completes the background information and the discussion now moves to examining the discourse of elites to discover how they discursively construct the issue of climate change policy in times of crisis. The three ecopolitical theories are used to examine the findings. The examination provides the findings related to these research questions.

4.6 Elite discourses

The relevant background for the GFC and climate change policy in New Zealand has been established to aid analysis and understanding of the discourses used in the interviews. The interviewees are identified with a country code, number, and a letter indicating which sector each elite interviewed belonged to: A for academic expert, B for business sector, G for government, M for media expert, and N for NGOs. The interviews were carried out in September 2010 after the recession had finished and the ETS had been operating in most sectors for three months. Each of the following sections examines the discourses in relationship to each research question to discover how the event was discursively constructed.

4.6.1 The influence of the GFC on the economy and climate change policy

As a signatory of the UNFCCC and the Kyoto Protocol New Zealand needed to introduce policy to reduce GHG emissions. Public concern about the issue reached a peak in 2007 and both main political parties were mindful of the need to satisfy international commitments and internal demands. The introduction of ETS legislation, a drought in the main dairying regions, the GFC, and national elections all coincided creating a difficult period for governance and the country in general. In this section the responses from the elites interviewed were examined to find what discourses were dominant in relation to the economic influences on the country and to climate change policy decisions.

4.6.1.1 Recession, GFC and climate change policy

New Zealand went into recession in the third quarter of 2008: ahead of many other countries. Interviewees tended to see the recession as caused by internal problems in the countries and did not relate excessive household borrowing and spending, the collapse of the property market, and multiple failures of financial institution with being a part of

financial problems that caused the GFC. Interviewee NZ10M commented that the Reserve Bank was trying to control the housing boom and "supercharged consumption" by tightening the official cash rate but "banks could just go to London or New York (to) borrow cheap, short-term, wholesale money (and on-lend it)...The world was awash with cheap money." Another interviewee was adamant that the drought in the main dairy regions over the summer of 2007, coupled with a high New Zealand dollar had caused the recession (NZ8B). If the GFC had not happened, the recession in New Zealand would probably have been a much shallower event with a quicker recovery was the response of another (NZ10M).

A second complicating factor was that the country was preparing for national elections when the GFC began. As details emerged about the extent of the crisis, especially after the American based investment bank Lehman Brothers failed in September, both main political parties had to adjust their campaign strategies. By October the government's budget surpluses had gone and high deficits were forecast through to at least 2013 (Edwards 2009, p.1057). The Labour Government managed to get an ETS legislated on 24 September. Although this was attributed to trying to improve their environmental credentials (Edwards 2009, p.1058) they had been working on this complex policy during most of their third term in government (NZ13G). The National Party didn't "want to put themselves in a position where this was a big differentiator between the two parties" (NZ10M) and said they would keep the scheme but would amend it to reduce compliance costs if they won. "Now all they (Labour) can say is your scheme is even weaker than our scheme which isn't much of a rallying cry so it kind of neutralises it as a partisan issue" (NZ10M). While both main parties said they would keep the ETS a changed approach was evident: "there were some pre-set policy views coming from government which were always going to be carried through" (NZ9G). The National Party sits centre-right drawing support from the farming and business sectors which usually have a conservative approach to environmental politics. "Some might argue that for a conservative government the fact they proceeded with an ETS, with major environmental policy, might be seen by some as a bit novel" (NZ9G). The fact that the National Government retained the ETS showed recognition that the world was going to price carbon: "It says look, they took a long-term view. The world is going to. The problem is real. It's not going to go away. Addressing the problem will require putting a price on carbon" (NZ10M). National moved from Labour's positioning slogan of being a climate change leader: "We took the position that NZ should be a fast follower. That was a slogan airing. In other words not lead, but be a faster follower and do our fair share" (NZ4G). During this economically dynamic period both main political parties had to put much energy and attention into running electoral campaigns knowing that if elected they would have to manage a very difficult economic period.

4.6.1.2 Economic policy during the GFC

Before the November election both parties recognised that the economy would need financial stimulus to lessen recessionary effects. As the influence of the GFC extended bank guarantee schemes were introduced to maintain confidence in the banking sector. The National Government announced increases to previously planned tax cuts to take effect in April and brought forward infrastructure spending as part of their stimulus package (National Business Review 2008). National initially cancelled a Labour Government/Green Party initiative to insulate homes but "eventually they came around to seeing that retrofitting home insulation could be a good part of the stimulus package so that was when we negotiated the new package" (NZ1G). Although the New Zealand stimulus package was touted as one of the largest as a percentage of GPD for OECD countries this was criticised for largely being "spin" (Watkin 2009). Supporting this belief the government later reneged on much of the promised tax cuts which formed a significant part of their stimulus package (Kay 2009).

The new government inherited a deficit financial situation and part of their reaction was to make cuts in the public service sector. "So one of the things they started doing was pulling back on public service spending across all areas and I guess environment was one" (NZ15G). One interviewee agreed with this explaining that the: "Ministry for Environment has had to back out of dealing with climate adaptation because of big budget cuts" (NZ2A). The reality of the changed financial situation for the incoming government was that: "for the next few years we'll only be able to spend about 1.1 billion dollars a year (for discretionary spending) which is nothing. I mean previous budgets have been 3 or 4 times that and that's going to be the case for the next...probably 4 or 5 years, at least until we get into surplus" (NZ3G). Focusing on the consequences for climate change policy an interviewee commented: "with a new issue like climate change it just becomes a whole lot harder to be able to get budget for dealing with a new issue. You are competing out of that relatively small picture and then of course, with the ongoing impacts of the global financial crisis" (NZ6G). Another

interviewee added: "So there was kind of a general systemic impact in the public sector about a realisation that there would not be additional funding available except for things the government had already committed to as priorities" (NZ9G). But the government had committed to the Kyoto Protocol and as explained by one interviewee: "the way we sort of work it is that we know about Kyoto because there are definite rules and we budget plan it in the accounts" (NZ3G). These comments illustrate that when National came into government in December 2008 they found themselves with a very busy period of acting on election promises and reacting to the GFC.

4.6.1.3 Branding, competitiveness and affordability

Another consideration identified for climate change policy was the country's branding position. The branding of the country as "clean and green" was based on New Zealanders' pride in their scenically beautiful country with relatively few of environmental problems. As one interviewee put it, "New Zealanders identify 'clean and green' as part of being a Kiwi. It's part of the New Zealand ethic" (NZ6G). New Zealand has sought to promote the country's commodity exports and tourism through a "clean, green image". New Zealand's high per capita levels of emissions create additional pressure for the country to be seen as acting responsibly with regard to climate change policy. "The big factor...concerns New Zealand's brand and global positioning. You know the "clean green thing" and they were afraid, with some justice I think, of being on the wrong side of barriers at border tax adjustments" (NZ10M). An interviewee from the business sector agreed: "it's a question of what policy settings do we do and what New Zealand should do in order to protect its clean green image and marketing slogans while not crippling its economy" (NZ5B). Commenting on pressure for National to remove the ETS completely one stated that: "New Zealand's clean and green image as being a leader in environmental matters would have become totally and incredible tainted if it (the National Government) would have said "oh we are not going to do anything about climate change" (NZ12A).

While concerns for brand and image were considered important by interviewees, the predominant focus during the entire ETS policy process debate was on costs. In interviewee discourses two distinct cost concerns were discernible: the discourse related to household spending, and the discourse related to GHG emitters, businesses and farmers. The government admitted a focus on economic concerns: "When people are feeling financially buoyant, feeling secure about their jobs, feeling good about

improvements in their standard of living, they get the opportunity to focus on the longer-term issues...the global financial crisis has brought the issue hard back on the bread and butter issues of: "have I got job security, is my business in the black, and what's happening to my living standards?" " (NZ6G). As one interviewee emphasised: "because of the recession, they absolutely wanted to mitigate the effects on households and businesses" (NZ10M). With regard to the household situation one interviewee observed: "in terms of climate policy the government has routinely mentioned the recession from the point of view of "we do not want to place extra burdens on people at this particular time" " (NZ5B). Others remarked: "there was a huge level of focus on living costs" (NZ11G) and: "people became extremely sensitive to any price increases or anything that might be seen to affect economic activity so the arguments against introducing a price on carbon were piled up higher than they already were" (NZ1G).

While government was concerned about mitigating costs for the people, businesses, high volume GHG emitters and farmers were active, well organised participants in the policy debate protecting their own interests. "Any excuse by those who face a bill is used to their advantage. I mean there's a lot of self-interested behaviour by emitters. You shouldn't expect anything else" (NZ13G). This sentiment was supported by the comment: "I think the bigger influence on climate policy, and particularly the ETS, was rent-seeking behaviour. And that was occurring prior to the financial crisis; it continued through it, and it continued after it" (NZ14N). Another pointed to the influence of lobby groups: "The opposition to paying...they funded many hundreds of thousands of dollars, probably millions of dollars, for the lobby groups and they had a wellorchestrated campaign. You used to see things coming out on a Sunday. One week it would be the Greenhouse Policy Coalition, another week it would be Business New Zealand, another week it would be Solid Energy" (NZ13G). One interviewee compared the protests of sectors that could re-locate overseas with others that were not able to: "Now the farming sector doesn't have economic leverage on climate policy because they can stop farming but they can't relocate the land" (NZ14N). Farmers concentrated on political leverage and were "so hostile anyway it (GFC) wouldn't have increased their hostility more" (NZ14N). The opposition to increasing business costs was strongly related to the argument of competitiveness and this aspect formed a defining part of the discourse on costs. As one interviewee stressed: "the big debate that's been had over the ETS for the last four or five years...has been not the impact on householders, although

there's definitely that impact, but on New Zealand's competitive advantage vis-à-vis those that do not have a price on carbon" (NZ8B). The general sentiment of interviewees was that the New Zealand recession and GFC contributed to "a political climate in which people are a bit more risk adverse about putting new costs into businesses" (NZ7N).

But National was regarded by some as always planning to amend the ETS: "They reviewed the ETS as we currently saw it and they basically softened its impact, fundamentally on New Zealand businesses in New Zealand communities. Now my suspicion is even if we had not had the global financial crisis they would have done about that anyway" (NZ8B). Another explained the outcome in relation to the effects of the GFC: "In regard to having an ETS ready to crank up when things change internationally, there was a lot of pragmatism about that and I think it was driven partly by the recession. Clearly households were in a worse position to bear an increase in costs" (NZ10M). But another interviewee lamented this approach: "effectively now you've got an ETS that doesn't really price emissions. So it looks good, you know it's a great fig leaf. A great thing to parade around in international conferences but whether it will actually do a jot as far as emissions reduction in the short to medium-term I couldn't tell you" (NZ11G). The softening of the scheme meant costs had to go somewhere and there were complaints that initially these moved to the taxpayer. One interviewee commented: "they presented their changes as halving the cost of the ETS for the consumer...It would have cost you this under the previous government; it'll cost you this under ours. So from that point of view they were able to proceed. Yes the costs went somewhere, over the first couple of years they went into the Crown accounts." (NZ9G).

National also delayed the entry of agriculture which gave rise to the following comment: "Now what they've (farmers) managed to do is convince the government that despite the fact that New Zealand is liable for their increasing emissions in the agricultural sector under the Kyoto Protocol, the tax payers should pay the bill instead of them" (NZ13G). New Zealand was expected to meet their emission targets by the end of the first Kyoto commitment period in 2012 using forestry off-sets, much of which is due to be felled post-2020 and will then have to be accounted for as carbon emissions. "But the question about if we sign up for post 2012, that's definitely a live issue. Obviously because it has multi-million dollar consequences for NZ" (NZ3G). This

concern seemed warranted when at the COP18 in 2012 New Zealand, "like Canada has bailed" (NZ3G), withdrawing from the Kyoto 2012 to 2020 commitment period.

4.6.1.4 Concluding comments on the influence of the GFC

The examination of the discourse around the ETS that was being modified and implemented during the period of this study shows that costs were a crucial component. But this discourse was in use before the New Zealand GFC and the main change was that this was intensified by the deteriorating economic situation. Most of the elites interviewed felt the GFC either did not directly affect the process of introducing or amending the ETS, or if it did, it was an indirect influence. New Zealand needed a mechanism to meet the country's Kyoto Protocol commitments and the legislative process to introduce this mechanism was well advanced before the GFC. There was also consensus between both main parties to use an ETS to reduce emissions although it is worth noting that: "it's easier philosophically for the Nats because they're a centre-right party so there's still an element which thinks that whatever the problem, solution is a market. Tax is bad, market is good" (NZ10M).

Indirect effects discussed were that it intensified opposition to the ETS and strengthened arguments against increasing costs for both householders and businesses. Others felt the reduction of the strength of the ETS was planned by National before they won the election although some felt the GFC may have pushed the amendments further than they had intended. The change of government in 2008 affected governmental discourse as National chose the slogan of being a "fast follower" rather than maintaining the Labour Government's leading role positioning. New Zealand is a small open economy paying a lot of attention to what other countries do and the issue of competitiveness was considered central to the debate by several interviewees. By prioritising competitiveness, noting global action, protecting the country's brand and global positioning, the government was taking a more conservative and economically pragmatic stand than their predecessor.

The general opinion of the elites interviewed was that much of what happened in New Zealand in relation to the legislation and implementation of the ETS would have proceeded much as it did regardless of the GFC. An intensification of the discourse around costs was noted but the economic priorities of this small, open market country were generally considered the real drivers of policy decisions at this time.

4.6.2 Ecological modernisation related to discourses during the GFC

This section examines the influence of ecological modernisation on climate change discourses and the relationship with policy and business reactions during the GFC. Although ecological modernisation provides a practical, market based approach to reforming means of production there are still many challenges to its adoption. The agricultural base of the economy makes this type of modernisation more difficult to apply. At the same time the discourse of ecological modernisation is influential because it fosters incorporation of environmental consideration into business practices. New Zealand is attentive to international agreements and to maintaining the country's brand which maintains pressure on being seen to be building environmental concern into all facets of production be it manufacturing or primary resources. The GFC provides an extreme period to examine how strongly ecological modernisation is incorporated in discourses in New Zealand.

4.6.2.1 Ecological modernisation and ETS discourses

New Zealand, after rejecting a carbon tax, chose an ETS as the main action to reduce emissions in the country. Although they took a world leading position by including all sectors and all gases in the scheme, they have persistently postponed the entry date for agriculture. As stated by one interviewee achieving an ecological modernisation winwin situation with the ETS is: "the Holy Grail and that's what we're aiming for" (NZ4G). With this acknowledgement came the proviso: "But I tell you what; we have to achieve both objectives because you will never get farmers...to adopt technologies that will reduce their incomes, which is a close proxy for meaning reduce their production levels. So unless it is at least neutral with respect to agricultural productivity it won't work. You have to achieve both objectives" (NZ4G). The original scheme introduced under the Labour Government was explained as exposing: "every sector, overtime, to the full market price of carbon for marginal increases and decreases in emissions which is necessary if you're going to use an emission trading scheme to reduce emissions" (NZ13G). With agricultural emissions making up almost half of the country's emissions Labour felt it was important these emissions were included. In the scheme allocation of rights are all gifted with the government, or taxpayer money used to pay the cost of allocation. One interviewee commented: "moving to an intensity-based allocation model for free emissions rights for those industries that are exposed to competition in markets not yet pricing emissions; that change is wrong in terms of the economic efficiency of it and the environmental effectiveness of it, in my view. In fact I don't think there's much doubt about that from a theoretical economics point of view" (NZ13G). And from a business interviewee who felt that innovation incentives had been removed: "they've got to charge that at the margins so that if we reduced our energy consumption by 10 to 15 per cent...you don't have to pay it (emissions cost) any more. That would then make it economic to do something about it but the way it is now they're just charging us twelve fifty for every tonne we emit" (NZ18B).

That the National Government led their ETS review with the slogans of being a fast follower and doing our fair share, suggests they were less concerned with the ETS being a tool to drive innovative change. This is reflected in comments relating to the entry date for agriculture which was: "pushed back to 2015 and almost certainly will be pushed back further still, so half the emissions have gone" (NZ10M) and that the changes for big trade-exposed emitters have been "extremely generous" (NZ10M). "So what they've done is sort of install the infrastructure for an ETS but we'll hardly feel a thing...I think the political calculations say, we'll water it down, we'll install it and make it part of the invisible plumbing of the economy, buried behind the plaster board. People will have forgotten that it exists" (NZ10M). As an instrument to encourage structural changes in the economy, the ETS also does not send strong signals to investors. One interviewee expressed this frustration: "instead of sending relatively strong price signals to investors that they should be planting forestry on marginal land, (it encourages) yet more dairy conversions with all the economic consequences and environmental consequences. We have the signal that they can keep dairying" (NZ11G). And another: "It (the ETS) really is aimed at being a money-go-round, the way it's currently designed, rather than a behaviour changer" (NZ14N).

In 2012, when further amendments to soften the impact of the scheme were made, it was more doubtful that the New Zealand ETS would contribute much change in production based on ecological modernisation principles. The focus of the policy appears to have been more on protecting competitiveness than on driving significant emission reduction, and to have a scheme ready in case the rest of the world acts.

4.6.2.2 Ecological modernisation in practice in New Zealand

Interviewees understood the reform principles behind the ETS although they were not

necessarily familiar with the term ecological modernisation. Moving beyond the policy process of the ETS interviewees were asked about examples of ecological reform in New Zealand. One interviewee commented: "there's not a lot of industry where ecological modernisation can be applied...and whether or how it can apply to agriculture is always a bit of a question" (NZ12A). This same interviewee noted with regard to agricultural improvements, any reductions achieved through ecological modernisation may be too little too late: "You buy time by creating some efficiency but even if the pollution was decreased by 10 per cent, at the rate dairying has been growing in the last decade then the gains that are being made by this pretty quickly (disappear) in absolute terms." (NZ12A). While growth of the dairy sector is of concern for the country's emission profile, several interviewees noted that the country was leading an international research initiative to find solutions for agricultural emissions. "The one area where we do have a competitive, comparative advantage is agriculture. And there, what the Global Research Alliance is saying is let's pool...an understanding around what you can do in the agricultural space" (NZ3G). This was seen as a practical approach for a small country of four million people: "in many areas NZ is a price taker and it's a technology taker, we're never going to be cutting-edge on vehicle design and electric cars and even power design." (NZ3G).

One policy that was considered to be driving innovation was a landfill levy. As one interviewee commented: "Now that one does drive a degree of innovation because, of the levy funds collected for every ton of waste disposed, half goes back to councils and the other half is handed out to people who can apply for funds for projects that will minimise waste" (NZ9G). Another interviewee talked of the benefits of that levy and how it helped them manage landfill emissions prior to their inclusion in the ETS because these: "make up something like 40 per cent of total emissions profile for the Council...The landfill that we've got has landfill gas capture and it generates electricity from that" (NZ15G). The following comment supported the influence of the ETS, even in its "softened" form: "we've worked through the development of a couple of carbon management policies in terms of how we meet our obligations under the emissions trading scheme for our landfill obligations" (NZ15G).

Much of the regulation and monitoring of the environment in New Zealand is managed under the *Resource Management Act*, an internationally advanced policy introduced in 1991 to include environmental consideration into development. While this act is largely regulatory in design it has potential to drive investment in innovative technologies to manage problems. "The *Resource Management Act* has all sorts of requirements around, you know impacts on water and air and all that kind of stuff which has some substantial teeth to it. So in terms of ecological (modernisation)...there's already a body of behaviour there within industrial companies and with agriculture" (NZ5B). This supports the contention that changes to support ecological reform are already more institutionalised than many people recognise (Mol & Spaargaren 2000; Buttel 2003). Although the Parliamentary Commissioner for the Environment criticised amendments made to the Act in 2012: "There is a sense in the changes that the environment is considered the enemy of economic progress despite the fact that a large part of our economy is built on our environmental credentials" (3News 2013).

An important contribution to moving the discourse away from one of economy versus environment is the increasing adoption of the principles of sustainability into business practices in New Zealand. The recession and concerns about the GFC may have influenced new project development for sustainability but it was observed: "they are rapidly coming back to it of course for all the same reasons they were doing it before because it is actually the biggest thing happening out there" (NZ8B). When commenting on the overall effects on businesses of the GFC the following statement illustrates the general mood of businesses: "Business tended to use it as a good opportunity to look at the number of employees that they had and there were a lot of redundancies made. It was a great opportunity for business to do that sort of thing. But there was all of this doing the right thing, the tidying up of my backyard, the taking of the chocolate biscuits off the tables; you know all those luxury things" (NZ16B). Larger businesses complained about the continual reform pressure: "They are already advanced in terms of energy efficiency. I mean energy is expensive in New Zealand so they save a lot of money by doing that anyway. One of my members was saying the other day they want to know why they get grief from 'greenies' because their emissions are below 1990 levels" (NZ5B). Another interviewee referring to larger businesses' attitude to the ETS commented: "They're ambivalent about it. They're not strongly opposed to moving in this direction. And their attitude would at best be a common sense response - oh well we know you have to do something...enthusiastic about it...no way!" (NZ4G).

Interviewees felt that incorporating environmental concern into the way business is done is reasonably established in New Zealand although it is done with varying degrees of commitment. Government intervention through the *Resource Management Act* and ETS is encouraging change although it was felt that some businesses see environmental concern and sustainability as a business opportunity and are more pro-active.

4.6.2.3 Concluding comments on ecological modernisation

The interviews conducted in New Zealand were examined to identify the dominant discourses during the GFC and to understand how these relate to the policy decisions taken at the time. Howes et al. (2009) argue an aspect of effective ecological modernisation in a country is a discourse that reflects taking care of the environment is an integral part of the way things are done. Ecological modernisation as a discourse is not widely used in New Zealand, although environmental protection has formed an important part of development since the introduction of the *Resource Management Act* in 1991.

The timing of the ETS policy process and GFC provided the focus for examining the environmental and economic discourses of the elites interviewed. The principles behind the use of such a scheme were understood by most of the interviewees and formed a part of their discourse about the policy. Many understood that carbon pricing needs to influence profit margins to create sufficient financial incentive for businesses to investment and create the win-win condition promoted by ecological modernisation. Many of the objections to the National Government's amended ETS were that business saw themselves as losers, with the scheme lacking incentives to make changes and acting like a tax. The general discourse related to the ETS was economically focused and centred on costs to businesses, farmers, taxpayers and the householder. This dominance of economics resulted in little discourse related to the importance of making changes for the good of the society, or of future generations, in relation to preventing dangerous global warming. As one interviewee lamented research and policy on climate adaptation had also slipped well down the agenda.

When talking about other areas of environmental policy the discourse is still constructed around having regulation imposed rather than being incorporated in the way business is done. Research and development were barely mentioned by interviewees when discussing innovative solutions and the role of technology, apart from the Global Research Alliance for agriculture. This initiative demonstrates a positive stand on looking for solutions to agricultural emissions which fits an ecological framework. Local government showed closer regard for citizens' interest in taking action to prevent environmental damage and it was felt that they have a financial incentive to reduce GHG emissions to lessen costs under the ETS. All the elites interviewed spoke of the need for New Zealand to be part of international effort to reduce GHG emissions and discourse related to climate change and international action was well established at this level. Business interviewees were insistent that their objections to the ETS were around costs, and other details of the scheme, and stressed that they believed anthropogenic climate change was occurring. At the same time a strong belief in individual selfinterest was evident in some commentaries about businesses. Some considered that business reorganisation and cost trimming during the GFC may have been beneficial to the environment, but that this was mostly achieved as unintentional consequences.

Ecological modernisation discourses could be discerned in the elite interviews, mainly due to several years of debate relating to the ETS policy process. It remained an important concern for those in the scheme as they understood the need for sufficient financial incentive before investing in new emission reducing technologies. There was still considerable concern about the scheme and opposition, especially from the agricultural sector, but overall there was a sense that New Zealand needed to be seen as a responsible international actor in the ecological reform process.

4.6.3 Postmaterialism related to discourses during the GFC

Value change in modern societies draws much attention from researchers and Inglehart's theory of postmaterialism forms an important part of these investigations. New Zealand experienced the societal change associated with the new social movements of the sixties and seventies along with protests and political action similar to that which took place in much of the developed world occurred. The development of postmaterialist values influences the political arena and in this study the interest lies in how such values can explain what happened in New Zealand during the GFC. Taking action on climate change is associated with postmaterialist values where lifestyles and taking care of the environment are important.

4.6.3.1 The influence of recession and the GFC on postmaterialism

The recession lasted five quarters so a period effect on postmaterialist values could be expected although some interviewees felt New Zealanders were not influenced to a great extent by job insecurity. One interviewee commented: "access to the Australian and Chinese markets has been the saving grace for the NZ economy. That's helped so the unemployment hasn't got anywhere like it has overseas" (NZ1G). Putting figures to unemployment one interviewee remarked: "unemployment benefit numbers which were down to almost as low as 80,000 people on the dole in 2008...it doesn't get any lower than that really and that's now gone up to above 160,000" (NZ3G). One of the reasons given for the relatively low increase in unemployment was that businesses tried to retain staff rather than risk them going to Australia where employment conditions were better: "one of the things firms did, to some extent, was to hoard labour. Employment didn't fall as much as output and they also tolerated less output per hour: they took a productivity hit" (NZ10M). Overall interviewees felt people were not too concerned about unemployment so this may not have influenced those holding postmaterial values although some expressed the feeling that there was stronger job insecurity in the rural and regional areas.

A stronger effect on economic insecurity may have come from the debt many people accumulated. This came from the period before 2007 when "super-charged spending" resulted in national household debt rising to around one hundred and fifty per cent of disposable income (RBNZ 2012). The GFC and uncertain long-term economic outlook caused a sudden drop in spending: "people have gone from being very profligate and improvident and so on. Borrowing like crazy and spending a dollar twelve for every dollar of income: to something more prudent, and that's a permanent change" (NZ10M). Exporters fared better than those supplying or servicing the domestic market as the trading downturn in commodities was relatively short lived. This economic insecurity may have produced a period effect on postmaterialism as people focused on their debt commitments and trying to maintain their lifestyles.

Some interviewees felt that postmaterialist values were more likely to be held by those living in the large cities than by rural and provincial dwellers. One response related to Wellington: "I mean we've got the most highly educated population in the country and they're quite discerning, so you know we've probably got more support than other parts of the country in terms of understanding and belief" (NZ15G). Commenting on the National Party's polling on environmental questions: "the polls dipped mostly in rural and provincial New Zealand but not in the main cities" (NZ7N). Also referring to city based people: "Volvo drivers in cities, not much affected really, I mean kept a job,

perhaps didn't get a pay wage increase, perhaps didn't change their house over. But you know otherwise, for those skilled people in work, we did not go through the gut wrenching stuff that many other countries in the world went through" (NZ8B). Another distinction is made between Auckland and Wellington: "Auckland just gets on with trying to run businesses and be commercial and make a living whereas Wellington, because it has the public service and the government, that is such a big part of what it is. People up here just don't care about a lot of the stuff that people in Wellington care about" (NZ17M).

Vowles et al. (1995) showed in their study on postmaterialism that Labour politicians were three times more likely to be postmaterialists than National politicians. This could relate to one interviewee's comment on discourses: "in a way in New Zealand the word 'conservationist' is more widely acceptable on the political right and 'environmentalist' is more widely acceptable on the political left" (NZ7N). Environmental street protests tend to focus on conservation issues, for example in 2010: "when those people got concerned about mining this year we had 40,000 plus on the streets in Auckland in a march over mining" (NZ14N). A public survey was run around the same time this issue was being debated and: "they found out that people didn't want mining on high value conservation land even knowing the economic benefits it would bring. Which suggests again that in terms of public preferences, the financial crisis and the subsequent recession wasn't changing fundamental social values to a great extent here" (NZ14N).

The environmental policy issue that focused attention on action against climate change was the introduction of an ETS to manage the country's GHG emissions. The next section examines the discourse of the elites interviewed in the context of people's values and the ETS policy process.

4.6.3.2 Values related to the ETS

A factor that had a strong influence on the discourse about the ETS was that the scheme was to be the first in the world to include all GHGs across all sectors. This formed the basis of several lines of discourse that developed: the issue of fairness and justice, that of leading the world, that the rest of the world was doing nothing, and that the country's emissions were such a small part of world emissions they were inconsequential. There was a lot of media coverage of the policy process and most New Zealanders had an opinion on it even if they could not understand it very well. One interviewee commented: "The economics of it make an ETS a complicated instrument. And the people even ask the questions "how can you trade in something as esoteric as a ton of CO2? I wouldn't know a tonne of CO2 if I tripped over it in the street", they would say" (NZ6G). After the amended bill was introduced into parliament in September 2009 a survey was run to gauge public opinion on the scheme which showed 58 per cent felt they were not well informed on the issue (ShapeNZ 2009b).

Commenting on the entry of most sectors to the scheme in 2010 one interview said: "When it came to July 1st, petrol went up three cents at the pump. It's the kind of movement that happens all the time as international prices and exchange rate move around. So far I think only two of the power companies have raised their prices, so there's been the mere-ist little bump in terms of the public opinion. It's a little sort of flurry of bad temper that lasted for about a week and is now forgotten" (NZ10M). Another interviewee felt people were influenced by the unfairness if having an ETS: "It wasn't, from what I could see, "it's about the global financial crisis and therefore the recession"...sitting behind that was a much stronger view which said "why should we be ponying up when the rest of the world isn't?" " (NZ8B). An Auckland based interviewee commented: "I never detected there was a great ground swell against the ETS" (NZ17M). While public opinion surveys showed continued support for taking action on climate change during the economic downturn, much of the opposition discourse appealed to societal values and this did appear to have an impact on people's opinion. The following comments from one interviewee help explain the opposing debate: "They couldn't see why they would pay a price while the rest of the world wasn't...So that's the driver here, and that's to do with a very, very key piece of New Zealand culture, which is a very strong sense of fairness and justice, and it plays out and feels unfair and unjust that this would be happening to New Zealanders when we actually are good citizens and we do all these good things around the world" (NZ8B).

4.6.3.3 Concluding comments on postmaterialism

The recession in New Zealand lasted five quarters and was followed by a long period of slow economic growth and uncertainty. That climate change dropped significantly as a priority issue politically was felt to be related to this and could have caused a period effect on postmaterialist values. This latter point was supported by a halving of the level of postmaterialists between the 2004 and 2011 (WVS 2011b) although it remains to be seen if there is an increase again in the next WVS. Although discourses focused on the

fact that the issue dropped as a priority, public opinion surveys continued to show majority support for taking action on climate change. Support for action on environmental issues remained high and this was reflected in the 2011 national election when the NZ Green Party passed the ten per cent vote level for the first time.

Unemployment did not rise dramatically and interviewees believed that this would not have a big effect on New Zealanders postmaterialist values. Contrary to this, some interviewees felt there was a difference between unemployment pressure in the cities compared to what rural and regional dwellers experienced. Added to this the rural and regional people are considered to be more conservative than their city counterparts, and more likely to vote for the National Party. Consistent with this, opposition to the ETS was much stronger from the rural sector than from those in the big cities. While unemployment was not considered a big influence, interviewees recognised that the household debt problem was a concern for many. National Party politicians have been shown to be less postmaterialist than Labour Party politicians and this could have influenced discourses on the issue under the different governments.

The interviewees associated people's opinions on climate change action and the ETS with deeply held values which manifested in the discourses of lifestyle, the clean green image, fairness and justice, and being good international citizens. The National Government was seen to base their discourse on these values although it was not necessarily felt they acted in accordance with them.

4.6.4 Consumer and citizens preferences discourses and the GFC

In New Zealand, after the radical reform period between 1984 and the mid-nineties, neoliberal market thinking became institutionalised and is associated with a strong sense of individual self-interest (Kelly 2010). Against this background it is especially interesting to examine the influence of such thinking in relation to preferences during the GFC. With economic issues gaining priority over other issues it is easy for elites and politicians to place priority on preferences expressed as consumers as opposed to those people hold as citizens, or other-regarding individuals.

4.6.4.1 Preference contradictions in public opinion surveys

In surveys it has been observed that there are big differences between what people say they will support for action on climate change and what they actually do. The

concluding comments in a New Zealand survey describe this in relation to the ETS: "The disassociation (between personal action and what they believe) suggests that New Zealanders apply different rules to judging ETS related strategies versus day to day carbon footprint reduction. ETS appears to be somewhat 'out there' and theoretical -amoral judgement perhaps. But it has little to do with our day to day decisions" (Stuart 2010, Section 11). Reinforcing this contradiction related to voting, one interviewee was passionate on the issue: "this is not just some fine academic, clever point to make, this is fundamental...there is a vast difference between what people say they believe on this issue (climate change and ETS) and what people do in terms of their voting" (NZ4G). One interviewee talked about the seeming anomaly between actions and beliefs, and explained it as myths that New Zealanders have created: "there's a myth around quality of life, and the clean green one's another myth, that's another identity myth which again tells you a lot about how people see themselves and how they see this country. And those are very, very deep-seated values and it's come up time and time again" (NZ14N). A lifestyle centred on having a detached home with a garden, the quarter acre section of the fifties and sixties, helped establish the New Zealand concept of lifestyle. Related to this an interviewee commented on sprawling suburbs and reliance on cars: "they adopted urban development in the fifties and it's been going backward ever since" (NZ1G). Even the greenest New Zealander's dream is escaping from the crowd to an idyllic, isolated location – with their car. The low population with plenty of space has resulted in ever expanding city boundaries and larger homes. Vehicles for everyone over fifteen in the household, every home appliance available, lawnmowers - ride-on are the new fashion, and the bach³, all constitute things that are regarded as necessary for the New Zealand lifestyle (NZ14N).

A survey in 2007 showed "Kiwis want to shop, recycle and plant their way out of climate change troubles" because they "favour buying energy efficient appliances, light bulbs and cars, ahead of alternatives like walking, cycling or taking public transport" (ShapeNZ 2007b). New Zealanders' do not appear to relate their lifestyle to the country's very high per capita emissions even though the highest emissions increases since 1990 have been from road transport. The "farting" cows tend to get the blame: "I mean there's a real sense of unfairness that fully 57 per cent of our emissions come from animals and there's nothing much we can do about that" (NZ8B). New Zealanders

³ A weekend house

find it hard to comprehend how Europeans have much lower per capita emissions. For example, animal housing where pollution can be controlled more easily runs counter to New Zealand lifestyle values. One interviewee demonstrated this sentiment when recounting a travel experience: "in America we went and looked at a dairy farm...the cows had chains around their necks, and they were chained into these stalls, and they could only move about one or two metres backwards or forwards and lie down. And that was their life and for me, that's just horrible" (NZ18B). Expressing frustration at New Zealanders' unwillingness to change their high energy-use lifestyles one interviewee highlighted how the government's discourse disguises the situation: "The government always says we should do our fair share. But when you actually look at it, we're not doing our fair share politically. To get away with it in New Zealand they have to present it as 'doing our fair share'" (NZ14N). The contradiction relates to what people consider essential values in New Zealand society and they express this in their citizen preferences. But in contradiction to this, they express their consumer preferences when they wish to preserve what they often regard as a right: a high energy-use lifestyle.

4.6.4.2 Willingness-to-pay and reaction to ETS costs

During the ETS policy process the discourse of those opposing the scheme centred on costs which appealed to people's consumer preferences. Commenting on New Zealanders WTP for action an interviewee remarked that: "when confronted with the choice about how much they are prepared to pay for New Zealand to do its fair share around climate change, the dollars quickly focus the mind...there is a real cost" (NZ6G). Using more picturesque language an interviewee explained: "you know that jaunting old song "Everybody wants to go to heaven but nobody wants to die"? Everybody wants to savour it but they don't want to pay. So it's only when people have even a relatively modest cost of carbon pricing brandished in front of them then get quite grumpy about it" (NZ10M). In defence of the people and the difficulty of understanding the debate one noted: "People really don't understand an ETS...you've got the public watching and listening to the rhetoric at a political level and hearing that they will suffer higher prices, but not really understanding what the benefit of that will be" (NZ11G). In trying to measure what people are prepared to pay: "if you ask people whether they think climate change...is a problem that needs to be dealt with, overwhelmingly people will say yes. And it's certainly true when you start to say "well

would you be willing-to-pay 10, 15, 20, 25, 35 dollars a week out of your household budget as a contribution to combating it", support starts to fall away exponentially" (NZ11G). Another explained: "so typically people know they are meant to say the right thing but the evidence is very weak that they vote with their dollars" (NZ4G). Directly related to measuring how much people say they would pay for the ETS and commenting on surveys run at the time: "consumers were willing-to-pay up to about \$400 a household for action to reduce climate change...Where the scheme came out it was around \$165 per annum direct cost per household for the first couple of years. So to that extent it was all well within the realm of what people would pay" (NZ9G). Although the rider on this was: "but of course with an ETS it's not directly people's money, it's not their personal income directly that's at stake in that" (NZ9G). One interviewee related how the policy process could affect future changes to the ETS: "but their willingness to entertain further cost increases now that they've got an ETS and they're facing it...will be one of the bigger issues about the extent to which the government is able to adjust the price over time and thereby achieve higher incentives" (NZ9G). In the debate and policy process related to the ETS, the recession and GFC did have an influence on consumer preferences as measured through expressions of willingness-to-pay. Also the discourse on costs was widely used by both those supporting and opposing the scheme.

4.6.4.3 Voting and citizens' preferences

People get the opportunity to express their citizens' preferences in opinion surveys, and by voting in elections. As discussed earlier in this chapter there was not a defining difference between the two main political parties on policy for reducing GHG emissions. One interviewee commented: "in terms of citizens' choice, when both major parties favour an ETS really the choice is one of degree in detail rather than the finery" (NZ10M). By the 2011 elections, after a disappointing result in the 2008 election, voters turned in greater numbers to the NZ Green Party to express their concern for environmental issues.

Often more climate change action is visible at local government level: **"this** is where the stuff is actually happening, I mean we're practically doing these things and, it's fantastic, it's exciting stuff to be involved in" (NZ15G). An example of this is was a council committed to reducing emissions by 30 per cent by 2020: "it's some of the things that the councillors and the mayor are working towards" (NZ15G). To check they are preforming as citizens' want they run resident satisfaction surveys. This approach

sits well with the way one interviewee expressed how he saw people developing their beliefs: "I don't think it was big top down things like IPCC reports or Al Gore. I think they had some influence but I think it was a bottom up thing. People started to interpret, quite possibly misinterpret, things that they experienced anecdotally in terms of the meta-narrative of global warming." (NZ10M). One interviewee noted support for campaigns on climate change action stayed high during the GFC: "going right through to 2009 you could still mobilise people despite the financial crisis" (NZ14N).

Climate models show that New Zealand is not expected to be exposed to extreme climate changes but this can easily change: "you can see any number of factors that could suddenly put environmental and climate related concerns back up at the levels, or even beyond the levels, that it was last year...one of the risks that people will focus on here is if the Pacific starts to suffer extreme weather events, or rising salinity in water tables" (NZ11G). While most interviewees talked of New Zealand not being as vulnerable to climate change as other countries, a reason given for the country going into recession before the GFC in 2008 was a drought in the main dairy farming region. The economic reliance on farming as the principal export earner for the country also makes the weather a very important factor for the country.

4.6.4.4 Concluding comments on preferences

Measuring preferences is important for political decision making. If governments want to be re-elected they need to know that they have the support of the electorate for decisions they make. With neoliberal thought regarded as common sense in New Zealand it is not surprising that much of the discourse used in the ETS debate was based on costs and the country's economic interests. To conform to citizens' preferences the government and interested parties in the ETS debate developed discourses that supported the deeply held social values of New Zealanders. This has created contradictions for the people as they support doing their fair share, support the clean green brand, and being good international citizens while they are being told about the cost burden they will have to bear under the ETS. The implication being that this will affect their ability to maintain their life styles during the weak economic times.

Willingness-to-pay for action declined during the GFC and was related by interviewees to concern about employment, income, and paying the bills. The ETS is not related to people's everyday lives and was difficult to understand which could contribute to the contradictions seen. It is possible that the contradictions observed also relate to the context the issue is placed in, with the consumer emerging in market and costs based debate and the citizen when the moral, social values arguments are used. That citizens were very aware of the ETS debate in New Zealand suggests a scrutiny of government action that appears to be typical in Anglo-Saxon adversarial political systems. For example the ETS debate in European countries was mainly between emitters and governments with much of the population hearing very little about what happened. In New Zealand the political parties saw that taking action on climate change was important and the issue featured strongly in the 2008 electioneering period. Although, because there was no major difference between the stand the two main parties took, it was not a distinguishing issue and even the NZ Green Party could not gain much support from the issue.

In this section and the three preceding sections, the discourse used by elites in interviews related to the three ecopolitical theories has been examined. To contribute to and test these findings the examination is extended to the discourse used in a media event during the ETS policy process.

4.7 Discourse during a media event

To provide further insights into the discourses that developed a policy event related to the ETS was chosen. The public reporting related to this event was examined to determine if the discourse findings from the elite interviews were consistent with what appeared in print. The event chosen was the second and third readings of the *Climate Change Response (Moderated Emissions Trading) Amendment Bill* in November 2009. The timing of the process leading up to the adoption of the bill is relevant to the study period because the country was barely out of recession, the longer term economic impacts of the GFC were better understood, and the country was preparing to go to Copenhagen for the COP15 able to support whatever emission reduction action would be decided by the parties. After a review process by select committee, the government introduced their amended bill and it had its first reading in September 2009. The bill had its second and third readings in November before it was adopted by a vote of 63 for, and 58 against. There was considerable attention given to the amended bill before the parliament in November and the Hansard debates and media reports from this time are examined here.

4.7.1 Parliamentary discourse on the ETS amendment

The National Government set up a review of the ETS in December 2008. The terms of reference for the review included the following: "Consider the impact on the New Zealand economy and New Zealand households of any climate change policies, having regard to the weak state of the economy, the need to safeguard New Zealand's international competitiveness, the position of trade-exposed industries, and the actions of competing countries" (Government of New Zealand 2008). This was reiterated during the second reading of the bill when the Minister for Climate Change Issues explained why the government needed to soften the impact of the scheme: "we are part of the biggest economic downturn since the Great Depression. This government has gone to a huge amount of work to try to get us back onto a growth path. The last thing we want to do is to snuff out that recovery with an overly ambitious emissions trading scheme" (NZ House of Representatives 2009, p.7963). The economic downturn and burden on householders were regularly used by the government as reasons for the amendments to the scheme with frequent reference to: "not prepared to burden households and businesses", the "worst economic downturn since the Great Depression" (NZ House of Representatives 2009, p.8052-3), and "to take account of the global economic recession" (Government of New Zealand 2011, online source). Amongst the main points the National Government raised in the second reading of their bill were that it would meet international obligations: "we need to be seen to be playing our part", and it would reduce the cost of the original scheme: "let us be really clear that under this bill the cost on New Zealand households will halve--it will halve". Justification for the softened scheme also focused on the need to stop exporters going off-shore with resulting job losses: "we see the emissions trading scheme as about protecting the environment and protecting jobs" (NZ House of Representatives 2009, p.7917). Wagner, a National Member of Parliament, summed up the government's discourse to dealing with climate change: "It is a fiendishly difficult problem, and it comes at the worst possible time: a time when the world is also struggling with a hugely challenging financial situation, a time of great economic turmoil and international uncertainty. This bill is a first step, a sensible, pragmatic, responsible response to both environmental and economic conditions...that allows New Zealand to do its fair share for global climate

change without destroying our economy or the quality of life that it delivers" (NZ House of Representatives 2009, p.7920).

Most of the opposition to the amended bill criticised the speed with which the review and introduction of the bill had been conducted with. Labour Party opposition also focused on the lack of a cap on emission levels in the amendments and that taxpayers would be paying the bill for excess emissions: "It will make New Zealanders poorer, our economy weaker, and our emissions higher" and "what has happened here is that the punters out there, the taxpayers, the mums and dads and their children, are to pay for the emissions of the big emitters" (NZ House of Representatives 2009, p.7905 & 7908). The Act Party, a supply and confidence partner of the National Government, refused to vote for the scheme because they felt New Zealand did not need an ETS and their leader made the statement: "an emissions trading scheme will hike the costs to business, to farmers, and to hard-working New Zealanders right at the time when we can least afford it. There is no doubt about it: an emissions trading scheme will put up the cost of basic goods and services for ordinary New Zealand families" (NZ House of Representatives 2009, p.7913). A Labour Party Member of Parliament reminded the House that : "the thing that worries young people today is not the global financial crisis—that is just a blip-it is not the end of the American Empire or the rise of East Asia, but it is the threat of a changing climate" (NZ House of Representatives 2009, p.7919). The Green Party lamented that: "we are dismantling (the first scheme) today by taking away the cap in the "cap and trade"...instead, the bill in front of us today is a bill to weaken our response to climate change. It is a shameful day to be a member of the New Zealand Parliament and to watch the New Zealand Parliament passing this legislation" (NZ House of Representatives 2009, p.7911).

During the readings of the amended bill in parliament the discourse the National Government placed a great deal of attention on the weak economy, the ongoing economic effects of the GFC, the effect of the ETS on household costs and the economy, the need to retain jobs, and to maintain international competitiveness. The next part of this analysis is to look at the discourse the media used.

4.7.2 Media and reported discourse on the ETS amendment

When the amended scheme was introduced in September it was reported in the NZ

Herald that the Climate Change Minister said the scheme was workable and affordable and criticising Labour's ETS as: "a branding statement by a dying government wanting to make grand gestures about saving the planet with little regard as to whether it would work and its impact on consumers, jobs and investment" (NZPA 2009). With reference to the submissions received by the select committee, Deuchrass (2009, online source) wrote in the National Business Review that the Climate Change Minister: "said submissions had come from a range of positions: from those who denied climate change existed to the "Greens who want to save the planet yesterday" and the government had taken the best middle ground approach". Fallow (2009a, online source) observed what he saw as a key difference between the schemes: "clearly the government's model, under which to produce more is to increase your entitlement to free emission units, represents a wealth transfer from taxpayers to emitters that Labour's capped model rough justice as it may be - does not". Going into the 2008 elections, both parties agreed to retain the ETS but as National introduced their amendments there was strong opposition from Labour to the softening of the scheme. The NZ Business Council for Sustainable Development (2009, online source) made the observation that: "the prospect of a broadly based multi-party deal, including both National and Labour, appears to have disappeared. It means the ETS will probably remain on the political agenda for each future election." Aspects of the debate that drew special attention from the media are now reviewed.

Short-term benefits versus long-terms costs

Another focus evident in the media was that the decreased costs for emitters and households under the amended scheme were only short-term and that initially the taxpayer would be subsidizing industry. Fallow (2009c, online source) reported: "from the standpoint of households, National's version of the scheme is better than Labour's, at least in the short-term...Come 2013, however, those measures expire and a price shock awaits." CO2 New Zealand (2009, online source) wrote in a media release: "critics state, with some justification, that the net effect of the changes will be that the Crown (i.e. taxpayers) will be subsidizing industry and agriculture more, and for longer. In effect, they point out, the polluter is not paying." The short-term financial relief for emitters and household alarmed many commentators. Terry (2009, online source), like many critics complained that this was only delaying the time the real costs to New Zealand would be realised: "Putting most of the Kyoto bill on the credit card is the

government's plan...and that it is our children who would needlessly face the bill." Fallow (2009d, online source) on the same point: "it plans to just pass on the now much larger bill to future taxpayers. It is the same story with the costs of the Emissions Trading Scheme, the cornerstone of the official response to the challenge of climate change: a multibillion-dollar post-dated cheque on future taxpayers." Terry (2009, online source) concluded his article with: "the government's proposals fail at the most basic level: making today's polluters pay today's emissions bill." While the short-term benefits for householders were prominent in the media, others were also noting that the scheme would not achieve what it should have been intended for: to reduce GHG emissions.

As stated previously an ETS functions within an ecological modernisation framework by providing incentives to lower carbon emissions from production. During the review and amendment process the number of media reports about the lack of effectiveness of the moderated scheme to achieve emissions reductions increased. CO2 New Zealand (2009, online source) in a media release on the proposed changes commented: "there should be incentive for a move to lower carbon technologies and practices...the proposed ETS changes do not seem to be moving New Zealand towards a low carbon future, at anything like the pace the scientific community thinks is necessary to minimize the risk of dangerous levels of warming and climate change". The NZ Business Council for Sustainable Development (2009, online source) also pointed out the shortcomings of the modified scheme: "overall, this proposed policy appears to greatly reduce incentives to heavy emitters to reduce emissions". Fallow (2009a, online source) commented that: "only full carbon pricing at the margin would fulfil the object of the scheme, which is to shift relative prices in favour of a sustainable, low carbon future". The media story was that by reducing the effectiveness of the scheme it was not going to achieve the purpose of reducing emissions, either to meet Kyoto commitments or to drive technological change and move to a lower carbon economy. In the debate the position of agriculture in the scheme was also prominent in the media.

Unhappy farmers

The farming sector made it clear that it was unfair to include them in an ETS as no other

county's scheme included agriculture. The President of Federated Farmers (2009a, online source) expressed his organisation's frustration in farming language: "if the ETS was a sheep, I'd have it put down. Including agriculture is like having a loaded gun pointed at your head, with a finger on the trigger. We still have to look at the detail of this report, but as far as we are aware no other country on the planet is looking to include agriculture like New Zealand is". Later another media release from Federated Farmers (2009b, online source) based their appeal on the importance of farming to the country: "New Zealand's farmers are custodians of our land and water resource and have successfully done so for generations. But while we support efficient and sustainable resource use, we have big concerns over the impact of an ETS". Unfortunately for New Zealand agricultural emissions make up about half of the country's total and these have increased since 1990 mainly due to an increase in intensive dairy farming. With the National Party traditionally receiving strong support from the farming sector, farmers had hoped they would remove agricultural emissions from the scheme but as Fallow (2009b, online source) reported close to the passing of the amended bill: "the government remains committed to an all-sectors, all-gases scheme even though agriculture's entry would be pushed back from 2013 to 2015".

4.7.3 Concluding comments on media event discourse

The variation between the elite interviews, and media and parliamentary discourses that stands out the most is that reference to the GFC and the weak economic conditions were a stronger feature in reported accounts. In contrast to this the elites interviewed mostly felt the influence from the GFC and weak economic conditions at most, only had an indirect effect and that the same policy process would have occurred regardless of the economic conditions. The recession and GFC may have pushed National further with the softening of the scheme than they originally intended but it was felt that this was not a driving force. Interviewees commented that the economic conditions gave greater legitimacy to the arguments National used on keeping household and business costs down.

In both the elite interviews and the media discourse the issue of delayed Kyoto emission costs was prominent. There was a sense in both discourses that the country will face a pay-back time and that it was difficult to comprehend the magnitude of this. With the government having offset emission increases with carbon sequestered in forests due to be cut down post 2020, the future bill is further exacerbated. This short-term focus of the government and their "fast follower" discourse suggests they did not have confidence in the international process advancing, or that they wished to move New Zealand to the edge of the international emissions reduction arena. Also in both elite and media discourses the issue of the effectiveness of the ETS was an issue. The modified scheme was recognised as contributing little to reducing emissions or driving change to a lower carbon economy. The ecological modernisation discourse of producing an economic or competitive advantage by making these changes was not prominent in New Zealand. Discourse focused more on being responsible citizens and doing ones fair share. Interestingly not a lot of attention was given directly to what citizens wanted in the way of action on climate change in any discourse. In elite, political, and media discourses this appeared to be taken for granted. One interviewee expressed the sentiment that once a government was elected it has the mandate to act on behalf of the citizens (NZ4G). Although in a small country like New Zealand where the people have a reasonably close relationship with their politicians this is not a mandate to ignore citizen preferences. In the parliamentary debate it was the young people that were regarded as most concerned about climate change and incongruously the current government allowed most of the costs of climate change action to be put onto these same young people.

In 2008 most parties contesting the elections agreed with the introduction of an ETS to manage New Zealand emissions: "it is an interesting fact that over 90 per cent of voters supported parties which stated support for an ETS in their policy statements, with over 96 per cent supporting parties which accept human-induced climate change as a reality" (CO2 New Zealand 2008). The issue of the inclusion of agriculture in the scheme remains doubtful under the National Government and will depend on international action and technological solutions to agricultural emission reduction being developed. The arguments and discourses that developed centred on the details of the scheme and how effective it would be. Hope that there would be agreement between the two main parties on the policy disappeared as the National Government announced the amendments and the bill was only passed with a narrow five vote majority.

4.8 Summary of the New Zealand case

This chapter established the background in New Zealand to aid understanding and identification of the dominant elite discourses. In the 1980s New Zealand underwent a strong economic change to become one of the most open market economies in the world. By the turn of the century this economic model was well established as the common sense way things are done and this was reflected in the discourses of the elites interviewed. A distinctive feature of politics in New Zealand relates to the quality of democracy. The closeness of the people to the political class, a three year electoral term, and the proportional voting system used in the country results in a political class that is more sensitive to public concerns than in many other democracies.

When the discourses from the interviews were examined in relation to climate change policy outcomes, the dominant discourse findings was that the GFC did not have a direct impact on ETS policy. It was felt that the policy process would have preceded in much the same form with or without the GFC. Indirect effects were that it probably pushed the government further with the policy amendments than they had intended and had intensified opposition arguments to the legislation. In contrast to the interviewees' discourses, the examination of the media event showed a stronger focus on the influence of the GFC in the discourses used, especially by the government and those pushing for a softening of the scheme. The neoliberal thought that dominates economic activity is seen to give the role of economic growth a controlling position in the mind of most New Zealanders. Balancing this to some extent, in relation to climate change policy, is that the people rate the environment as being an integral part of the New Zealand lifestyle.

The discourses that emerged were consistent with the primacy of economic activity, both with the National Government's policy agenda, and their intention to represent policy choices as being in the interests of the citizens. A notable discursive change occurred with the change of government in November 2008. The incoming National Government changed the discourse from wanting to be a world leader on climate change, to one of being a fast follower with a scheme in place ready to react if others did. The new government delayed the introduction of the legislated ETS and modified the scheme substantially. The discourse used for this process centred on softening the scheme and protecting households from increased costs. Capacity for ecological

modernisation in New Zealand is quite weak and postmaterialism was not a focus in the discourse with interviewees generally stating people were more materialistically focused. This was supported by the WVS survey results in 2011 where the number of postmaterialists halved from the previous survey in 2004. Much of the discourse that emerged in relation to preferences and values centred on issues of core importance to the New Zealand people such as lifestyle, fairness, justice, and being good international citizens. But New Zealanders were considered to not relate the lifestyle they consider as so important with the country's high level of per capita emissions especially with regard to transport emissions. The National Government introduced a discourse based on these values but their policy action did not match the discourse. They appear to have taken a gamble that the rest of the world will not act effectively on climate change policy and have put economic interests ahead of effective action on reducing emissions.

In the next chapter the same structure of discussion and analysis is followed for the second country studied. In many ways Australia is considered to be similar to New Zealand but in relation to the issues in this study there are some significant differences that help answer the research questions. After examining the relevant background, the differing variables are described along with how the ecopolitical theories can assist with explaining the Australian findings. With the background established the discourse findings from the elite interviews, a specific media event, and the data from public opinion surveys are used to examine the influence of the GFC on the dominant discourses.

5 THE AUSTRALIAN CASE

5.1 Introduction

The examination of discourses and climate change policy during the GFC now moves to the Australian case. The preceding chapter examined the findings from New Zealand which established what occurred in that country during the study period. The discourses that were used at this time focused on values and preferences that relate to strongly held beliefs about what constitutes being a New Zealander and what is necessary for their lifestyles. Climate change policy outcomes were not necessarily well aligned with these. There was a dominant discourse that the GFC did not have a major effect on the policy process and it would not have been very different if there had been no GFC or recession.

In this chapter the Australian data is explored to discover what occurred to discourses in that country. A similar format to the New Zealand case is followed with the relevant Australian background explained for the economy, political situation, climate change policy and the ecopolitical theories. Public opinion survey results relevant to this case are presented within the discussion on consumer and citizen preferences. With the context established, the discourse findings from the analysis of the elite interviews and a media event are examined using the three ecopolitical theories to provide a focus to this examination. The relationship between the variables identified in Chapter 3 and dominant discourses help assess the influence on climate change policy in Australia during this time.

The chapter is presented in eight sections. After the introduction the Australian economy, the political culture and climate change policy related to the Kyoto Protocol are examined in Sections Two, Three and Four. Section Five examines the background information on three ecopolitical theories in Australian. Public opinion polls and surveys are incorporated within Section Five. Sections Six and Seven present the analyses of the discourses in, first the elite interviews, and then in the media event chosen. The last section provides a summary and preliminary conclusion of what has been found and how this relates to the discourses, political outcomes and the ecopolitical theories for the Australian case.

5.2 The Australian economy

Australia is an advanced economy with some particular features relating to economic growth especially with regard to abundant mineral resources. While the distance to markets influences the country's economic development, the demand for raw materials from emerging economies has resulted in the Asian market becoming the most important for Australia. The country is one of the wealthiest in the world with the fifth highest GDP per capita. The population of 23 million people enjoy a high quality of life with the country ranked second on the 2012 Human Development Index (UNEP Development Programme 2013) and sixth on the 2011 Democratic Index (Economist Intelligence Unit 2011). Like New Zealand, Australia underwent economic reform in the 1980s to become an open market economy although New Zealand took a "more farreaching and radical approach" than Australia (Castles, Curtin et al. 2006, p.137). Nowadays Australia has a diverse economy that is able to compete strongly in world markets.

Early economic development in Australia was dependent on agricultural exports back to the "mother country" but in the 1970s, around the same time that dependence on Great Britain was ending, the mineral boom was beginning (Castles, Curtin et al. 2006). Australia is rich in mineral resources and economic growth currently depends on the continued success of the extractive and agricultural sectors (Australian Government 2011). In 2009 mining exports accounted for 39.3 per cent of export earning followed by 32.5 per cent from manufacturing (Australian Government 2009). Australia is the largest exporter of coal in the world (Australian Coal Association 2010) and 80 per cent of internal energy production comes from burning coal. This relatively cheap source of energy is attributed with helping Australia maintain competitive advantage internationally (IEA 2005) and has resulted in a very strong industry lobby that challenges legislation aimed at pricing carbon and environmental reforms in general (Kevin 2009, p.14). The current buoyant economic situation in Australia is reliant on continued demand from Asia for minerals as economic growth in other sectors is much lower and a high Australian dollar makes it difficult for other export sectors. Australia has a more diverse economy than New Zealand and the size of the economy means that economies of scale help offset costs related to the distance to markets. The agricultural sector is vulnerable to extreme weather events and the country suffers from frequent

droughts, bush fires, and flooding. Climate change is expected to exacerbate the usual pattern of extreme weather conditions.

Australia and Poland were the only two OECD countries not to go into recession during the GFC (OECD 2010). Australia had a very sharp downturn in the last quarter of 2008 when world trade dropped dramatically but this was relatively short lived. As well as domestic fiscal action to avert recession, Australia benefited from a massive financial stimulus in China during the GFC (Barrett 2011). This helped commodity exports recover quickly and contributed to the continuing boom in the mining sector. Australia has a flexible labour force which was an important factor in helping prevent a significant rise in unemployment during the GFC (Makin 2010). Unemployment only rose from 4.4 per cent in 2007 to 5.6 per cent in 2009 (ABS 2013). Like in other developed economies Australians were enjoying the availability of cheap foreign money. This contributed to a housing market boom and excessive spending by citizens was fueling inflation. With the GFC Australians became more cautious with households reducing debt and saving more. All the same, the GFC did pass the country by to a large extent and the discourse became one of economic downturn rather than one of financial crisis (Stevens 2013).

5.3 Political culture in Australia

Australia has a federal system of government with a bicameral parliament made up of the House of Representatives and the Senate, and compulsory voting in all states. A preferential voting system, referred to as instant-runoff, is used for election to the House of Representatives and in most state governments. This favours a two party dominance although, in various forms since 1922, one of the dominant parties has been a coalition between two parties: the Liberal Party and the National Party. It is difficult for minor parties to win seats in the House of Representatives and they tend to concentrate their efforts on winning seats in the Senate where there is a proportional representation system known as single transferable voting (Blount 1998). The Senate helps maintain a check on government policy and as such plays an important part in the democratic process in a federal state like Australia. The Australian Federal Senate has considerable power and can block bills from the lower house.

The Coalition is ideologically centre-right and the Australian Labor Party centre-left.

When elected in 1996 the Howard led Coalition Government pursued a conservative political agenda similar to the US Republican Government of George Bush. They joined the USA to become the two developed nations not to ratify the Kyoto Protocol even though they had managed to negotiate "a relatively easy, generous target to limit its emissions to 8 per cent above 1990" (Harrison 2012, p.12). The government's policy approach on climate change was characterised by promoting the dichotomy that acting on climate change would adversely affect the country's economic growth (Economou 1999, p.77). By 2006, with elections looming, the Howard Government responded to the increasing public attention to climate change and as a result eventually committed to introducing an ETS (Harrison 2012, p.12-13). Coming into the 2007 elections the issue of climate change was one of the most defining issues between to two main parties although Labor did not campaign strongly on the issue (Rootes 2008, p.473). The Labor Party won the November 2007 federal election with a clear majority. Although climate change appeared to play an important part in this victory, it is more probable that unpopular industrial policy, their decreasing popularity after eleven years in government, and economic concerns held more weight for voters (Rootes 2008, p.475). Prime Minister Kevin Rudd ushered in a new era of climate change politics for Australia at the same time the GFC was beginning to take effect. By mid to late 2008 the Rudd Government found itself dealing with the financial turmoil caused by the GFC while it was making concerted efforts to advance climate change policy.

Rudd became the Prime Minister who was set to repair Australia's reputation with the rest of the world (Rootes 2008, p.475) but by early 2010 is was clear there were issues with his leadership style and his ability to deliver on his policy promises (Taylor 2010a). His tight, inner circle of young advisors and his inability to make decisive moves on major issues alienated the ministry and caucus. Both of these were mindful that it was election year and there was not much to show for Labor's first term (Taylor 2010a). The discontent in the Labor Government eventually resulted in a challenge to his leadership and Julia Gillard took over as Prime Minister on 24 June 2010. Gillard called an early election in August and although Labor lost its outright majority they formed a government with the support of three independent members of parliament. Taylor (2010a, p.1&4) cites the GFC as having an impact on the political process at the time referring to interviews with central players revealing "a prime minister reluctant to adjust his ambition or ditch any promises despite having spent almost 18 months of a

fleeting three-year term fighting the global financial crisis". Rudd's personal style, the problems within the Labor caucus, and the ill-fortune of the GFC, combined together to make it very difficult to for the government to be able to follow through on their policy process for climate change action.

5.4 Climate change policy in Australia

After the Howard Coalition Government came to power in 1996 climate change policy was relegated to the position of being a threat to economic and employment growth. Internationally the Howard Government's performance in the arena of mitigating climate change was one where the Australians played a role as a spoiler at COP meetings (Crowley 2010, p.212). Energy intensive industries, large transport distances, reliance on coal for cheap energy, and the lifestyle of Australians in general, result in the country having one of the highest per capita carbon dioxide emissions in the world (Flannery, Beale et al. 2012). Public opinion on climate change action has been high since the issue gained saliency internationally and yet the Howard Government managed to avoid taking measures that effectively reduced emission levels. The approach they adopted was based on "volunteerism" which Crowley (2010, p.215) referred to as the Howard Government's "no-regrets, no-cost policies". "No regrets" were measures that achieve a net benefit, or no additional costs, while reducing emissions (Crowley 2013, p.610): an approach which has proven to be ineffective in halting the growth in emission. While Australia's actions have been blamed on the close relationship that Howard promoted between the USA and Australia, Crowley (2010, p.205) argues that decisions were taken for pragmatic reasons associated with "ideological prioritization of domestic jobs, concern for growth of industry and the economy, and by the closeness of business-government relations under a conservative government".

The Australian Labor Party in contrast established much stronger climate change action credentials. Ross Garnaut, a respected Australian economist, was commissioned to prepare an economic review of climate change in the Australian context (Garnaut 2008). Rudd had announced that "climate change is the great moral challenge of our generation" (Taylor 2010a, p.4) and that a Labor Government would take serious mitigation action. True to their word, the new government's first acts were ratification

of the Kyoto Protocol, attendance at the Bali COP13, starting the policy process to introduce an ETS, and increasing the target for renewable energy production to 20 per cent by 2020 (Crowley 2013, p.607). The policy process for an ETS included presenting a Green Paper, and later a White Paper with details of emission reduction targets and the proposed Carbon Pollution Reduction Scheme (CPRS) on 15 December 2008. By the last quarter of 2008 the government was under considerable pressure managing fiscal stimulus to counter the effects of the GFC. With the credit crunch, trade downturn, lost asset wealth, and general uncertainty, "financial ruin was now a threat for many" (Hinkson 2009, p.23). The policy process continued during this time and the *Carbon Pollution Reduction Scheme Bill 2009* was first introduced to the House of Representatives on 14 May 2009 but it failed to pass the Senate where it was opposed by both the Coalition and the Australian Greens Party. It was introduced twice more without success. The second Senate rejection presented the government with the opportunity of being able to call for a double dissolution of both the House of Representatives and the Senate but they chose not to use this option.

In early 2010 the government set aside the CPRS which was seen by voters as walking away from their electoral promise. Labor's popularity slipped badly and it was only a short time later that Gillard took over as Prime Minister. The policy process to introduce an ETS in Australia was highly contested and had significant influence on political events and political careers. The Gillard Government managed to legislate a carbon tax in 2011, with a plan for transition to an ETS in 2015 (Crowley 2013, p.608). Under Rudd and Gillard Australia had begun to change the spoiler role developed under Howard at international climate change meetings but this was reversed with the election of a conservative government in 2013 led by Prime Minister Abbott. Australia was set to return to a position of climate change pariah and the carbon tax was removed.

Australia is an interesting case in which to study the obstacles to introducing effective climate change policy. The strong fossil fuel energy sector and the country's reliance on the extractive industry for economic growth are seemingly at odds with what the citizens say they support on climate change action. To uncover more about this relationship the three ecopolitical theories used in this study help examine what has happened in Australia.

5.5 Ecopolitical theories in the Australian context

Australia is a country that has attracted considerable interest in regard to ecopolitical theory. It is the highest per capita GHG emitter in the OECD (OECD 2011a) but until the Rudd Government came to power the conservative Howard Government had consistently avoided any structural reform that would move Australia in the direct of a low carbon society (Curran 2009). High levels of public support for climate change action contrasted with either unwillingness or inability of successive governments to take effective action to reduce escalating emissions. The backgrounds on the three ecopolitical theories in Australia are now discussed to aid understand of the findings from the elite interviews.

5.5.1 Ecological modernisation in Australia

In Australia one would expect the market-based approach of ecological modernisation reform to sit well with a country that embraced neoliberal market economics so strongly. Such reform offers an opportunity to reduce GHG emissions at the same time as creating greater industrial efficiency but issues related to the country's capacity for reform have thwarted the modernisation process in Australia. Curran (2009, p.205) stresses that the introduction of ecological modernisation reform: "does demand a robust and committed political governance to meet difficult restructuring challenges". The overriding barrier to reform in Australia is the country's high dependence on fossil fuels for its economic wealth. The 2011 GHG emission profile for Australia showed that the principal sector emissions (excluding land use changes) were energy at 76.42 per cent, agriculture at 15.24 per cent, and industrial processes at 6.03 per cent (UNFCCC 2011a). By 2011 energy sector emissions had increased 45.96 per cent on 1990 levels and industrial processes by 35.0 per cent (UNFCCC 2011a) with the majority of emissions in the energy sector from energy producing industries followed by transport. Capacity to deal with environmental issues was identified in Chapter 2 as the ability of a society to identify environmental problems and the ability to solve them (Weidner 2002, p.1342). In a similar fashion to that used in the New Zealand Chapter, the themes identified by Howes et al. (2009) to assess the capacity of a country to introduce ecological modernisation reform are discussed.

• With regard to technological innovation Australia is less of a technology taker

than New Zealand having a larger and more diverse economy. Reflecting this difference Australia spends a little over 2 per cent of GDP on research and development compared to the 2011 OECD benchmark of 2.38 per cent (Chapman-Smith 2013). Howes et al. (2009, p.9) argue that industry still tends to import technology although, given the importance of coal, strong emphasis has been placed on clean coal technologies to reduce carbon dioxide emissions (Curran 2011). This solution would enable continued use of coal energy with decreased emissions. Industry investment in research, development and innovation is influenced by government tax incentives and disincentives. There is evidence from industrial discourse and action that the uncertainty of whether Australia will have a carbon tax has adversely affected investment in new technology and innovation (Curran 2009, p.210; Coorey 2010).

- Engaging with economic imperatives is the capacity that is most difficult for Australia to achieve. As Howes et al. (2009, p.9) point out a major part of the economy is based on mining and exporting non-renewable resources "and they are strongly supported by government policies." A study on subsidies related to the Australian fossil fuel industry estimated \$A6.54 billion/annum was paid as subsidies to fossil fuel production and consumption (Riedy & Diesendorf 2003, p.135). Howes et al. (2009) argue that if ecological modernisation reform was occurring there would be a move away from this type of support for fossil fuel use with a move to support renewable energy and alternative means of transport. The Howard, Rudd, and Gillard governments have continued with policies that support and promote expansion of the extractive industry sector. In the last five years there has been a boom in investment in mining infrastructure which includes government funding of port and transport facilities (Yeates 2010). Subsidises and protectionism in a market are often criticised for acting as a barrier to investment in modernisation (Papadakis 2002; Turton 2004; Lattimore & Eaqub 2011, p.22).
- Howes et al. (2009, p.10) argue that governance needs to shift from being regulatory to a role as facilitator of sustainable development. Australia has seen a move to greater public consultation and participation in policy and development processes especially at state and local council level although industrial interests and the primacy of the need for economic growth appear to have a greater influence on decisions made.

- On the core theme relating to the role of social movements, the House of Representatives does not have proportional representation which makes it difficult for small parties to be elected. In the Senate, where there is proportional representation voting, the Australian Greens were able to gain sufficient seats to hold the balance of power between Labor and the Coalition in 2011. With Labor losing the confidence of the electorate for various reasons which included poor carbon pricing policy management, voters turned to the Australian Greens in greater numbers. Outside of government there is good support for environmental groups and these play an active role in society.
- The final core theme of discursive change is of central interest in this study and the findings investigate how established ecological modernisation discourse is with elites. Christoff (2005, p.39) stresses the importance of discourse in industry and government as an obstacle to structural change in the fossil fuel industry where the power of the sector generates "direct and personal links between government and fossil fuel interests within the policy and political elites". Curran (2011) presents a treatise on the relationship of Prime Minister Rudd's climate change narrative with the ecological modernisation reform his government eventually proposed. She (p.1005) argues that "Rudd's government's lofty discursive promotion of the justice underpinnings" with a strong moral focus was not matched by the strength of ecological modernisation reform they were able to negotiate with industry for the CPRS policy. Curran claims this approach "risked exposing too wide a gap between political rhetoric and policy outcome" (p.1015) and that by raising expectations that were not able to meet, this contributed to his downfall as prime minister.

Pricing carbon is a programme of government intervention to drive investment in new technology and improve efficiencies, both of which sit at the heart of ecological modernisation. Although the Rudd Government was not successful with their attempt to introduce the CPRS much of the work done during this process formed an important source of information and learnt experience for the complex carbon tax process undertaken by the Gillard Government (Crowley 2013, p.608). The resulting legislation was the *Clean Energy Package 2011* which included plans for an ETS in 2015 and for major investment to reach a renewable energy target of 20 per cent by 2020. Although the proposed policy was subject to the scare campaigns relating to increasing prices and

an adverse effect on economic growth, once it was legislated there was a sense from the public that it was time to get on with it (The Climate Institute 2013). Unfortunately the Abbott Coalition dismantled much of what had been achieved when elected in 2013 leaving Australia with an ongoing challenge to join international efforts on emission reduction.

Australia has moved to accepting the ideas of ecological modernisation but evidence to date shows this has had limited effects for the reasons discussed above. This study contributes to understanding how strongly ecological modernisation is established in Australia by examining the discourse of elites close to the CPRS policy process in relation to the effects of the GFC. The next ecopolitical theory discussed in the Australian context is that of postmaterialism.

5.5.2 Postmaterialism in Australia

Australia experienced the major shift in values that began in developed countries in the 1960s and experienced strong debates associated with the development of new social movements. Prominent examples were protests against Australian involvement in the Vietnam War, anti-nuclear testing in the Pacific, protests against the milling of natural forests in Tasmania, wilderness area development for hydro water storage, gas or mineral extraction, and protection of Aboriginal rights. "Australia was widely regarded as a globally significant hotbed of environmental consciousness and activism in the 1980s" (Crook, Pakulski et al. 1998). Political parties eventually responded by incorporating the new issues into their agendas although Papadakis (2000, p.92) warned that there was still an important part of the population that were "less easily persuaded than others that the major political parties are strongly committed to preserving and protecting nature".

Measurement of postmaterialist values has been carried out for over 25 years in Australian Election Studies (AES) and in the WVS. The following table shows levels in the AES since the 1990 elections in Australia using Inglehart's four-item battery.

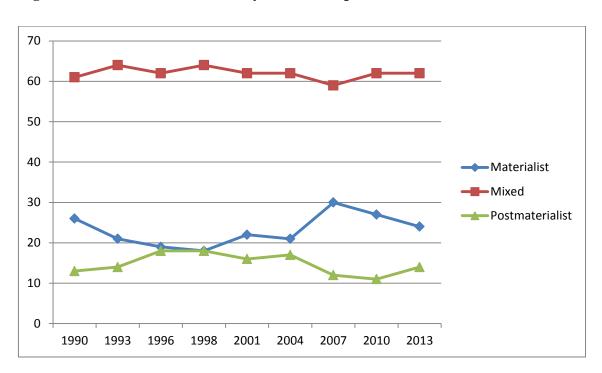


Figure 5.1. Australia 4-item battery measure of postmaterial values

The AES results show an overall decline in values since 1996 through to 2007 and 2010 with a corresponding increase in materialist values (McAllister & Cameron 2014, p.62). The Australian economy had been buoyant for many years and this long period of economic growth had resulted in high living standards, high home ownership levels, and low unemployment. Tranter and Western (2003, p.244-5) argue that under these conditions, according to Inglehart's theory, the level of postmaterialism should have kept increasing. They posit that political systems that allows the development of smaller issue-based parties are more likely to have green parties and these are important because "green politicians and new social movements increase levels of postmaterial values by highlighting and giving legitimacy to 'new politics' issues" (Tranter & Western 2003, p.251). In Australia the Green Party has succeeded largely thanks to proportional voting in the Senate. Blount's (1998) study of the effects of postmaterialism on Australian politics was supportive of this argument. He argued that in the Senate, with the proportional voting system, postmaterialism did have an effect. He reasoned that postmaterialism was linked with voting for minor parties which were more likely to be promoting the new political agenda (Blount 1998, p.447).

Another explanation for the decline relates to the primacy given to economic growth and material concerns under the Howard Government. Eckersley (2005b, p.3) argues

Sources: AES surveys (McAllister & Cameron 2014, p.62)

that individualism and excessive materialism are in fact reducing the quality of life for many young Australians. While economic growth has brought a high level of material progress, planetary environmental consequences, social costs such as inequities and social division in societies, and decreased perceptions about the quality of life, are creating new tensions in modern societies. Added to such concerns is the insecurity caused by threats such as terrorism, drugs, organised crime and corruption (Díez Nicolás 2008b, p.256). A problem for people in individualistic societies is that with the moral autonomy people gain also comes responsibility. When faced with an inability to deal with the primacy of economic growth in government policy and in business interests and the massive media-marketing that supports this, they are frustrated or become ambivalent (Eckersley 2005b; Manne 2011).

In a similar vein, Roskam (2012) expressed alarm at the percentage of young people in Australia who expressed ambivalence about democracy and freedom of speech in a Lowy Poll. More than half the respondents said they would consider an alternate form of government to democracy and almost half did not have a problem with government censorship or did not know if they had a problem with it: findings not supportive of postmaterialist values. Rising prices and interest rates were prominent in the media (Rootes 2008, p.474) as the financial crisis began to dominate the news and people became very concerned about what would happen in Australia (Garnaut 2009). Such conditions can cause a period effect in postmaterialist values as focus increases on personal economic security (Inglehart & Abramson 1994) although postmaterial values only dropped one per cent between 2007 and 2010 which barely constitutes a period effect.

The discussion now moves from value change in Australia, to the role and influence of preferences in the political arena from the perspective of people as citizens and as consumers.

5.5.3 Consumer preferences and citizen preferences in Australia

Consistent with other Anglo-Saxon countries, individual preferences play a key role in political deliberations in Australia. The neoliberal reform that took place in the late eighties led to a strong economic influence on public issues which was further entrenched as the frame for deliberation under the Howard Government. As preferences are context and time dependent, and less stable than values, they can be influenced by societal norms of the time such as neoliberalism. This section seeks to identify citizen preferences using public opinion surveys and voting in elections, and consumer preferences using market based measurements and surveys.

Public opinion surveys in Australia

In 2011 the Gillard Government commissioned an update of the Garnaut Report which included a report to collate findings from public opinion surveys related to climate change in Australia. The report period between 2008 and 2011 included 22 surveys and polls that had sufficient information and data available. The research team's general conclusions were that "most Australians believe the climate is changing" but that in recent years, belief in climate change, whether it is caused by human, and believing urgent action is needed, had declined. They further concluded that beliefs are strongly related to political preferences, and that although Australians believe the country should act before there is global consensus, there is no clear consensus on what action to take (Leviston, Leitch et al. 2011, p.i). In the study the researchers highlighted the difficulty of making comparisons when questions are worded differently but the comparison of so many surveys does give a good indication of people's beliefs (Leviston, Leitch et al. 2011). They showed that on average there had been a decrease in the belief climate change is caused mostly by human activities with a small increase in those believing it had natural causes (p.5). In relation to the perceived seriousness of climate change they found that across the studies "56 per cent to 69 per cent of Australian respondents perceived the threat of climate change to be serious, or very serious. Also, 52 per cent to 66 per cent of respondents were worried or very worried about climate change" (p.3). Two surveys that asked if Australia should take action without waiting for international agreement showed a "substantial majority" felt this should happen: 72 per cent and 83 per cent. But again declining interest in taking immediate action and a rising preference for a "wait-and-see approach" was noted in the findings (p.8).

When Australians are asked about climate change as an international issue affecting Australia it is possible they give it higher priority than when they are asked to relate it to domestic issues. The Lowy Institute polls on foreign policy include the threat of global warming as a parameter and in their 2009 poll 76 per cent rated climate change as a problem with 48 per cent saying it was an urgent and pressing problem (Hanson 2009,

p.13). The results are included in Leviston, Leitch et al.'s (2011) report and form a part of the information that shows a clear decline in action needing to be urgent over the 2008 to 2011 period. In 2013 the Lowy Poll (Oliver 2013, p.11) showed a slight increase on the 2012 level to 40 per cent of those thinking the issue was an urgent problem, the first increase in this parameter since 2006. In Australia the drawn out process of trying to price carbon with the strength of opposition has kept media attention on the issue. But a global decline in interest and concern for climate change in developed countries was noted with the Great Recession and the resulting economic insecurity was cited as the likely cause (Scruggs & Benegal 2012). Scruggs and Benegal (2012, p.513) argued that immediate economic concerns "lead many to adjust their expressed concern about long-term worries when they seem to directly compete".

Consumer preferences

Measuring willingness-to-pay assesses individual preferences in a market setting and as such concerns consumer preferences. In Australia a decline in WTP since 2007 was also found (Hanson 2010; Leviston, Leitch et al. 2011). The Lowy Polls include questions asking respondents how much extra they would be prepared to pay on their electricity bills. By 2010 the level not prepared to pay anymore had risen from 21 per cent in 2008 to 33 per cent (Hanson 2010, p.15), and to 39 per cent by 2011 (Hanson 2011, p.8). Although it should be noted that during this time there were big electricity prices increases unrelated to carbon pricing. In 2010 59 per cent said they were still prepared to pay for action on climate change but this dropped to 54 per cent in 2011. When asked in surveys if people would rather pay increased prices as opposed to a tax, respondents indicate they would rather pay increased prices, a preference that has been evident in Australia for some time (Ivanova & Tranter 2008, p.185; Leviston, Leitch et al. 2011, p.9). Leviston et al. noted a substantial decline in WTP in surveys when the proposed price increase reached 10 per cent.

Opposition to carbon pricing focused on increasing prices for households as part of their campaign to turn people against the policy. Abbott called the CPRS "a great big new tax" on everything, which drew on the known aversion of Australians to increasing taxes (Taylor 2010b online source). This does appear to have been successful in reducing policy support especially at a time when economic concerns were high. Although Stefanova (2013, p.3) found that "an electorate that was largely fatigued with

the politics of climate change and scared about the rising costs of living" in 2012, were more prepared to give carbon pricing a go in 2013. Price rises related to the carbon tax were not as bad as they had been led to believe, emission reductions in energy use had been achieved, and there was renewed interest in the benefits of a strong renewable energy sector. At an individual level many Australians see that it as their personal responsibility to take daily actions to "do their bit" to prevent climate change even though only 50 per cent think such actions will help address the issue. Their reasons for doing this relate to "cost savings, reducing pollution, improving health and more broadly their family's quality of life" (Stefanova 2013, p.22) although in general people believe that government and business need to lead on the issue. Interestingly Leviston et al. (2011, p.9) report that car use is one area where Australians do not appear ready to make changes for the sake of the environment. It appears that car use is too strongly embedded in the Australian way of life to be considered as a way to take personal action against reducing emissions.

Citizen preferences as expressed in elections

Voting allows people to express what they believe is best for the society as a whole: their citizen preferences. The 2007 federal election saw climate change as a differentiating issue between the Coalition and Labor although not a decisive one (Rootes 2008). Labor won the election which, as remarked by some observers (MacKerras 2008; Qvortrup 2008), on the surface looked counter-intuitive as the country had an economic position that was the envy of many countries. Reasons for why Australians' voted for Labor were: the unpopular WorkChoices legislation, the Coalition had control of both the Senate and the House and were seen as becoming too arrogant, lack of action on climate change, Iraq war involvement, tactics used to prevent illegal immigration, unaffordability of housing, rising interest rates, and it was time for a change (MacKerras 2008; Qvortrup 2008; Rootes 2008). In 2007 climate change concern had reached peak levels internationally and this was reflected in Australian polls. Labor's popularity in the 2007 election, especially with young voters, resulted in the Greens gaining lower representation in the Senate that they had hoped for (Rootes 2008, p.476). With Labor promising to sign the Kyoto Protocol and take action on climate change there was reduced need for voters to turn to the Greens if they wanted to vote on the issue.

For the 2010 election Gillard led the Labor Party and Abbott the Coalition. By this time Labor had shown they were not prepared to fight for climate policy and Gillard's replacement of Rudd as leader was not popular. In the election "Labor bled votes and seats to the left and right" (MacKerras 2011, p.893). But Labor still gained sufficient votes to be the largest single party and after three weeks of negotiations were able to form a government with the support of independents and the Australian Greens Party in the Senate. The Greens gained a seat in the House of Representatives and four more in the Senate where they had nine in total. Mackerras (2011, p.894) attributes the rise in support for the Greens as being a result of the impression Labor was not serious about climate change although other issues on the agenda like refugees were also influential. Many of those who switched were voters under 35 years of age (Sidoti 2011) which demonstrated the influence these voters can have in an election.

The September 2013 election saw the Coalition returned to power with a clear majority in the House of Representatives but without a clear majority in the Senate. Rudd returned to lead Labor into the election because many of the caucus believed they could not win the election under Gillard (Cassidy 2013). The change did not affect the outcome and the swing from Labor to the Coalition was 3.65 per cent in an election dominated by economic issues. The Coalition promised to repeal the carbon tax, which they subsequently did. The Greens gained an additional seat in the Senate giving them ten seats. A central economic concern in Australia at this time was whether the mining boom, related to strong demand from China and a large amount of investment in mining infrastructure, could be sustained (Hutchens 2013). Climate change action did not feature as a central concern for the electorate at this time.

Overall the evidence from these three elections was that voters put economic interests above others. The Labor Party was seen as being more progressive and a better option for taking action on climate change but they showed themselves incapable of managing the political process of such a controversial and complex issue. This left voters that prioritised the issue of climate change with a poor choice between the two main parties and they increasingly voted for the Australian Green Party. The background for the three ecopolitical theories has been examined to provide a reference for the analysis of the elite interviews and the discussion now moves to the findings from these interviews.

5.6 Elite discourses in Australia

This section examines the discursive findings from the elite interviews in Australia. The interviews were carried out in September 2010 which was shortly after the federal election and by which time the Gillard minority government had been formed. The interviewees are identified with a country code, number, and a letter indicating the sector each elite came from: A for academic expert, B for business sector, G for government, M for media expert, and N for NGOs. The findings are structured with regard to the research questions in order that these can be answered.

5.6.1 The influence of the GFC on climate change policy

This section addresses the first research question and therefore examines the discourses related to the GFC and climate change policy in Australia. When the interviews were carried out the CPRS policy had been put aside and the related budget allocations removed from government finances. It was widely considered that the legislative process around the CPRS had led to Kevin Rudd losing his position as Prime Minister, and to Malcolm Turnbull losing his position as leader of the Liberal Party. The failure of the CPRS was also linked to the major loss of support that Labor suffered before the 2010 election. This had almost resulted in the rare situation of not being returned to government for a second term: something that has not happened in Australia since 1931 (MacKerras 2011, p.893). The fraught political process of the CPRS and the recent federal elections meant relevant events were still prominent in the minds of those interviewed.

5.6.1.1 The influence of the GFC on Australia in general

A notable feature of the responses of interviewees when questioned about the GFC was an emphasis on Australia not being affected as much as other economies. Typical of the response was the following: "Australia wasn't insulated from the global financial crisis however probably more so than most others, if not all OECD countries" (A10B). As international events unfolded and pessimistic financial news circulated the world, Australians were concerned about how this would affect them. Another interviewee noted the short-term effect this had on the country: "So we had a recession but it was a very mild one and I think that it certainly did slow down the economy for a few months...six months until people realised it wasn't really happening" (A1M). In the same vein: "I think it was less important here than maybe people expected, because I know that people were expecting unemployment to go from five-ish percent up to eight-ish percent in the period...but I don't think we got much above the sixes" (A8B). While there was fear of increased unemployment, the flexibility of employment laws in Australia helped companies decrease workers' hours, reduce shifts, and to close manufacturing plants for a week or two at the height of the world trade downturn which allowed businesses to retain workers (A10B).

The government reacted to the GFC with strong fiscal stimulus which included cash payments to citizens. Unfortunately for the government a lasting negative memory of the stimulus package came from the main green stimulus measure included in the package. When comparing efforts other countries in Asia and the USA made to include green stimulus: "We didn't do anything equivalent here. We did one very big thing, pink batts in people's houses, insulation, which if it had worked might have made a difference...But by putting so much weight on that one thing, without having the administrative capacity to do it, they made a mess of it" (A14A). The overall benefit of the scheme was lost to many in the negative press the programme received which also damaged the government's climate change credentials. An area that was affected by the government's response to the GFC that the government interviewees talked of was the impact on the government budget. The GFC and public spending on the stimulus package changed the government's fiscal situation from one of running a surplus to one of budget deficit and public debt (Makin 2010). Several interviewees commented on a related reduction in government spending on environmental issues and climate change related research (A11A; A2G; A3N; A7A). Referring to the effect of the GFC on the government budget one interviewee said: "It's had a big effect on the government budget which the opposition makes an extraordinary fuss about" (A1M). Talking with regard to state level climate change action and decisions during this time one interviewee commented that: "the biggest impact at the state level has been the Commonwealth imperatives and it's been over-riding. And that has certainly been impacted by the global financial crisis" (A2G). As this interviewee commented they had to wait and see what the federal government would do and that affected planning and programmes.

In September 2010 the discourse of Australia having escaped the worst of the GFC and

the effects having been relatively mild was dominant. Although, interviewees that would say it was not affected much would then go on to discuss the problems related to: the government having to deal with the stimulus package, budget deficits, reduced government spending, and that the period from late 2008 through to mid-2009 was one of high uncertainty and fear of recession for everyone in Australia. It was clear to some that the GFC effects were underestimated at times: "we're talking about the two speed economy too of course which is that resources, and now agriculture to a certain extent, rebounded very quickly and are driving a lot of growth in Australia whereas there's other parts of the economy that haven't, like the services industry and the financial industry of course, and that did take a hit" (A6M). Another interviewee noted the differing effects on different business sectors: "Mining, engineering and construction are very strong however there are some, the more consumer sensitive parts of the economy, which are still finding trading conditions difficult" (A10B). In a country where the service sector accounts for 68 per cent of GDP this affects a significant part of the economy. The strength of the resource sector exacerbated the perception of a two speed economy causing a high post-GFC exchange rate and financing problems: "Banks don't want to lend to any other business because they've got nice safe lending to very profitable resource companies and that is another hit for everything else. So quite apart from the financial crisis...the resources boom is putting huge pressure on any Australian business that's not in the resources sector" (A14A). If anything the resource sector became more soundly established as the paramount source of wealth for Australians as a result of the GFC. But the dominant discourse in the interviews was one of down-playing the influence of the GFC and supported the idea that the resource sector had prevented recession in Australia.

5.6.1.2 Discourse that the CPRS process was independent of the GFC

The GFC coincided with the process of trying to introduce emission reducing legislation in Australia. One interviewee remarked: "The ETS is probably the only environmental issue, well climate change, is probably the only environmental issue which affects the big political picture. In a way it's the only one where you can tell a story of interrelationship with the big political story" (A14A). The rationale for an ETS had been established by the Rudd Government in a Green Paper in June 2008. This was around the same time the government was taking precautionary budget measures as concern in international financial circles rose (Barrett 2011, p.9). Later, the White Paper appeared when the government was dealing with the most difficult period of the GFC. The delayed release of the White Paper on 15 December was barely a week before Christmas and the summer holiday break, and Rudd left to visit Afghanistan the following day: "effectively leaving a vacuum for six weeks" (A4G). Deliberations and lobbying on the White Paper were carried out during the period of greatest uncertainty about how the GFC would affect the country. One interviewee observed that: "the obvious comment to make more broadly is that it focused a lot of people's attention, government and policy and so on, on that particular issue and away from other issues like climate change" (A11A). But a comment from the same interviewee reflects what was common discourse on the issue by 2010: "from what people tell me that the undoing, if you like of the CPRS, was very little to do with the global financial crisis and far more to do with domestic politics within Australia" (A11A).

A general theme in the interviewees was that the reason the Rudd Government failed to introduce the CPRS was related to mistakes Rudd and the government made and not to the GFC. When considering the influence of the GFC, a business sector interviewee remarked: "I don't think it was a significant factor in the tribulations of the climate policy" (A8B) and from another interviewee: "I don't think the global financial crisis has had a big impact on the policies of the ETS" (A13G). Others pointed to government policy process mistakes: "the recession was not a part of the reason for the government's decision (to abandon the CPRS)...the government had a deal with the opposition to get it through the Senate. The opposition reneged on that deal. The government had handled the whole thing very, very badly by not bothering to fight for this thing" (A1M). Another expressed the same sentiment: "the government as a matter of strategy decided it was going to rely on the support of the opposition which was bad strategy" (A14A). One interviewee pointed to Rudd's leadership style: "I think Rudd became a bit too insular and just assumed that everyone understood why this was worth doing. He came in on such a ground swell of support...and in fact there was all the denialism going on mobilising the counter attack sort of thing" (A7A). Several interviewees considered another key mistake made by the government was that they did not handle promotion of the new policy very well: "It never occurred to Rudd, and it didn't occur to Julia either, that if you've got difficult policies you have to fight, you have to explain, you have to bang on about them day in, day out, it never occurred to them that they had to do that" (A1M). A government interviewee emphasised, using the goods and services taxation reform as an example, that: "governments can do one or maybe two major things per term along with care and maintenance, and if you look back at the last time a government tried a significant relative price change it was the goods and service tax. Howard and Costello basically stayed completely on message with very little else on the agenda for two and a half years, and spent a lot of money: they spent one per cent of GDP" (A4G). It was clear from interviewees that business could be expected to contest the CPRS reform whatever the political conditions and that the government would be expected to refute their arguments.

5.6.1.3 Discourse that the GFC did influence the CPRS process

There were others that felt the GFC had been a crucial factor in the failure of the CPRS legislation. If the Rudd Government did not effectively promote the policy or counter opposition arguments, it was also felt that the GFC had added weight to opposition arguments and reduced general support. One interviewee noted that as international companies in Australia, especially those with exposure in the USA, began to react to the financial crisis there was: "an absolute hardening up of the rhetoric between July, and say October 2008 in terms of business attitudes to the climate change debate" (A4G). So much so that: "By October, early November 2008 the language, particularly from those sorts of sectors, is almost a single dollar of cost is unacceptable" (A4G). One interviewee noted the change by December: "I think that fear of quite a shocking recession, you know we talked of depression, makes it's a more difficult climate in which to consider a serious economic reform" (A16G). Another added: "I've been through recessions, I know how they work and I know concerns about the environment go from being top of the heap to 'we'll worry about that later'. When people don't have jobs, that's all you can talk about." (A1M).

One interviewee was adamant that the GFC had influenced the process: "I don't think there's that much doubt that we would have had an emissions trading scheme currently operating if it wasn't for the global financial crisis" (A4G). Echoing this sentiment another said: "it was a crisis and it meant that policy makers, our government, and the political debate in the country had to shift to grappling with the global financial crisis ...I'm not saying you can't do two things at once, we can but had there not been a global financial crisis it may have been that we could have paid greater attention, perhaps gone a bit quicker" (A16G). Emphasising this point even more strongly: "The other thing that just **cannot** be underestimated in this, it's hard to see this from outside

of government, but the genuine limits on the capacity of governments to handle multiple issues at the same time is really very poorly understood" (A4G). This interviewee continued: "in a contested political space you need both internal decision-making time for government and you need the capacity to be completely on message to sell a particular policy and have the time to counteract scare campaigns etc." Illustrating these points the interviewee spoke about the level of uncertainty shortly after the Lehman Brothers collapse and that there was a debate on: "...should the government just say that we can't deal with an emissions trading scheme at the same time we do a global financial crisis. And it was on a real knife edge as to whether the White Paper would proceed because of the sense that could the government digest the decision making process required to get to that point" (A4G).

But they did decide to continue although the influence of the GFC was noted: "The White Paper was written in a context of the GFC where people were trying not to scare the horses in the business community. So all the language and the narrative of the White Paper is it's not scary, it's not too bad, there's transition assistance" (A4G). One media commentator noted: "you could actually see there'd been a shift and softening between the Green Paper and the White Paper. I think personally, and the government never really said this, it was part of recognition that Australia's exporting industries would be hit at that point" (A6M). Another commenting on the GFC effect felt that: "it probably helped to water down a lot of the political impetus and the drive to actually reduce emissions" (A17N). The most noticeable effect of the softening was that it: "led the government to set the target range as minus five to minus fifteen percent rather than having a larger target range" (A4G). The government ended up being "pummelled" on both sides of the debate because for business: "we're in the middle of a global financial crisis, how can you impose any costs upon us?" and from the environmental side: "they still wanted to see targets of at least 25 per cent on the table and many wanted 40 per cent cuts by 2020" (A4G). The GFC therefore affected the positioning of the White Paper and "that would have probably meant that without the global financial crisis it was much more likely we would have got to legislate the scheme by the middle of 2009 which was the intended schedule...And that just reflects the complexity of the decision making involved with doing an emissions trading scheme...It just overloads the system." (A4G).

The intensity of the lobbying, the lack of majority in the Senate, Coalition demands,

opposition from the Greens, and preoccupation with the GFC were linked to the government's decision to delay the introduction of the CPRS for a year. One interviewee explained: "they called it the global recession buffer. Basically it was a weakening of the scheme because they'd been getting to talk to businesses and stuff like that" (A6M). On 4 May 2009 the government negotiated changes with some of the stakeholders which included the delay, increased targets, and increased assistance for business, in a bid to gain support in parliament for the legislation: "It just gives it some breathing space from the global financial crisis" (A4G). Once the legislation was introduced: "the opposition started to play deferral games to try and slow the process down" (A4G). This slowing behaviour did allow other events to weaken the government's position and its ability to get the legislation passed through the Senate. The most significant of these were the Liberal Party leadership change, lack of support from the Australian Greens in the Senate, and the failure of the negotiations at Copenhagen. For those close to the policy process there was recognition in their discourse that the effect of the GFC had been significant.

5.6.1.4 Opposition discourses during the GFC

Generally, it was felt that an indirect influence of the GFC was that it added weight to the arguments against increasing business costs, and prices of goods and services for households. The coincidence of the CPRS policy and GFC sharpened the focus on costs: "So at the same time you've got the onset of the global financial crisis you have the community confronted for the first time with there's no free lunch" (A4G). "It was an uncertain period...anyone raising a scare about the effects of having to layout all this money, permits, got a better hearing than they otherwise would have" (A14A). And adding to these sentiments: "There was a serious risk of Australia going into recession. People were more cautious and more focused on financial risk...it enhanced the influence of business" (A9A). A reason some interviewees regarded the focus on prices as scare campaigns was that electricity prices were rising, and were expected to rise much more, regardless of a price being put on carbon. As one put it: "there seems to be this source of perception that an ETS will create more expensive power but the reality of it is that without it there's going to be more expensive power" (A3N). Put more colourfully by one interviewee: "The talk-back jocks and a few right-wing types did their best to convince everyone it was going to be the end of the Earth. There'd be huge increases in the cost of electricity; we're actually getting quite big increases in electricity anyway that don't have anything to do with the CPRS" (A1M). One interviewee mused in relation to the effectiveness of different scare campaigns that: "It was probably just something even broader which is the uncertainty of something that's big and new landing on top of everyone during a time of economic disturbance even though we didn't really have it in Australia." (A6M).

After the White Paper was released through to May 2009, the business lobby went into overdrive. One business interviewee outlined their approach: "we're not in the denial game but we were pretty vocal after the White Paper, that the design was wrong...we decided pretty soon after the fifteenth of December, 2008, that we didn't have many options left and so in January at least, we started a public campaign. We didn't advertise but we tried to be as forthright in the media as we could" (A8B). Another interviewee talked of the lobbying: "December 2008 to about May 2009 there was a lot of lobbying around the financial crisis...it was the export earnings, you know the companies were saying, "look we're getting X for our export earnings already, if you put this on us then we'll take a further hit in the recession...you know it'll be a double whammy"" (A6M). This same interviewee commented on the intensity of lobbying during this time: "...there were just lobbyists around every day, it was extraordinary, like every day you would see twenty or thirty people who were lobbyists for one industry or another in the building, walking into MPs offices: opposition, government, every day" (A6M).

Another discourse that gained currency was that: "the world's doing nothing, repeated again and again, why should we go first, the rest of the world's doing nothing" (A4G). One interviewee talked of the relationship with Copenhagen: "Copenhagen falling over was probably more of an issue for Australia as well. That really changed the mood in Australia too because there is that argument about not going ahead of the rest of the world which always had a bit of currency in Australia whether you believed it or not" (A6M). Another comment was made about this period: "So my sense is that at that point climate change did fall down the political agenda a bit and of course anyone you want to could say "well this isn't the time to do something about it". It's just ammunition for people who don't want action." (A5A).

5.6.1.5 Concluding comments on the influence of the GFC

The discourse about what caused the failure of the CPRS policy in Australia was spilt between those who felt the effect was minimal and those that felt it was the main cause. The arguments variously centred on internal government errors, leadership characteristics, intense sectoral lobbying, as well as to government difficulties handling complex tax reform at the same time as an economic crisis. The overall outcome was that the CPRS policy failed to pass through the Senate twice, and two party leaders, Turnbull and Rudd, were replaced in their respective parties largely related to their position and actions on the policy.

While it was clear to interviewees that opposition to the CPRS played a part in having the policy put aside, it has been the purpose here to examine the role the interviewees felt the GFC had on the outcome. Australia has a highly adversarial political system with strong sectoral lobbying and, as with the goods and services tax legislation, a strong, well planned government programme to support new policy is considered essential. Some interviewees felt that the intense pressure the government was under dealing with the GFC affected the time and effort they were able to make in this regard. Coupled with this the GFC added weight to concerns about increasing business costs and maintaining international competitiveness. Government ineptitude in relation to the introduction of the policy was exposed as they sought to manage the complex policy negotiations at the same time they were introducing measures to lessen the effects of the GFC. The latter process contributed to a change from a government financial surplus position to a deficit one: under market fundamentalism an untenable position for a government. A compounding factor noted in the Australian case was that the influence of the resource boom on the Australian economy that was largely independent of the GFC. Opposition was seen to make use of the economic uncertainty to scare the public with talk of high electricity prices and that the policy was just a new tax, and they used this to put pressure on government not to increase their own costs. Most interviewees stressed business used the GFC to argue that it was not the time to be adding extra costs.

Dominant discourses of the interviewees were about how relatively unaffected Australia was by the GFC and that the strength of resource demand meant that the related sectors were only affected for a short period. With regard to the effect of the GFC on the CPRS policy process there were two dominant discourses: one that there was little, or only indirect, influence from the GFC on what happened, and the other that without the GFC Australia would almost certainly have had an ETS in place in 2009. These two discourses highlighted, on one hand, that lobbying, scare campaigns and rent-seeking were expected behaviour and that the government did not counter these effectively

through a combination of governmental mistakes and miscalculations. On the other hand, the discourse focused on the GFC distracting the government from adequately promoting the policy, and having to make policy adjustments to accommodate GFC related concerns which weakened support for the policy. This meant that the policy was variously attacked for being too weak and too generous to business, or for being too ambitious and imposing costs that businesses could not carry at the time.

This study is concerned with discerning the influence of the GFC on the process of trying to introduce the CPRS legislation. While there is discursive evidence that the GFC did impact on the CPRS policy process further aspects of the effects of the GFC needs to be considered: that of public opinion and support for the CPRS. The next three sections explore this aspect in relation to the three ecopolitical theories being examined.

5.6.2 Ecological modernisation related to discourses during the GFC

This section examines elite discourses related to the CPRS policy process to determine how the ecological modernisation agenda was influenced by the GFC. Prime Minister Rudd made action on climate change his "signature policy commitment" (Curran 2011, p.1004) and chose an ETS as the instrument to drive reform. By incorporating the external cost of GHG emissions into business the aim is to provide incentives to drive the reform process. In this way benefits for both business and the environment can be achieved through innovation and eco-efficiency measures (Curran 2011). The advent of the GFC in 2008 provided an extreme situation which tested the country's capacity to introduce such reform.

5.6.2.1 Costs and competitiveness dominate during the GFC

Australia, like many advanced economies, applied fiscal stimulus measures to prevent the economy going into recession when the GFC occurred. Although countries were urged to use the stimulus for the development of low carbon economies the Australian stimulus lacked a specific focus on this (OECD 2009b). Commenting on ecological modernising practice in Australia an interviewee noted: "I see so little evidence that we've internalised those values in any real way. Certainly as a culture, maybe individually it's different" (A12N). At the same time that assistance was provided to businesses, the issue of international competitiveness gained prominence due to both the GFC and the proposed CPRS policy. One interviewee noted: "Australian companies have realised more than ever...that they need to be competitive, they need to be price competitive. We're fundamentally, globally exposed" (A10B). And echoing the legacy of the Howard Government's policies of no-regrets, no-cost: "there's a realisation on behalf of Australian business that whatever policy is adopted it can't be to the detriment of our economic competitiveness" (A10B). The same interviewee felt that: "if you're going to deal with the issue of reducing emission there's a strong preference for looking at technology and looking at efficiency measures in order to reduce your energy costs" (A10B). In answering a question on the influence of the GFC on business reaction to the CPRS one said: "Well it's probably more focused on costs and maintaining our competitiveness now, which is probably less pronounced than during strong economic growth" (A10B).

The increased emphasis on maintaining competitiveness was related to a lot of discussion around energy use. This was largely related to the perception that: "our economic competitiveness in large part is built on...low energy prices" (A10B). Another commented: "we use our electricity, because it's so cheap, very inefficiently so we can make these efficiency savings, which pay for themselves and get a better performance that means you get a double benefit. You've made your global contribution and you've actually benefited domestically by not wasting..." (A1M). With cheap energy being so central to the international competitiveness several interviewees expressed concern about the lack of investment in new generation facilities. One interviewee commented: "There has been a delay in investment on the generation and supply of electricity because of the uncertainty created about whether we're going to have an emission trading scheme or a carbon tax...we now have on average, 20 to 30 year old coal-fired power stations" (A10B). With regard to business investment in general it was felt that this had decreased due to the economic conditions and uncertainty associated with the GFC. "Australian investment fell off" (A10B) and "there was capital expenditure that was delayed" (A13G). Supporting the need for business to find win-win solutions this comment was made: "the extent to which business will invest in plant equipment which is more energy efficient business is always interested in the extent to which they can reduce their energy bills. If it's economic they'll certainly do that" (A10B).

While the discourse in keeping with ecological modernisation could be discerned in the interviews the overriding discourse centred on concerns about increased costs and

international competitiveness during the global financial crisis. In most interviews the CPRS was not talked about as tool for modernising the economy and meeting Australian commitments under the Kyoto Protocol, but rather from the aspect of being a burden for businesses to manage when they could least do so.

5.6.2.2 Ecological modernisation during the GFC

Australia, as observed in other coal-intensive economies, follows a weak form of ecological modernisation putting "overriding faith in the capacity of markets to generate environmentally friendly innovation" (Curran 2011, p.1007). The interviews were related to the themes that Howes et al. (2009) used to assess the Australian capacity to adopt ecological modernisation reform. First, technological innovation was still the lynchpin of Australian reform at the time of the GFC. Carbon capture and storage was widely regarded as central to enabling Australia to continue using coal for energy production. "I think the biological sequestration of the wastes of carbon combustion will be important. Tremendously important, we have lots of research going on all of these things...We've got the biggest CCS project in the world just opening up in the Gorgon Gas Project" (A14A). The government stimulus package also included money for business development and investment in innovation because they were regarded as important for economic growth and future development.

The ability for ecological imperatives to engage with economic imperative continued to be a major problem in the country and if anything, this has been exacerbated by the GFC. One interviewee lamented the difficulty of overcoming this hurdle: "it became very much about a solution driven through economics and market forces and I think that the environment was quite ill-equipped for that" (A17N). The extractive industry sector gained an even stronger position through the discourse of saving Australia from going into recession when almost all other OECD countries had. A similar obstacle was seen during the GFC for the third capacity theme related to political and institutional change. Although Rudd began his term with strong moves to support his commitment to climate change action, which included establishing a new Department of Climate Change (Curran 2011, p.1004), the stimulus packages had little to drive any structural change. Much of the infrastructural works in the stimulus were to support the current economy with more roads, railways and port developments. But while the period of uncertainty caused by the GFC may have fostered a retreat to conservatism, the electoral outcome in 2010 was considered by some to show that the public did not accept the main parties' position. "The difference is, and it might turn out to be crucial, there's much more community interest in climate change than financial regulation. So for example here both major parties gave up. Our community came out with this strange electoral outcome that stopped them giving up" (A14A). It was only through needing to get the support of the Greens that a collaborative multi-party committee was able to be established that led to agreement on a carbon tax policy (Crowley 2013, p.608).

Transformation of social movements was limited and most initially took an adversarial role during the CPRS debate because they saw the reduction targets as being too low. The agreement reached on 4 May 2009 included higher targets: "the second and most important thing is targets. The green groups had to have a 25 per cent target on the table to be able to bring their constituents back to the table" (A4G). This May agreement helped the government show it had support for its policy but it never involved the Greens Party which held the balance of power in the Senate. As mentioned above when discussing the theme related to engaging with the economic imperative, environmentalists were ill prepared to deal with the intensity and pre-eminence of the economic debate during the GFC (A17N). One interviewee talked about how they changed their approach because of this: "I think we kind of accepted that unless we're prepared as a movement to go out and completely shift the prevailing socio-economic paradigm that we live in, we're going to have to deal with market mechanisms and so we were ready to do that" (A17N). Another interviewee felt they were adapting their focus to the way business operated on new resource developments: "I think the lesson we learnt, and it's been many years in development, was trying to get in on the conversation early" (A3N). But in general the divide between economic interests and those supporting environmental interests was more pronounced than ever during the GFC and the CPRS debate.

The final theme related to successful ecological modernisation is the need for discursive change to establish the environment as an integral component of all business decisions and the way people live in general. Rudd led on climate change action with a discourse that invoked strong ecological modernisation but failed to produce policy to match this promise (Curran 2011). At a time when discourses on the need for economic growth, unemployment, finance, and market competition were dominant it was difficult to move business to talking about future generations and social justice. "Western countries have succeeded in creating a culture landscape that is about individualism. It's about the

economy being the greatest good and the most important element of society rather than community or in terms of the health and happiness. All of the indicators tend to be economic ones not social ones or psychological ones" (A12N). Another interviewee talked of aligning environmental discourse with the financial crisis to strengthen their message: "we're talking about the same kind of urgency in climate - the environmental "sub-prime". So just relating it to the same blinkered way we ignored the fact that we were over-investing and piling up our debts" (A17N). Others were more resigned to the difficulty of changing the economic discourse: "I think that (the GFC) probably increased the capacity of the opposition to paint the proposed measure as being too costly, too expensive, too dangerous, but that was the discourse anyway. And it's going to continue to be the discourse even as we emerge from the global financial crisis, we can't afford it" (A12N). Another commented pragmatically: "as long as that divide exists between the environment and the economy...as long we have that discourse being the predominant one, as soon as you get a global financial crisis, of course, then you can't give to the environment because you have to retreat into your economic shell" (A12N).

5.6.2.3 Concluding comments on ecological modernisation

The extreme conditions created by the GFC helped inform this study with regard to the state of ecological modernisation reform in Australia. The coincidence of the emission trading scheme process with the GFC gave a sharp focus to the examination of elite discourses as the aim of such a scheme is to drive reform. A key discourse finding was that interviewees felt that the GFC made business in Australia more acutely aware of the need to retain international competitiveness. It was unfortunate that the CPRS policy was being introduced at the height of economic uncertainty due to the GFC and sectoral lobbying was able to increase demands for not adding extra costs. The discourse on the need to maintain competitiveness kept the discourse strongly related to economic needs. The discourse used related to energy efficiency included some criticising business for arguing against proposed CPRS allocation on the basis they had no more ability to make efficiency savings, while others criticised cheap energy costs for giving rise to inefficient use of energy. Overall the dominant discourse during the period of the GFC was one related to the importance of the economy and the need to maintain economic growth.

Of the five themes related to the capacity for adoption of ecological modernisation in a

country the only one that could be considered as retaining some importance at this time was that of technological innovation. Part of the stimulus package that was allocated to business for investment and carbon capture and storage research maintained strong funding. The other four themes were all adversely affected because of the dominance of the economic imperative. The most interesting outcome was the "strange electoral outcome" (A14A) in 2010 when dissatisfaction at both main parties resulted in a minority Labor Government with support from the Greens. This situation enabled greater collaborative and participatory process between government, business and environmentalists and the passing of a carbon tax. It was only in this way that "an institutional barrier to the lobbying efforts of the carbon industry" was created (Crowley 2013).

The dominance of the economic showed that ecological reform is only weakly established within political or business discourses in Australia. Ecological modernisation was not strongly endorsed by interviewees and there was still discourse that was more related to the no-regrets, no-cost discourse of the Howard Government where emission reduction needed to result in net benefits or, at a minimum, no additional costs (Crowley 2013, p.610). Ecological modernisation was not considered to have had an important role in policy making and business practices during the GFC. Whether interviewees talked about the need for delay, or a better policy, or were frustrated at the inability of the government to introduce policy to reduce emissions, the discourses used mostly demonstrated a lack of environmental consideration within decision making.

5.6.3 Postmaterialism related to discourses during the GFC

Climate change is strongly debated and controversial in part because it challenges core values and worldviews (Riedy 2012). In this study postmaterial value change has been used to examine if value change helps explain the discourses used in the Australian case. Australia is considered something of an outlier with regard to postmaterialism, similar to the United States, where both countries show a weak link between age and postmaterialism (Tranter & Western 2003). When studying the role of values in relation to climate change policy the most interesting feature in the Australian context is the continued high level of public support for taking action on climate change. Here the discourses of elites are examined with regard to postmaterialism, first looking at the

influence of the GFC followed by how postmaterialism was related to what happened during the CPRS policy process.

5.6.3.1 The relationship of postmaterial values with the GFC

The AES results after the 2007 election showed a drop in postmaterialism and a rise of materialism (McAllister & Pietsch 2011, p.56). Therefore levels of postmaterialism had dropped significantly before the GFC which runs contrary to what would be expected during the buoyant economic times Australia had been enjoying. Explanations posited to account for a decline in postmaterialism in some countries since 2000 include a growing sense of insecurity in modern societies (Díez Nicolás 2008b). Consistent with this argument the use of the word "fear" was prominent in the discourse of the elites interviewed. Fear was associated with being used by those with political and economic power: "I think that economic fear is one of the tools that are used along with the fear of terrorists etc... there's very strong use of that as a political weapon" (A12N). This discourse is evident in the following statements: "there was probably more of an increase from people in the camp of fear, going towards the fear of my job and my mortgage payment and things as the recession took some hold" (A6M). Or: "I think that fear of a quite shocking recession, you know we talk of depression, makes it's a more difficult climate in which to consider a serious economic reform" (A16G). Even as Australia enjoyed economic conditions that were the envy of many other developed countries, the governments of the time and the media focused on issues such as threats to economic growth, the rising exchange rate, rising prices, the unaffordability of housing, and rising costs of living. Leading up to the 2007 elections economic concerns centered on inflation and ever rising interest rates but once the GFC began to spread globally this concern moved to sustaining economic growth, having jobs, and reducing debt. Another noted: "There was a serious risk of Australia going into recession and therefore people were more cautious and more focused on financial risk" (A9A). As one interviewee commented: "people feel less secure, more worried about their immediate future, about their job" (A11A).

Inglehart and Abramson (1994) identified a period effect on postmaterialist values during recessions when jobs are threatened and people are more concerned about paying bills. While it was admitted by interviewees that there was a time when no one knew how severe the GFC would be and what the effect on unemployment would be, this passed quite quickly as it became evident the country was not going to be badly affected. "The increase in unemployment was very, very modest and it's now started going down, it's down towards levels that economists regard as full employment, which is four and three quarters. So I don't think it explains anything much (about) our attitude in Australia to global warming and what we're doing about it" (A1M). Another interviewee agreed: "Not a lot of people really felt the pinch" (A6M). And yet another: "it was less important here than maybe people expected" (A8B). During the period of uncertainty there was "a hunkering down" (A12N) and it was noted that people paid off debt "even households, mortgages, it's evident they're de-leveraging. Credit card debts are lower, people paying off their credit cards, well trying to" (A10B). Although there was concern about how the GFC and some sectors of the economy were more affected than others, interviewees felt the influence of economic insecurity on Australians was mild and it would not have been significant in influencing citizens' views during the climate change debate. There was little evidence of a period effect on the number of people expressing postmaterialist values as there was only a small drop of one per cent between 2007 and 2010 in the AES surveys.

5.6.3.2 Postmaterialism related to the CPRS debate

A widely acknowledged feature of the debate on taking action on climate change in Australia is the continuing high level of support for action. As one interviewee commented: "Yes absolutely, I mean everyone supports action on climate change" (A15B). Another interviewee put strong emphasis on this: "there was and remains **a very high level of support** for action on climate change in Australia and I'm not in doubt about that and I don't think even our conservative opponents...would doubt that either" (A16G). NGOs also reported that they had not seen a drop in membership during the GFC: "we were tracking very closely income from our various sources...our supporter base held relatively steady" (A2N).

The phenomenon of high levels of support for taking action on climate change and the contradictory response of public reaction objecting to price increases led to surprise or frustration by some. As one interviewee commented there is a sense that the people say: "oh yes, I'm a concerned citizen who does nothing" (A12N). Another commented on the difficulty of understanding this: "Perceptions of what the community's genuinely concerned (about) and the depth of that concern, I don't think anyone knows the answer to that" (A4G). Another commented on the nature of society: "I think we live in a pretty passive, political environment as a society. We don't engage and unless our three meals

a day are really being threatened and enough of the population are, I don't think we're going to rise up in that way" (A17N). Others criticised what they considered was a high level of ambivalence in Australian society: "there's still this great ambivalence. Yes they believe the scientists largely, they prefer not to believe the scientists, they'd prefer not to have to make any sort of sacrifice but they know it's necessary that we do" (A9A). Continuing in this vein: "people know that something has to be done and...they want the government just to do something" (A9A).

One argument that carried some weight was that a populist conservatism, similar to that in the USA, was fostered in Australia under Howard. This resulted in a new political and cultural complacency which has largely been "imported into Australia from rightwing American political culture" (Manne 2011, p.6). Interviewees recognised the influence of US style conservatism in Australia: "You need to understand that many conservative people hate environmentalism and regard it as an enormous threat" (A9A). Another commented: "there's an old blokes phenomenon in this, fathers of children, when you confront them with saying the way you've actually conducted your life or set up the economy is not in the interests of your children, it's so confronting they'll look for any evidence to reject it…So that sociological hub is playing out, primarily through the Nationals but also parts of the Liberal Party" (A4G). Consistent with this was the comment: "I think within the Liberal Party there are a lot of people that do accept there's climate change and then there are definitely some more out and out people who don't" (A7A).

5.6.3.3 Concluding comments on discourses and postmaterialism

Many different forces were influencing the debate and progress of the CPRS and although postmaterialism could be related to the outcome of the 2010 election, the influence of populist conservatism appears to have affected the CPRS debate. When the GFC began to impact on Australia the level of postmaterialists had already dropped to the lowest levels recorded in the AES. During the GFC economic concerns, or "fears" in the Australian discourse, were given more weight in relation to the CPRS debate and the discourse was strongly related to materialist concerns.

Support for NGOs was reported by interviewees as staying steady during this time. The increase in unemployment in Australian was not very high and the period of highest uncertainty due to the GFC only lasted about six months. Although there was a move to

pay down debt it was felt that most Australians had not been affected very much. Some interviewees identified a contradiction between continued high levels of support for action on climate change against what they perceived as lack of support for the government's CPRS policy. This was identified as ambivalence in the public at large or alternatively as the political passiveness of the people. The argument that the dominance of two political parties hinders postmaterialist value development because of the lack of minority parties appeared to be supported by the federal election result in 2010. When both main parties opposed, or were unable to act on climate change, there was a swing in votes to the Greens that allowed a minority party to influence policy outcomes for the next three years. Those holding postmaterialist values would be unlikely to vote for the conservative Coalition, and would be more likely to vote for the Greens to support concerns on climate change.

The combination of a dominant two party political system and the conservative agenda promoted by the Howard Government, help explain the discourses that developed during the GFC in relation to the CPRS policy. If this is the case, this could also explain the peak levels of materialism in the 2007 and 2010 surveys. While this level dropped after the 2010 elections the return to conservative government under Abbott in 2013 has since reinforced the position of populist conservatism in Australia. The examination of interviewee discourses now moves to the theory of citizen and consumer preferences to determine how this helps to explain what happened in Australia.

5.6.4 Citizen & consumer preferences discourses related to the GFC

With Australia, a second Anglo-Saxon country is examined where the role of individual preferences in democratic political deliberations is strongly established. The policy process to introduce an ETS coincided with the onset of the GFC against a background of strong support for taking action against climate change. How the elites interviewed saw political party support being affected, and how strong the support from Australians was during this difficult economic time, is the basis for the examination of preferences.

5.6.4.1 The consumer focus during CPRS debate

Australians have enjoyed a high standard of living for most of the twentieth century and this has continued into the present century. That their open market economy has delivered such material benefits to the country helps understand why many Australians support this. Demonstrating this view one interviewee observed: "There's a certain element of consumers being the greatest good, far more than citizens" (A12A). The high standard of living supports a consumerist culture, and it is easy to see why opposition to the CPRS focused on making Australians think it would damage economic growth and their own standard of living. The influence of the GFC was noted by one interviewee: "it was an uncertain period...anyone raising a scare about the effects of having to layout all this money, permits, got a better hearing than they otherwise would have" (A14A). It was during this time the CPRS debate tested just how much Australians were prepared to pay for emission reducing action. An interviewee stressed that: "People want action but they don't want higher electricity prices" (A13G). Another commented on the anomaly between wanting action and not being prepared to pay for it: "There have been some more sophisticated surveys that have been done recently, none of them ask are you concerned about climate change, but how much are you prepared to pay and for most people it's a very small amount before they say I'm not prepared to pay that. So there's breadth but not depth of commitment" (A4G). Supporting this, one interviewee remarked: "there was some polling done by the lobbying institutes which showed that...people were still a majority supporting climate actions but were only prepared to pay around \$10 for it" (A6M). Although one interviewee pointed to evidence that people will react differently to what they say in surveys: "you'll often have 80 per cent or more of the Australian public saying they're willing-to-pay more for the electricity if it comes from a green source however only 10 per cent or less of us do" (A17N). Some interviewees felt it was to be expected that people would not want to pay anything: "It's a nice social observation to say we're concerned about it but you say to people well that means your electricity price is going to increase by 100 per cent over the next three or four years, how do you now feel about it?"

At household level Australians have the option of buying green electricity, and moves have been made to "bring together consumer and citizen preferences" by "engaging people in a dialogue of being aware of your footprint, to be aware of where it comes from, be aware of the sustainability issues associated with it" (A3N). But while consumers may be more informed about the choices they make when shopping, the link between the economic structure of the country and polluting behaviour was felt to be: "understood by an absolute **fraction** of the community...the recognition that the consumer is actually the thing that drives the polluting behaviour is absolutely negligible" (A4G). These anomalies help explain where the criticisms of ambivalence arise from within the population. As one commented when relating consumer and citizen preferences: "there's no law against wanting to have your cake and eat it" (A1M).

5.6.4.2 Citizen preferences related to the GFC and CPRS

Although support for climate action stayed high there was still a drop in levels in Australia although interviewees did not voice much concern with the drop. For example: "we did our own polling and there was a large amount of polling that showed public support remains extremely high" (A3N). Although one interviewee did note: "most polls show erosion of support for the CPRS and an increasing percentage of people who had questions about the science" (A11A). In general the focus was not on the decrease as it had been in the New Zealand case, with most interviewees continuing to stress the high level of support for action in Australia. The question for those who "want to be a responsible citizen" became "what do you want to do about it" (A15B).

Most action at the individual level is supported by state level government and in the more active states the approach is: "a lot of community type forums and community type consultations ...on what they wanted to do and see for climate change action from the government" (A2G). One interviewee stressed that even though there was a growth in denialism similar to the USA during the GFC: "it wasn't anything like a majority. It came across as a massive amount of noise but actually 60 to 70 per cent of people, and at least 60 per cent of companies, are still acting on climate change in one form or another" (A7A). Another discussed the mix of citizen preferences with consumption practices: "It's not consumerism for the sake of consumerism, it is accepted consumerism. We do need to eat and we do need to go to shops to buy food to eat and when you've got a choice and you're encouraged to buy the toilet paper that's recycled or the light bulbs that have less wattage or whatever it may be" (A17N). While citizens were seen as taking private action and as supporting state government regulation to protect the environment, their role in the CPRS debate was through voting at the federal level.

Labor was elected in the 2007 federal election, in part, for its intention to act on climate change. Their inability to pass the CPRS policy through the Senate, with both the Coalition and the Green Party opposing it, and then to put it aside resulted in: "a lot of

ordinary voters were pretty upset that the government seemed to be backing off when it came to climate change" (A5A). One interviewee felt the government: "may have thought OK this is one that's actually safe to put aside, perhaps because people are more concerned with economic matters as a result of the global financial crisis...but I think that turned out to be a bit of a miscalculation. If you look at the part that the climate change issue played in the 2010 election I think it ended up really punishing the position of the Labor Party under both Rudd and Gillard" (A5A). Another comment on voter reaction at this time was: "lots of people angry that Labor was no longer acting on climate change in a meaningful way, or it was because as a politician he had basically betrayed the trust of the voters...then there was quite a big swing to the Greens of course as well, which was probably all the people who thought Labor was going to deal with climate change and now they're not, so now we'll vote for the Greens" (A6M). The opinions expressed by the interviewees supported the contentions that voters' preferences on climate change were influential in both the 2007 and 2010 elections.

5.6.4.3 Concluding comments on consumer and citizen preferences

Australia is an affluent country where the people enjoy a high standard of living and have a society where consumerism plays an important role in the economy. While Australians support their economic system, and primarily judge their governments on how well they manage the economy, there is concern about the country's poor performance on reducing GHG emissions. This peaked in 2007 but those interviewed for this project emphasised that support had remained high since and played an important role in federal elections.

Fuelling consumer concerns about increasing prices was a tactic used by those opposing the CPRS and interviewees felt this argument was given greater weight by the GFC. In general Australians have not responded in surveys, or in practice, to wanting to pay very much to take action on climate change. Interviewees pointed to ten dollars as the most people were willing-to-pay and that although eighty per cent of people said they supported green power, only ten per cent actually used this power option. Several states have public consultation processes to support and encourage private actions by citizens with regard to reducing emissions. In relation to the CPRS policy, and in contrast to Europe where "it never became the front page discussion it was here" (A4G), it became a very public debate. Several interviewees felt people voted Labor into power with the mandate to act on climate change: with a just get on with it and do it attitude. The anomaly between wanting action and not wanting to be affected by such action was related to what some interviewees identified as the ambivalence of Australians.

Citizens' preferences for taking action on climate change were expressed in both the 2007 and 2010 federal elections. Labor's miscalculation of the effect of shelving the policy nearly cost them the 2010 election as voters saw this as a betrayal of trust and failure to act on the mandate they had been given. It was considered that voters punished them by voting for the Greens when they felt that neither of the two main parties showed leadership on the issue. The Australian case shows that there was considerable pressure applied appealing to consumer preferences during the study period. The interesting counter to this was that citizen preferences expressed through voting in 2010 had a significant impact on the outcome for the Labor Party and for moving action on climate change.

The discourses related to the three ecopolitical theories have been examined to help explain what happened in Australia at this time. The examination now moves on to look at the discourse used in the media and in public documents during the introduction of the CPRS into parliament in May 2009. This analysis helps test if the discourse of the elites interviewed is consistent with what was being reported publically at the time.

5.7 Discourse during a media event

The media event chosen in Australia concerns the announcement of CPRS amendments on 4 May 2009 and the introduction of the *Carbon Pollution Reduction Scheme Bill 2009* into the House of Representatives on 14 May. Up until the changes were announced there had been widespread disapproval of the bill from industry and business, from the opposition, and from those supporting the need to take action on climate change. By May 2009 concerns over Australia being severely affected by the GFC were beginning to lessen although there was still considerable uncertainty relating to how the global recession was going to affect Australia in the longer term. In this section the discourse in the media is examined to see if it was consistent with that in the elite interviews. Media reports leading up to the 4 May are considered first. This is followed by an examination of the reports related to the announcement of the amendments to the bill, and its introduction into the Parliament.

5.7.1 Opposition to the CPRS before the 4 May 2009

There was widespread disapproval of the proposed CPRS up until May. Practically all parties concerned objected to it. On one side, industry and business attacked it for being introduced at the wrong time, and that it would be damaging for business and employment. While on the other side, it was criticised for being so modest that it would be ineffective in contributing to emission reductions. The government's own position was not convincing and their argument was seen to be that any scheme was better than none. On 4 May one commentator's report reflected the combined disapproval of the scheme: "It looks as if the Rudd Government's Carbon Pollution Reduction Scheme is dead in the water. The Greens hate it because they believe it gives Australia's biggest polluters a licence to pollute. The Coalition hates it because they believe it doesn't offer enough concessions to big polluters" (Davidson 2009, online source). Arguments for a more ambitious scheme centred on two issues: "the Greens attacked the government's proposed target of cuts of between 5 and 15 per cent of 2000 emission levels by 2020 as being too low, and said the free permits for trade-exposed industries were too long and generous" (Taylor 2009b, online source). Another reason for lack of support was reported as: "Environmentalists believe that, while in principle emissions trading schemes are as effective as carbon taxes, in practice, the schemes are complex and difficult for politicians and voters to understand and therefore, easy to rort" (Davidson 2009, online source). Supporting this view: "There's also the problem that most voters don't have the faintest idea how an ETS will work, but support it, meaning debates over how it will work are likely to go right over their heads" (Keane 2009d, online source).

Media reports from industry focused on potential job loses, lack of resources for investment, and industry moving to other countries with lower operating costs. An industry report to a Senate select committee stated: "under the scheme, hundreds more of the 11,000-strong workforce would be at risk in the short-term due to loss of a competitive position...arguments centred on the danger of driving Australian manufacturing overseas and the potential cuts to profits" (Chambers 2009, online source). The global financial crisis was frequently given as a reason that it was not the right time to add extra financial burden onto sectors that were already suffering. One of the big steel makers making submissions: "has recently flagged 1000-plus job cuts because of the global financial crisis...as a result of the downturn, both companies had

forecast second-half losses" (Chambers 2009, online source). Another report covered the whole mining sector: "The CPRS scheme will shed 23,510 jobs in the minerals sector by 2020 and more than 66,000 by 2030. These are direct jobs...You can add to these numbers the jobs of the council workers, the school teachers, the nurses, gardeners, and employees in the hundreds of small businesses in the towns and communities that service these mining regions" (Hooke 2009, online source). Comments from the New South Wales Business Chamber were reported as: "Companies have already been doing it tough because of the financial situation...there was a feeling it wasn't the right time for the scheme." (Hannon 2009, online source).

At the same time that industry sectors and businesses were raising fears of job losses the government was under attack for bowing to industry pressure. They were also criticised for not working with the Coalition on the policy. In early March 2009 the government presented the CPRS they proposed to introduce in May. One source complained that: "the Australian people are being presented with a dodgy, "take it or leave it" option that they are unwilling to accept" (Barns 2009, online source). The idea that the CPRS is better than no scheme was reported by Taylor (2009b, online source): "Climate Change Minister Penny Wong has repeatedly argued that the Senate should pass the scheme because it begins the process of moving to a low-carbon economy and provides business certainty, and is therefore better for business and the environment than no scheme at all." Others saw the weakened scheme as a lack of commitment by the government: "we see a government whose heart is not in it put forward a minimalist option that disappoints and disempowers the people" (Barns 2009, online source).

Another report complained that the government had responded to pleading from industry and business interests and that the GFC had probably influenced their decisions: "this week has shown that climate change is not the overarching priority that Australians imagined it would be under the Rudd Government. Politics has apparently prevailed over policy, with the issue being wielded as a weapon against Mr Turnbull and the Coalition" (The Age 2009, online source). Another commentator lamented the government's lack of commitment and will to engage with the Coalition: "The government has never taken climate change seriously enough to invest political capital in it. It could have followed its "moral challenge" rhetoric and tried to engage the Opposition in a genuinely bipartisan approach to addressing the issue. Instead, it saw it primarily as a weapon to use against its political opponents" (Keane 2009a, online

source). The government had never negotiated with the Greens and expected that the Coalition under Turnbull would support the bill in both Houses of Parliament. That the government continued to attack the opposition instead of build their support was noted by the media: "A bipartisan refinement of policy would seem to be a vain hope, even though long-term certainty depends on knowing that any emissions scheme will survive a change of government...the exclusion of the Coalition from recent negotiations with groups outside Parliament suggests a bipartisan position was not high on the agenda" (The Age 2009, online source). Another argued that: "The impact of the CPRS in the Australian economy is so fundamental and far-reaching it needs support from both sides of politics" (Gailey 2009, online source).

5.7.2 Reaction to amendments and introduction of the CPRS

The principle amendments to the CPRS on the 4 May were a year's delay, a conditional increase in the target for emission reductions, increased assistance to trade-exposed industries, and a set price of \$10 for carbon. The opposition had called for a delay to the introduction of the scheme because of the GFC. When the amendment was released the government's new position was noted as: "the government, which was friendless on its Carbon Pollution Reduction Scheme Mark I, has mustered support for CPRS Mark II from business, industry and environment groups" (The Age 2009, online source). Another commentator added: "The announcement, a week before the federal budget, has been overwhelmingly endorsed by key business groups, unions and most green and conservation groups. It gives the government a welcome circuit breaker in the face of almost universal opposition to the original scheme unveiled in March" (Hannon 2009, online source).

There was plenty of speculation about the government's intentions regarding the amendment. One commentator felt that: "The amendments...are designed to win support from Malcolm Turnbull's opposition in the Senate and appease mounting industry concern about the costs of the scheme during the global recession" (Taylor 2009a, online source). In a similar vein the following was reported: "the point of the delay and the extensive revisions to the scheme will be to refocus pressure on Malcolm Turnbull to support the legislation on the basis that the government had compromised on the key Coalition demands of timing and compensation" (Keane 2009b, online source). However some felt that the Labor Government was continuing to put the Coalition in a

difficult position: "the rush to legislate appears driven by Labor's urge to turn its ETS back down into political damage for Malcolm Turnbull" (Stutchbury 2009, online source). Another report noted that: "Rudd's retreat this week is an admission that the economic costs are significant enough to blow away a core election promise" (Stutchbury 2009, online source). This sentiment aligned with those still seeing the amendments as appeasement of large polluters. It was reported that: "The amendments represent almost complete surrender to the largest polluters, who will now face virtually no increased cost associated with their carbon emissions...It continues the remarkable string of victories big polluters have scored in neutering action on climate change" (Keane 2009b, online source). Once the budget came out on 12 May it was noted: "What is on offer is underwhelming and predictably tilted toward polluting interests...the government's climate policy is hopelessly skewed toward coal" (Macintosh 2009, online source). Even though the government was running a high deficit, increased spending on other climate change measures were announced in the May budget: "Emissions trading has been delayed so the government is forging ahead with other ways to cut greenhouse gas emissions. The climate change budget has been beefed up, despite tough economic times, to \$15 billion over nine years" (Australia Associated Press 2009, online source).

But overall for those that had supported Rudd and his promise of action to combat climate change in 2007, there was frustration at the resulting policy put forward: "So much for climate change being the "great moral challenge of our generation"...The government needs to do a lot more if it wants to live up to the climate change hype it generated before the 2007 federal election" (Macintosh 2009, online source). It appeared that by May 2009 media commentators felt that the government's position was one of supporting economic interests ahead of making a serious effort to deal with the issue. After the amendments to the bill were announced it was reported: "the government will have regained control of the issue, which has always primarily been a political tool for it rather than a serious challenge to prevent climate change" (Keane 2009b, online source). Another commentator despaired at the ineffectiveness of the proposed policy: "So are we doomed to fry, or must we simply hope the climate sceptics will be right after all...?" (Davidson 2009, online source).

5.7.3 Discourse related to ecopolitical theory in the media

Overall there was little media coverage that could be directly related to the ecopolitical theories being studied. The strongest link was with ecological modernisation principles. There was general recognition in media reports that innovation and new technology was needed to either reduce emissions from polluting industries, or to move to renewable energy production. Milne (2009, online source) from the Greens echoed this stating: "we want innovation to deliver us the transport of the future". The CPRS was variously criticised for sending the wrong investment signals and for not being strong enough to drive change: "This hardly creates an incentive for urgent transformation to green technology, and the sustainable jobs that go with it" (The Age 2009, online source). Another report stated: "If the scheme will not provide the right signals and incentives for a shift to a low-carbon economy, then doing nothing or doing something else is a better option" (Keane 2009c, online source). In the reports examined the ecological modernising supporting concept of putting a cost on emissions to drive polluting industries to find emission reducing technology to reduce these costs was not explicitly spelt out. For example: "looking at reducing greenhouse gas emissions...Making big polluters pay for their emissions will be an important strategy too" (MacGibbon 2009, online source).

In relation to postmaterialism, and citizen and consumer preferences there were only a few references to what the people wanted in the media reports examined although arguably the Greens and environmental groups represent postmaterial values. The Greens were reported as reminding the government about the high level of support for stronger targets: "A massive 37 per cent of Labor voters, and 48 per cent of young voters who tend to live in vulnerable inner metro seats, believe that the target should be strengthened" (Milne 2009, online source). Overall the media reports examined were more focused on the politics and business negotiations than on public reaction, and principles of ecological modernisation were not very evident. The conclusions for the examination of the media event are presented in the next section.

5.7.4 Concluding comments on media event discourse

Before the 4 May amendments to the CPRS bill were announced and the bill was introduced to Parliament widespread disapproval of the government's policy was reported in the media. The Greens and environmentalists in general felt the targets were unacceptable and that the scheme would be ineffective. Concessions to industries and businesses included in the scheme were criticised for being too generous and that they would be applied for too long. Some reports claimed that the complexity of an ETS made it easier for those opposing change to manipulate the process and prevent real change occurring.

Business and industry were reported citing the job losses the new scheme would cause and how they were in a poor economic situation to manage the change due to the GFC. The timing was therefore wrong and they were also reported raising concerns about companies moving off-shore to countries where costs would be lower. Recognising that investment in new technology would be necessary and that investment was needed in new energy production facilities, industry was reported as both needing policy certainty and financial relief in the uncertain economic conditions of the times. The government's position was reported as presenting the CPRS bill as better than no policy as it would at least begin the process of moving to a low carbon economy. But the low targets and generous concessions to industry were interpreted as a lack of commitment to a key election promise. Many media commentators at the time reported that the government appeared more interested in attacking Turnbull politically, at a time when they needed the support of the Coalition to get the bill passed through the Senate. The lack of bipartisan approach on the major tax reform was criticised by several commentators. Once the amendments were announced on 4 May the debate changed with important business and environmental groups giving support to the bill. The higher targets were seen as appeasing environmental group concerns, industry gained more concessions to meet their concerns, and the year's delay recognised the uncertain economic times and demands from the Coalition. When the bill was introduced on 14 May there was wider support reported in the media. Some commentators identified the government's pressure to introduce the policy as soon as possible as a tactic to make it difficult for Turnbull while others pointed to the need to have credible policy on the table for the Copenhagen climate meeting in December.

There was little discourse that could be related to the ecopolitical theories being studied although innovation and technology were recognised as being a necessary part of any actions to reduce emissions. There was also limited mention of public sentiment during this time and what was reported in the media was more concerned with the political process and negotiations around the policy. The overall impression in the media was one of dislike of the policy, and attention was focused on the politicking surrounding the event in the reports examined.

5.8 Summary of the Australian case

In this chapter the background within which the elite interviews were conducted was established before moving to examination of the dominant discourses that were used. The Australian case concerns a wealthy, advanced economy relying on fossil fuels from rich mineral resources to produce cheap energy for local industry and to provide high-demand exports. For over eleven and a half years the conservative Howard Government had cultivated a culture of populist conservatism similar to its ally the USA which largely excluded climate change concerns. This began to change in 2007 when the Labor Government came to power with a clear mandate to join the international community in taking action against climate change. The new government acted promptly but soon found they were dealing with the GFC and resulting global recession at the same time that they were proceeding with the CPRS policy process. After two attempts at passing the legislation through the Senate, where they did not have a majority, they eventually put the policy aside in 2010.

The discourses used by the elites interviewed focused on poor management by the government during the CPRS policy process. They were variously criticised for not supporting the policy effectively against the scare tactics of those opposing the scheme, for bowing to industry pressure to weaken the scheme, and for being distracted by the GFC. While some interviewees felt the CPRS process was only related to the GFC indirectly at most, others felt that without the GFC Australia would certainly have had the CPRS legislated by the planned date of mid-2009. Economic concerns dominated the discourse with interviewees recognising that those opposing to the bill worked to create fear of the policy in the public. Relating the discourses to ecological modernisation showed that the elites interviewed are not strongly informed by the theory. Whereas the need for investment in technology and the need for innovation were recognised by most, this was seldom referred to in a sense of reform and creating change that would benefit both industry and the environment. In the discourse it was more common to find an endorsement of the no regret, no cost policy approach fostered

by the Howard Government. Examining the outcome through a postmaterialist lens was equally unsatisfying. According to the regular AES surveys carried out in the country postmaterialism only dropped slightly from 2007 to 2010. Prominent in the elite discourse was recognition that levels of support for action on climate change stayed high even in the face of the strong materialist debate around the CPRS and growing dislike of the CPRS before Parliament. This anomaly was more pronounced when looked at from the perspective of consumer and citizen preference theory. At the same time that the high level of support for action on climate change was a feature of elite discourse, it was also noted that Australians did not want to pay much for action. Several interviewees identified what they termed the ambivalence of Australians for wanting action but not being prepared to pay for or to support the CPRS policy aimed at driving industry action. Citizen preferences were frequently noted related to the 2007 election outcome, and to the 2010 election where the reaction of voters to failed CPRS influenced the results.

The media event analysed coincided with the introduction of the CPRS legislation to Parliament for the first time and the end of the six month period identified by interviewees as the period of greatest uncertainty caused by the GFC. During this period industry and business lobbying was at its most intense according to interviewees. The policy was almost universally opposed until the government made amendments on 4 May that were in line with demands from environmental groups, industry and the Coalition. Media articles at this time frequently quoted the GFC as an important influence on proceedings. This was in contrast to much of the interviewee discourse although both media reports and the interviewees focused on industry scare tactics concerning potential job losses and not being able to manage more costs. Another theme of the discourse in the media was that the government action around the CPRS was interpreted by many as a lack of commitment to action, surrendering to industry and business demands, or alternatively as trying to damage the Coalition's standing. At this time media interest was more on the debate between the government and industry and other interested parties than on reaction or concerns of the public at large.

The next chapter explores the discourses in a European country following the GFC and follows a similar structure of discussion and analysis to the previous two cases. Spain provides a contrast to the two Anglo-Saxon countries that were in the process of trying to introduce ETS policy at the time of the GFC, as the country already had an ETS in

place as part of the European Union scheme. As a country severely affected by the GFC it provides some important contrasts that help answer the research questions posed. After examining the relevant context the intervening variable that are different to the New Zealand and Australian case are described along with how the ecopolitical theories relate to the Spanish setting. After establishing the context in which the Spanish elite interviews were conducted the dominant discourses are identified. A specific media event was also chosen to examine what discourses were dominant in the media for comparative purposes.

6 THE SPANISH CASE

6.1 Introduction

The final country studied is Spain. The two previous chapters examined elite and media discourses in New Zealand and Australia. While it was found that the discourses in New Zealand could be related to values and preferences that are important to the New Zealand people this was not evident in the Australian discourse. In Australia the focus of elites was on poor Labor Government management of their attempt to introduce an emissions trading scheme. Industry pressure, populist conservatism, the GFC, and lack of bipartisan support for the policy were themes of Australian interviewee discourses. Another discourse related to a continuing high level of support for taking action on climate change whereas in New Zealand the discourse highlighted the decline, often obscuring the fact there was still majority support for action. With the policy process for the ETS paralleling the GFC and subsequent global recession, there were varying opinions on how much effect the GFC had on the CPRS process in Australia.

This chapter sets out to discover and examine the dominant discourses during the GFC in Spain which enables the research questions to be answered. The relevant context related to economic conditions and climate change policy prior to the crisis is established to aid understanding and identification of the discourses used. The background for the three ecopolitical theories is established in a similar way. Discourses from the elite interviews and a media event are examined to help understand what influenced climate change decision making in Spain at this time. Focus is provided using the ecopolitical theories in the assessment of the dominant discourses. In relation to this, public opinion survey data relevant to Spain are presented within the discussion on consumer and citizen preferences: as done in the previous two chapters.

In this chapter the economic, political, and climate change policy background is discussed in Sections Two, Three and Four. These background sections are followed by Section Five where the ecopolitical theories are explained within the Spanish context. Sections Six and Seven deal with the analysis of the elite discourses and the chosen media event, and finally the chapter is concluded with a summary and discussion of the relevant discursive findings. The chapter begins with an overview of the relevant economic situation in Spain.

6.2 The Spanish economy and the GFC

Spain has experienced various stages of economic growth since the 1960s to become an advanced post-industrialised state. When Spain became a member of the Economic European Community in 1986 it resulted in an intense period of democratic consolidation and socioeconomic modernisation. Nowadays, with a population of approximately 47 million people living mostly in or around urban centres, it is a highly urbanised society (Magone 2009, p.33). Manufacturing is the principal source of Spain's export earnings and the service sector forms the largest part of the domestic economy (CIA Factbook 2013). Spain has to import much of its energy needs and is therefore vulnerable to oil price fluctuations. Tourism, construction and the related realty sector had been drivers of Spain's high economic growth. The success of these sectors meant that low-skilled work was readily available to immigrants and to young people, which contributed to high dropout rates from school during the boom (Wölfl & Mora-Sanguinetti 2011, p.5-6). But while Spanish economic growth was boosting EU growth, the country was spending beyond its means and the current account deficit reached 10 per cent of GDP by 2007 (Chislett 2013b, p.2). The severity of the crisis in Spain exposed the structural and political weaknesses of the rapid development and a lopsided economy.

Concern had begun to grow about the unsustainability of the construction boom and its vulnerability to any number of factors such as rising interest rates, decreased demand for housing, increased unemployment, or a drop in tourist numbers (Crawford 2006, online source). These concerns were realised when the financial outfall of the USA mortgage and financial crises flowed through to the Spanish construction and realty sectors. In Spain generous mortgages with hardly any guarantees were common, made mostly through regional savings banks. El Partido Socialista Obrero Español (PSOE) Government increased spending by around seven per cent in 2006 on the back of record tax and social security receipts, and showed no desire to adopt more precautionary policy, especially with elections due in 2008 (Crawford 2006, online source). As Crawford also reported there was a lot of complacency in business and government prior to the GFC. While initially unwilling to publicly acknowledge the crisis (Mallet, Barber et al. 2010, online source) the PSOE Government was obliged to take the economic measures required of them to prevent a bail-out by the European Central

Bank and the International Monetary Fund in 2010 (Mallet 2010b, online source). Even though the government had not been talking crisis they began applying Keynesian style stimulus as early as March 2008 to stave off recession (Prasad & Sorkin 2009, online source). From running a budgetary surplus, the situation deteriorated to one with a public deficit of around 11 per cent of GDP in 2009 and unemployment had risen to more than 20 per cent by 2011 (OECD 2011b, p.8). The growth in public debt, the crash in the realty sector and recessionary conditions left the country facing the need for considerable economic correction after the heady boom years before the GFC.

With easy access to cheap money Spaniards upgraded homes, cars, and enjoyed being able to adopt modern lifestyles. When the crash came the result was a high level of indebtedness for households and business alike (Chislett 2013a, p.166). By 2010 private debt had risen to 214 per cent of GDP (Mallaby 2012, online source) although it was claimed that a significant proportion of the private debt arose from investment by companies in emerging markets (Beneyto & Perez 2012). Within the country, as the GFC impacted on the construction sector, there was a dramatic decrease in private spending, steadily rising unemployment, high household debt, and a recessionary economic outlook. By 2011 over one fifth of the work force was without work with a disproportionate number of these being young people. Job losses continued to 2013 with unemployment eventually reaching over 26 per cent before the trend changed. While the government has made some progress on liberalising the labour market (Wölfl & Mora-Sanguinetti 2011, p.2) the rigidity and generous conditions of permanent contracts appear to pose an insurmountable obstacle to reform. Such high unemployment has an enormous social impact.

Corruption surfaced as another key concern for citizens. Although efforts were made over time to reduce this "there are still many cases of corruption, patronage and clientelism today" (Magone 2009, p.132). The construction industry collapse exposed the corruption rife during the boom times especially in the political class as urban development irregularities at local government level increasingly came to light (Delgado and Lopez Nieto 2009). Spain confronted the collapsing economy with an indecisive government and the main opposition party "mired in corruption scandals whose lurid details are pored over with relish even by the right-wing media" (Mallet, Barber et al. 2010, online source). The monthly Centro de Investigaciones Sociológicas (CIS) surveys showed corruption as a main issue of public concern along with dissatisfaction of the political class in general (CIS 2012). Politicians are seen as part of Spain's problems and these remote elites control appointment to many important positions in Spain (Chislett 2013a, p.181).

Undoubtedly Spain would have experienced a correction in the realty sector at some point as the situation was unsustainable but the GFC triggered a much more severe crash than it would probably have been. The relevant background for the political culture in Spain is now explored.

6.3 Political culture in Spain

Spain is a federally organised state with a constitutional monarchy. Democracy is relatively new with the transition from a dictatorship only beginning in late 1975. Since then there has been an intense process of democratization and modernisation, although the bloody civil war from 1936 to 1939 and the lengthy dictatorship under General Franco still influence the political culture. Spain has a bicameral parliament with an upper house Senate, and the lower house Congress of Deputies. There are 350 seats in the Congress and although voting is based in a proportional system, issues relating to very small electoral districts and uneven distribution of seats related to population numbers, make it one of the least proportional in Europe. The result is a system more similar to the British simple plurality system along with strong presidentialisation of the prime minister (Magone 2009, p.93). Another feature is that according to the Spanish Constitution members of parliament are representatives of Spain and as such are accountable to their party and not their constituencies (Magone 2009, p.111). This fosters strong party discipline as the party selects the candidates making them reliant on the party rather than voters to maintain their position. This closed-list method of candidate selection can also result in the selection of people that are inappropriate for constituencies. This contributes to the large gap between the citizens and the political class as candidates to both the Congress and Senate can be virtually unknown to the voters. The autonomous communities follow the same parliamentary model as the national one.

From 1996 to 2004 the conservative, centre-right Partido Popular (PP) was in government. Under President Aznar PP continued the macroeconomic reform agenda the previous socialist government had begun but with more discipline and success (Magone 2009, p.306). After the long period of isolation under the dictatorship Spain has strongly supported being at the forefront of EU development. The Aznar Government managed to bring economic stability to the country and to meet the monetary union's entry requirements contributing to thirteen years of sustained growth. PP lost the March 2004 election to PSOE who continued the macroeconomic policies of the previous government. By 2004 warnings were emerging from the OECD and the Bank of Spain that the economy was over-heating with growing risk of the realty bubble bursting (Chislett 2013a, p.169) although first the PP and later the PSOE governments chose not to act on the situation. During their 2008 electoral campaigns both main parties demonstrated that they were either unaware of, or ignoring, the mounting signs that the bubble was about to burst (Chislett 2013a, p.173).

In 2008 the PSOE narrowly won a second term, six months before the GFC turned into a broader macroeconomic crisis (Prasad & Sorkin 2009, p.1). While the PSOE Government were not publicly acknowledging the economic crisis in Spain, the PP were equally out of touch with what was happening (Chislett 2013a, p.173). The Financial Times labelled the President as "the perennially optimistic José Luis Rodríguez Zapatero" who wouldn't use the "c" word in the face of the rapidly deteriorating economy of the country, an approach that added to the country's problems by alienating foreign investors (Mallet, Barber et al. 2010, online source). PP was dealing with corruption scandals that eventually reached as high as Rajoy himself in 2013 (Erquicia 2013, online source). The Zapatero Government's unconvincing response to the economic situation led to defeat in the November 2011 elections with a massive loss of over four million votes. PP only picked up about half a million of these votes and it was the swing of PSOE voters to left-wing and other minor democratic parties that gave PP an absolute majority. PP inherited an unenviable task of reform on five fronts: economic, financial, institutional, social, and constitutional (Chislett 2013a, p.187) and implemented a more rigorous process of economic reform and public debt reduction than their predecessor. The austerity measures introduced were unpopular and opinion surveys and popular protest demonstrated the disapproval of the people (Chislett 2013a, p.191). Reinhart and Rogoffs' (2009, p.468-9) study of financial recessions demonstrated that the downturn in housing prices and high unemployment can take many years to recover indicating that Spain faces a long period of economic recovery. The background discussion for Spain now moves to consider climate change policy

leading up to, and during the GFC.

6.4 Climate change policy in Spain

Climate change policy in Spain is strongly linked to EU policy and therefore to EU ambitions in the global climate change arena. The transition to a democracy was important for stimulating awareness about environmental issues although, in general, Spain's late economic development was accompanied by late development of environmentalism (Pridham & Magone 2006, p.264-5). Environmental degradation on the Spanish Mediterranean Coast is extensive and such visible effects, along with the conflict between economic interests and environmental protection, have resulted in an image of the country as an environmental laggard within the EU (Pridham & Magone 2006, p.263). The Spanish people have a strong conservation approach to the environment and prioritise policies related to adverse environmental effects they can observe like forest fires and soil erosion. Because of this, there is a tendency to consider that global climate change issues should be dealt with by central government (Moyano, Paniagua et al. 2008, p.62). The country relies on imported fossil fuels for much of its energy requirements with around 80 percent of Spain's primary energy sources being imported (Stevenson 2012, p.156). Rapid economic growth, high population growth due to immigration, and adoption of modern lifestyles contributed to an overshoot of the country's allocated share of emissions under the EU Kyoto arrangement. This was reflected in large increases in GHG emissions in the transport and construction sectors (UNFCCC 2011b, online source) with emissions 53 percent above 1990 levels in 2007. This represented a 38 per cent increase over their burden-sharing allocation (IEA 2009, p.25).

Both political elites and citizens saw EU membership as a means to achieve economic development and social modernisation in line with other more advanced European states (Díez Medrano 2003, p.11). Their enthusiasm for membership produced a tension between meeting their economic growth ambitions and being a good European citizen, especially with regard to EU climate change objectives (Stevenson 2012, p.13). While some progress has been made, it has faced considerable challenges in doing so and still struggles to meet modern Western style environmental governance standards. Börzel, Fernandez et al. (2010, p.15-6) argue that policy overload, tremendous implementation

costs, and weak state capacity, especially with regard to environmental policy, faced late-comers to the EU. Over time, large amounts of money from the EU Cohesion Fund for environmental projects, EU infringement proceedings, and the legal requirements of EU directives have prompted Spain to make a greater effort (Borzel, Fernandez et al. 2010, p.11-2).

Since around 2000 climate policy in Spain has mostly been made in association with the EU (Jordan, Huitema et al. 2010, p.77). Policy is generally designed centrally although the autonomous communities have independence to draft plans and implement policy related to their specific requirements (Binda Zane 2013, p.1). The focus of EU global climate change policy has been support for the Kyoto Protocol and planning for the post-Protocol period from 2013 to 2020. Under the PP Government climate policy was limited, or largely ineffective, but with the change of government in 2004 a new phase of compliance and climate change policy began. The task the PSOE Government faced was enormous: emissions were almost 48 per cent higher than 1990 levels, the country had not conformed with EU policy document requirements, it was facing an infraction from the European Commission (EC) for failing to introduce the ETS legislation domestically, and the National Allocation Plan had not been submitted (Stevenson 2012, p.187). Against these odds the new government reiterated the country's commitment to the Kyoto Protocol and EU targets.

In 2007 the *Estrategia Española de Cambio Climatico y Energia Limpia*, built on previous plans, became Spain's overarching strategy for meeting the country's mitigation commitments (Binda Zane 2013, p.1). This plan dealt with Kyoto commitments to 2012, and the post-Kyoto period up to 2020. The key policy for emission reduction is the ETS which covers around 1,100 installations from the scheme's nine energy intensive industries (IEA 2009, p.32) and accounts for 56 per cent of Spain's energy related emissions (IEA 2009, p.32). PP's renewable energies programme was strengthened by PSOE, and using feed-in tariffs a wind energy sector ranked fourth in the world, only behind the economic powerhouses of the USA, Germany and China, was established by 2010 (Stingley 2010, online source). Strong government support had the desired effect of enabling an industry sector based on manufacturing and installing wind generators to be established. Spain also ranked second in the world on both photovoltaic and concentrated solar power production. The PSOE Government began to use Kyoto Protocol flexible mechanisms such as the Clean

Development Mechanism (CDM) which, as well as allowing them to off-set the overshoot, allowed advancement of economic interests especially in Latin America (Stevenson 2012, p.192).

When the GFC hit and the reality bubble burst, the ETS and various energy efficient initiatives were already in place. The ensuing economic slowdown lowered domestic energy demand, closed factories, and construction companies which contributed to a reduction in GHG emissions. By 2011 Spain's overshoot on total emissions had dropped to 24 per cent above 1990 levels (Binda Zane 2013, p.2) although much of the country's enthusiasm to move to emission reduction measures that were sustainable fell victim to the austerity programmes the country had to adopt. As austerity measures were strengthened support for renewable energy production was reduced: "this cornerstone of climate policy has effectively been abandoned" (Binda Zane 2013, p.1). While the GFC has had the positive effect of reducing emissions it has not been done by transforming the economy to a sustainable one. Once the country returns to better economic conditions it is expected that emissions will increase again.

The discussion now moves on to assess the Spanish background related to the ecopolitical theories used for their explanatory value in the study.

6.5 Ecopolitical theories in the Spanish context

Spain attracts attention with regard to ecopolitical research largely because the country's late economic development provides contrasting economic conditions to other large European countries, and now the severe economic crisis adds to this interest. Spain's economic boom had taken it close to being the seventh largest economy in the world. Per capita income had risen close to the European average by 2006 where it had only been about 55 per cent of the EU-15 in 1986 (Stevenson 2012, p.168). But the challenges associated with rapid growth and reform of structural institutions is reflected in a ranking of 25th on the 2011 Democratic Index (Economist Intelligence Unit 2011).

The study of preferences and postmaterialism help to discover the role people have played in the socioeconomic development of the country. But before looking at the background on these two social theories, the background on ecological modernisation is explored. This theory relates to reform of the methods of production to reduce environmental damage and is therefore related to business and institutional arrangements.

6.5.1 Ecological modernisation in Spain

As a late moderniser, Spain faced considerable challenge to catch up with other European Union countries. Baker (2007, p.297) argues that the EU uses an ecological modernisation framework to achieve their sustainable development goals and so the discourse of ecological modernisation is well established. While Spain is strongly influenced by the EU approach, the challenges posed by prioritising economic growth and a lack of capacity for ecological modernisation reform have adversely affected the integration of these principles into policy.

To consider Spain's capacity for implementing ecological modernisation reform the background is discussed related to five themes identified by Howes et al. (2010).

- The first theme concerns the level of scientific and technological innovation in the country. Spain's investment in research and development is well below the OECD average. In 2009 it was 1.38 per cent of GDP against the 2.3 per cent average (OECD 2011b, p.14). Spain ranks as a below average, moderate innovator on the EU's scoreboard of innovation performance with weaknesses listed as: poor investment by firms, weak linkage, and entrepreneurship (European Commission 2013). During the economic crisis there was stronger recognition of the need to innovate by the government and industry to help economic recovery although it appeared such action fell victim to the austerity programme (Chislett 2013a, p.191).
- A major challenge Spain faces is to engage environmental concern with the dominant economic imperative: the second theme. Since accession to the EU successive Spanish governments have prioritised securing stability and economic growth. The country had to achieve international competitiveness, and reduce high levels of unemployment while introducing social welfare policies, all of which left the environment well down the political agenda (Fernández, Font et al. 2010, p.172). Tàbara (2007, p.162) adds that during the eight years of conservative rule from 1996 to 2004 "climate change was perceived either as a non-issue or as a threat to economic growth and competitiveness". After 2004

the PSOE Government recognised the opportunities modernisation offered especially for diversifying energy sources. But even the use of Kyoto off-setting CDMs were regarded as a way to further Spain's economic interests abroad, and it is argued that using these masks the need for change to a lower carbon economy (Stevenson 2012, p.192).

- The third theme relates to political and institutional change. The difficulties Spain had establishing environmental institutional capacity within the new democratic institutions is well recognised (Tàbara 2007; Borzel, Fernandez et al. 2010; Fernández, Font et al. 2010; Stevenson 2012). A combination of domestic conditions and EU drivers have assisted with a change away from control of policy by limited circles within central government (Tàbara 2007, p172) to more inclusive governance. This decentralisation of environmental policy has created more opportunity and incentives for greater participation by non-state actors (Fernández, Font et al. 2010, p.572). The main problems associated with decentralisation related to problems that arose from poor central coordination of climate change strategy, and a complex network of actors working at different levels of government (Fernández, Font et al. 2010, p.564). Institutional capacity suffered a setback in 2008 when the Ministry for the Environment was merged back with its historical antagonist, the Ministry of Agriculture headed by a former agricultural official (Fernández, Font et al. 2010, p.564).
- Transforming the role of social movements is the weakest theme when compared to New Zealand and Australia. There is no green party in the Spanish Parliament and no environmental group has significant influence at the autonomous community level (Tàbara 2007, p.178). The electoral system makes it difficult for minor parties to gain representation in the Congress although larger environmental groups have used their international links to influence environmental policy making in the European Parliament (Pridham & Magone 2006, p.294). Tàbara (2007, p.173) argues that environmental issues tend to be oriented to the state in contrast to Anglo-Saxon countries where they are more oriented to civic society.
- The final theme concerns the development of a discourse that supports ecological modernisation. Although such a strong focus on economic growth suggests related discourse will be dominant, the influence of the EU discourse of ecological modernisation could moderate this. Tàbara (2007, p.168) argued that

for two decades the official Spanish discourse supporting climate change policy was largely rhetorical but that there was a change when the PSOE Government came to power in March 2004. The discourse under the socialist government became less rhetorical as they moved to comply with EU environmental policy. But while the discourse may have moved closer to that of the EU there is limited evidence of an integrated effort to move to a more sustainable society using ecological modernisation reform.

The lack of capacity for ecological modernisation in Spain is related to the fact there has been little concerted action to integrate environmental goals with economic goals in the Spanish society.

Spain has avoided making a committed effort to reduce emissions thanks to extensive use of CDMs, but it faces increasing pressure from the EU to play its part in meeting specific reduction targets. The main instrument introduced in Spain to drive reform consistent with ecological modernisation is the ETS. Since its inception in 2005 the scheme has provided incentives for companies to invest in less polluting technologies. Other autonomous government emissions regulations have helped encourage businesses not in the scheme to incorporate new technologies, especially with regard to energy efficiency. But most action is regulation-driven and less is driven by company enterprise and innovation to gain competitive advantage. There have been exceptions which are usually associated with companies with an international outlook such as the Torrecid and Porcelanosa Groups in the Castellon Province, the clothing enterprise Inditex, and the Mercadona supermarket chain. One area where economic and climate change interests have worked well together in Spain is the renewable energy sector. In Spain the base of a feed-in tariff programme for renewable energy development was established as early as 1994 (Jordan, Huitema et al. 2010, p.106) which helped Spain establish an industry sector with early starter advantages. Although Spain's investment in renewable energies can be related to the country's undesirable reliance on fossil fuel imports, the threat of climate change to the country is widely recognised and it does help support a desire by the citizens for action (Stevenson 2012, p.197).

Overall in Spain, with weak capacity for the introduction of ecological modernisation, it is not surprising that there is limited evidence of this type of reform in the country. Most modernisation and emission reducing strategies are regulation driven. The discussion of the ecopolitical theories in Spain now moves to consider the theory of postmaterialism.

6.5.2 Postmaterialism in Spain

The period of isolation Spain experienced started as far back as the First World War and continued well into the dictatorship of General Franco. This created very different economic conditions under which successive Spanish generations have grown up which should be reflected in postmaterial values according to Inglehart's theory (Díez Nicolás 2008a, p.248). Postmaterialism has been measured in Spain in domestic surveys and international surveys since 1988 and although levels rose until 1999 a decline began in 2000. Díez Nicolás (2008a, p.256) speculated that the factors causing this decline could be increased insecurity in modern societies caused by terrorism, organised crime, corruption, high unemployment, the changing climate, globalisation of markets, social and economic inequities, nuclear threat, and delinquency. These influence one's sense of personal security and possibly affect an increase of materialistic values. The 2007 WVS showed a notable decrease in the level of postmaterialist values from 2000 with a further decrease recorded in 2011.

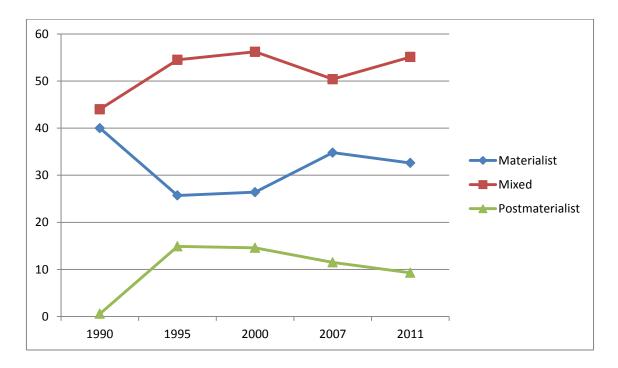


Figure 6.1. Spain 4-item battery measure of postmaterial index

Source: WVS (WVS 1990; WVS 1995 ; WVS 2000; WVS 2007; WVS 2011a)

Data obtained by Roales-Nieto and Segura (2010, p.509) in Spain between 2003 and

2005 supported a tendency to materialistic values in the three generational groups they defined. Although their survey was a preliminary investigation and used an open format survey which is inherently difficult to categorise, the study showed that young people rated themselves as materialists while they rated the values they thought were driving their generation as strongly postmaterialistic. While definitive conclusions cannot be drawn from this study it suggests that although postmaterialist values are socially promoted and fashionable for the younger generation, their personal values may be more materialistic.

Green parties and politicians help increase awareness and legitimize issues such as the environment which in turn helps promote postmaterial values in a society (Díez Nicolas 1996, p.163). The development of NSMs was somewhat restricted under the dictatorship and environmental protest was not well organised as well as having associations with the anarchist movement (Pridham & Magone 2006, p.285). Even when there was a strong resurgence of civic society after Franco's death there were many other priorities that sidelined the advancement of environmental concerns. This only changed as the Europeanization process began to have a stronger influence (Pridham & Magone 2006, p.303). The conservative electoral system also makes it difficult for minor parties to become established which eases pressure on the main parties to respond to issues these parties support. While there is evidence of increased interest in voting for minor parties their influence is still low.

Although levels of postmaterialism are consistent with other southern European countries, they are much lower than those in other European countries (Cantijoch & San Martin 2009, p.168). This low level is not consistent with the increased economic security the people have experienced in Spain. According to Inglehart's theory one would expect the exceptional circumstances in Spain to result in large generational changes in values (Dalton 2008, p.90). But Dalton argues that although postmaterialists only form a minority in advanced economies the influence of these values extends beyond politics to influence many aspects of society. Cantijoch and San Martin (2009) studied the effect of postmaterialism on political participation in Spain. Using data from the WVS they were not able to determine if postmaterialism influenced voting intention but were able to show that Spanish postmaterialists. In Spain the transition to democracy had a major influence on political values and the moderation shown during the time has

continued to influence the political arena to present day (Díez Nicolás 2008a, p.266). Related to this influence Díez Nicolás notes a possible governmental effect in the surveys with equality preferred ahead of freedom in the surveys done under socialist rule and all generations preferring freedom in the 2000 survey when the conservatives were in power. The question about why levels of postmaterialism decreased after 2000 during an economic boom period remains to be answered and the GFC and prolonged economic crisis in Spain provides a period which may help to answer this question. While the influence of the GFC was evident earlier, it was not until 2009 that the general public appreciated the full impact of the crisis on their lives and the country changed from being an economic growth leader in Europe to one of the most economically troubled countries in the Union. Inglehart and Abramson (1994) demonstrated that recessions can cause a period effect on postmaterial values as people temporarily change their choices in the measurement index but as levels were already declining this explanation does not fit the data.

As supported by their position on Inglehart and Welzels' (2010, p.554) cultural map the Spanish have increasingly adopted self-expression values with all the attendant characteristics these values are associated with: participation, subjective well-being, trust, tolerance, and quality of life. Self-expression values in Spain do not sit well with the conservative socio-cultural history of the country which supports privileged, remote political and economic elite classes: elites which have shown they are prone to bribery and corruption. During the GFC and economic crisis the frustration of citizens with how the crisis was managed was evident in a high level of protest through both conventional and nonconventional political action. In 2011, the PSOE socialist government suffered massive vote losses in both the local and national elections which was largely attributed to their poor performance during the crisis (Delgado & Lopez Nieto 2012). Besides ongoing street marches and general strikes, the most significant protest related to selfexpression values and frustration at exclusion from being able to voice their concerns was the 15-M or Indignados protest. Started just days before the 2011 local body elections, online websites and social networking were used to mobilise mainly younger people to set up camps in city and town squares around the country. Their dissatisfaction centred on the handling of the economic crisis, corruption, the politics of austerity, the outdated political system, along with a multitude of other concerns (Hughes 2011, p.407). But statistics indicate that the likelihood of significant political change is weak with a staggering 73.4 per cent of Spaniards finding politics boring, or were indifferent, distrustful of it, or irritated by it (Magone 2009, p.40).

Moving from a consideration of postmaterial value change in Spain the discussion now moves to the related role of consumer and citizens preferences.

6.5.3 Consumer preferences and citizen preferences in Spain

The rapid socio-economic modernisation that took place in Spain exposed the society to the influences of globalisation, market-growth economics, and consumerism. By 2007 the Spanish had a lifestyle similar to other advanced democratic economies with the right to free speech and to vote for who will govern their lives. Having adopted modern lifestyles, the GFC and heightened climate change concern focused attention on the conflict between consumer preferences and citizen preferences. Especially in Spain, people's jobs, and the ability to maintain the lifestyles to which they were becoming accustomed, were threatened and their consumer preferences could be expected override their citizen preferences. When the GFC started awareness was very high that urgent action was needed to prevent global climate change and this was a strong citizen preference for many. As a consequence of international and especially EU attention on climate change, information about the problem was regularly reported in the media and the heightened awareness was reflected in opinion surveys (Stevenson 2012, p.189). Spanish citizens' preferences are typically expressed in public opinion surveys and when voting in regional, national and European Union elections. To discover consumer preferences WTP measures or questions in surveys asking how much people are prepared to pay for environmental action are used. Details of public opinion surveys in Spain are presented in this section as this information on expressed preferences provides data that is used to examine the findings from the elite interviews. The public opinion information is presented first followed by discussions on consumer and citizen preferences as they relate to Spain.

Public opinion surveys in Spain

In Spain monthly public opinion surveys are run by the Centro de Investigaciones Sociológicas (CIS) providing a regular indicator of the issues people see as priorities. The Eurobarometer (Eurobar) surveys conducted in the EU also provide a rich source of opinion data that is comparable with other member states. For comparing data autumn 2007, was taken as the baseline as the influence of the economic situation was more defined in the Eurobar surveys after this date (Eurobarometer 69.3 2008, p.2) and the previous survey in spring 2007 had been atypically exuberant (Eurobarometer 68 2007, p.3). In autumn 2007 the most important issues facing the Spanish were identified as terrorism, housing, immigration, and unemployment (Eurobarometer 68 2007, p.25). By autumn 2009 this had changed to a clear majority putting the economic situation first, followed by unemployment (Eurobarometer 72 2009, p.40). In general environmental problems rate lowly when compared to other issues of public concern although an increase between 2005 and 2006 can be observed and later, in December 2008, a sharp decline is discernible (CIS 2012). But when surveyed specifically on concerns about the environment and climate change people express a high level of concern with 87 per cent of respondents still saving climate change was "a very serious problem" or "a fairly serious problem" in the autumn 2009 EBS (2009, p.16). The change attributed to the GFC that received attention from investigators was a drop of 12 per cent classifying climate change as "a very serious problem" between the spring and autumn Eurobar surveys in 2009. This was also matched with a significant increase in people thinking the issue of climate change was exaggerated and those saying that carbon dioxide did not matter much for warming. While Spain presents an extreme economic case where one could expect greater drops in concern than other countries, the decrease in those that classified climate change as "a serious problem" was similar to other European countries with much lower rates of unemployment.

Spanish surveys also showed that people continued to consider climate change an important issue for the country. A survey on the environment conducted by CIS for the International Social Survey Programme (ISSP) showed climate change was the most important environmental problem for the Spanish (CIS 2010, p.5). In contrast to this, a 2011 EBS concerning attitudes towards the environment that used multiple ranking, showed the Spanish ranked climate change concern lower than human-made disasters and water pollution. They rated it at a similar level of concern to air pollution, chemicals in consumer products, growing waste, natural resource depletion, and natural disasters although the 2011 rank only represented a small decrease of 2 per cent when the same question was asked in 2007 (Special Eurobarometer 365 2011, p.2). In this survey an impressive 94 per cent of Spanish respondents said protecting the environment is important to them personally and that they support protective action. At

the same time a high percentage saw the EU as a necessary player in legislation to protect the environment. The Spanish response is consistent with the observation made in the 2007 EBS that "Europeans attach an overwhelming importance to protecting the environment" (Special Eurobarometer 295 2007, p.11) and this has not changed significantly during the economic crisis. Consistent with attributing this importance to the environment, taking action was also considered very important. In the ISSP survey a clear majority, 73.1 per cent, believed that "only if we change our form of living will we resolve the problem of climate change" (CIS 2010, p.20).

When questioned about efficient use of natural resources a majority of Spanish consider that corporations, national government, European Union and citizens are not doing enough in this regard although 97 per cent of Spanish respondents believe that big polluters (corporations and industry) should be mainly responsible for protecting the environment (Special Eurobarometer 365 2011, p.20). The belief that the citizens themselves need to do more does not necessarily translate into their personal behaviour (Díez Nicolás 2006). This lack of deeply held conviction can help explain fluctuations in opinions expressed in surveys and adds weight to a contention of Scruggs and Bengals' (2012, p.513) that immediate economic concerns have affected people's responses to climate change questions in surveys. While economic issues predominate at national level in the surveys, issues associated with living conditions, such as the environment or climate change, predominate when the context is global (Eurobarometer 69.1 2008, p.61).

Citizen preferences in public opinion surveys showed that the environment and climate change action continued to be important during the crisis but this was not matched by actual action people took to protect the environment or by considering it a priority concern when included with all issues of concern. Here the Spanish citizen preferences as expressed in public opinion surveys regarding the environment and climate change have been discussed and now the discussion moves to look at their consumer preferences.

Consumer preferences in Spain

The EC regularly includes questions in surveys to determine support for existing or

planned policies. This is particularly important with regard to environmental policy as the EU has adopted action on climate change as internationally defining policy as well as one for stimulating sustainable economic growth during the economic crisis. Questions cover people's WTP for action, consumer choices, who should take action, and actions they personally take to protect the environment: much of which reflect consumer preferences. In a pre-crisis 2007 survey, 57 per cent of Spaniards prioritised environmental protection over economic growth although this question was conspicuously absent from the next wave in 2011 (Special Eurobarometer 295 2007, p.35). During the GFC and economic crises the EC changed from presenting climate change as a moral problem to one of economic self-interest with a discourse of energy efficiency, innovation and lowering costs (Chaffin 2010, online source) with this change reflected in the questions used in surveys. For example in the 2007 survey, 61 per cent felt that policies to protect the environment motivated innovation, and later in the 2011 survey 77 per cent of Spaniards saw environmental protection as being able to boost economic growth in the EU (Special Eurobarometer 365 2011, p.43). In the 2007 and 2011 surveys, 64 and 60 per cent respectively, of Spanish respondents said that they were WTP more for products that were environmentally friendly. But when asked in 2007 if they had actually done so, the figure dropped dramatically to 11 per cent. This European wide anomaly led analysts to speculate whether: attitudes did not necessarily lead to action, financial circumstances were influential, or issues related to product labelling were the cause. Reducing the discrepancy between expressed preferences and action was identified as one of the main challenges in the 2007 survey (Special Eurobarometer 295 2007, p.29).

A Spanish survey conducted in spring 2011 investigated consumer opinions related to their carbon footprint. It was found that while a majority of Spaniards said they were concerned about climate change and recognised they needed to change their way of living there was an inertia that was difficult to overcome to do so (Fundación Entorno 2011, p.2). The survey found that although consumers expressed WTP more for sustainable products, price appeared to be the first obstacle to doing so. Price was not just related to the cost of the product but to the trip needed to go to other places rather than the usual ones to buy such products. Also when people got to the alternative place they were frequently confused with the labelling and information on the products which lowered confidence in what they were making the effort to purchase. Díez Nicolás

(2006, p.214) carried out a comprehensive survey to measure environmental behaviour along with a set of independent variables to test for valid explanations of actual behaviour. His most significant finding was that having information about the environment was not necessarily linked to the attitudes people had. He further posited that mass media played a role in presenting "values, attitudes and opinions that are accepted without critical reflection by large sectors of the population and which do not respond to deep convictions" and that people often feel more comfortable adapting to the majority opinion or what they see as the socially acceptable position on an issue (Díez Nicolás 2006, p.227).

In general, Spanish consumer preferences related to environmental concerns is mixed. People express WTP and to make lifestyle changes, something which surveys show has not been greatly affected by the GFC, but this does not translate through to dedicated action by many. In Spain people became very price sensitive as job insecurity grew and people shopped for the cheapest products as supermarket profits attest during the crisis (The Economist 2011). This fits the pattern found in surveys that people stated WTP for action or sustainable products but the level of those that did so was low. Having examined Spanish consumer preferences the next section examines the expression of citizen preferences when they vote.

Citizens' preferences as expressed in elections

Spain is a relatively new democracy with founding elections held in 1977 after the dictatorship had ended. Magone (2009, p.176) notes that since the first elections voting participation has ranged from 68 to 80 per cent with higher turnouts when the voters want an alternation of the party in government. After eight years of government by the PP, the socialist PSOE won the 2004 elections. The new government led by José Luis Zapatero came to power during very buoyant economic times and next elections, in accord with the four year electoral term, were called for March, 2008. The PSOE Government approached the 2008 election in a strong economic position although there were signs that the effects of the subprime mortgage crisis in the USA was spreading and unemployment had begun to rise. Researchers noted the prevalence of Western style, adversarial politics in the election campaign with both the PP and the PSOE adopting a bipolarization strategy which was supported by mainstream media (Sampredo & Seoane Pérez 2008; Delgado & Lopez Nieto 2009; Magone 2009).

Sampredo and Seoane (2008, p.340) note that campaign topics were mismatched with citizens' concerns. For example housing, which rated highest as a personal concern, was the lowest ranked topic in the campaign and foreign policy, which did not exist as a concern to citizens, was ranked fifth in the election topics. Climate change and the environment did not feature as election issues. Sampredo and Seoane (2008, p.340) argue that in Western democracies there is a trend for politicians and journalists to focus on faraway agendas while "citizens shut themselves away in ego-trophic issues" such as housing, the economy and employment.

The election saw PSOE win the 2008 election with a narrow margin of 169 seats to PP's 154 seats in the 350 seat Congress (Delgado & Lopez Nieto 2009). The polarised campaign saw voters preferring to vote for one of the main parties rather than support minor parties, many of which lost seats. This can be considered a pre-crisis election as the economy still appeared buoyant and sustainable to many people. In contrast the following national election in November 2011 was a held when the economic crisis in Spain was passing through its most critical period. The sovereign debt crisis in Europe had reached Spain and deteriorating financial ratings and reluctance of investors were pushing Spain towards a financial bailout similar to those given to Greece, Ireland and Portugal. Zapatero had lost the support of the right, was detested by business leaders, and was generally perceived as having mismanaged the economic crisis (Mallet 2011). The debt crisis, the calls of business leaders and PP, as well as those of his own party, forced Zapatero to call the election earlier than required. The PP won the election with an absolute majority. PSOE lost around 15 per cent of the vote but the PP only gained about 5 per cent which as one commentator put it meant that: "the election was more of a defeat of the PSOE than a victory of the PP" (Hermine 2011, online source). That many voters who did not vote for PSOE did not change to PP resulted in a break with the polarization which had been developing since 1996 and benefited the minor parties. Citizens showed dissatisfaction with the two main parties. The discontent and frustration with the bipartisanship of the two main political parties helped spawn a new party, Podemos (We Can). The online coordinated party surprised many in the 2014 European Parliament elections by winning five of Spain's 54 allocated seats. A new green party, EQUO, contested the national election in 2011 but it was not successful. Having teamed with contentious nationalist parties did not give it a clear environmental agenda so it was not able to demonstrate the strength of green voter preferences.

Citizens' over-riding concern for the economy and unemployment meant parties left environmental issues well down party manifestos. But a low voter turnout for the 2011 elections suggests that voters were just not very interested in the campaign or that they saw neither of the main parties as a suitable choice for the difficult times (Hermine 2011, online source).

Voting in elections has been discussed to understand the citizen preferences that were expressed during the GFC and ensuing economic crisis in Spain. This section completes the background information for Spain and the examination of the data from the elite interviews in Spain is now presented.

6.6 Elite discourses in Spain

To discover the discourses used during the difficult economic times Spain has experienced, elite interviews were carried out in a similar manner to those in Australia and New Zealand. This section looks at the findings of the interviews within the context established for Spain in the preceding sections. The code for each interviewee contains an S to indicate Spain, and the sector they are classified in is indicated by: A for academic expert, B for business sector, G for government, M for media expert, and N for NGOs. The interviews were carried out from 2011 to 2012 which coincided with the years where the economic situation in the country reached its most severe with unemployment rising to near 25 per cent and international financial bailouts on the agenda. As in the Australia and New Zealand chapters the discourse findings are discussed in relation to the research questions.

6.6.1 Influence of the GFC on the economy and climate change policy

Whereas in Australia and New Zealand the focus of climate change policy at the time of the GFC was on the process of introducing an emissions trading scheme Spain, as part of the EU, had an ETS in place from 2005. The EU had taken a leading position on climate change adopting a 20 per cent reduction in emissions by 2020 and, at the time of the interviews, was pushing to increase this to 30 per cent. The Zapatero Government had taken significant measures to improve the country's response to its Kyoto Protocol commitments and discourse was generally positive and supportive of the country taking climate change action in line with EU objectives. In this section the discourses evident during the crisis are examined in interviewee responses when they were asked how they felt the GFC and economic crisis had influenced government actions and climate change policy at this time.

6.6.1.1 Government reaction to and influence in general of the GFC

Nearly every city and town in Spain was a sea of construction cranes prior to the crisis but this changed dramatically with the construction sector crash and the GFC. One interviewee commented: "So the housing bubble burst around 2008 and that caused all kinds of problems for the government including a loss of revenue because they got a lot of their revenue from property taxes of one kind or another" (S1M). The extra revenue was mostly coming from land use change taxes and construction permits "so suddenly this huge wodge of income for the government (stopped), which was one of the reasons why the government, regional government and municipalities were so keen on building houses, almost millions of houses that nobody needed, was because they got income from it" (S1M). Another interviewee complained the government: "has been taking and taking and taking the money until now, and the autonomous communities were the same.....they didn't take measures to slow-down all of that, you can always take measures, but this needs to be done by central politics" (S5G). It was clear to interviewees that because so many were benefitting from the construction boom there were few calls to control the situation and little political will to do so.

Once the flow-on effects of the GFC were evident the government response was that they: "decided along with everybody else.... to spend government money to try and keep the economy going...the government spent a lot of money. I think the total amount was something like two and a half percent of GDP" (S1M). With unemployment rising as construction companies laid off workers: "they basically did a lot of construction work to keep small construction companies in business" (S1M). During this time construction companies and associated businesses were closing down at an alarming rate. But at the same time the government was spending public money to stimulate the economy they avoided using a crisis discourse (Mallet, Barber et al. 2010) which damaged public confidence in the government's handling of the rapidly deteriorating economic conditions. People could see the problems in the country as one interviewee noted: "all the world knew that we were in crisis less Zapatero" (S5G). Another comment reflected the loss of confidence: "as a head of state what he's (Zapatero) saying and what he's doing, it doesn't match ... I'm starting to think they aren't able to

deliver anymore" (S4M).

The pressure to manage the mounting debt reduced the ability to achieve the environmental goals Zapatero had set. As an interviewed observed: "he's always sort of talked a good line on environmental policy" (S1M) but support for reform could not be sustained as the public debt rose. "The environment issue begins to be a little relegated" (S6A). One interviewee talked of the effect of this pressure on environmental regulation: "we talk about the impact of the crisis, the economic and financial situation, obviously this decreased interest a lot...people relaxed the obligations, the rules, the laws, all are the same as before, but the pressure from government, speaking regionally or nationally or locally, decreased a lot" (S11B). While the lack of public finance was lessening the pressure to implement environmental laws some interviewees felt this highlighted underlying problems with commitment to change. "There was a sudden stoppage of the political ambition for climate change...I believe a problem here in Spain is the lack of public and political ambition." (S12B). But as one interviewee emphasised: "But the first reaction is not to complicate our lives because we have 5 million unemployed" (S6A).

Although Spain's total public debt position was better than many other European countries thanks to the preceding boom times, they had accumulated a large current account deficit by 2009 and this had to be financed by foreign borrowing. "Spain looked bad so then they had to engage in a big sort of rescue operation. Basically they had to impose lots of austerity because people said: my god, look at Spain" (S1M). Another interviewee talked about the internal consequence of the situation: "This is the problem of course, the deficit is increasing and this is transferred to everyone" (S5G) although it was sometime before the worst was felt. As another observed: "for us the crisis has been especially severe from 2010/2011: it was serious for public administration. In Spain the crisis that affected us after 2008 was very significant, many businesses closed, or reduced jobs, but the public administrations didn't take significant measures." (S9G). For regional and local government the loss of extraordinary income from construction was compounded by reduced funding from central government. One noted the effect on government spending: "They spend less directly on administration because they have fewer resources and spend less indirectly because they have to stop further investment. Then, many individuals that enjoyed assistance for their business or for their houses to make changes, now there is no solution so they don't do these" (S9G). This was reflected in the comment from a business relying on government funding: "I mean last year we were in Madrid with one of our main financing agency who announced 60 per cent cuts this year" (S10B). Overall interviewees tended to focus on poor leadership from central government, as one stated: "Well the central government always does things badly which has repercussion over everything. It's evident; if we do the things bad, the town halls suffer...it is always a cascade. If the central government doesn't make the policy that we need to follow, it translates to whatever end and all of us fall" (S5G). But public debt and concerns about rising unemployment distracted the government from issues like the environment.

This section has dealt with the discourse related to wider considerations related to the GFC and economic crisis and the discussion moves on to consider how climate change policy action was affected.

6.6.1.2 The influence of the crisis on climate change policy

Several interviewees lamented the fact that the central government did not use the financial stimulus to help move to a lower carbon society. One commented: "they missed a great opportunity there because if they just thought for another couple of weeks before allocating that money they could have actually done some really worthwhile long-term things, you know to do with environmental policy" (S1M). Another added: "we are in a difficult economic situation but we are also not taking the advantage we could take in Spain, and not getting the benefits of it" (S4N). There was recognition that the PSOE Government had moved to improve Spain's environmental and climate change action record but there was frustration that during the crisis, action did not match their discourse. The following comments reflect this perspective: "the socialist government in particular, had a very pro alternative energy bias up until the crisis which, broadly speaking, I think is good, especially for wind" (S1M). And: "they began to do it (climate change policy) better than the last government and this stopped" (S13M).

The focus of government, media, and people moved to the economic situation and rapidly rising unemployment. One interviewee explained: "environmental problems have been put aside and passed to be a secondary problem because the economic problems superseded this" (S7A). Another talked of the level of concern in public surveys: "the environment as an issue on the political agenda falls. We have these issues

on the (concern) list in very low positions" (S6A). Noting the sudden drop of media and advertiser interest in climate change: "if someone only speaks about ecology at this time you say: pah! excuse me, now the problem is our jobs, to find jobs" (S7A). From within the media industry itself the comment was: "Nobody tells us we need to make environmental programmes now, never" (S13M) and from government: "the crisis is also taking off the agenda this kind of topic" (S8G).

The ETS began operating in 2005 and is the key action for reducing emissions. By the time the crisis affected companies in the scheme they had already been investing in emission reducing technologies. The crisis adversely influenced ETS outcomes by exacerbating pre-existing permit excesses and suppressing the carbon market. One interviewee explained that permit allocations were based on: "predictions for four years based on a normal economic cycle with the rate of growth extrapolated, but the Great Recession happened and the big companies have lowered their production" (S6A). This reduced incentives to continue investment so it became: "business as usual and you have to take into account that this is a generalised situation and therefore if everyone wants to sell the price goes down" (S6A). Businesses before the crisis: "were investing a lot in technology to decrease CO2 because they were earning a lot of money in carbon trade" (S5G). The crisis contributed to a price crash in the carbon market although many Spanish companies had already invested and gained a lot of financial benefit from this.

Emission reducing policy already introduced continued in force during the crisis and, while some said it was not affected much, others noted decreased pressure on businesses to introduce further changes. One government interviewee explained that: "we can't say 'ok so it's a very difficult time'. We can't relax our politics, we have to comply with European directives so it's difficult for them...but now because of the crisis we are doing the same policy as Brussels. If Brussels says 'A' we'll do A, not AA" (S5G). This was supported by another interviewee who commented: "with the crisis the administrations haven't made significant cuts to do with environmental policies. They spend less directly on administration because they have fewer resources and spend less indirectly because they have to stop further investment" (S9G). A key influence of lowered pressure for reform, and less government support was reduced interest in investment which also adversely affected expansion of the renewable energy industry.

When the government announced reductions to feed-in tariffs for photovoltaics in late 2010 there was considerable outrage: "the photovoltaics cell thing is a very interesting example because that is a very clear example of the crisis, the budget crisis pushing the government to retroactively reduce subsidises for an alternative energy sector" (S1M). And from a government source: "I think it was mainly driven by the economic crisis" (S8G). Many people had invested in this sector because of high, long-term, government guaranteed prices: "The solar panel thing is a huge scandal because it was very, very heavily subsidised...and anyway you can't retroactively change the law because that's against international law" (S1M). Many saw it as withdrawal of government support for the renewable energy sector although those with more knowledge understood why the government had to act: "it didn't make any sense... in the end a lot of people invested in solar energy, and they had to pay the bill. The outcome was very unbalanced because you had to pay three or four billion US dollars in subsidies for just 1 per cent of the energy generated for the grid" (S8G). One stated that the energy deficit "reached about 15 billion euros" (S1M). These feed-in tariffs were also being paid to a sector relying on imported materials whereas the wind generation sector had developed its own supply industry. One interviewee noted the importance of the renewable energy sector for the economy commenting that: "it gives you the possibility of becoming much more independent in terms of energy policy, so you don't have to rely so much on fossil fuel imports" (S8G). It is also useful to remember that the vagaries of the political arena at such a difficult time come into play when assessing the influences on climate change policy.

A clear example of the contradiction between climate change policy and other government interests was when: "Zapatero did do something very interesting, he's from León, and there are lots of coal mines in that area and in Asturias. He very foolishly, to the anguish of the EU, decided to continue subsidising coal mines...it was a huge scandal because it was clearly pointless. It was just to keep 4,000 people in work but by destroying the environment. It made absolutely no economic sense and no environmental sense either but he's a politician" (S1M). The Royal Decree passed to support the coal industry in 2010 ran counter to new EU rules that member states must stop subsidising coal industries. Other contradictory actions were explained about the PSOE Government actions: "they said it (climate change) was real so they cut the budget, there were 3,800 million euros for climate change, and it's gone...We had a

climate change office and now it doesn't exist" (S13M). Clearly the change of government in late 2011 was also influential in lowering political interest in climate change policy. The PP had showed little concern for climate change policy in the past and was elected as the best option for solving the country's economic problems.

Here the discourse of interviewees related to the influence of the GFC and economic crisis in Spain on climate change policy has been examined. The discussion now moves to look more specifically at the discourses of businesses and financial institutions in relation to the crises.

6.6.1.3 Effects of the crisis on the business sector

The business sector plays an important part in the ability of Spain to meet EU climate change objectives but the culture of this sector makes support for action variable. An interviewee explained that businesses without an international outlook often operated on traditional, conservative basis and were not very interested in issues like climate change: "Spanish businesses that operate in an international scenario know that internationally it is fundamental to develop the politic against climate change. Therefore these businesses have been developing initiatives for years, making an effort, setting objectives to reduce emissions, but for those businesses not in this international scene, they are much more conservative" (S12B). Another talked about this different between businesses in Spain: "We talk about the old business economy and the new business economy, in some cases you have someone to connect these but this is exceptional" (S11B). Associated with the conservative business economy are smaller, family based businesses which an interviewee believed restricted development: "We need to make more efficiency, more entrepreneurship, inside or outside of the companies, the problem in general" (S11B). Employment practices seen as being affected by this culture: "one of the main reasons for unemployment in Spain is precisely the paternalistic type of organisation that permeates business so if you know somebody that's fine, if you don't know anybody you're dead...you cannot move around; it's very tribal in a way" (S2A). Some saw the economic crisis having a positive influence on established practices: "now many people move outside (Spain) to obtain work. This is marvellous...as long as some of them come back in the future" (S11B). Another interviewee noted: "Europe in general terms is very paternalistic about primary producers...in Spain they come from a culture of being paid for a lot of things which in other countries they would have to pay for" (S10B). This sentiment is supported by the fact that funding for environmental programmes mostly comes from government or the EU and the farmers do not see such costs as part of their running expenses.

At the height of the GFC credit and finance was very difficult to obtain, and with domestic spending dropping dramatically, businesses were badly affected. This hit the production sectors hardest but the extent of the economic crisis meant the hardest years were still ahead. For many that survived 2009 there was a difficult transition from selling domestically to establishing international markets: "the companies who are getting out of the crisis are basically exporting" (S2A). Others who relied on government funding with long-term contracts, hoped funding would carry them through until things improved. But as the economic crisis deepened it was clear that any buffer would not be sufficient and the situation for many businesses was critical in 2011. During this year unemployment reached 20 per cent. One interviewee commented: "So for us the bad crisis has been 2011, the really bad one, and just now. So we are now in the situation that some sectors were in 2008 or 2009" (S10B). From the regulatory side it was: "people relax if you like, relax the obligations, the rules, and the laws. All are the same as before but the pressure from government, speaking regional, national or local, decreased a lot" (S11B). Conditions for the business sector were very difficult and this continued for many years. The main flow-on effect for people was ever increasing unemployment. The large, well-protected public service sector did not escape and was eventually affected when salaries were reduced in 2010.

In this section the discourses related to the influence of the GFC and subsequent economic crisis on the economy in general and on climate change policy have been examined. Concluding comments on the discourses examined in this section are now presented.

6.6.1.4 Concluding comments on the influence of the GFC

Discourse in the interviews centred on poor government performance in managing the crisis and a decreased appetite to strengthen emission reducing measures or invest in new technological solutions. In general there was a loss of interest in issues, such as climate change action, not directly related to economic recovery and employment. The government stimulus was regarded as badly planned, wasteful and debt inducing. As the interviews were done in 2011, the dominant view of the interviewees was that any benefits from the Keynesian style public spending stimulus had been minimal and

instead the country was being punished for creating a large current account deficit. With the ETS starting in 2005 businesses had made significant effort to improve energy use and install technology to reduce emissions before the crisis hit. So while there was lessening of pressure and interest in further investment, businesses continued operating under existing regulations. While policy continued regulatory pressure reduced to only meeting base requirements and financial difficulties reduced interest in investment. The most debated climate change related policy actions from central government were the retroactive reduction of subsidies for photovoltaic solar energy production, and the Royal Decree to continue subsidising coal mining for energy production.

Innovation and entrepreneurship were seen as hindered by an internal, traditional, paternalistic business culture which works against ecological modernisation reform. In contrast, the businesses that internationalised were seen to have adopted a culture that supports climate change concerns in line with international competitive forces. For the public sector and businesses reliant on government spending or funding there may have been a buffer from the GFC but as the economic crisis deepened they found themselves struggling with continually reducing income and laying off staff. This explains increasing unemployment right through to 2013. For businesses in Spain the period has been one characterised by survival and, for many people, as one dominated by job security and employment concerns.

In this section the influence of the GFC on climate change policy and political decisions has been examined along with what happened in the private sector. With emission reducing policy in place for at least three years before the GFC the main influence was seen as a reduction of pressure and ambition for further investment and action. The examination of the interviews continues with a more in-depth study of discourses related to the ecopolitical theories. The first theory dealt with is ecological modernisation.

6.6.2 Ecological modernisation related to discourses during the GFC

The interviewee discourses were examined to look for the influence of the GFC and economic crisis on ecological modernisation reform in Spain. Spain's rapid economic development was described by one interviewee: "40 years ago (Spain) was very poor and really quite backward in every way, culturally, industrially, and it had this massive

growth and modernisation but when everyone else was being all environmental, the Spanish were just discovering industry let alone environmentally (friendly) industry" (S1M). Being a member of the EU helped advance environmental policy and the main emission reducing mechanism is the ETS. In the following sections the influence of the crises in Spain are examined relating the interviewees' discourses to the five themes proposed by Howes et al. (2010) that speak to the capacity needed for adopting an effective programme of ecological modernisation reform.

6.6.2.1 Political and institutional change

Late economic development without integrating environmental concern has meant businesses have not developed an environmental consciousness. This is reflected in the following statement: "I was thinking whether that (ecological modernisation) applies to here because here we don't use ecological concepts really. It's modernisation full-stop" (S2A). Another added: "in general Spanish industry, and that really includes some of the big companies, are pretty clueless when it comes to environmental stuff...it's not something the Spanish corporate bosses are asked about by the media or politicians... it's not something that is at the top of their minds, whereas in other countries it has been and it is" (S1M). Although this interviewee felt things were beginning to change even with, or perhaps because of, the crises: "they're beginning to but they are late....you know they'll do it because, they don't care about the environment, but they want to save money and the main thing about most environmentally sound policies is that they save energy and therefore save costs" (S1M). Another interviewee talked about a reason for business culture problems: "they say that Spain has two problems, one is that probably people need to be hungrier in the terms of necessity and the second one: ambition. Very few people are ambitious." (S11B). Interviewees also commented on a well-used discourse on employment choices: "when you asked parents some time ago here what is the best work for your children, the answer was in the public sector, public administration. Why, because they work less, earn enough, and job for life. And this is the mentality through the family, parents and children, today in the crisis....and in education because generally speaking the universities are to produce people to work for others, not entrepreneurs" (S11B). Another problem was related to trust within the business community: "People prefer smaller-alone than bigger-connected" (S11B).

Although the crisis was seen to cause a regression to the old-style business culture another interviewee saw positive aspects such as removing excesses and increasing concern for cost savings, especially for energy: "the economic crisis had caused a very significant reduction in public works in infrastructure, in many cases for unnecessary things, like airports where there was no need for them. So for climate change this was good. On the other hand, it is also good for the effects of economic savings in a context of increasing energy prices...the pressure to reduce energy costs" (S12B). One interviewee talked of conservative influences within companies: "if the title of this plan isn't efficiency of energy, if it's "fight climate change", there are various directors that will raise their hand and start an ideological argument and there will be an argument about whether climate change exists or doesn't exist. And this has to do with an ideological approach to the subject of climate change" (S12B). Another interviewee felt that there was variation between businesses depending on how closely climate change could be expected to affect them: "If you think about a company that is very sensitive to water scarcity that company may take that into consideration and it can be part of the company's agenda" (S8G).

In general interviewees felt that the crisis had resulted in a retreat to the traditional business culture where environmental issues like climate change were not considered something business had to concern itself with. It appeared that while some progress had been made encouraging stronger ecological modernisation, reduced pressure from government and lack of ambition from business has led to a dampening of this process.

6.6.2.2 The dominant economic imperative and technological innovation

The crisis showed there is very little evidence that the environment is linked to the economic imperative in Spain. The importance of this was stated by one interviewee: "it doesn't matter whether you have a Ministry of the Environment; the key point is that unless you make climate change and sustainability part of the economic agenda of the country it's never going to have an impact...people are not aware that climate change and the environment are economic issues" (S8G). Continuing on the Spanish situation: "people are not conscious that ecological modernisation is a **must** and has to be part of the economic agenda, because if you don't include it as part of the economic agenda, economic growth potential is going to be undermined" (S8G). But many interviewees indicated that taking care of the environment was still seen as a burden on the economy and on economic recovery during the crisis: "it is considered that the protection of the environment is able to have indeterminate costs against the generation of

employment...above all because it requires some type of public spending associated with this or puts restrictions or costs on the companies that are able to generate employment" (S6A). The crisis showed that little progress had been made on moving care for the environment closer to the economic imperative.

In Spain, the period of rapid industrial development resulted in less emphasis on making improvements and building competitiveness for the future which left technological innovation off the agenda for many. Combined with this, during the construction sector boom, less attention was given to advancing other industries. Because of low investment in innovation Spain received EU funding for this purpose although an interviewee noted: "In Brussels at a meeting of the EU they explained that in Spain they had put 170,000 million euros into the research, development and innovation policy...they said when they analyse the indicators they have practically not moved. They are the same indicators as 10 years ago. Not exactly, but they don't move proportionally to the effort" (S11B). Also businesses in Spain contribute half what most other EU member states do to research, development and innovation (S11B). "We need to make more efficiency, more entrepreneurship, inside or outside of companies...you need to innovate, to innovate you have to produce more added-value and produce more competitiveness as well" (S11B). Another interviewee was more positive about the drivers of technological innovation and felt the incentives from the ETS and emission regulations had pushed companies to invest in new technologies to decrease costs and increase competitiveness: "they know their image as an exporter. The image of a company that contaminates little is much better than a company that contaminates a lot" (S5G). As domestic markets collapsed in production sectors, many companies that had survived the GFC had to transit to international markets which exposed them to a wider set of competitive forces which often include good environmental practices. In this way, the crisis has helped moved these companies towards a cultural change where ecological modernisation can play a role in reform.

6.6.2.3 Social movements and a discourse of ecological modernisation

Internally Spain lacks green party representation in politics: "And here we have no ecological party; we don't have the pressure to have a green party like the Greens in Germany. There's no party with ecological representation in parliament" (S6A). This influence from within the political system is also compounded by lack of coordination between the environmental groups that exist in Spain. With environmental issues

moving down the political agenda during the crisis there has been little change in transforming the role of environmental movements in Spain.

The theme related to the need to developing a discourse that supports ecological modernisation is most closely related to the purpose of this study. Given Spain's enthusiasm for the EU project and desire to catch up with other Europeans countries one could expect environmental awareness and discourse in keeping with European environmental discourse. One interviewee cautioned that: "in Europe there is a certain differentiation between the north and the south, and ecological discourse is stronger in the north than in the south" (S6A). This interviewee continued explaining that: "a little bit of what happens is that the ecological discourse is buried in the left part, the left of PSOE has assumed part of the discourse but also a little the right because it's a discourse that's a little transversal...the ecological discourse is politically correct but is not really adopted by the political parties" (S6A). Another interviewee felt government attitude had not helped the adoption of ecological modernisation discourse: "the Government of Spain, as well the previous one, haven't been inclined to move on the environment. Not to move to a green economy. If you believe there are economic incentives for environmental commitment by the businesses they'll believe they are going to win" (S12B). Another interview talked of evident use of the EU discourse as rhetoric: "one of his (Zapatero's) lines is the sort of law on the sustainable economy. Which is a curious mixture of sort of quasi-environmental measures but really it's about austerity. By sustainable they don't mean environmentally sustainable they mean financially sustainable" (S1M). An interviewee expanded on the discourse currently being promoted: "we need an 'ecological' here, so it may be that they now call it "smart growth" or "if you're dumb, you're dead". People in China and in Korea they are smart, they are investing in renewables; they're building all this infrastructure for green growth" (S2A). Highlighting this change another commented: "countries put it on their agenda and they think that it will be a place to develop and Europe is working on it too. It's maybe one of the places in which they are working the most...Europe wishes to develop technologies in clean energies to sell to all the world" (S7A). The wind turbine sector in Spain is one of the sectors that looked outside the country for markets as domestic investment in wind energy fell and in doing so is part of the export led recovery Spain achieved in 2013. But while this established sector is regularly used in the discourse of smart green growth the real driver has always been energy security.

6.6.2.4 Concluding comments on ecological modernisation

Starting from a position of weak ecological modernisation reform it was soon clear that the economic imperative worked above everything and the environment formed little part of that. Anything seen as potentially imposing extra costs during this time was opposed and environmental reform was mostly considered as an extra cost and as potentially costing jobs. At the same as some retreated to the traditional business culture, the need to find new markets drove other manufactures to seek markets outside the country. This exposed these businesses to international competitive forces where sound environmental practices and innovation play a greater part. In addition, the crisis drove stronger efforts to reduce energy costs which indirectly contributed to efforts to decrease GHG emissions.

The European Union discourses of ecological modernisation and, more recently, smart and green growth have had limited influence in Spain. The PP Government has continued to show little interest in using any discourse related to the environment. But while the government is not leading on ecological modernisation, the businesses that have transited to selling internationally may have an influence on generating reform within Spain. The discussion now moves on to look at the influence of the crisis on postmaterialist discourse.

6.6.3 Postmaterialism discourses related to the GFC

The rapid industrial and socioeconomic growth Spain experienced made it an interesting country within which to study postmaterialism. One interviewee told the usual story: "after 40 years of dictatorship the country was broken in all senses. Spain is a country of people that aren't extremists. They are very open in their customs with politics near the centre: left moderate. Very quickly divorce was allowed, homosexual marriage: without problems. For the Spanish in the 40s and 50s that wasn't possible...And then came big economic development and everyone was getting better and better but suddenly this has been broken" (S7A). The extremes of development in Spain could be expected to be reflected in postmaterial value development and, although not what was anticipated, Spain presented an interesting change with levels of postmaterialism declining since 2000 during economic boom conditions.

6.6.3.1 Postmaterialism in the 21st century

A general sentiment reflected by the interviewees when asked about postmaterialism and environmentalism was that younger people did not appear to be more concerned about these issues than older people. With some frustration one interviewee observed: "I would like to say that young Spaniards are much more green oriented than their elders but I'm not sure that it's true. It probably is true they're more aware of these issues but I think compared to young people in other countries I'd say they're deeply unaware of these issues" (S1M). Another expressed the sentiment that concern can be quite superficial: "we obviously care about the environment in a kind of, how to say nicely, let's say a snob way, we care about the environment because we go and drive an electric car and go to a kind of green tourist lodge in Africa, so it's kind of ironic to say this" (S2A). Another overall comment was: "I believe in Spain…the people are not very committed to these things" (S9G).

One interviewee commented on modern values: "some values are changing: those that are meant to be measurements of postmaterialism. The others that are not changing are the ones that we call emancipation, like agreement with the primary goals, sexual relations, and all those things that have to do with what I call the glorification of your ego. All I want must be given to me: which is the times we are living everywhere" (S3A). Suggesting reasons for the decline of postmaterialism in Spain: "there is much more personal insecurity because of terrorism, because of all kinds of threats, because of the rise of organised crime, drugs" (S3A). Continuing the idea that life was less secure another interviewee remarked that: "the children of my generation live worse than we did...they have been prepared to be very individualist, the web and all this, and they are new people with less hope than us for the future" (S7A). Lack of hope in a country with higher than average unemployment, especially youth unemployment, where: "young people are more educated than we were. A lot of them went to university" (S7A), and less inclination to work together with others can help explain why postmaterialist values have not increased in Spain. A lack of security, little hope for the future, and a general lack of consciousness about the need to take care of the environment appeared to characterise many Spaniards in the eyes of some of the interviewees. These factors could help explain why there has been an increase in materialist values before the crisis and how these intensified with the GFC and economic crisis.

6.6.3.2 The influence of the GFC related to postmaterialism

Inglehart and Abramson (1994) demonstrated a period effect during economic crises as people temporarily became more preoccupied about material well-being. One interviewee corroborated this: "there's a relationship with Inglehart's claims between values and the economic situation. If we now go to worse times, we will become more materialist again. Well the data for Spain are absolute: I mean they don't leave you any doubt" (S3A). But it is not possible to say if there is a period effect due to the crisis as values were already decreasing for other reasons. Moving to comment on the drop of postmaterial values since 2000, the same interviewee noted: "So between nations and within each nation you see the same pattern of reversal towards more materialistic values. Now the economic crisis is going to aggravate this situation, to make it even more evident than it was in 2005" (S3A). If people felt insecure before the GFC they were soon confronted with the basic concerns of having a job and paying the bills each month. As Spain took stronger austerity measures and youth became increasingly sidelined the 15-M movement appeared giving voice to the concerns of youth. One interviewee acknowledged the actions these people: "they don't care about the environment, not everybody of course because we have here a social movement, it's the 15-M, this is very young people, and they are great but they are very few" (S13N). When talking about environmental groups during the crisis one interviewee observed: "You know we were a bit afraid and we had some people that dropped off but the situation was balanced. I mean we had other people that were more committed than before...For a couple of years it hasn't been growing a lot but not decreasing, and now it's kind of starting small growth" (S4N). During the crisis there were frequent street protests and strikes especially as concern over the austerity measures increased. An interviewee commented on the contrast with environmental policy cuts: "no one goes to the street with placards because there is no assistance (for renewable energies), but of course if you take away the public servants' salaries or they have to pay for the hospital, this yes!" (S9G).

The crisis clearly raised concerns about job security and how to manage economically. Levels of postmaterialism had dropped prior to the crisis and continued to do so during the crisis. Overall the discourse related to postmaterialism and the effect of the crisis was one of focusing of material concerns.

6.6.3.3 Concluding comments on postmaterialism and the GFC

The GFC and economic crisis created another extreme period of development for Spain although the main effect of the crisis according to the interviewees appears to be one of aggravating pre-existing patterns. Several interviewees felt that with regard to postmaterialism and environmental concern, young people were not markedly different compared to older generations. Some remarked on what they saw as increased individualism in youth but also that there was also a lack of hope for these people. The 15-M movement showed some young people were ready to take alternative political action although their concerns during this protest were still largely related to a materialist agenda. While protest action was frequent throughout the crisis period in Spain it has almost exclusively been related to personal issues of employment and frustration at government austerity measures.

After the Franco dictatorship there was a big increase in self-expressive values, which include postmaterialism, in Spain. But it was observed that while some self-expressive values have increased coming into the twenty-first century, others that are considered the emancipative values like postmaterialism, have shown a decline. Reasons for declining levels of postmaterialism and rising levels of materialists since 2000 were attributed to increasing societal insecurity related to terrorism, drugs, organised crime and less hope for the future. The crisis aggravated this as insecurity related to employment and paying the monthly bills grew. If the decrease in postmaterial values noted since 2000 is related to a wider sense of insecurity in modern societies then this effect has been exacerbated by the GFC and economic crisis in Spain.

Having considered postmaterialism in relation to discourses, the examination of the interviews now moves to the next ecopolitical theory. Consumer and citizen preferences are used to examine the interviews to look for their explanatory value during the GFC and economic crisis.

6.6.4 Citizen & consumer preferences discourses related to the GFC

In Spain, preferences do not play as prominent a role in political culture as in New Zealand and Australia. The Spanish have less of an individualistic orientation and decisions have historically been based on collective consideration: characteristics of society that affect the preferences people express. Under the Aznar Government

neoliberal politics had increasingly been promoted along with political alignment with the USA. One interviewee commented: "he (Aznar) tried to bring the ideas, not only liberal in the economic system, but also neoconservative. He developed one big think tank called FAES and from this he was trying to make a conservative revolution in Spain in his second term. And these people are trying to change public opinion to the right" (S7A). With the economic boom many people enjoyed the benefits of a growth economy and showed signs of increased individualism and materialism consistent with the American model. One interviewee felt this was changing the Spanish mentality: "they have been all their life receiving messages (about) being individual, to not believe in the group, the big media discourse is to be one, to be individualist, the American films have an individualist image...the development of a neoliberal paradigm also destroyed the social democrat paradigm, the base of this paradigm was to go together" (S7A). This was seen as people thinking of themselves as independent of past societal restrictions: "Many young people believe that we don't need to grow economically and they don't want to try and be an executive. They just want to work, to live, to be happy and to see the sun, to go for a walk at the weekend and to have time" (S7A).

6.6.4.1 Consumer preferences during the crisis

During the construction boom people were buying new houses, new cars, going abroad for holidays, and buying holiday homes but this spending came to a sudden halt when the GFC and construction sector crash hit the economy. With the credit crunch and debt loading created by high spending, factories and business closures put many out of work: termed destrucción de empleo in Spain (Government of Spain 2012). People became focused on job security, having reduced incomes, and supporting family members without jobs. Spending decreased dramatically and consumers looked to buy as cheaply as possible. All interviewees were very conscious of the social cost of the high levels of unemployment: "for the people who don't have any salary, or have finished receiving the state unemployment benefits, or the people where no one in the family is working, it's a serious problem...depending on the figures that we use, from half to 1 million families today, so a bad level" (S11B). Interviewees felt it was obvious that people would put their consumer interests ahead of citizen preferences: "It is true that when people don't have an economic problem they act more like citizens than consumers. And they can focus on global interests or on the country's interest instead of on their own personal needs. When the economic situation is difficult and has an impact on a million or so of people, one of the first priorities for all those people is their personal need, not the country's needs: so public goods are not a priority when you are in difficulties" (S8G). Yet another mentioned the reaction to environmental concerns: "Now, citizens only want one thing – jobs!...So now the first preoccupation of Spanish citizens is employment. The environmental or ecological measures are not very important" (S5G).

Several interviewees were not confident that people who said they were concerned about the environment actually did what they stated in public, especially when their willingness-to-pay was tested. For example one commented: "When you have to put money on the table is where you're able to evaluate how important the preferences they have are on the environment. If I ask you if you are preoccupied for the hunger in the world, well, you can't say the opposite because you appear to be a bad person, of course!" (S6A). In relation to green shopping one interviewee commented: "the other influence to incentivise action is consumption but the consumer also has a problem because the Spanish, we are very good at the time we declare our intentions, 'Me, yes I buy fruit that is ecological'...but in the practice they don't do it" (S12B). This problem of assessing how genuine people were led to this comment: "There are those who are pessimistic about this aspect, I believe that the discourse in society is also politically correct. All the world says they are environmentalists but when they are asked how much will you pay for the environment...there are a reduced group of people, maybe 10 or 20 per cent, not more, that will" (S6A). Interviewees felt there was a sense of putting environmental concerns aside as people dealt with the immediate problem of paying the bills at the end of the month. As one commented; "when people have to make a choice between saving the planet or saving themselves they decide to save themselves" (S8G). But even when not focusing on immediate concerns there was a perception that many Spanish were not honest when expressing their concerns on climate change. Interviewees felt that too often actions taken in private as consumers did not match intentions expressed as citizens.

6.6.4.2 Influences on citizen preferences

The regular surveys conducted give a constant account of citizen preferences as previously discussed. Indicative of the changes during the crises was the leapt in concern about unemployment from 38 per cent in the June 2007 survey to 84 per cent in the March 2012 (CIS 2012). One interviewee talked about the change: "when the crisis

came in 2008, Spain was denying the crisis. So everybody was denying it and if you look at the history of climate change it's like that as well" (S2A). Although another felt that the people were not so easily mislead: "the government messages in relation to the crisis didn't really have an impact on public opinion because the Spanish public was very aware of the economic situation. So there was a mismatch between the government's discourse about the economic crisis and what people believed was going on" (S8G). This exacerbated the divide between the people and political class: "this is a big problem in Spain, this growing distance between people and politics, and political parties...they arrive to thinking that they have the power by themselves. ... people can see them acting like this...the politician is one of the jobs with the worst image nowadays and the crisis made this worse" (S7A). The construction boom had created conditions that led to considerable corruption and when the crisis came the people saw the political class was unable to control it: "the people see the politicians as responsible for the problem because they haven't fixed the problem, they aren't able to stop the crisis and because they keep living well earning a lot of money" (S7A). Citizen preferences for who they voted for were influenced by poor government performance and evident corruption in political circles.

Some interviewees talked about continuing concern for environment action: "citizens demand that environmental policy is complied with but in these times, it's not the first thing for them" (S5G). Media acted in concert with political and public concern and climate change dropped to being a minor issue: "No journalist thinks it's strange that the government doesn't talk about the environment: how can they talk about the environment when we have the problems we have?" (S7A). Acting against the drop in public concern is the Spanish climate: "one of the problems that we have...is that our own climate change creates difficulties for fighting against climate change" (S12B). In some regions people are more aware that the issue has to be dealt with: "the programme in Andalusia is on adaptation because there are some models that say that they will get up to 50 degrees in summer and obviously you can't grow anything at 50 degrees apart from cacti, and people are beginning to be aware of that" (S2A). Another interviewee felt the crisis had stopped people from thinking about the environment: "I think that Spanish society it's getting into a kind of hibernating state" (S4N). In general the interviewees felt that people showed less interest in their citizen preferences as they focused on surviving the crisis.

6.6.4.3 Concluding comments on consumer and citizen preferences

In Spanish politics preferences play a lesser role than in the other two countries studied although it was felt that there has been movement to greater individualist in the society especially during the economic boom times. People were being more materialistic with many of the newly rich spending freely on houses, cars, boats and holiday homes. After the GFC, as the economic crisis developed unemployment and economic welfare became the over whelming issues of concern in the country. For citizens there was a noticeable decrease in concern about environmental issues as they focused on their short-term financial needs. Several of the interviewees expressed opinions that many Spanish were not very genuine in their stated opinions about support for environmental action. They felt people said what was expected of them in public but did not necessarily follow this up which their actions or words in private. This was also consistent with people not being willing-to-pay very much for environmental improvements. The distance between citizens and the political class was exacerbated by the inadequate handling of the crisis by government and constant revelations of corruption in elite classes. Trust and confidence in the political class hit record low levels. Media also played a part in lowering attention on the environment by removing it from the news. While Spain has shown it does eventually move on EU policy there was a hunkering down and just getting by attitude during the economic crisis. The overall impression was that citizens' preferences were not being strongly expressed as both public and private sectors focused on dealing with the economic crisis. This moves consumer preferences to the forefront with a lessening of attention to citizen preferences.

This concludes the discussion related to the discourses used by the interviewees in relation to the three ecopolitical theories. The next section examines an event related to climate change action reported in the media to look for consistency with the discourse used by the interviewees. The event used is the retroactive reduction of feed-in tariffs for photovoltaic solar panel electricity production as the economic crisis was deepening.

6.7 Discourse during a media event

One of the most direct emission reducing policy changes in Spain after the GFC was the reduction of subsidies for renewable energies. PSOE had introduced new, stronger feed-

in tariffs in 2007 as part of their policy to meet GHG emission reducing commitments. The media event chosen for study here was the reaction to the changes to the tariff legislation between 2009 and 2010 with specific regard to solar photo voltaic (PV) installations. During this time the government was changing to economic austerity politics and, although it was the power utilities that carried the accumulating debt created by the tariff regulations, it became a liability for the government. The examination of this media event aims to compare the discourse used in the media with that from the elite interviews. After a brief outline of the background to the changes, the media reporting of the event is examined.

6.7.1 Background to photovoltaic feed-in tariffs in Spain

Promoting green energy was a part of the political agenda of the socialist government when they came to power in 2004 and by 2007 they had established a workable plan *(Plan de Energías Renovables en España, PER)* with a financial framework. "Spain's solar gold rush" began when "Solar investors…were lured by a 2007 law…that guaranteed producers a so-called solar tariff of as much as 44 cents per kilowatt-hour for their electricity for 25 years -- more than 10 times the 2007 average wholesale price of about 4 cents per kilowatt-hour paid to mainstream energy suppliers" (Sills 2010, online source). As a result "solar grew like foam" (Viúdez 2013, online source) and the three year target for photovoltaic panels was reached within a year.

The feed-in tariffs were applied by requiring the utility companies to preferentially buy renewable energy at above wholesale prices. The utilities could not pass the additional cost onto consumers because electricity prices are controlled by the government. This arrangement means that the utilities accumulate debt: "It is this long-standing rate regulation that gives rise to Spain's electricity system deficit" (Couture 2011, online source). In 2005, the short term solution to this problem was that the "utilities would package the majority of the debt (just over 5 billion EUR at the time) into securities and sell them on the capital markets...Both utilities and the government acknowledged that this situation was highly problematic." (Couture 2011, online source). The GFC made this untenable as buyers for debt could not be found and borrowing costs to finance debt increased dramatically. The crisis forced the government's hand as it was "politically impossible" to increase electricity costs at the time so "utilities turned to the government to address the issue…by providing government guarantees on the

securities" (Couture 2011, online source). By 2010 the deficit had climbed to around \in 18 billion and as one commentator noted this was disproportionally related to the PV tariffs: "Of the total 2009 alternative energy subsidies of \in 6bn, photovoltaic electricity took half, though it produces a small fraction of Spain's electricity" (Mallet 2010a, online source).

The generous feed-in tariffs were designed to attract investors and they did that in a way the government had not anticipated. One commentator wrote: "They underestimated the technology -- how cheaply panels could be installed and how quickly they could be installed," says Jenny Chase, Zurich-based chief solar analyst at New Energy Finance." (Sills 2010, online source). Investors ranged from individuals, estimated at around 30,000 Spanish citizens, to about a third made up of large fund investors from foreign banks (Viúdez 2013, online source). The number and mix of investors meant that policy changes the government made received a lot of scrutiny. The initial government response was: "Zapatero reduced the subsidy for new solar parks by about a quarter starting on Sept. 30, 2008. The move virtually eliminated any new solar investment in 2009, according to the Photovoltaic Industry Association" (Sills 2010, online source). But as the GFC turned into a prolonged economic crisis the situation became more difficult to remedy: "As the crisis wore on, Spain's ballooning electricity system deficit became increasingly unmanageable, fuelling a lot of uncertainty in the renewable energy market and placing enormous pressure on the government to address the underlying issue" (Couture 2011, online source). The government was left with little choice in difficult economic times but to manage the deficit problem and criticisms from those affected were considerable.

6.7.2 Media reporting on the feed-in tariff reductions

Spain had been held up as an example of how to kick-start a solar power sector after the spectacular expansion of PVs in 2007 and 2008 but this quickly changed: "Spain's hopes of becoming a world leader in solar power have collapsed since the Spanish government slammed the brakes on generous subsidies. The sudden change has rippled across the global solar industry, in a warning of the problems that government-supported renewable-energy programs can encounter" (Gonzalez & Johnson 2009, online source). In describing the sentiments of small investors to the PV policy changes one commentators wrote: "more than 50,000 other Spanish solar entrepreneurs face

financial disaster as the policy makers contemplate cutting the price guarantees that attracted their investment in the first place" (Sills 2010, online source). Another source added to these sentiments: "The majority of those affected are small investors, many of them farmers that placed solar panels on their farms to ensure a tranquil retirement, a dream that has evaporated because the government has, by decree, changed the rules of the game and production of this type is now not as attractive as it was at the beginning. The profitability has reduced by 40 per cent" (Viúdez 2013, online source).

While small Spanish investors attracted media attention within Spain, large investors were spreading their message wider: "Investors in Spain's €20bn photovoltaic solar power industry have protested against what they say is an illegal government plan to slash subsidies by up to €3bn (\$3.9bn) over the next three years. The backers, including foreign private equity groups and specialist funds, are particularly outraged by the possibility that cuts will be imposed retroactively on plants built before 2008." (Mallet 2010a, online source). Arguments from large investors centred on how much credibility the Spanish Government would lose for future investments. ""It would be very bad for Spain's reputation," said Tom Murley, head of renewable energy at HgCapital in London. He speaks for a group of 20 non-Spanish investors from the US, UK, Denmark and elsewhere with €720m of equity in Spain's photovoltaic plants – supplemented by €3.5bn of bank debt. "Most of the capital is from pension funds," he said. "We're talking about actions that would be extremely detrimental for global pension fund money" (Mallet 2010a, online source). The government action that caused most controversy was the proposal to change the rules for PVs installed before the 2008 policy changes. "Spain's decision to move ahead with retroactive cuts has stirred up a storm of protests from the solar industry and from investors worldwide, and a wave of lawsuits is already in the works to counter the government's plans...one thing that is beyond doubt is that the reputation damage is done" (Couture 2011, online source).

The pressure on the utility companies from the debt imposed on them by the regulatory regime was expressed in a report: "Credit rating agencies threatened to downgrade the companies if something was not done to address the "tariff deficit". Salle recalled: "The situation was horrible a year ago $- \notin 20$ bn for three companies was an amount comparable to an entire budget for some countries." "(Webb 2011, online source). Not all criticism was negative of the changes with some reports playing down the impact on existing renewable energies: "However, market observers say the effect of the changes

will be minimal. Juan González Ruiz, a partner in the energy practice at Spanish law firm Uría Menéndez, said the changes were "no big deal", adding industry would not have agreed to terms that would have significantly damaged the feasibility of its projects" (Dudley 2010, online source). Yet others felt that the reduction of subsidies throughout Europe reflected development of the sector: "Observers who attribute these cuts solely to government belt-tightening in an age of austerity are missing the bigger picture: Renewable energy is swiftly coming of age, reducing the need for public support" (van der Hoeven 2012, online source). Criticism of government policy changes was strong both internally and externally although the focus was mostly on the harm done to investors and to Spain's reputation for future foreign investment. While solar provides an important part of the electricity generation mix in Spain it only constituted two per cent in 2010 compared to 16 per cent for wind and 20 per cent for hydro (Couture 2011, online source).

6.7.3 Concluding comments on media event

The renewable energy policy of 2007 was part of the PSOE Government's strategy to meet emissions reduction commitments and reliance on imported energy sources. It was noted that original feed-in tariffs and guarantees for PV energy production were overly generous which attracted investment which resulted in the three year production target for PVs being reached within the first year. Although the government changed the policy for PVs, claiming rapid development of technologies had led to lower set up costs; media commentators also noted the rapidly accumulating debt by the utility companies. These companies were forced to pay premium prices for renewables that could not be recovered in electricity sales due to government controls. The GFC brought the problem into the spotlight as it became increasingly difficult for the utilities to sell securitised debt and the cost of borrowing to fund the debt rose sharply. Politically unable to raise electricity prices due to the crisis, the government found it had to guarantee the debt to prevent the utility companies having their credit ratings lowered. Most media criticism focused on economic concerns for small investors and, especially when the reductions began to be applied retroactively, the large international investors condemning Spain for unreliable government security that would affect future investments.

Practically no discourse relating to the ecopolitical theories examined in this study was

noted in the media event. The focus was on business and investment activity and the financial welfare of the investors. There was some reference to problems with meeting Kyoto objectives from the PV producers association but this did not carry much weight as the overall development of renewables and combined-cycle gas-fired plants had reduced Spain's reliance on oil and coal electricity production, thereby reducing emissions and the country was also on track to meet its 2020 renewable energy target. The economic crisis also reduced electricity demand which helped lower energy emissions. Overall the protest at the tariff reductions raised awareness of the changes throughout Spain and this is what was noted in the elite interviews. While several of the interviews directly blamed the crisis for the reductions a fuller story was also reported in the media.

The examination of the media event concludes the data analysed for Spain. The next section provides a summary of what has been covered in this chapter with an overview of the key findings noted.

6.8 Summary of the Spanish case

This chapter established the context in which the Spanish elite interviews were conducted before examining them for the dominant discourses. Spain experienced rapid socio-economic development in the later part of the twentieth century but prior to the GFC a lopsided economy favouring construction and property speculation had developed. The realty bubble burst as financial problems spread globally from the USA and Spain entered what became a protracted, severe recessionary period. From 1996 to 2004 the conservative government made minimal effort to improve the country's performance on international climate change commitments. This changed when the socialist party came to power in 2004 and they made a concerted effort to rectify the situation. But indecisive and ineffective action during the GFC resulted in the PSOE Government losing the confidence of business and the electorate. Although they were eventually forced to introduce austere, debt reducing measures it was the conservative government elected in late 2011 that pursued this political course in earnest.

Elite discourses reflected a deep-seated concern for the economic situation and especially the very high unemployment figures. The political class was singled out as the main cause of Spain's economic problems, both for not controlling the construction

boom and not being able to manage the financial and economic crises. Related to climate change action, it was noted by most that this slipped well down the agenda in politics, in business, in the media, and for the people. Economic concerns were dominant with employment considered the dominant issue of concern for people. While the ETS was well established and regulations were in place for emission reduction, several interviewees felt that regulatory pressure was eased to minimum requirements because of the crisis. In the business sector only the large international companies were seen as continuing more progressive environmental programmes while domestic companies retreated to the more traditional paternalistic culture characteristic of Spanish business.

Discourse related to ecological modernisation supported the dominance of the economic imperative and that where this framework was used; it was in little more than in a rhetorical fashion. The economic crisis appeared to remove any pretence about the integration of ecological modernisation principles into business. The crisis highlighted the lack of capacity for ecological modernisation in Spain as government cut back on environmental institutions, funding for policies and innovation, and their discourse was almost exclusively concerned with the economy and employment. The companies that had internationalised were seen as putting more value on environmental performance in line with the need to create a competitive international image. This was the only clear example mentioned in the interviews of ecological modernisation operating in Spanish businesses.

When talking about postmaterialism interviewee discourses were focused on material concerns and few felt postmaterial values were relevant given the economic situation. Even the 15-M protests in 2011 were principally about materialistic issues related to employment, security, and apportioning blame to political and financial elites. Some interviewees talked of greater individualism in the society which could explain why Inglehart's self-interested, emancipative self-expression values have not changed in Spain, while the postmaterial levels that measure freedom of speech and political participation have dropped. Similarly, consumer interests were considered to have priority over citizen interests. As one interviewee expressed, when it comes to saving the planet or oneself, people have chosen themselves. Several interviewees accused Spanish people of saying what they thought was politically correct about protecting the environment in public, but that in practice they did not do these things. People were

focused on paying bills, having food on the table and buying as cheaply as possible. Willingness-to-pay for environmental protection was regarded as dropping dramatically and citizens were seen to be hibernating. Business was blamed for emissions and the government was expected to deal with such issues. Indirectly, cost-consciousness and decreased production reduced petrol and electricity use which contributed to a drop in GHG emissions.

With regard to the media event examined, interviewees and mainstream media saw the feed-in tariff reductions in the photovoltaic solar energy sector as being related to the crisis. Interviewees saw this as being bad for climate change action although this was not discernible in the media reports. Although mainstream media presented dramatic headlines and stories, economic and business media sources focused more on the need to reduce overly generous subsidies in a maturing sector along with recognising the massive debt the tariffs had created. Investor interests were a key focus in all media. Less visible in media reports was acknowledgement of the successful contribution of the renewable energy sector to Spain's electricity mix.

This chapter completes the examination and discussion of the three countries chosen for this study. The research question and aims of the study are now addressed by comparing the findings from the three countries in the following discussion chapter with the conclusions presented in the final chapter. Each country has a unique set of domestic circumstances relating to the global financial crisis and both common and differing themes are used to provide answers that are useful for understanding what happened during this difficult period and how ecopolitical theory can help explain this.

7 DISCUSSION

7.1 Introduction

The analysis of the data from the three case countries has been completed in the three preceding chapters. The relevant background in each country was contextualized before the data findings from public opinion surveys, elite interviews, and a media event were presented. In the last chapter, Spain provided an interesting example of a European country and where the effects of the GFC were the most extreme of the three countries studied. The discourses of the elites interviewed provided insight into the study issues and this current chapter moves to compare the findings from each country.

This chapter therefore presents the comparison and discussion of the findings from the three countries as related to the questions guiding the study. The discussion focuses on three themes that were identified which establish the basis for the conclusions. The themes arising from the discourses relate to: political reaction to the GFC, climate change policy, and how the public were perceived as reacting to the GFC. Each theme is discussed with regard to the research questions, the theoretical background established, and to the findings in each country.

The chapter is structured on these themes which are then followed by comments on the limitations of the study. As this chapter provides the basis for the conclusions it leads straight onto the conclusion chapter. The first theme discussed concerns interviewees' discourses related to the role of government.

7.2 Discourses on political reaction during the GFC

The three countries were all advanced OECD economies that follow the prevalent economic ideology of market fundamentalism. Prior to the GFC the economy of each country was overly reliant on the success of one economic sector: New Zealand on dairy farming, Australia on the resource sector, and Spain on the construction and realty sector. This lack of diversity created a potential vulnerability but following the GFC this was only fully realised in the Spanish case. While the key sectors the New Zealand and Australian economies were both affected by the crisis, the effect was relatively short lived. All three economies moved from a financial surplus position to a deficit one: as

one interviewee noted an untenable position for a market economy. The three governments used Keynesian style public spending to maintain liquidity and reduce the impact of the GFC on banks and businesses and therefore on employment: a lesson learnt from the 1930s, when tightening of monetary policy contributed the severity of the Great Depression.

7.2.1 Discourses supporting the economic imperative

In New Zealand the comprehensive change that took place in the eighties to one of the most open market economies in the world was more or less taken for granted by the interviewees. The focus of the New Zealand Government was seen as the need to maintain competitive advantage for the country's exports and that the well-being of the citizens depends on the country's economic success. The discourse centred on New Zealand being a small, open economy country that has to pay a lot of attention to what others do. Therefore, competitiveness was seen as depending on the actions of others, especially Australia, the need to protect the country's brand, and the country's global positioning. Overall interviewees saw market concerns as the overriding priority during the GFC.

While Australia also underwent a change to economic liberalism in the eighties it was less radical than in New Zealand. Powerful industry sectors and eleven years of conservative government under Howard enhanced the dominance of the economic imperative. Policy making is characterised by a highly adversarial political system and strong sectoral lobbying. When the conservative government lost to the Labor Government in 2007 the economic ideology stayed the same. It was a Labor Government, as in New Zealand, which led the 1980s change to a market economy. Most interviewees believed that Australia was largely unaffected by the GFC, although media discourses in the first six months of 2009 contradicted this discourse to some extent, as did the level of public debt that accumulated from stimulus spending. And although they thought the country was not affected very much, they were aware of the measures and effort the government made to protect the economy.

Spain, as a late economic developer, has always been playing a catch up game with other developed countries which has resulted in the country being strongly influenced by the policy and economic actions in the European Union. The modernisation process

was not seen by interviewees as having a big influence on the way business is done domestically with many businesses still retaining a traditional culture. The paternalistic culture was criticised by some interviewees for stifling enterprise, restricting access to jobs, and lack of mobility of the workforce: all of which were seen as restricting recovery during the crisis. The support of the society in general for the construction boom was widely regarded by interviewees as the reason no one was willing to take action to control the bubble that developed. Extraordinary revenue from permits and land change titles were flowing into government at all levels all over the country. The benefits flowed through the society and, along with the availability of cheap, assessable bank loans with almost no deposit needed, meant the country went on a spending spree. These conditions allowed a resurgence of corruption which had plagued governments in the nineties. With the GFC ensuring the bubble burst in spectacular fashion, the country experienced one of the most severe economic crises of any OECD country. The interviewees, even those in government, pointed to the central government as the cause of all the country's economic problems. With the eventual unemployment figure reaching over five million workers, all interviewees emphasised that was the issue of most concern for the country and that everything else was sidelined by *el paro*. The centre-left PSOE Government was universally condemned for their handling of the GFC and economic crisis. Their efforts at Keynesian style stimulus were ridiculed with many projects seen as superfluous, even frivolous, at a time when the country was suffering so much pain. The interviews were done two years after the stimulus spending so there was a certain amount of hindsight in this discourse as the country was in the worst phase of the economic crisis and by then the stimulus was seen as a bad policy choice. Debt accumulated from the loss of realty revenue, lost tax revenue, and stimulus spending, eventually brought pressure onto the government from those financing the debt to adopt austerity politics. Both the PSOE and the PP governments were condemned on all sides for their handling of the crises. Throughout this time the economy and unemployment have been the key concerns for most in Spain.

7.2.2 Features of government in each country

The countries chosen have very different political cultures. New Zealand has a unicameral parliament and uses a proportional electoral system that enables smaller parties to gain a voice and influence government which provides a robust form of

democracy. Both Australia and Spain have bicameral parliaments with electoral systems which favour the dominance of two parties although in the Australian case, the Senate is endowed with considerable political power creating a stronger democratic process. In Spain the lower house, the Congress, is dominant and there is a tendency to presidentialism and the Senate has limited powers to veto decisions reached in the Congress. The electoral and parliamentary arrangements mean that in New Zealand the government has more incentive to be responsive to the electorate. This is less evident in Australia although the proportionally elected Senate provides a counter balance to the ambitions of the government in the lower house. In the Spanish case a "thinner" democracy results in a situation where the government believes they have the mandate to make whatever decisions they consider necessary for the country and only have to account to the electorate at the next elections. In Spain this is also evidenced by a large gap between the political and business elites, and the people, which results in lower regard for citizens' opinions of policy passed in government. This feature of the Spanish political culture created a limitation for this study as it was very difficult to gain access to elected political representatives or senior bureaucrats without formal introduction. This was not the case in New Zealand where access to senior Members of Parliament, both in government and in opposition, as well as to senior government administrators was possible although this was less forthcoming in Australia. Interestingly, this ease of access closely paralleled the comments made on the robustness of democracy in each country.

Overall, interviewees saw their governments having the central role for dealing with the GFC, and most laid blame on politicians for what they saw as the problems of this time. This also applied when the interviewees were questioned about climate change policy.

7.3 Discourses related to the climate change policy

The climate change policy that provides a link across the three countries is that related to emission trading schemes. New Zealand passed an ETS into law in September 2008, Australia began the process to introduce ETS policy with the Rudd Government in 2007, and Spain entered the second operational stage of the EU scheme in 2008. Comparing the discourses related to the GFC and emission reduction policy in each country provided insight into decisions and actions during this time.

7.3.1 Public debate and discourses related to climate change policy

Globally heightened interest and concern about climate change peaked in 2007. In New Zealand public concern, coupled with market concerns about brand and international positioning meant that both main parties supported pricing carbon although the best manner to do this was disputed. This alignment of interest and the National Party's desire to not make climate change a differentiating electoral issue helped the Labour Government pass an ETS into law two months before the election which National won. The ETS policy process under both governments was widely debated in the public arena. Interviewees considered that the public debate principally focused on potential costs of the ETS, whether to industry or to the general public, on competitiveness of exports and the country's responsibilities as an international actor. The competitive debate focused on fairness as this is considered part of the New Zealand psyche. The closeness of the people to the debate meant both governments had to balance economic interests with citizens' concerns. The Labour Government used a discourse of New Zealand being a world leader in climate change action but the National Government changed this to one of being a fast follower. This latter approach favoured being able to wait and see what other countries chose to do.

The debate in Australia was more fiercely fought than in New Zealand with the strong industry lobby vigorously opposing the proposed Carbon Pollution Reduction Scheme. Many interviewees discussed opposition tactics used and how *scare* and *fear* became key words in the debate. Despite the opposition and scare tactics interviewees stressed that many people were not swayed by this and that support for taking action remained high in the country. Another common discourse at this time concerned Australia having a two speed economy: one the booming resources sector and the other the rest of the economy.

In Spain there is very little public debate about climate change policy especially the ETS. Much of the sectoral lobbying on the issue takes place at the EU level and is not widely reported in the media. The lack of debate reflects the gap between elite classes and the people and supports the attitude that once in government those elected have the mandate to make whatever policy decisions they feel fit to make. While this thin democracy may not concern many during buoyant economic times it caused a great deal of frustration and anger during the severely depressed economic times. In Spain what

climate change issues were on the political agenda slipped from view and were relegated to minor pages in print media. In all media the overwhelming focus became that concerned with the economy and unemployment.

The debates in the three countries were also influenced by electioneering as each had national elections either the year before the GFC or as the crisis began. Electioneering affects the issues debated usually the avoidance of controversial policy making. The next section discusses how the GFC was perceived as influencing climate change policy.

7.3.2 Discourses on how the GFC affected climate change policy

In all three countries many interviewees said that the GFC did not have much effect on their ETS policy process. This included some who saw economic events as particular to their country and not related to the GFC. In New Zealand some saw the drought in the main dairy region and the housing market downturn, as the reasons the country went into recession. Others acknowledged that a "world awash with cheap money" (NZ10M) helped increase property market speculation, the expansion of debt exposure in the dairying sector, and a general spending spree in the country. But most believed the policy process of the ETS was largely predetermined before the GFC occurred. Prior to their election and the GFC the National Government stated their intention to review the legislation and delay its introduction. Several felt that the GFC may have led them to soften the scheme more than they intended. The GFC intensified opposition to price increases with claims that it was not the right time and no one could stand extra costs. The opposing debate moved to risks to jobs and living standards. In a democracy where the government pays close attention to citizens' concerns, a big drop in climate change as a priority issue was taken as a signal they were justified in reducing the strength of the ETS.

Although the situation in Australia showed similarities there were some major differences. The Rudd Government found itself dealing with the GFC in parallel to introducing policy to help meet the newly signed Kyoto commitments. The government used strong financial stimulus to avert recession, and the country was cushioned from the full effects of the crisis because the downturn in demand in the resource sector was relatively short lived. Australia did not go into recession and at the time of the interviews the discourse was that neither the country nor the CPRS process was affected much by the GFC. The problems attributed to the failure to legislate the policy were poor handling of the issue by the government, problems with Rudd's own leadership style, and internal issues within the Coalition. But the lack of alignment of necessary conditions made the task of introducing the policy in the highly contested political space characteristic of Australian politics, extremely difficult. Interviewees pointed out that the last major tax reform, the goods and services tax, was introduced mid-electoral cycle, during a period of economic growth, and that the Howard Government focused on little else for two years. In contrast, the Rudd Government found itself in a highly uncertain economic period, working under pressure to prevent the economy going into recession. It was felt by some that this distracted the government from the CPRS process. As well as weakening the government effort required to support the new policy and reducing political will for the reform, the GFC was seen as strengthening the arguments of lobby groups. Those opposed to the bill used the GFC to reinforce their arguments that competitiveness must be protected and that no one could bear any price increase. In the media event examined a discourse that the government's CPRS decisions often related to the GFC was discernible, and it was also noted that the timing was wrong because of the GFC.

Spain already had an ETS in operation when the GFC struck although they had only begun the more tightly controlled second phase of the EU scheme in 2008. Most interviewees considered that with the ETS operating it was not affected by the GFC. The indirect effect was considered to be the lessening of political ambition in regard to climate change action in general. Reduced spending and cuts in expenditure affected institutional arrangements that supported climate change action and less money was available for environmental programmes in general. In the paternalistic culture that exists in many sectors there were observations that many businesses expect government assistance to comply with any policy that will add costs to their business and such assistance was affected by the crisis.

At the autonomous state level it was observed that instead of striving for higher reductions in emissions some states moved to doing the bare minimum to avoid putting more pressure on businesses that survived the economic crisis. There was also a positive discourse that the economic crisis had reduced emissions. Less construction, factory closures, less and more efficient transport and electricity use meant that, against expectations, Spain was on track to meet its emission reduction targets. For the media event examined, the economic crisis was cited as the reason the government reduced subsidies to photovoltaic solar energy production. Interviewees were all aware of the changes to the subsidy regime but the discourse in both the interviews and the media mostly focused on economic, and investor confidence, issues rather than on emission reduction concerns. Overall the principal focus of any discussion that related to climate change action concerned the economy and the need for job creation.

7.3.3 The relationship between the GFC and ecological modernisation

For ecological moderation to be successful as a framework for reform it must engage with the economic imperative. The difficult economic conditions coupled with the intention for an ETS to drive innovation and emission reducing changes in industry provided a test for ecological modernisation capacity in each country. Government interviewees in New Zealand understood the principles behind this reform but were reserved in their expectation of achieving a win-win outcome from the ETS in its softened form. Most acknowledged it was a weak scheme that could be strengthened if other countries took action. But although the ecological reform framework may have been recognised it was not highly regarded for the New Zealand situation. The primary produce focus of the economy challenged the idea that technological solutions for environmental problems could be found for farming.

In Australia ecological modernisation theory was not well known by interviewees outside of academia and the economic imperative discourse appeared more dominant than in New Zealand. This was reinforced through the strong sectoral lobbying and the arguments presented against the CPRS. In the interviewees' discourse there was reference to the continuing influence of the Howard Government's no-regrets, no costs approach to incorporating environmental concerns into production, and that the uncertain period had reinforced this. In the discourses it appeared that all themes related to capacity for ecological modernisation reform apart from innovation were adversely affected by the GFC as the country retreated into its economic shell (A12N). The government recognised that innovation was important for the future and additional funding was allocated. In the media event examined the need for technology and innovation advances in the country were also noted in relation to the CPRS process. In general, the GFC was seen as reinforcing the dominance of the economic imperative

and ecological modernisation was not found embedded in the discourse of the elites interviewed.

Spain belongs to the home of ecological modernisation theory with the framework used by the EU to achieve sustainable development goals. Therefore it would be reasonable to expect that the discourse would be established in Spain. Contrary to this expectation there was little evidence that the discourse was adopted by elites. One referred to the concept as a Northern European idea and many of the interviewees were not familiar with the theory. Added to this, most were not interested in discussion on the theory quickly moving back to economic issues during the interviews. Several discussed how business saw environmental actions as a cost to business and as threatening jobs, both of which were completely unacceptable during the recession. The extreme recessionary pressure in Spain resulted in bringing the dichotomy between the economy and the environment back into the spotlight. Ecological modernisation in Spain has been a weak form and the capacity for adoption of this type of reform is limited. The GFC further reduced this capacity as the economy dominated decision making. Several interviewees recognised the need for Spain to develop better strategies for research, development and innovation for progress to be made. While little ecological modernisation discourse was evident there was some reflecting the newer "smart" discourse adopted by the EU. For the media event chosen the news was mostly reported in business media or on business and investor pages of newspapers with little evidence of an embedded ecological modernisation discourse. Overall the economic imperative dominated all discourses with anything not concerned with the economy or unemployment considered non-news in Spain.

In this section the discourses related to climate change action and the GFC have been discussed. Discourses related to ecological modernisation were included because this relates to modernising production and aligns with economic concerns. If this framework is embedded in the discourse of elites, it would be expected to emerge in the context of the discussion on the economy and climate change policy. The remaining theme discussed covers the discourses related to the other two ecopolitical theories. The examination related to these theories was largely concerned with how the public were perceived as reacting during this time.

7.4 Discourses related to public reaction to the GFC

This theme discusses how the interviewees saw values and preferences amongst the general population in their countries in relation to the GFC with postmaterialism, and citizen and consumer preferences forming part of this consideration. In this way the discussion establishes the basis for the conclusions reached concerning these theories. First the discussion deals with changes noted amongst the people in each country.

7.4.1 Changes observed in the public related to economic conditions

Concern about climate change had reached a high globally in 2007. Most advanced economies, including the three countries in this study, had enjoyed relatively long periods of sustained economic growth and unemployment was at record low levels. Within a year the situation had changed dramatically and these same governments were grabbling with measures to prevent their economies going into recession.

New Zealand was the first of the three countries to enter into recession. With banks and financial institutions eager to loan money that was easily available thanks to the global financial situation, people went on a spending spree. Household debt increased dramatically and when the country was pronounced to be in recession at almost the same time as the GFC began, people stopped spending and became more prudent. Unemployment did not increase a lot so fear of job security was not considered to be high but nervousness about servicing debt did concern people. Interviewees generally felt that peoples' values were not very affected although some pointed to differing effects on different segments of the population. While it was recognised that climate change as an issue slipped well down as an issue of concern it was felt that urban dwellers were less likely to have changed their view than those in the regions. Also youth faced reduced employment prospects, and especially young Maori and Pacific Islanders were seen as having less employment security. Interviewees felt that postmaterial values would not have been affected very much by the GFC and cited mobilisation of people for environmental protests continuing in force as well as continued support for climate change action in surveys. The 2011 WVS did not support this contention as the level of postmaterialism in New Zealand almost halved from the previous survey in 2004. Although people still stated that they supported the country taking action and that it was an important issue in surveys, their willingness-to-pay for

action dropped as did belief in the seriousness of the issue. This was reported as a softening of views, using the same discourse the government used for the ETS policy amendments. It was also observed that there was a difference between what people would say in surveys and what action they would take personally. Others felt New Zealanders were not aware of the impact their way of life had on their carbon footprint and if they were, they were not prepared to make the changes to the way they lived to rectify this. Expressing their citizen preferences, there was a big increase in voting for the New Zealand Green Party in 2011 and they gained a record 14 seats which consolidated their position as the third largest political party

In Australia the discourse about people's concerns about climate change was one of high support and that this had continued during the study period. A contradiction between these high levels of concern and low levels of postmaterialism in surveys was noted in domestic AES surveys. Even though interviewees stressed how little the country had been affected by the GFC the public were exposed to the fear discourse of those opposing the ETS and lots of news about global economic uncertainty. This discourse of fear was evident in the media event examined where the possibility of continued global recession was frequently mentioned. Australians experienced a similar reaction to New Zealanders having accumulating high levels of household debt and they also reduced their spending. In relation to the CPRS policy debate interviewees pointed to the complexity of the tax reform and that it was difficult for people to understand. This was attributed with a lessening of support for that particular policy choice as people were more easily swayed by the opposing arguments. This was especially evident when Abbott came to power in 2013 having run a campaign against a great big, new tax, which played on Australians' dislike of taxation.

A contradiction between what people said they supported and actions they took was noted in surveys and by the interviewees. This general public ambivalence was included in observations that people wanted something to be done but not did want to be bothered with how it was done: a just get on and do something attitude. The climate change action debate influenced the 2007, 2010 and 2013 elections in one way or another. This was most evident in the 2010 elections when the Australian Greens and independent members achieved a position holding the balance of power. Labor voters were frustrated at Labor's disunity and how they had handled the CPRS. Interviewees showed recognition that Australians could express their citizens' preference when

making consumer choices. In Australia it is possible to purchase green power, although only 10 per cent of Australians actually do this, and there are many options available for those wishing to use their citizen preferences in their consumption choices. But it was also felt that consumers in Australia do not see that they drive polluting behaviour and, as in New Zealand, there is an unwillingness to make basic changes to their living styles to support emission reductions.

In Spain the rapid social change that has occurred since the transition to democracy makes it an interesting country to study value and preferences changes in. The over ten years of economic growth prior to the GFC changed employment opportunities, increased individualism, changed consumption practices, improved education, and changed general expectations in life. But some interviewees felt that although there was considerable socioeconomic growth there has also been growing insecurity in the society. Issues like terrorism, organised crime, drugs, and global environmental damage all present modern youth with the prospect of a less secure future. Add a severe economic recession to the mix, and this created what some considered a generation without hope. One interviewee argued that this is the reason that postmaterial values in Spain began decreasing in 2000 in spite of increasing economic growth in the country. Youth, often with much more education than their parents or grandparents, experienced skyrocketing unemployment rates as a result of the GFC. Some interviewees also felt that young people had developed different expectations in life to that of their parents. They do not want to work as hard, they want to enjoy their lives more and have a good time. Some felt they were not committed to things like preventing climate change, and had grown up with an expectation that their parents would pay for things. It was also added that as well as a lack of commitment, there was a lack of consciousness of such issues.

Increasing materialism throughout the Spanish population was evident to interviewees as people had to deal with job insecurity, had trouble paying the monthly bills, and had difficulty with the most basic need of feeding the family. There was a sense in interviewees' responses that people were hibernating or just hunkering down and getting by during the crisis as best they could. Most believed it was natural to expect people to prioritise their consumer interests and to have less interest in issues like climate change and the environment. Climate change surveys done in the EU after the GFC showed that there were continued high levels of concern about the issue, although it was often ranked lower than other environmental issues. In agreement with what several surveys have shown, interviewees noted that although people said they supported actions related to reducing emissions this was not matched by their actions. But in general, in Spain if people had changed their behaviour to recycle rubbish, reduce energy use and use public transport, they continued to do so during the crisis.

7.4.2 Political and societal influences on the people during the GFC

Wider social and political influences on people need to be considered in this study. All three countries had established liberal market economies: New Zealand the most strongly, followed to a lesser extent by Australia, and to an even lesser extent in the more socialist-oriented Spain. As seen in New Zealand and Australian, once the social pain of the economic change passed and the benefits to the general population were realised, these paradigms became common sense to the people and the economic imperative was endorsed as the way things are done. In Australia and Spain, the Howard and Aznar conservative governments reinforced free market economics fostering the belief that environmental protection and climate change action were usually seen as a threat to production imposing costs, restrictions and hindering competitiveness. In free market economics greater importance is placed on the consumer than the citizen and the idea that economic growth is needed for the wellbeing of the country and people is dominant. Although the government in Australia, and later Spain, changed to governments persists for many.

When considering influential societal factors in each country the sense of fairness and justice is very relevant in New Zealand. Governments have been careful to adjust their discourse when promoting policy and doing the country's fair share was a common discourse. Equally those opposing the ETS have used the fairness argument to protest that New Zealand should not to do more than others as that would be unfair. In Australia the country's economic success and relative isolation from the rest of the developed world has resulted in what some referred to as growing complacency in the population. This complacency led some interviewees to comment that people just do not pay a lot of attention to issues like climate change. For Spain the severity of the crisis was considered to have caused a regression to the more traditional family culture, with family groups pulling together to get through these times with limited help from the

government: such survival living left little room for concern about climate change.

7.5 Limitations of the study

In this research only three countries were studied which results in what is referred to as small-n research. Because small-n research design produces data that is too rich and complex to allow the study of many cases for practical reasons the comparative method is employed in political science to overcome some of these problems. In this way the issues of validity and generalizability of the findings can be dealt with.

The constructivist approach used does not pretend to make specific predictions and is concerned with building understanding of social life and social change. The researcher acknowledges an interpretist position which is appropriate for this research project as the researcher believes the world is socially constructed through people's knowledge of it. To manage this limitation, and also the limitations associated with the less structured nature of elite interviews and the characteristics of those interviewed, more than one method has been used. For this reason the findings from the elite interviews were triangulated with the findings from a specific political event, and public opinion surveys in each country. This further addresses issues of validity.

This chapter has presented the discussion and comparison from the three case countries based on three themes that were identified from the findings. The limitations of the study were also outlined. As explained in the chapter introduction, because the discussion forms the basis of the conclusions, the chapter leads directly on to the conclusion chapter.

8 CONCLUSIONS

8.1 Introduction

This study investigated how the global financial crisis affected climate change politics. The research focused on discovering how climate change policy issues were discursively constructed during this time. By examining the meanings the elites interviewed gave to what occurred it is possible to discover the social reality that was produced during this time. Understanding the fundamental character of modern society in relation to environmental problems is necessary to inform the development of strategies to deal with them, especially one as pressing as changing the planet's climate.

In Chapters Four, Five and Six, the discourses of interviewees in each case country were examined in a narrative style. The stories that emerged were compared to a related media event and to public opinion surveys as a means of validating and improving credibility of the findings. Chapter Seven provided a comparative discussion which brought together the findings from the three countries. This discussion helped explore the discourses related to the variables in the most-different comparative design adopted for the study. This comparative process informs the discussion that provides the basis for the conclusions and answers to the research questions presented in this chapter. Following this, the implications of the findings are discussed and suggestions for further research arising from the study are made.

8.2 Research outcomes

The research questions were ordered with one main question informed by four further questions: three of which are concerned with ecopolitical theories. The ecopolitical theories provided a theoretical perspective which allowed a smaller set of explanatory factors to guide the study. This reduced the problem within comparative research of having too many variables. Each of the themes identified in Chapter Seven are used here to provide conclusions to the study and address each of the research questions. Firstly, the conclusions that arise from examining the discourses used when speaking about the political culture in each country are presented.

8.2.1 Discourses related to political reaction

This study concerns the policy implication of how issues have been discursively constructed during a severe global economic event. An understanding of how the interviewed elites explained the reaction of their government in each case leads on to the more specific consideration of the effects on climate change policy. The differences between the three countries provide the opportunity to test if the differences caused any variation from what was expected for the independent variable. Factors internal to each country such as the political culture, the strength of neoliberal market ideology, the strength of democracy, and the political approach to the Kyoto Protocol, were seen to influence policy outcomes and the way each government reacted during the GFC. The discourse of the elites interviewed showed that regardless of significant differences in each of these factors between countries they still felt that the economic imperative dominated events in each of their countries. This finding is consistent with the independent variable that the GFC would focus attention on growth promoting economic policy settings.

In examining discourses about the political reaction in each country both the independent variable and the intervening variables were considered. In this way the main research question is partially addressed but to fully answer the question and test the dependent variable the discourses from the elites that relate to climate change policy need to be considered.

8.2.2 Discourses related to climate change policy during the GFC

The first research question was: "How are climate change discourses affected by the GFC and how was the GFC seen to influence climate change policy decisions at this time?" Interviewees felt that the public nature of the ETS debates in both New Zealand and Australia had an influence on the discourses used. In both cases the GFC intensified arguments about the timing of the schemes and about related costs to industry and the public. The GFC was attributed with pushing the New Zealand Government further than they had planned with amendments to the ETS, and in the Australian case as strengthening the arguments of opposition and lobby groups. In Spain where debate around the ETS was much less public, with most debate occurring at the supranational level, the issue of climate change simply slipped from view.

In all three countries the majority opinion of those interviewed was that the GFC had not had much effect on climate change policy, especially when considering the status of the ETS in each country. Most interviewees felt the same process and actions would have happened without the GFC, and changes that did occur were considered to be indirect at most. In New Zealand there was possibly more "softening" of the policy, and in Spain a lessening of pressure to exceed base requirements, and a reduction of political ambition towards climate change action. While most interviewees in Australia felt the failed CPRS policy would have run the same course regardless of the crisis, there was one notable exception to this point of view. This interviewee talked about a lack of favourable alignment of necessary conditions for introducing major, complex tax reform and said that the government was distracted by having to deal with the GFC. This resulted in the government being unable to defend or promote the new policy to the necessary extent in the country's adversarial political culture. The media event examined in Australia also showed a discourse regularly citing the GFC as the reason for many government actions.

The second research question asked: "How does ecological modernisation help explain the stories that emerge during the GFC and recession? If ecological modernisation theory informed policymakers prior to the GFC and was established in discourses, did this change during the crisis?" The discourses examined showed that ecological modernisation was not embedded in the discourse of the elites interviewed. Nor was there evidence it was embedded in the discourse used in the media events analysed. In Australia and Spain a retreat to their economic shell was noted with a discourse that often indicated the environment was still regarded as a cost to businesses. When considering the capacity for adopting ecological modernisation, the discourse mostly suggested a weakening in this respect except for innovation where, in Australia and Spain, there was a discourse related to recognising that innovation was needed for future progress. In Spain ecological modernisation discourse was surprisingly absent although there was an EU promoted discourse of smart growth and cities. Both discourses share the idea of incorporating environmental concerns into development, and using technological innovation but while the former focuses on production the latter is more concerned with urban development.

8.2.3 Discourse about values and preferences during the GFC

The third and fourth research questions are addressed here. Question three asked: "How does postmaterialism help explain the stories that emerge during the GFC and recession? Did the discourse used become more materialistic?" Question four asked: "How does the theory of consumer preferences versus citizen preferences help explain the stories that emerge during the GFC and recession? Did the discourse show consumer preferences being favoured over citizen preferences?"

Regarding the first question there was recognition by interviewees in the three countries that people had accumulated increased household debt due to easy access to cheap money. When the GFC hit there was a sudden drop in spending and a new level of prudence was evident. Many interviewees spoke of the logic that people became more materialistic during the uncertain economic times that developed. The discourse did become more materialistic which was especially evident in Spain where interviewees considered no one could talk about anything that did not concern the economic situation and unemployment. But in Australia and Spain there is evidence of decreasing postmaterialist values before the GFC which has been related to increased insecurity from other pressures in the society. This makes it difficult to discern any period effect related to the GFC. Some interviewees debated whether young Spaniards were in fact more postmaterialist than their parents arguing that newer generations displayed more self-interest and wanted an easier working life than their parents.

Answering the second question in this section, it was clear many interviewees felt people put their consumer preferences ahead of citizen preferences during the GFC. The three countries have adopted neoliberal market economics which give the consumer a privileged position, although this is weaker in social-democratic Spain. The wider economic discourse was one of needing to encourage spending although people generally did the opposite and started saving and paying down debt. Surveys showed decreased concern for climate change although a majority still supported action in each country. Willingness-to-pay for action reduced especially in New Zealand and Australia where people were exposed to campaigns about the costs to the public of an ETS. In all three countries it was noted that there was a significant difference between what people said they supported in opinion surveys and the actions they actually took. Some interviewees pointed to people saying what was considered socially acceptable, but not actually being prepared to change their lifestyles.

With the four research questions answered it is possible to answer the main research question. This question asked: "How did the financial crisis of 2008 and the subsequent economic crisis affect climate change discourses and what have been the policy implications of this?" Having considered the answers to the four research questions after examining the elite interviews, the media events, and public opinion surveys, the answer to this final question is that according to the discourses used, the effect of the GFC and recession on climate change policy has been minimal. What effect there has been in these three countries has been indirect and mostly been associated with a lowering of political ambition related to policy. Although in Australia there was a strong contradictory claim partly supported by the media findings, that without the GFC the CPRS would almost certainly have been passed into law. The hypothesis of this study was that the GFC would focus political attention on economic growth and that this would adversely affect climate change policy decisions and implementation of policy. Overall the finding was that this was not demonstrated by the discourse of those interviewed with most saying that there had been no, or only minimal, influence in relation to ETS policy.

8.2.4 Implications for climate change policy

This study set out to gain insight into policy process and climate change policy making and the discursive findings to the research questions suggest that climate change policy in the form of an ETS was mostly regarded as being independent of economic issues. This was a surprise given the severity of the GFC and global recession. An ETS is essentially a complex tax reform and as such strongly related to economic interests, so the finding could suggest that those interviewed had adjusted their thinking to match the outcomes at the time of the interviews. The GFC did not provide a shock that changed the economic paradigm and if anything a retreat to more conservative politics was observed. This finding supports Mirowski's contention that the GFC has demonstrated the triumph of neoliberalism over other ideologies. Especially related to climate change, the widespread concern for economic growth and socio-economic welfare resulted in the issue slipping down the political agenda and the neoliberal inspired denialist movement gaining ground. New ideas and new approaches induced by the GFC did not materialise in relation to climate change action. Even the hoped for move to stimulus spending on energy efficiency and low carbon technologies was limited. That this financial crisis did not create fundamental economic change as the Great Depression and period of stagflation in the seventies had, demonstrates how pervasive the influence of the neoliberal doctrine and right-wing parties are globally (Mirowski 2013, p.2).

It appears that climate change issues are considered in a different political space and as just another issue on the political agenda that has to be dealt with as pressure, money and time permit. The findings suggest that although the governments in these three countries will introduce climate change policy for their country's wider interests they will only do it at a pace they believe business and the economy can reasonably manage. The ETS had no privileged position and was seen as subjected to standard political processes. The public were considered to accept this process, and that immediate economic concerns have more importance than protecting future interests. An implication of this finding is that it appears to have focused blame for failure or weakening of climate change policy to fall on the political class: something that was noted in the discourse of most interviewees. This was notable in the New Zealand and Australian cases although Spain was probably the most extreme case assigning blame to the government for practically everything. The ramifications for the political process of climate change reform are that a greater effort to introduce policy and change should be made at times when the necessary conditions are aligned: for example not competing with other reforms, a buoyant economy, strong public support, and bipartisan support. That approach works within the current economic paradigm but as Blyth (2002, p.4) argues Polanyi's double movement is not over and that one can expect "those dislocated by the market" to react against markets. While there has been little evidence of labour being able to organise effectively against the neoliberal economic order, demands of central funding agencies to impose austerity policies and continued high unemployment could still see a movement towards change as is occurring in Europe countries with new political parties emerging and gaining power. If a reaction against the economic paradigm does gain momentum the change would create opportunity for climate change action to be considered outside of the neoliberal economic imperative.

8.2.5 Implications for ecopolitical theory

The GFC provided an empirical opportunity within which theoretical concepts could be tested and understood. Examining the discourse of those close to the policy decisionmaking process provided important insight into what, why and how things happened during the GFC. Here the implications of the findings related to the three ecopolitical theories used in the examination of the discourse data are discussed.

Ecological modernisation is still developing and being tested as social theory and empirical research is necessary to further this process. The findings in this study are not encouraging for demonstrating the development of ecological modernisation as a framework for changing the means of production. It has been found that the GFC exposed a lack of elite discourses informed by ecological theory. There was a reduced appetite of politicians and industry to consider any reform that could be considered as adding costs. As Warner (2010) warned this framework may work when dealing with environmental pollution but it is not an adequate response to deal with climate change issues. The GFC actually resulted in a reduction of GHG emissions but this was related to decreased production and cost reducing measures that were usually not linked to innovative technological changes. The expectation was that when the economy recovers emission level would step back up to where they were before. This study supports the contention that ecological modernisation is used more as rhetoric rather than as having any real substance. This suggests that continued instability, or an even larger shock, may be necessary to move to a paradigm where ecological modernisation can become an effective reform process.

The implications arising from the study for postmaterialism relate to the fact that the theory does not explain well what happened to values at this time. The discourse findings support data that show a levelling or decrease of postmaterialism in recent years and support the suggestion, that while the theory had merit prior to 2000, it is less satisfactory for explaining value change in the twenty-first century. Evidence of this was best seen in the Spanish and Australian cases where levels of postmaterialism have dropped since 2000 and 2004 respectively, and in Spain young people were not considered to be more postmaterialist than their parents. The GFC created a time of poor employment prospects for many youth and the influence of a wider set of insecurities in the new century may be influencing values in a way that the postmaterialist measurement fails to capture.

The relationship between consumer preferences and citizen preferences provided another framework to assess the elite discourses. Consumers play a central role in market economies but the distinction from citizen preferences becomes less obvious as moral responsibility and other regarding issues have increasingly been incorporated into consumer preferences. The implications of the findings related to discourses is that people will put themselves and their consumer interests ahead of what they think is best for the country in difficult economic times. This in turn influences government decisions as they know from polling that people will be more tolerant of economic reforms. As observed by both interviewees and in surveys there is a considerable gap between what action people say they will take to prevent climate change and what they actually do. The implication is that governments may act knowing that self-interest and lifestyles influence voters more that their other-regarding concerns.

8.3 Research recommendation for the future

By examining the discourses used during this severe global economic event a contribution is made to furthering understanding of what shapes the actions of those close to the climate change policy making process. The crisis brings issues into sharper focus and understanding how they are dealt with provides a way to understand how each society in this study dealt with their problems. Questions are raised about how strong and protracted a crisis needs to be to promote change and what the precise mechanisms that link crises and paradigm shift are. More research is needed on the power of neoliberal market economics on influencing and controlling the debate and actions taken on climate change policy. Advancing such understanding would help labour, or the people, take control of issues rather than leaving markets to deal with them. Using the three ecopolitical theories in the study contributed to their empirical development. Through studying how elites constructed issues concerning the GFC and climate change policy the aim has been to provide greater understanding of how language influences what happens both socially and politically. Galtung's (1964) centre-periphery theory claims information flows from the centre to the periphery and if this is the case, then the elites interviewed are establishing the story which will flow to the wider community. Further work which would build on knowledge gained from this study would be to interview those at the periphery to look for influence from elite sources. This would provide more empirical research on how information moves through society.

With regard to postmaterialism two areas for further work are worthy of consideration. The recent decline in postmaterial values needs more investigation and that greater insecurity in societies may be the cause provides a point to work from. Since Inglehart first proposed the theory there has been considerable social change especially related to globalisation and information technologies. Evidence of a period effect was weak and the elite discourses supported a change in young peoples' values that runs counter to the theory. More research investigating the differences between values young people say they have and what they consider others have would help advance knowledge of the changes noted. On this subject the study by Roales-Nieto and Segura (2010) presents some preliminary findings that were supported by elite discourses in Spain and their contention that further study in this area is merited.

Further research related to consumer and citizen preferences is needed to understanding the difference between what people say in surveys and what action they actually take. This would also contribute to better understanding of how citizen preferences are becoming incorporated into consumer preferences. This may help explain the ambivalence of people that was noted in the elite discourses.

This thesis has made an important contribution to understanding what happens to climate change policy making decisions during severe economic conditions. This is particularly important at a time when evidence of anthropogenic climate change is very strong and action to prevent this is inadequate. While the conclusions presented here are not optimistic for achieving effective action, it is hoped that by understanding the impediments they can be managed in some way. Related to adding knowledge to the ecopolitical theories used, this was also not supportive of the theories, especially ecological modernisation or postmaterialism, although building knowledge of these still helps with the advancement and refinement of the theories.

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