Grassroots Climate Action in Australia: Visions, Practices and Innovation

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Abstract

Australian grassroots action on climate change is a recent phenomenon. Climate change as an issue of concern entered the Australian political landscape and national psyche later than in countries like the United Kingdom and some Western European nations, but since then there has been a surge of climate action. In 2007, the first ‘climate election’ was held, followed by many other headline-grabbing events including a proposed (but axed) nationwide emissions trading scheme and an implemented carbon price scheme. Coinciding and co-evolving has been a grassroots layer of the climate movement. This layer consists of concerned citizens seeking to address climate change through personal action and pushing for broader social and political change. The research produced by this thesis delves into this layer of climate action in the Australian state of Victoria, describing grassroots actors and practices as well as the potential contribution that actors could make to the mitigation of the climate problem.

This thesis first seeks to answer the questions of who comprises the grassroots layer of the climate movement in Victoria and what practices are being advocated and/or undertaken. It then discusses whether any of these practices contribute to addressing the climate problem more broadly. The intent is to conceptualise and systematically explore the grassroots terrain of Victorian climate action whilst seeking to uncover innovative practices in response to climate change. The significance of exploring this terrain and practices is traced to the limited research to date on the grassroots layer of climate action, and, in turn, the limited exploration of the innovative practices that can occur in that space.

The research is positioned within a critical political ecology approach. Climate change is considered real and due to anthropogenic causes; the interpretive endeavour is to explore what is being done as well as what can be done. Examining the grassroots layer of actors and practices via a discursive ecological framework enables a deep interrogation of the discourses in circulation. A qualitative approach was chosen, incorporating multiple data collection methods. The research was restricted to
Victoria, due to the rich diversity of actors and activities in the state and to ensure that the project was manageable.

The findings reveal a diverse collection of grassroots actors united in their goal to radically curtail climate change. All the actors frame climate change as having dire and far-reaching consequences if unmitigated. Climate change is often connected to other ecological issues that form part of the larger problem of an unsustainable society. Two storylines — coined ‘the refashioning storyline’ and ‘the remaking storyline’ — are apparent in the assumption grassroots actors make about the capacity of the current socio-political system to respond. The *refashioning* storyline assumes the capacity to respond to climate change within existing arrangements. This storyline is in contrast to the *remaking* storyline, which assumes a significant altering or even a collapse of the socio-political system due to the impacts of climate change and other ecological issues and, hence, requiring a community-led transformation. These different storylines result in differing approaches being undertaken and/or advocated to address climate change. These range from large-scale plans characterised by a strong ecological modernisation discourse of super-green industrialism that would restructure the fabric of Australian society, to relocalisation efforts styled on self-reliant communities akin to the discourse of social ecology. Lying between those positions are many hybrid forms involving novel responses to climate change.

The grassroots layer of the climate movement in Victoria is highly diverse in terms of its actors and practices, which may be the movement’s greatest strength as it enables multiple avenues for climate action now and into the future. Innovative practices for broader societal application are occurring today and they include the cultivation of the ‘realness’ of climate change and responsibility for people to enact personal behaviour change and undertake political actions as well as localised actions encouraging sustainable living, premised on holistic and ethical design principles. They also include inspiring proposals that could alter perceptions of possible futures. My exploration of these practices opens future possibilities and research directions that warrant pursuit, both because they contribute to the gap in the literature on the contributions of grassroots climate action and because of the risk unmitigated climate change entails.
Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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Publications related to this Thesis

The following publication was written early in my thesis journey and covers emerging themes and understandings from my confirmation process; including my initial scoping study of grassroots climate actors and literature review on climate action and innovative practices.

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**List of Acronyms**

ACF: Australian Conservation Foundation  
BOM: Bureau of Meteorology  
BZE: Beyond Zero Emissions  
CAG: Climate Action Group  
CANA: Climate Action Network Australia  
CCPTM: Cities for Climate Protection  
CFC: Chlorofluorocarbon  
CO2: Carbon Dioxide  
CSIRO: Commonwealth Scientific and Industrial Research Organisation  
EDAP: Energy Descent Action Plan  
ENGO: Environmental Non-Governmental Organisation  
GDP: Gross Domestic Product  
GHG: Greenhouse Gases  
IEA: International Energy Agency  
ISE: Institute for Social Ecology  
IPCC: Intergovernmental Panel on Climate Change  
LETS: Local Economic Trading Systems*  
NGO: Non-Governmental Organisation  
NIABY: Not In Anyone’s Backyard  
NIMBY: Not In My Backyard  
NSM: New Social Movements  
OECD: Organisation for Economic Co-operation and Development  
PPM: Parts Per Million  
WCED: World Commission on Environment and Development  
WWF: Worldwide Fund for Nature  
WEN: Women’s Environment Network  

* Please note LETS can denote variations on the above combination, for instance, ‘Local Energy Trading System’ or ‘Local Exchange and Trading System’, however, the theme of an alternative system of exchange runs throughout. Additional description is provided in Chapter Five.
Part 1: Foundation

Chapter 1: Introduction

1.1 Introduction: The Spectre of Climate Change

This thesis begins with the premise that the challenge of anthropocentric climate change — in terms of both its predicted impacts and required remedial actions — is significant. This will be demonstrated shortly; first, I wish to outline the thrust of the thesis. This thesis argues that the Australian grassroots layer of climate action is underexplored; it warrants exploration in its own right and more broadly as a site of innovative practices for climate action. By ‘innovative practices’, I refer to Seyfang and Smiths’ (2007) concept of grassroots sustainability innovation. This interpretation of ‘innovative’ is more expansive than the dominant technological interpretation as it includes changes to values, behaviours and attitudes in social, economic, and cultural realms towards greater sustainability. This expanded understanding is akin to the form of innovation Falk and Ryan (2007) outline as needed for Australia to respond to the challenge of climate change and other socio-ecological issues in the future.

The intent of my study is to explore the grassroots climate movement through an evaluation of the green discourses in circulation. This approach produces a deep and systematic account of how grassroots climate actors are framing the problem of climate change, the response mechanisms and future visions. This thesis situates grassroots climate action politically and ideologically, while highlighting the important contribution that grassroots actors make to address climate change. The Australian climate movement has rapidly proliferated and evolved over the last five years, and its growth and changes have occurred within a context of broader climate change ecological and socio-political related events. This study focuses on the grassroots climate movement in the Australian state of Victoria over the 2010 to 2011 period. Victoria contains a vibrant and diverse array of grassroots climate actors, which makes it an ideal site to capture the depth and breadth of the movement.
The brief introductory statements in the paragraph above will be expanded upon as the thesis progresses. The task now is to demonstrate: (1) the challenge climate change represents and (2) the failed response thus far. The demonstration of these points underscores the scale of the problem, provides background context to grassroots climate action and develops a context for the importance of my research.

Anthropogenic climate change is set to cast a dark shadow over humanity’s future. In a relatively short time frame, climate change has moved from a peripheral scientific concern to a preeminent issue on the political and public agenda. Persuasive evidence has now accumulated that anthropogenic climate change is occurring and the projected impacts are dire.\(^1\) The cause of climate change is greenhouse gases (GHGs) produced by human activities — carbon dioxide, methane, nitride oxides, CFCs, carbon monoxides and water vapour — adding to the naturally occurring levels that keep the Earth’s temperature habitable for humanity. These additional GHGs arise from nearly all facets of modern society and are now breaching the assimilative capacity of various biogeochemical cycles. According to the Intergovernmental Panel on Climate Change (IPCC 2007b: 2), global temperatures have already risen by 0.74°C over the past century. ‘Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level’ (IPCC 2007b: 2). The IPCC’s modelling indicates that the world will be between 1.1°C to 6.4°C warmer by 2100.

The consequences of climate change are global but there is significant regional differentiation. Australia is one country that will be severely impacted by climate change. Since the 1950s the average temperature in Australia has increased by 0.9°C degrees (CSIRO and BOM 2007). In the last decade alone, severe bushfires, prolonged drought, followed by intense regional flooding, have wreaked havoc on the nation (Climate Commission 2011). Climatic change, although not supported conclusively, has been stated to have played a significant role in these events (CSIRO and BOM 2007, Climate Commission 2011). Australia’s vulnerability is primarily due to its aridity, in addition to unique ecological, social and economic features

(Hennessy et al. 2007, Jones and Preston 2006, Palutikof 2010, Steffen 2009). The ecosystems considered most at risk — alpine regions, tropical rainforests, coral reefs, semi-arid habitats and freshwater wetlands — are all of high ecological and economic importance (Allen Consulting Group 2005, Garnaut 2008, Hennessy et al. 2007, Steffen et al. 2006). The projected outcomes for these ecosystems as a result of unfettered climate change are serious decline and even collapse, followed by cascading negative consequences ranging from individualised health impacts to impacts affecting the whole of society (Allen Consulting Group 2005, Climate Commission 2011, Jones and Preston 2006). Spatial demographics are unfavourable too; with over 86 percent of the Australian population living within 50 kilometres of the coastal zone, the predicted impacts from higher sea levels — inundation, salt water intrusion and flooding — will be exacerbated (Harvey and Clarke 2007). If sea levels rise 1.1 metres by 2100, the projected asset costs alone are AUD$226 billion (Department of Climate Change and Energy Efficiency 2011: 3). Adding to the seriousness of climate change outcomes are issues of social justice due to the maldistribution of impacts. Maldistribution will be felt through increases in food prices, employment risks and the costs of adaptation falling on those least able to afford them (Bambrick et al. 2011, Capetola 2008).

To avoid the worst impacts of climate change while retaining the capacity to adapt to unavoidable changes, temperature changes will need to be curtailed to under a two degree centigrade rise in global average temperature above pre-industrial temperatures (see Climate Commission 2011, Garnaut 2008, Meinshausen 2006a, Meinshausen et al. 2009). Two degrees is considered the upper point of warming for a ‘safe’ climate, but its achievement requires a dramatic reversal of GHG emissions. Modelling by Baer et al. (2009) shown in Figure 1 demonstrates the global GHG emission reductions required. The light grey section is the global emissions trajectory over the last 20 years, while the dotted line represents the business-as-usual trajectory. The added dark grey section exposes the glaring disparity between the current trajectory and the emission reduction trajectory required to stay below two degrees.
The theoretical rapid decline in GHG emissions shown in Figure 1 will require reductions of at least 80 percent of GHG emissions by 2050 to avoid the worst impacts of climate change (Baer et al. 2009, Meinshausen 2006a). These reduction targets need to be global, and with equity inclusions for the majority world, targets would be raised to 90–95 percent reductions by 2050 for the minority world countries. Based on current emission trajectory models, a mean stabilisation of atmospheric GHG concentrations is indicated at above 650ppm; these trajectories would translate into warming above 4°C in the long term (Betts et al. 2011). Currently, global atmospheric concentrations stand at 392.41ppm as of August 2012.

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2 See, for example, Monbiot (2006). Doyle (2005) uses the term ‘minority world’ to describe what have been loosely categorised as the Developed, Northern or First World countries. ‘Majority’ is then deployed to describe countries in the category of Developing, Southern or Second and Third World. The terms are useful as the demarcation is made on consumption of resources and population; hence, the minority world includes countries such as Australia, the United States of America and Western Europe. The majority world is where the majority of the population resides (over 80 percent) while consuming considerably less resources (20 percent). It is acknowledged that it is not a perfect categorisation, but it overcomes the dubious geographic placement of North and South countries, which do not necessarily align. Furthermore, it surpasses the Eurocentric ranking of Developed and Developing, as well as the Cold War, and again Eurocentric, categories of First, Second and Third World.

(CO2Now.org 2012), indicating the speed and scale of the response required. The dramatic reductions required demand whole-of-society transformative changes that would fundamentally alter technological, economic, social and political practices, in addition to individual lifestyles and values.4

Despite the risks posed by climate change and the need for unparalleled global cooperation to spur the action required, Australia is a laggard nation (Christoff 2010, Hamilton 2010, Pearse 2007). Australia’s international stance on climate action has frustrated countries seeking strong multilateral emission reductions targets. Moreover, Australia’s domestic policy efforts have failed to reduce one of the world’s highest GHG per capita emission profiles (Christoff 2010, Hamilton 2007). From the 1990s, Australian climate discourse has been ‘framed by a narrow economism’ that emphasises the ‘immediate (and usually over stated) costs of mitigation to jobs, investment and GDP, rather than the potential longer term damage of climate change to non-economic assets, principles and values (such as ecological conditions, equity, and ‘lifestyle’ choices)’ (Christoff 2010: 14). Those espousing this discourse were ‘politicians, the media, industry groups and civil society’ (Christoff 2010: 14). Australia’s economic reliance on mineral exploitation and other primary industries — the mining, burning, and exporting of coal — illustrates this dependence. Australia is the world’s largest coal exporter, a trade worth over AUD$26 billion annually (Howarth and Foxall 2010). Coal also provides most of the cheap electricity that supplies Australian households and energy-intensive industries such as aluminium and steel production (Christoff 2010, Curran 2009, 2012, Howarth and Foxall 2010).

Australia’s reliance on primary industries has resulted in resource coalitions that have actively undermined any real action on climate change, as well as the public debate on climate change and people pushing for action on it (Bulkeley 2000b, Hamilton 2006, 2010, Pearse 2007). Early research by Bulkeley uncovered a dominant ‘resource-based’ discourse coalition of elite governmental and industry forces framing climate action along economic lines that stifles action and debate. More recent work by Pearse (2007) and Hamilton (2006, 2010) has revealed that elite actors from the mining, cement, electricity, aluminium and fossil-fuel industries have stifled the debate and

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action on climate change. Pearse’s insider account describes a self-titled group called the ‘greenhouse mafia’ who has undue influence on climate policy, leading to inertia and, in some instances, outright sabotage.  

Between 2006 and 2008 there was a brief flowering of climate action as a combination of international and domestic influences, including the breaking through of dissenting voices, led to change (Christoff 2010, Curran 2011, Jotzo 2007, Wilkenfeld et al. 2007). In 2007, Australia was the site of the world’s first climate change election as promises of climate action took centre stage (Rootes 2008, Tupper and Freeman 2008). The Labor Party, led by Kevin Rudd, promised 60 percent GHG emission reductions by 2050, the ratification of the Kyoto Protocol and strong renewable energy targets. These election pledges influenced its win and within a few months the Kyoto Protocol was ratified and an Emissions Trading Scheme (ETS) proposed (Christoff 2010). However, this short spate of climate action proved to be largely symbolic. By 2009, climate action had retreated as the ETS bill was defeated in the federal parliament, a global financial crisis erupted, and voices opposing climate action regained control of the debate. Overall, Australian climate policy has been described as an elite affair characterised by weak ecological modernisation incapable of spurring the structural changes required (Byrne et al. 2009, Crowley 2007, Curran 2009, 2011). This weak policy situation contrasts sharply with Australia’s per capita GHG emission profile, more than four times the world average and contributing over 1.5 percent of the global total of GHG emissions while representing only 0.32 percent of the world’s population (ABS 2010, 2011, Garnaut 2008). Overall, Australia is the highest per capita GHG emitter in the developed world (Climate Commission 2012a).

While Bulkeley (2000), Hamilton (2006) and Pearse (2007) uncovered an array of elite actors with vested interests and undue influence stifling climate action, there are

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5 See Pearse (2007) for an account of the undue influence. A pertinent example uncovered by Pearse (2007) was the ‘concern’ over mandatory renewable energy targets and the voiced desire for these to remain low by members of the Greenhouse Mafia, to avoid tilting in favour of wind technologies.

6 By using the term ‘climate action’ I am encapsulating all practices directed towards addressing anthropocentric climate change. The two most commonly cited mechanisms to manage climate risk are ‘mitigation’ and ‘adaptation’. Mitigation entails ‘[reducing] climate change impacts by reducing the rate and magnitude of global warming’ (Jones and Preston 2006: 9), while adaptation consists of ‘actions aimed at reducing the potential impacts on society and nature from the consequences of climate change’ (Tschakert and Olsson 2005: 329).

7 For an insightful account see Christoff (2010).
substantial voices of dissent. The Australian climate movement seeks to address climate change in a hostile socio-political context. Having emerged later than in other countries, it has been subjected to comparatively minimal research. When the movement is separated into national, regional and grassroots layers of action, it is apparent that even less research has been undertaken on grassroots climate action. This thesis seeks to fill this research gap by exploring the grassroots layer of the movement. It poses the following questions: who forms part of the grassroots climate action movement? What assemblages do these activists form? What practices do they advocate and/or undertake? And could these practices provide insights for new or alternative courses for climate action in wider society? The research examines the grassroots layer in its own right but also as a site for uncovering innovative practices that might be applicable to climate action more broadly. The remainder of this introductory chapter presents the (1.2) rationale, (1.3) guiding aims and significance, (1.4) methodology, and (1.5) structure of the thesis.

1.2 Rationale

I have demonstrated the challenge anthropocentric climate change presents; I now intend to demonstrate why a detailed study of the grassroots layer of the climate movement is important.

Activists and the social movements they create are phenomena of research interest in their own right. Social movements offer unique opportunities to view and change the social world. More importantly, as agents of change, social movement actors make possible new and innovative ideas, knowledge, actions, and desired futures, while challenging accepted norms, institutions and traditions. The innovative practices emerging at the grassroots scale of the climate movement remain thus far unexplored.

A brief description of research already undertaken on the Australian grassroots climate movement is needed before identifying and considering any innovative practices. Up to the present time only a few researchers have undertaken research on the totality of actors seeking action on climate change, and their work has

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predominantly focused on actors from the upper echelons of well-funded national non-governmental organisations (NGOs). Research by Baer (2010), Diesendorf (2009), and Hall (2008) focuses on the Australian climate movement’s relative strengths and weaknesses, before turning to practical suggestions to foster more effective political and/or campaign action. Critiques of the climate movement have included that it has failed to achieve political change to facilitate climate mitigation (Hall 2008, Hall and Star 2007, Hall and Taplin 2006), or that the movement is stuck within an ecological modernisation paradigm, which, it is argued, is incapable of spurring the action required (Baer 2010, Goodman 2010). Overall, the research tends to have a macro focus, with the grassroots layer included as part of the totality of the climate movement (Baer 2010, Hall 2008), or a micro-focus on single grassroots practices (Goodman 2009, Hall et al. 2009, Pearse et al. 2010).

Defining the climate movement and the grassroots layer has produced mixed results as different climate actors have been identified and depicted in contrary ways. Diesendorf (2009) describes 12 different categories of actors seeking climate action in Australia (these are described in Chapter Two). Baer (2010: 1) separates the movement into three layers of ‘above’, ‘middle’ and ‘below’, with the divisions based on organisational form, influence and access to media. Baer (2010: 8) describes the ‘below’ layer as filled with ‘numerous local climate action groups (CAGs), a still emerging national climate action network, two regional climate action groups, various socialist groups, and student environmental collectives’. A clear definition of the commonality these groups share is the following: ‘independent groups based in Australian local communities, formed by local citizens voluntarily taking action in response to their concern about climate change’ (Hall et al. 2009: 72). A rich understanding of the grassroots layer and its actors, or what Eckersley (1988:19) describes as ‘homo communitas’ — the ‘active responsible person-in-community’ — is missing. The limited research to date demonstrates insufficient knowledge regarding the state of grassroots climate action; I will fill this gap by researching a broad set of grassroots activists and the assemblages they form in a systematic way.

Burgmann and Baer (2012) have collaborated recently to provide greater depth and expansion on these three layers in the book *Climate Politic and the Climate Movement in Australia*. Presented is the context of climate change in Australia and the roles played by government, unions, academics, business, NGOs, the Australian Greens, as well as the ‘below’ layer of the climate movement (Burgmann and Baer 2012).
Although — as already outlined — grassroots climate practices have been the subject of minimal research, they can be described as an emerging area of research interest. Doyle (2000: xxviii) describes the informal sector of the Australian environmental movement, of which the grassroots forms a part, as:

much larger than the formal movement. On occasions the former may not wield as much short-term power, but it is more representative of our lives, and it provides the opportunities to work with our creativity and hopes.

Doyle’s citing of creativity, hopes, and representation in everyday life indicates that opportunities exist to uncover possible innovative practices for climate action. Seyfang and Smith (2007) also argue that ‘grassroots sustainability innovation’ has the capacity to create innovations that are more likely to ‘fit’ local conditions and meet the criteria of ecological, social, and economic sustainability. In more recent work, Seyfang (2009b) developed a sustainable consumption framework premised on five criteria that she applied to three grassroots practices; each of the practices was found to meet her sustainability criteria. This is discussed further in Chapter Two. A recent compilation of ‘grassroots sustainability enterprises’ from selected countries across the globe, omitting Australia, continues to demonstrate the interest and foreseen potential of grassroots capacity (Davies 2012). Giddens (2009: 5) also observes the potential of ‘dramatic initiatives’ to spring from individuals and ‘the energy of civil society’, while Adger et al. (2009) and Moloney et al. (2010) both cite the adaptive and/or mitigative capacity of community-led climate actions. Together, these views highlight the potential for uncovering a range of innovative grassroots practices not previously identified and/or considered in any systematic way, and with the prospect of making an important contribution to our understanding of the management of climate change risk.

1.3 Aims and Significance

This thesis aims to identify and then describe the grassroots scale of climate action in the Australian State of Victoria. The interrelated objectives are twofold: the first, conceptual and the second, empirical. First, the thesis seeks to situate these grassroots actors politically and ideologically using a framework of green discourses. These
discourses enable the deep exploration of grassroots movements’ practices inclusive of values, strategies, and direction (Grist 2008, McGregor 2004). Second, through the potential identification of a range of innovative grassroots practices, the thesis seeks to highlight the potentially important contribution that grassroots actors can make to addressing the climate problem.

Several broad questions drive the research. The overarching question is: who is included in the grassroots layer of the climate movement in Victoria and what are the practices they are advocating and/or undertaking to facilitate action on climate change? This broad question can be disaggregated as follows:

1) Who is included in the grassroots layer of the climate movement?
This question is fundamental as it seeks to identify the totality of actors in the grassroots layer of climate action. For greater clarity, it is further sub-divided into:

1.1 Who are the grassroots climate activists, and what are the assemblages they generate in the Australian State of Victoria?
1.2 What practices are being undertaken and/or advocated by these actors to respond to climate change?

2) How do the discourses of the grassroots climate movement compare with the spectrum of green discourses?
This question seeks to describe and conceptualise the grassroots climate movement by locating the practices being advocated and/or undertaken in a spectrum of green discourses, and can be divided further into the following sub-questions:

2.1 Where are the various grassroots climate actors positioned on the spectrum of reformist to radical green discourses?

10 Exploring the concept of ‘practices’ Wagenaar and Cook (2003: 143) state that ‘the concept of practices is elusive’ then relay past theorists’ key designations of practices before outlining their own views on what practices encompass, such as action, knowledge and values. Seyfang et al. (2009: 7–8) describes the ‘practice turn’ as a unit of analysis and how practices are composed of knowledge, skills, understanding, and the ‘doing’ in the social world that spans the social and technical realm. To clarify, the term ‘practices’ within this thesis encompasses what the grassroots climate actors are undertaking (e.g. changing personal behaviour, communicating climate risk, establishing community gardens) and promoting (e.g. pressuring the government for policy change, creating large-scale plans for low carbon futures) to redress climate change.
2.2 What are the values, strategies and directions of the movement as evident in the use of particular green discourses?

3) What insights emerge for the management of climate change risk?
This question seeks to move the research beyond conceptualising the grassroots climate movement to answer:

3.1 Are there innovative climate practices emerging within the grassroots movement that could be available for broader societal application?

Answering these research questions makes a unique and significant contribution to knowledge in three ways. First, it provides a novel conceptualisation of the grassroots layer of climate movement in Australia. Second, it offers a detailed and systematic description of the movement, politically and ideologically. Third it uncovers innovative practices that could be more broadly applicable to climate action.

The first contribution regards the constitution of grassroots climate movement. My conceptualisation of Australian grassroots climate action and actors is novel and far broader than those employed by previous researchers. The terrain of grassroots climate action is composed of individual climate activists and the numerous assemblages that activists form. The individual activists range from those solely undertaking individual lifestyle changes and disseminating information about their experiences, to politically oriented activists who engage in lifestyle changes as well as advocating for broader social change. The grassroots climate actors I identified include groups concerned with one aspect of managing climate risk, such as advocating for renewable energy projects or personal behaviour change in a supportive group environment (for instance, Carbon Action Reduction Groups). Other actors are concerned with building community resilience, such as the Transition Towns Movement. Some groups focus on personal change, community building and political action; they include many of the climate action groups and groups concerned with broader sustainability issues. And, finally, there are the networked alliances, composed either solely of grassroots actors, or containing other societal actors such as NGOs.
My second contribution is to describe the grassroots climate movement in Victoria in a detailed and systematic way that conceptualises the actors politically and ideologically. Ideologically, the movement is concerned with significant society-wide change to redress climate change. Unconstrained by any traditional political ideology, many actors weave together novel green practices. Therefore, the thesis’ findings indicate the emergence of positions ideologically similar to Dobson’s (2000) ecologism. The climate actors present a description of the social world on an ecological precipice with a radical program of change, which, if implemented, would permit a more ecologically sustainable (and potentially socially just) future. The program of change is extensive, from individuals engaging in significant personal change, to social ecology inspired localised building of self-reliance, to large-scale ecological modernisation involving structural change in major sectors of the economy. Politically, the actors seek a more open and inclusive governance approach, in which everyone has agency and responsibility to redress climate change. The specific role for every actor varies, but evident throughout is the construction of a citizenship composed of ecological rights and responsibilities.

The third contribution is the uncovering of innovative practices to redress climate change that were and are occurring in Victoria. These practices include innovative practices in communicating climate change, interpersonal practices, urban greening, alternative consumption and production approaches, in addition to macro-scale proposals for rapid transitions to a zero emission economy. The communicating of climate change revolves around the cultivation of new frames of responsibility and agency to act on climate change in personal and political life, while building assemblages that create and support more ecological social norms. The innovative interpersonal practices include the building of ‘bonding’ and ‘bridging’ ties that share knowledge and enable learning and action. The broader societal changes are the imaginative practices that range from micro-scale experiments in food localisation to alternative systems of exchange, such as sharing, swapping, and giving away. These changes are part of community-scaled plans called ‘energy descent action plans’, which are premised on the design and ethical principles of permaculture. Finally, there are the large-scale undertakings and proposals that include community-owned renewable energy projects and plans that are intent on the restructuring of the whole of Australian society. All of these practices aim to re-imagine how society could be,
and propose the management of climate risk in a manner inclusive of social justice concerns.

1.4 Methodology

This section divides my methodological approach into broad macro, meso and micro layers: the macro layer positions my research within the domain of critical political ecology; the meso layer situates it within a discursive green framework; and the final micro layer focuses on the method of data collection and analysis, which is detailed in Chapter Four.

1.4.1 Macro Layer

At the macro layer, the methodology is positioned within critical political ecology and deploys a qualitative and interpretative approach (Forsyth 2003, Guba 1990, Guba and Lincoln 2005). Forsyth (2003: 2) describes the project of critical political ecology as committed to ‘developing a political philosophy of environmental science that indicates how social and political framings are woven into both the formulation of scientific explanations of environmental problems, and the solutions proposed to reduce them’. Forsyth’s concern with values, power and responses to social problems has parallels to the work of Flyvbjerg (2001). Flyvbjerg argues that social sciences should move towards outcomes that matter. Hence, the model of natural science that seeks universal rules and control is not achievable or desirable, as social sciences should instead seek to address questions of power and values. These questions relate to topics of ‘where is society going?’, ‘is it desirable?’ and ‘what can be done?’ (Flyvbjerg 2001: 162).

A qualitative approach was selected due to its capacity to explore ‘why people think and act as they do’ (Kalof et al. 2008: 80). In addition, including and expanding on Kalof et al., qualitative methods enable an interpretative approach to research to be undertaken in a real-world setting that can develop a rich description and capture multiple perspectives (Kalof et al. 2008, Savenye and Robinson 2004). Although the methodology was located within an interpretative paradigm, it was assumed that
environmental problems, notably climate change, do exist. Dryzek (2005: 12), citing and expanding on the earlier work of Litfin (1994), states that it is possible to subscribe to a ‘hermeneutic epistemology and realist ontology’. The realist ontology is reflected in Dryzek’s (2005: 12) observation that ‘pollution does cause illness, species do become extinct, ecosystems cannot absorb stress indefinitely...’. The introduction to this thesis has established the ‘realness’ and challenge of climate change; henceforth, the interpretative (hermeneutic) endeavour seeks to probe knowledge of what is being done to redress climate change, what could be done, how and by whom.

1.4.2 Meso Layer

In order to conceptualise the grassroots climate movement in Victoria and investigate the emerging practices, a framework of green discourses at the meso-level is pivotal. This framework provides a mechanism to systemically explore and describe how grassroots actors are conceptualising their climate change response. Furthermore, the discourse framework enabled revelation of the ideological and political positions of climate actors, as well as facilitating the uncovering of innovative practices. More broadly, discourses represent an important linguistic turn in social science, since language ‘represents more than words but is a system that attributes meanings and constructs practices’ (Costello 2005: 51). Discourses are important in environmental matters as the deployment of particular discourses influences how ecological problems are understood and framed, how ways to resolve them emerge, how the options are implemented and managed, as well as revealing underlying normative positions.11 Discourse matters and it shapes practices, an assumption that is supported by many theorists from different perspectives (for example Dryzek 2005, Fairclough 2003, Foucault 1980a, Hajer and Versteeg 2005). A final point in support of the importance of discourse is that ‘social life is mediated, and meanings produced, through modes of communication’ (Costello 2005: 51). Hence, modes of communication are not neutral media that reflect the world, rather, they are active in the way the world is interpreted and understood.

While there are multiple definitions and interpretations of discourse,\textsuperscript{12} this thesis uses the work of Dryzek (2005) as an organisational device. Sharp and Richardson (2001: 193) make a distinction between ‘strictly linguistic approaches that focus on communication [and] approaches that embrace ideas and actions as integral to discourse’. The latter draws upon the work of Foucault (Lees 2004, Sharp and Richardson 2001). Lees states that these Foucauldian-inspired understandings of discourse see language as of prime importance to establishing ‘regimes of truth’ (Foucault 1980a). Regimes of truth shape how social problems are framed and, in turn, addressed. Dryzek (2005: 9) draws on the understanding of Foucauldian-inspired concepts to define discourse as:

shared ways of apprehending the world. Embedded in language, [discourse] enables those who subscribe to it to interpret bits of information and put them together into coherent stories of accounts. Discourses construct meanings and relationships, help to define common sense and legitimate knowledge. Each discourse rests on assumptions, judgments, and contentions that provide the basic terms for analysis, debate, agreement and disagreement.

Dryzek (2005) explores the different environmental discourses by presenting the main storyline of each, focusing on four structural elements: basic entities whose existence is recognised or constructed, assumptions about natural relationships, agents and their motives, and key metaphors and other rhetorical devices. Due to the size and scope of this thesis, as well as the use of green discourse as an organisational device, Dryzek’s approach was narrowed and modified. Reformist to radical green discourses are presented in a spectrum that focuses on the main storyline of each, followed by a description of the elements utilised to frame the problem and causes, transition strategy and agents of change, and future. The framework incorporates the strengths of Dryzek’s approach to act as a tool to explore, describe, and critique. Chapter Three

\textsuperscript{12} See Bulter (1993), Burr (1995), Dryzek (2005), Fairclough (1989), Hajer (1995), Lessa (2006), Liftin (1994), Potter (1996), Smith and Kern (2007). In relation to ecological matters, Hajer and Versteeg (2005) summarise a decade of contributions made by the study of discourses into four categories: nature of contested concept, how discourses shape policy options and outcomes, as cultural politics, and governmentality. Feindt and Oels (2005: 163) contend that the various perspectives differ in relation to ontological and epistemological premises as well as in regard to methodology. They make a distinction between Foucauldian and non-Foucauldian perspectives, with non-Foucauldian approaches primarily concerned with linguistic utterances. Burr (1995) states that, while there are different perspectives on discourse, there is also much commonality, given that they all take a critical stance towards knowledge; adhere to historical and cultural specificity; view knowledge as sustained by social processes; and view knowledge and action as linked.
presents the spectrum of green discourses.

1.4.3 Micro Layer

At the micro layer of data collection four techniques were used: semi-structured individual and group interviews, an open-ended question online survey, documentary materials and observations. The duration of data collection spanned over a year (August 2010 to November 2011), a time span characterised by a considerable number of social, political, economic and ecological events pertinent to climate change. Appendix B lists the various tools used, including the online survey, guiding questions for the semi-structured interviews and a selection of the images and documentary materials collected. Using methods of triangulation, the multiple data collection techniques used over a prolonged period enhanced the quality and completeness of the description of the findings (Denzin 1978 in Guba 1990, Guba and Lincoln 2005, Henn et al. 2006, Tellis 1997). The context of data collection, details regarding the methods of data collection and description of analysis are provided in Chapter Four.

1.5 Thesis Structure

The thesis consists of seven chapters in two main parts. Part One covers the foundation of the thesis, which includes the introduction, literature review, theoretical framework and methods. Chapter Two reviews the current literature on grassroots climate action, situating it within the body of literature on social movements more broadly. This review divides the literature into three streams: social movements and the activists that drive them, the Australian climate movement and grassroots layer, and the emergent research interest in innovative practices within the grassroots layer of climate and sustainability action. Chapter Three then presents the spectrum of green discourses within which the grassroots climate movement is located and interrogated. Chapter Four is concerned with methods and details the broader socio-political context during data collection, in addition to the data collection and analysis methods.
In Part Two the empirical data are presented and discussed in relation to the framework developed and literature covered in Part One. Chapter Five presents a rich description of grassroots climate movement in Victoria. While it uncovers much diversity, all actors are intent on reformulating current Australian society to redress climate change. These reformulations span strong reformist to radical green responses that present climate change as a very real problem requiring urgent attention. Chapter Six discusses the main findings in relation to the innovative practices uncovered that could facilitate climate action more broadly. Chapter Seven concludes by restating the major findings and offers a few proposals for future action.

This chapter has demonstrated the formidable challenge presented by the predicted impacts of climate change if current GHG emissions continue unchecked. Furthermore, it has discussed some of the challenges of attempting the large-scale socio-political changes required to curb these negative consequences. These challenges are exacerbated by a problematic Australian socio-political context that stymies meaningful action. While much attention has been devoted to the forces hindering action, less research has been devoted to those actors undertaking and/or advocating climate action, especially at the grassroots level. It is important to close this research gap, since social movements are a critical force for social and innovative change, and new and/or redesigned practices for climate action.
Chapter 2. Literature: Social Movements, Climate Action and Innovative Practices

2.1 Introduction

This chapter reviews the relevant literature on social movements, grassroots climate action and innovative practices in response to climate change. The intent of this threefold focus is to build a foundation for the conceptualisation of answers to two broad questions. The first question is concerned with who is included in the grassroots layer of the climate movement in Victoria, whilst the second asks what practices are being undertaken and/or advocated, in addition to understanding the practices that enable a response to climate change at the speed and scale required. The exploration of these three themes is then united with the empirical data in the later chapters to answer the broad research questions.

The first section of this chapter begins by establishing the grassroots layer of climate action as a facet of the larger climate movement, situating grassroots climate action within social movement theory as a whole. Social movement theory establishes a contextual and theoretical basis for understanding the importance, emergence, as well as roles, forms and strategies of movements and their actors. The dominant theories on social movements are presented, with New Social Movement (NSM) theory identified, by multiple theorists, as having the best explanatory power for current social movements and, in turn, the grassroots climate movement.

The second section reviews the literature on the Australian climate movement, complemented by research on climate action movements globally. The intent is to develop an understanding of the actors engaged in climate action at the grassroots, and what is currently known about them. The review also acts as a springboard for the identification of grassroots actors who will be the subject of further investigation. Primarily, the thesis is concerned with grassroots activists and the assemblages they
generate; these are people who act out of their own resolve to address climate change, without partisan political and/or economic incentives.\textsuperscript{13}

The final section transfers attention from the grassroots climate actors to the specific practices of the actors, reviewed in tandem with Seyfang’s (2009b) theory of grassroots sustainability innovation.\textsuperscript{14} To complement and build a robust understanding of innovative climate action practices, additional literature on managing climate risk is reviewed. This section explores the framing of climate change, as well as the individual practices advocated and/or undertaken. The review of the literature demonstrates a state of incomplete knowledge of a deeper and richer level of the grassroots climate movement and practices, with little sustained attention or deep interrogation of those practices. The grassroots climate actors involved and the practices being undertaken and/or advocated are only partially documented. International research exists on innovative grassroots sustainability practices, however this is still an emerging niche area and similar research is even more embryonic in Australia. The chief exponent of grassroots sustainability innovation, Seyfang (2009b: 183), describes this layer as a ‘neglected site of innovation’. This reveals a pivotal knowledge gap to fill due to the need for practices that respond to the challenge of climate change.

2.2 Social Movements and Activists

Situating the grassroots climate movement within the social movement literature facilitates theoretical description and analytical clarity. Social movement theory provides insights into why social movements develop, their features and strategies, as well as the people involved. The characteristics of grassroots climate action fall well within the definition of social movements, as I show in the following paragraphs.

Melucci’s (1996) definition of social movements begins to demonstrate the scope movements can encompass. To Melucci (1996: 28), social movements ‘designate that form of collective action which (i) invokes solidarity, (ii) makes manifest a conflict,

\textsuperscript{13} A full description of the grassroots climate movement is contained within the empirical chapters. In addition, see Appendix A that summarises the grassroots climate actors identified.

\textsuperscript{14} See also Seyfang and Smith (2007).
and (iii) entails a breach of the limits of compatibility of the system within which the action takes place’. Tarrow (1998) further supports the breadth and elasticity of the term. Tarrow (1998: 4) defines social movements as ‘collective challenges, based on common purposes and social solidarities in sustained interaction with elites, opponents and authorities’. Routledge’s (1996: 411) contribution is to portray the heterogeneous formation of social movements, viewing them as a:

myriad (and at times conflicting) [of] interests and identities (of gender, race, class, sexuality, and so on) that constitute an analytical and political-cultural terrain of contestation in which the hegemonies of state, the development project, aspects of modernity (economic growth, progress) can be explored, defined and challenged.

Grassroots climate action would seem to fall well within these boundaries. Grassroots climate actors have a common purpose in seeking to redress climate change, engage in collective action and yet maintain heterogeneity of interests, ideas and identities. Furthermore, even those actors with stated apolitical stances present challenges to the current socio-economic and political system by proposing ecological limits on growth and questioning core tenets of modernity, such as whether material consumption is the harbinger of ‘the good life’ (Connors and McDonald 2011, North 2011).

2.2.1 Social Movement Theory

The study of social movements is important as they offer an insight into the social world and are sites of change. These movements confront tenets of the status quo, as well as create innovative ideas, values and actions, and alternative desired futures.15 Social movements as sites of change will continue to increase in number and relevance in the future as new issues emerge and others remain, in addition to increasing education levels, accessibility to information and decreasing deference to authority (Martin 2007). In relation to climate change, Jamison (2010) argues for the importance of social movements via the case of the alternative globalisation movement. Jamison contends that the alternative globalisation movement has enabled the emerging articulation of climate justice concerns from local to global scale. This

articulation of justice concerns significantly shapes the public debate on climate change and governance arrangements (Jamison 2010).

Bate et al. (2005: 16) argue that the theoretical understandings of social movements can be categorised into at least three broad schools of thought: collective behaviour theory, resource mobilisation theory and new social movements theory. The first, collective behaviour theory, privileges the importance of emotion in motivating collective action. In contrast, the second, resource mobilisation theory, privileges the idea of a ‘rational actor’ taking part in collective action if the perceived gain from involvement is greater than the effort. The late 1960s heralded a significant change in many of the concerns, features, and strategies of movements, resulting in new theoretical understandings (Wastl-Walter 2001). Emerging from this shift, and important to understanding the grassroots climate movement, is New Social Movement (NSM) theory. NSM theory is the primary theoretical approach used in this thesis, due to it greater explanatory power of the actors and practices of social and ecological movements that have arisen since the 1960s (Doyle 2005, Moser 2009).

NSM theory has often been cited as providing the best theoretical ‘fit’ with movements currently concerned with social and/or ecological change (see Doyle 2005, Moser 2007, Moyer 2001). Doyle justifies the use of NSM theory to explore and understand environmental movements in the majority and minority world by arguing that the theory is not perfect but overcomes many limitations of other theories. Doyle states that NSM theory is particularly applicable to minority world settings due to the numerous points of power that operate in modern society. The concept of numerous points of power operating in a web-like structure characterised by points of resistance and power in dynamic interplay is influenced by the work of Foucault (1980a). Although he did not engage with social movement theory, Foucault argued that changing the individual is just as significant as changing broader socio-political conditions, as the operation of power and discipline has become increasingly internalised. Hence, the emphasis on individual change is an important feature of NSM theory.
According to Moyer (2001), all social movements are ultimately about power and its subversion. Premised on NSM theory and integrating studies on sub-elements of the civil rights, anti-nuclear energy, and anti-globalisation movements, Moyer’s work explores the theory and practice of social movements. For Moyer, power is presented in two models — Elite and People, with the capacity of social movements premised on the latter. Power can be disrupted, and the system changed; to achieve this, movements need to illustrate to the public the divergences between (1) societal myths and societal secrets, and (2) official policies and practices and the actual policies and practices. Societal myths are the ‘slogans, beliefs, and values’ that power holders use for their benefit, while a societal secret is ‘the ideology that actually guides the power holders’ (Moyer 2001: 15). The official policies and practices are interrelated to the societal myths and they are what the power holders proclaim to be implementing, but the actual policies and practices are consistent with societal secrets (Moyer 2001: 16). An example of societal myths and secrets is the idea (myth) that equal democratic freedoms were enjoyed in the United States, whereas in fact, many practices (consistent with the societal secret) served to keep blacks from having the same democratic freedoms as whites (Moyer 2001: 16).

Moyer (2001) sets out a strategy for social movements to educate the public on these myths and secrets to build a momentum for change, via people power. He argues that to commence the strategy of change, activists need to start from the knowledge and values people have and then work with those to achieve the movement’s objectives. Movements are considered successful when demands become policy and/or produce a shift in social values (Dryzek et al. 2003, Hall and Taplin 2006, Moyer 2001). To be effective on ecological matters, Dryzek (2005: 232) argues that what is needed is ‘a dynamic, structural-level analysis of the liberal capitalist political economy, where it is headed, and what realistically can be done to alter this trajectory to more ecologically benign ends’; as well as ‘the capacity to facilitate and engage in social learning in an ecological context.’ On these criteria, ecological modernisation is presented as possibly the best option society can hope for, while ecological

16 Power is defined by Moyer (2001: 13–14) as ‘the ability to control, influence, or have authority over others. Today this includes power not only over what others do, but also over what people know and think ... Power is our capacity to manage the world around us and can be exercised through persuasion, persecution, different forms of coercion, or physical violence.’ Some other theorists put more emphasis on the individual’s capacity to conduct themselves as they wish, that is their autonomy, a consideration when discussing the concept and operation of power (for example, see Howitt 2001).
democracy has the capacity to enable learning (Dryzek 2005). Together, Moyer and Dryzek offer a way to examine how the grassroots layer of the climate movement might be directing its message about climate change and practices to redress it.

2.2.2 Social Movement Activists

People generate social movements. To understand who these people are, Moyer (2001: 2) uses the terms ‘engaged citizen’ and ‘citizen activist’, while Emirbayer and Sheller (1999: 146) refer to ‘self-organised citizenry’ to describe those members of society seeking change. From these examples, it is evident that many terms have been used to describe people engaged in social movement activity; however, for the purposes of this thesis, the term ‘activist’ will suffice to describe our grassroots actors. ‘Activist’, and the ‘activism’ they can engage in, covers a variety of practices. Martin (2007: 19) defines activism as ‘action on behalf of a cause, action that goes beyond what is conventional or routine’. Martin contends that there are activist and non-activist roles within movements; for instance, attending a protest would be activism while undertaking research would be a non-activist activity. However, this distinction contrasts with Martin’s own definition of activism. For example, researching advancements in scientific knowledge on climate change and disseminating findings would be beyond the routine of most people.\(^\text{17}\) Activism, therefore, encompasses a broad set of practices. Perceiving the activist in this unrestrained form enables exploration of an array of practices being undertaken and advocated by individuals at the grassroots level, not just those engaged in the more traditional concept of direct political action.

Activists are not homogeneous. Moyer (2001), again, provides a useful orienting point by identifying four activist roles within social movements: the change agent, the citizen, the rebel and the reformer. Each role is considered to be necessary to a movement’s success, although each has its own strengths and weaknesses. For instance, an effective feature of the rebel is the possibility of placing an issue on the public radar due to daring, often direct action tactics. However, an ineffective feature can be that the rebel may be overtly disruptive without ‘realistic strategy’ (Moyer

\(^{17}\) Callicott (1995) argues that even thinking about ecological matter is ecological activism.
In contrast, the reformer is effective at using mainstream systems and institutions, but can be overly concerned with organisational and procedural matters at the expense of the movement’s needs (Moyer 2001: 29).

Jamison (2003), Dahle (2007) and Hopwood et al. (2005) concentrate squarely on describing ecological activists. Jamison presents four forms of green activism: community environmentalism, professional, militant, and personal, then describes the contribution each makes to the creation of green knowledge. The professional works within the system to achieve reformist change. The community environmentalist is focused ‘on results, on changing policies and political decisions rather than on changing beliefs’ (Jamison 2003: 704). While stated to be ‘potentially motivated by personal ethical and/or spiritual beliefs’, the community environmentalist disseminates ‘reason and techno-scientific approaches, and seeks to empower local groups to effect greater local to global change’ (Jamison 2003: 704). The militant aligns more with radical green discourses, and, in contrast, is overt in her or his ethical and/or spiritual motivations. The personal activist, to Jamison (2003: 713), is the ‘most amorphous and variegated due to the spread of green discourses through society’. The personal activist’s array of motivations and actions can span green spiritualism, moral perspectives, new ageism and green consumerism.

Like Jamison (2003), Dahle (2007) describes five ideal types of ecological activists, with matching illustrative examples of existing green activists. The five ideal types are: reformists, impatient revolutionaries, patient revolutionaries, grassroots fighters, and multifaceted radicals. To Dahle, reformists are willing to, and do, work within the system, which is akin to Jamison’s professional category. In contrast, impatient revolutionaries seek to hasten the demise of the current system in their quest for a more ecologically benign future. The patient revolutionaries are waiting for the perceived inevitable collapse while building knowledge and skills to assist in the recovery. Dahle self-identifies with the multifaceted radical, which can be considered an opportunist. The multifaceted radical undertakes personal, political and social changes whenever opportunities present themselves. Even if these actions eventually

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conflict with the paramount objective, the imperative is to maintain momentum.

Hopwood et al. (2005) takes a slightly different approach and presents the actors as aligned with the degree of green change they support. Three categories of green change are identified: the status quo (no change), the reformist and the radical transformationist. Hopwood et al., along with the aforementioned theorists, acknowledge that these ‘ideal’ categories can intermingle in the individual activist to achieve movement objectives. As Hopwood et al. (2005: 47) state:

> [A]s in many political issues, some people may say one thing and mean another. On some occasions reformers and transformationists will tone down their arguments to persuade a government or business to move along the sustainable pathway. On the other hand, some may use more radical rhetoric than they actually believe or practice to deflect criticisms.

These are useful theoretical guides for the categorisation of the climate activists involved in this study. The next section turns to the empirical literature to understand the shape and form of the Australian climate movement and the grassroots climate actors thus far identified.

### 2.3 The Australian Climate Movement

Research on Australian social movements, especially on the environmental movement, is well established.\(^{19}\) Since emerging in the 1960s the environmental movement has gone through distinct stages in Australia, from outsider status (1960s to the mid–1980s), to working with government (mid–1980s to the mid–1990s), to bypassing the state to work directly with others and business (mid–1990s onward) (Doyle 2000: 71). Since the late 1990s, the environmental movement has been impacted by the dominance of neo-liberal ideology pervading government and society more broadly, which has had a significant impact on strategy and withdrawal of funding (Doyle 2010). Overall, the Australian environmental movement arose out of a strong focus on wilderness concerns, which has continued to characterise the movement; less attention is given to urban concerns and social justice ideas that

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characterise many other movements from the majority and minority world (Doyle 2005, Mulligan and Hill 2001). Pakulski and Tranter (2004) and then Davison (2006) have used ‘green’, ‘brown’ and ‘white’ descriptors to categorise the Australian environmental movement further. ‘Green’ is more dominant and representative of wilderness concerns. ‘Brown’ is associated with concerns about environmental health and NIMBY-ism (Not In My Backyard). ‘White’ has more recently emerged, with a focus on consumer preferences and moral issues such as biotechnology, and has an increasing urban emphasis (Davison 2006).

Green grassroots activism has been a prime focus of Whelan’s research and that of others such as Dhakal and Paulin (2009) and Ollis (2008). These authors’ research reveals a dynamic grassroots terrain of lifelong and circumstantial activists, consciously selecting strategies and actions with varying degrees of effectiveness. Dhakal and Paulin explored the important role social capital plays in sustaining grassroots action. Whelan and Lyons (2005) explained the strategies of the environmental movement to achieve enhanced environmental outcomes by larger NGOs working with grassroots groups and the strategic opting out of governmental participatory processes to apply more effective pressure for change. In addition, La Rocca (2004) focused on green grassroots activists’ motivations, including a sense of responsibility, as well as the barriers to grassroots activists’ experience, such as time pressures and feelings of alienation from others not involved in activism. Whelan (2002, 2003) has focused on academic activism and is currently the director of The Change Agency that works with sections of the Australian climate movement and has produced reports such as Building the Climate Movement Online. This report and other documents produced by The Change Agency were important in my initial exploratory research as they provided introductory insights into the strategies and tools deployed by various grassroots climate actors.

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20 The moral dimensions related to concerns over biotechnology depict genetic manipulation as ‘ecologically dangerous because it distorts ‘natural processes’, instrumentalises life and therefore, challenges our core ethical principles, including the sanctity of life’ (Pakulski and Tranter 2004: 230). Further, the authors state that at the core of these concerns are ‘broader moral implications for “humanity”’ and “life”, and general concerns about “interference with nature” (Pakulski and Tranter 2004: 230).

The climate movement took longer to emerge in Australia than in other countries and the grassroots layer did not emerge in earnest until the mid–2000s (Baer 2010). Early research by Bulkeley (2000b) and Hall and Taplin (2006) identified several of the key actors advocating climate action. Bulkeley’s research on discourse coalitions in Australian climate policy identified climate action actors such as the Australian Conservation Foundation (ACF), Greenpeace Australia and Rising Tide, a New South Wales based initiative that was the only grassroots climate actor included. Hall and Taplins’ research focused on the effectiveness of Australian NGOs’ climate campaign strategies. ENGOs included were national and international, for instance, the ACF and the Worldwide Fund for Nature (WWF), and one grassroots initiative — Rising Tide. Since publishing their 2006 paper, Hall and Taplin, in conjunction with other authors, have sustained a focus on the political effectiveness of the climate movement,22 whilst Hall’s (2008) doctoral thesis explored the climate change campaigns of Australian ENGOs. These initial works identified key actors in the Australian climate movement; more recently, however, the works of Diesendorf (2009) and Baer (2010) have presented a comprehensive description of all the actors involved up to the late 2000s.

Diesendorf (2009) provides an exhaustive list of Australian climate change actors, and Baer (2010) outlines a useful categorisation. Diesendorf advocates a strong ecological modernisation approach that gives practical and strategic advice for the building of climate action in Australia. His book’s title, *Climate Action: A Campaign Manual for Greenhouse Solutions*, demonstrates his intent. The approach is to pressure the government to implement a broad sweep of mechanisms that begin with simpler objectives, such as the establishment of renewable energy projects. Once these easier objectives are implemented more difficult objectives would be advanced, such as tackling population growth and moving to a steady-state economy. It is a proposition reflective of Beck’s (1997) contention that ecological modernisation, through the inclusion of ecological concerns into decision-making, enables new (greener) ways of thinking and possibilities to emerge. Diesendorf’s contribution here is his comprehensive attempt to identify the spectrum of actors seeking action on climate change. He divides these actors into 12 categories, as shown in Table 1.

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Table 1: Diesendorf’s (2009) Categories of Australian Climate Actors

<table>
<thead>
<tr>
<th>Category</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>International, national and state generalist NGOs and climate campaigns</td>
<td>Friends of the Earth, Greenpeace</td>
</tr>
<tr>
<td></td>
<td>Australian Conservation Foundation</td>
</tr>
<tr>
<td>Climate action groups</td>
<td>Rising Tide</td>
</tr>
<tr>
<td>Business alliances and business-NGO alliances</td>
<td>Australian Business Roundtable on Climate Change</td>
</tr>
<tr>
<td>Networks</td>
<td>Australian Student Environment Network</td>
</tr>
<tr>
<td>Trade unions with concern about climate action</td>
<td>Australian Council of Trade Unions</td>
</tr>
<tr>
<td>Professional organisations</td>
<td>Environment Institute of Australia and New Zealand</td>
</tr>
<tr>
<td>Faith groups</td>
<td>Australian Religious Response to Climate Change</td>
</tr>
<tr>
<td>Students</td>
<td>Australian Student Environment Network</td>
</tr>
<tr>
<td>Local government</td>
<td>Central Victoria Greenhouse Alliance</td>
</tr>
<tr>
<td>Academic / research</td>
<td>Institute of Environmental Studies, University of New South Wales</td>
</tr>
<tr>
<td>‘Left’ discussion groups</td>
<td>Politics in the Pub</td>
</tr>
<tr>
<td>Individuals</td>
<td></td>
</tr>
</tbody>
</table>

(Sourced from Diesendorf 2009: 160–161)

Baer (2010) cites Diesendorf’s (2009) classification system but simplifies the system into three layers divided according to the actors’ ability to create action on climate change by gaining access and influencing power holders and the media. These divisions translate into whether actors have the capacity to act from ‘above’, in the ‘middle’ or from ‘below’ society. Those acting from ‘above’ in the Australian climate movement are considered to be the large NGOs focused on climate action. These organisations have paid staff and engage lobbyists with access to power. This ‘above’ layer is composed of The Climate Institute, ACF, the Australian Council of Trade Unions and the Australian Coalition of Social Services (Baer 2010: 4). The ‘middle’ layer is described as civil society organisations that can apply political pressure and get the attention of the media. Within this layer are the Australian Greens; peak ENGOs such as Greenpeace, Friends of the Earth, the Wilderness Society, Climate Action Network Australia (CANA), state-based nature conservation societies and individual public intellectuals (Baer 2010: 5). The final layer is the ‘below’; this layer
consists of all the grassroots level actions and actors that go on below the radar of mainstream media. This ‘below’ layer is described as ‘numerous local climate action groups (CAGs), a still emerging national climate action network, two regional climate action groups, various socialist groups, and student environmental collectives’ (Baer 2010: 8).

The strength of Baer’s (2010) approach is the neat demarcation of the climate movement into several distinct layers. Moreover, Baer describes some of the activities being undertaken in the ‘below layer’, including conferences, rallies, climate camps and lobbying politicians and business people. Baer has a more radical green perspective23 than Diesendorf and is critical of what he contends is the whole climate movement’s predominantly ecological modernisation approach. Within the ‘below’ layer of climate actors, Baer describes the dominance of the ecological modernisation approach as evident in their actions of lobbying government and business for a societal shift to renewable energy sources as well as energy efficiency and public transport. Baer (2010: 8), however, detects a difference within the below layer, in a ‘much smaller democratic eco-socialist wing’, who are described as more expansive in their demands for transitional reforms, such as ‘public ownership of utilities, the expansion of public mass transportation, minimisation of car use, renewable energy sources, and redistributive mechanisms’. Baer (2010: 15) conducts a comparison with other minority and majority world countries’ climate movements to conclude that the main weakness of the grassroots layer of the Australian climate movement is:

[T]he muted critique of global capitalism and emphasis on social justice issues. This is quite in contrast with various other climate action groups around the world, particularly in developing countries, many of which might be more aptly termed ‘climate justice groups’ rather than simple ‘climate action groups’.

A limitation of Baer’s work is the size and scope of the climate actors under consideration and the practices they are advocating and/or undertaking. First, the focus of Baer’s work is predominantly on those grassroots actors seeking climate action through petitioning the state. This focus omits those actors who do not take direct state-centric political action, but may engage in more localised and personal forms of climate action. An additional limitation is the reliance on communiqués from

23 This perspective is further evident in Burgmann and Baer’s (2012) advocated eco-socialist agenda.
Climate Action Summits as the main supporting data sources. These communiqués are summations of desired actions compiled in a few pages and only partially reflective of the totality of grassroots practices being advocated and/or undertaken. Finally, recent commentaries differ as to the correctness of inclusion of social justice concerns in grassroots climate action. These commentaries are critical of the upper layers of the climate movement, but state that social justice concerns are or can be legitimately included within the grassroots layer of the climate movement (see Creenaune 2011, Pearse 2011). This last point indicates that climate action may be more inclusive of justice concerns in its framing of responses to climate change.

Diesendorf’s (2009) and Baer’s (2010) identification of the actors involved in the Australian climate movement has assisted an initial conceptualisation of the actors at the grassroots level as well as additional actors, such as state-based NGOs, that interact with grassroots actors. Furthermore, these two works drew my attention to some of the emerging critiques and proposed directions for climate action. The following section concentrates on the literature focused specifically on the identities of grassroots climate actors. Australian and international research has been integrated to conceptualise the scope of grassroots climate actors for inclusion in this thesis.

### 2.3.1 Grassroots Climate Actors

The Transition Towns Movement is one set of grassroots actors that has been omitted from the literature thus far cited. Ambrosii (2010) is one of the first authors to discuss transition towns and climate action group actors together. Much of the literature has tended to cluster and separate Transition Towns from climate action groups. Transition town groups are described as ‘decentralized local groups ... nearly always established by individual volunteer activists, and generally comprise a core of volunteers who meet regularly, and seek to engage and mobilize public action around carbon-reduction through awareness-raising and practical initiatives’ (Seyfang et al. 2010: 12). They are similar to climate action groups, which Hall et al. (2009: 72) define as ‘independent groups based in Australian local communities, formed by local citizens voluntarily taking action in response to their concern about climate change’. There are differences between transition towns and climate action groups, which will
be discussed in coming sections; nevertheless, both are citizen-instigated grassroots assemblages seeking to respond to climate change. Furthermore, both Transition Towns initiatives and climate action groups form larger networks. The Transition Towns Movement, however, is more formalised, with individual initiatives having ‘official’ and ‘muller’ status and global links as they are ‘connected through an international Transition Network’ (Seyfang et al. 2010: 12).24

Exploring climate action in the United Kingdom, North (2011) compiles an extensive list of grassroots climate actors, including the aforementioned Transition Towns and climate action groups as well as additional actors. These additional actors include those who use ‘excessively individualistic’ approaches that contain ‘prefigurative practices of low-carbon lifestyles’, for instance, carbon reduction action groups (North 2011: 1582). Others included are actors who use the ‘outward-focused activism’ of networks, climate camps and some dramatic direct action groups such as ‘plane stupid’25 who prefer to ‘work with known, experienced activists’ (North 2011: 1582). Connors and McDonald (2011: 2) also write on Transition Towns Movements; they take a broader view by including them in the set of ‘micro-level’ responses to the challenges of climate change, peak oil and general sustainability concerns. This micro-level is described as consisting of a spectrum of responses ‘from survivalists, who argue that it will be everyone for themselves when the time comes, to advocates for various technological fixes and single-issue groups advocating more recycling, more efficient water use or bicycle paths as means of achieving a more sustainable future’ (Connors and McDonald 2011: 2). These papers contribute to conceptualising an array of grassroots climate actors not previously considered.

An additional stream of research addresses individual climate actors (activists and the assemblages they form) and their practices. The practices will be addressed shortly. It

24 The Transition Network grants ‘official’ status after a Transition Town initiative submits responses to set criteria on their readiness and commitment to the Transition Towns approach. To become officially recognised, people considering starting a transition initiative are asked to contemplate 15 criteria centred on certain topics, including a commitment to inclusiveness, transparency, and an understanding about the issues of peak oil and climate change. Groups then submit written responses to the Transition Network (Hopkins 2008). ‘Muller’ status is for those initiatives that are interested in being a transition town but have not yet gone through the official process. The Transition Network supports initiatives and offers training to the movement. For additional information see Hopkins (2008) and the Transition Network (2012).

25 ‘Plane stupid’ is self-described as ‘a network of grassroots groups that take non-violent direct action against aviation expansion’. For additional information see http://www.planestupid.com/
is first important to highlight the individual actors who have been the subject of research, and thereby complete the account of grassroots climate actors in Australia and illustrate the gap in the literature. The research has centred on the outwardly politically active wing of individual Australian grassroots climate activists. For instance, Goodman (2009) as well as Pearse et al. (2010) conducted research on attendees at the climate camps. In addition, Hall et al. (2009: 74) undertook participant action research as part of Climate Action Coogee, a climate action group based in Coogee, New South Wales. Pittaway (2008) focused on the emergence and potential political effectiveness of five climate action groups, again in New South Wales. This stream of research has similarities to Baer’s (2010) and Diesendorf’s (2009) work, as the focus was predominantly on the political wing of the grassroots climate movement. By focusing on direct politically oriented activities, these authors omit the everyday practices and activists unable to attend direct political action or uncomfortable with confrontation. As North (2011: 1593) states, ‘the many people who are otherwise committed to low-carbon life-styles will be put off from participating in an action that might involve significant levels of police harassment or even violence’. These everyday activists and practices are what Eckersley (1987: 19) described as ‘homo communitas’: ‘the active responsible person-in-community’. The current literature limits our understanding of these everyday activists and practices.

From the review, it is clear that there have been many different attempts to categorise and describe the grassroots climate actors and, more broadly, the climate movement. A similarity throughout many of the works is that activists and the assemblages they form are motivated by concern for climate change but often in tandem with concern for other issues. Thus far, an understanding of some of the practices being undertaken is emerging. The array of practices identified in the literature span the personal, the prefigurative and the political. North (2011: 1595) finds that ‘the same activist who engages in clandestine direct action might well also take part in en masse demonstrations, subscribe to a number of e-mail lists, and participate in a local transition initiative’. The next section reviews what is known about grassroots climate action practices, in addition to the literature on the broader suite of innovative practices employed to redress climate risk.
2.4 Grassroots Sustainability Innovation

This section of the literature review weaves together Seyfang’s (2009b) work on grassroots sustainability innovation with current literature on advocated practices to address climate risk. This is undertaken to establish an understanding of the features of innovative climate practices. First, Seyfang’s work is introduced, followed by the literature on the overall framing of climate change down to the scale of individual practices to address climate change. The final part of this review examines what is known about grassroots climate practices, in Australia and internationally. Overall, while there have been general statements on the potential of grassroots climate practices, for example by Giddens (2009), Adger et al. (2009), Moloney et al. (2010) and Pearse (2011), there has not been any deep, sustained attention on practices being advocated or undertaken by the grassroots climate movement. Hence, there is an opportunity to develop an understanding of these grassroots climate practices, as well as to explore these for innovations for climate action.

Seyfang has an academic interest in grassroots practices and claims that the grassroots sphere is a ‘neglected site of innovation’ (Seyfang 2009b: 183, also see, Seyfang and Smith 2007). Seyfang and Smith (2007: 585) describe ‘grassroots innovations’ as ‘innovative networks of activists and organisations that lead bottom-up solutions for sustainable development’. Grassroots innovations for sustainability are positioned as different from top-down governmental and business innovation, as grassroots innovations are responsive to the whole gamut of sustainability concerns — social, technological, economic, ecological, and individual values and needs (Seyfang and Smith 2007: 585). A prime example given by Seyfang and Smith is the social and environmental differences between organic food supplied by Community-Supported Agriculture schemes and supermarket organic products. In this instance, supermarket

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26 It is important to note that the literature reviewed on grassroots climate action practices includes Australian and international research (drawn on to complement the limited Australian research). A proportion of this research concentrates on the Transition Towns Movement, as the movement has spurred a research interest due to its rapid proliferation and the ‘newness’ of the approach. Nevertheless, it is important to note that this ‘newness’ is not generally accepted. Mason and Whithead (2011: 4–6) find the Transition Towns Movement to be a ‘novel weaving together of various past approaches’ and that ‘the movement has woven together various strands of science, environmental design, psychology, and localisation traditions’. North (2011) also presents the Transition Towns Movement as a continuation in the experimentation with localisation traditions. Therefore broad points from the Transition Towns Movement literature provide insights that are applicable to other grassroots climate actors advocating similar themes such as localising, community-building and individual behaviour change.
organic products have the environmental benefits of better soil management practices and restrictions on the use of herbicides and/or pesticides. In contrast, the organically produced food from Community-Supported Agriculture schemes offers these environmental benefits alongside social benefits of supporting small-scale farmers and, in turn, economic benefits of supporting local communities. Seyfang’s (2005, 2006a, 2006b) past work has concentrated on sustainable consumption practices, ecological citizenship, and alternative economic models, such as Local Economic Trading Systems (LETS) and time banks. Haxeltine and Smith have collaborated with Seyfang intermittently on research into grassroots innovations and the means to diffuse these innovations into the mainstream (see, for example, Seyfang and Smith 2007, Seyfang et al. 2010, Haxeltine and Seyfang 2009).

Seyfang (2009b) has outlined an alternative consumption framework to assess innovative grassroots practices based on five criteria of sustainable consumption practices. These criteria provide a basis for understanding the forms innovative grassroots practices could take. In addition, as it will be demonstrated, these criteria and practices align with many advocated practices to address climate risk in the academic literature. The first of Seyfang’s criteria is ‘localising’. Localising includes practices that shorten supply chains, and campaigns to support local businesses and buy local products, with the intention of establishing local economies. The second criterion is the reduction of the ecological footprint and includes practices that reduce resource use (via green production and reduced consumption), as well as actions such as voluntary simplicity. The third and fourth criteria are community-building and collective action. These practices include valuing a range of community activities, building more cohesive communities, and enabling people to have greater participation and decision-making in everyday affairs and the community. The last criterion concerns the physical environment and centres on building new (green) infrastructure, for instance, public transportation and co-housing.

Seyfang (2009b: 7) targets societal consumption rather than production as the measure to a sustainable society, due to the capacity of consumption habits to reveal ‘much about inequality and inequity which a more traditional production-focused approach would neglect’. As well, a consumption approach examines ‘the lifestyles, habits, aspirations and routines of individual citizens and households — an area of life normally considered outside the sphere of regulatory attention’ and ‘going straight to the heart of modern lifestyles, a consumption focus demands that we examine our most mundane decisions and routines for their impacts and implications, and that we question the economic, cultural and social basis of 21st century consumer societies’ (Seyfang 2009b: 7).
Underpinning Seyfang’s (2009b) criteria is the regime-changing model of the New Economics of sustainable consumption presented in Table 2. Table 2 highlights key differences between the New Economics and mainstream models of sustainable consumption, and demonstrates the collective focus of sustainable consumption, with examples of practices in the bottom row.

**Table 2: Comparison of Mainstream and New Economic models of sustainable consumption**

<table>
<thead>
<tr>
<th>Mainstream Sustainable Consumption</th>
<th>New Economics Sustainable Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>System-wide changes in infrastructures of provision to reduce absolute consumption levels by ‘consuming less’</td>
</tr>
<tr>
<td>Incremental improvements in resource efficiency; continual economic growth through ‘consuming differently’</td>
<td></td>
</tr>
<tr>
<td><strong>Mechanism</strong></td>
<td>Collective action reshapes socio-technical infrastructures of provision, creating new systems and non-market alternatives where necessary</td>
</tr>
<tr>
<td>Sustainable consumers send market signals for sustainably produced goods and services, which drives innovation and improvement</td>
<td></td>
</tr>
<tr>
<td><strong>Consumers</strong></td>
<td>Ecological citizens within communities of place, practice and interest</td>
</tr>
<tr>
<td>Individual green consumers</td>
<td></td>
</tr>
<tr>
<td><strong>Progress measured by</strong></td>
<td>New measures of sustainable wellbeing; consumption not necessarily related to wellbeing</td>
</tr>
<tr>
<td>Traditional measures of economic growth; consumption as a proxy for utility (happiness)</td>
<td></td>
</tr>
<tr>
<td><strong>Theories of consumption</strong></td>
<td>Utilitarian social/psychological Infrastructures of provision</td>
</tr>
<tr>
<td>Utilitarian social/psychological</td>
<td></td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>Local provisioning e.g. farmers’ markets; mutual aid e.g. LETS; self-reliance e.g. low impact development</td>
</tr>
<tr>
<td>Green and ethical consumerism; corporate greening of global capitalism; social marketing</td>
<td></td>
</tr>
</tbody>
</table>

(Sourced from Seyfang 2009b: 21)

Using the New Economic model and the five criteria, Seyfang evaluates three grassroots practices of local organic food networks, sustainable housing initiatives, and alternative economic systems; the findings indicate the potential for each to contribute to a more sustainable society.
2.4.1 Climate Practices

The types of practices, that could contribute to a more sustainable society, and more specifically redress climate change, has become an increasingly wide-ranging field. Moving from the work of Seyfang, the review turns to the concept of framing, which is one dimension of the sustainability field that is receiving increased attention. This is because of the need to reframe and/or attempt to create new frames to enable the fundamental changes required to address climate change and other ecological issues (Lakoff 2010, WWF UK 2010). Studies have used discourse as a lens through which to view the framing, interpreting and addressing of climate change. Discourses are important, since how an issue is framed determines its management options (Dryzek 2005, Hajer 1995). Grist (2008) cites the importance of situating the management option considered to respond to climate change within green discourses. The author situates macro-scale — national and international — practices that could be adopted to manage climate change in a spectrum of green discourses.28 Grist’s findings reveal the incompatibility of certain practices, the normative positions underpinning the choices and the potential of some choices to limit future alternatives.29

Lakoff (2010) has focused on the internal frames and values required to manage ecological problems in terms of speed and on the large scale required. According to Lakoff, past approaches to redress ecological issues, such as providing information to motivate change, have been unsuccessful as they have not accounted for how people think, which is through pre-existing frames. The problem for ecological and climate change action is that the frames required for action, in a large majority of people, are absent. The first frame that needs to be cultivated is the idea that people are embedded within the environment, not separate from and immune to environmental degradation. The second frame refers to the fact that economic and ecological crises have the same root causes and, in turn, require a joint response. The third and fourth frames relate to the advancement of an economics of wellbeing rather than abstract economic growth, and the idea of a regulated commons of non-transferable ownership to everyone, for instance, clean air and water (Lakoff 2010: 76–78).

28 The initiatives considered by Grist include: carbon markets, green consumption, climate campaigning, global limits for emissions, voluntary carbon offsets, adaptation, bio-centric views and the ‘no-growth’ economy.

29 For example Grist highlighted the incompatibility of unregulated market approaches of voluntary offsets with bio-centric notions of reducing consumption and voluntary simplicity.
Influenced by the work of Lakoff, the WWF UK (2010) released a paper concerned with creating new ‘deep’ frames and values to address social justice and ecological issues at the scale of these challenges. The frames and values they cite as most important are those that shift ‘self-interest’ to ‘common interest’, ‘strict father’ to ‘nurturant parent’, and ‘elite governance’ to ‘participative democracy’. The shift towards these frames and values is intended to create greater citizen engagement, responsibility, and concern for the commons and social justice. The WWF UK clearly believes that the values that need to be enhanced are intrinsic values, such as a sense of community and interpersonal connections, while extrinsic values concerned with power and material wealth need to be de-emphasised. The argument presented is that if these values and deep frames are promoted and worked with, then the necessary changes will begin to emerge. Theorists such as Fransson and Gärling (1999), Dobson (2003), Nilsson et al. (2004) and Carter (2007) all suggest that the cultivation of more eco-centric perspectives is required to facilitate action on the scale needed to respond to climate change and other ecological issues. Carter states that there is a consensus about the need for active ecological citizenship. The consensus is driven by the recognition that the transition to a sustainable society requires more than institutional restructuring; it also needs a transformation in the beliefs, attitudes and behaviour of individuals (Carter 2007).

It is also contended that climate change needs to be framed as more than an environmental issue to broaden the spectrum of actors included in redressing climate risk (Bührs 2008, Hale 2010). The capacity to build these broader frames and linkages to other issues was recently demonstrated by Bambrick et al. (2011), who list the potential for ‘co-benefits’ from climate action in different policy areas such as transport and health. For instance, climate change mitigation policy pursued through the promotion of active transport options has the ‘co-benefits of increasing local air quality by reducing air pollution, as well as positive health impacts by reducing the disease burden and obesity’ (Bambrick et al. 2011: 74S). Climate action pursued via the lens of sustainability development has been advocated as a way to ensure these

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30 Ecological citizenship redefines citizenship as no longer territorial to a nation-state but premised on a citizen’s individual ecological footprint. Citizens have a duty and responsibility to ensure their ecological footprint is sustainable. This model of citizenship is, therefore, inclusive of personal and political actions, as well as concerns for justice and redistribution (Dobson 2003).
benefits (Bühr 2008, IPCC 2007c). Bühr examined New Zealand climate policy and found it too narrowly defined on issues of energy and transportation, which limited options for GHG emissions reductions. Bührs’ proposal, therefore, was that a sustainable development approach could open additional policy avenues in areas of consumption, production and social equity. The IPCC (2007c) has long recommended a holistic focus to redressing climate change through sustainable development, which is perceived as having the ability to reduce GHG emissions in tandem with attending to multiple ecological and social concerns.

Slocum (2004b) has demonstrated the failure to appropriately frame climate change through the symbolic use of light bulbs (Cities for Climate Protection Program, CCP™) and polar bears (ENGOs). The symbol of light bulbs, Slocum argues, framed climate action in a cost-effective, energy-efficient techno-economic discourse akin to a weak ecological modernisation approach, the result of which was to position citizens as mere consumers, with no rallying point to build momentum for additional climate action. In addition, there was no recourse for governments to proceed further once low cost actions had been pursued. The symbol of polar bears was also problematic, for while it had emotive cachet, it lacked the spatial sense and temporal immediacy required to motivate people to take climate action (Slocum 2004b). Oels (2005) found, on the international scale, that climate governance had also been framed in weak ecological modernisation terms and would be unable to deliver the GHG emission reductions required. Furthermore, the framing of climate change as a purely environmental concern has been detrimental (Hale 2010). Hale contends that the environmental frame had limited effect, and that climate change needs to be framed in broader terms, for instance, as a health and social justice issue, to build momentum for action:

We will only succeed in this if we tap into a broad range of motives for action. The environment has been the motivating concern for much public action on climate change, but this is not just an environmental issue. To succeed, we must establish a

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31 Cities for Climate Protection (CCP™) is a program under the umbrella of the International Council for Local Environmental Initiatives (ICLEI). The objective of the program is to work worldwide with local governments on issues of climate action mitigation, adaptation and, more recently, advocacy. Many local governments in Australia are involved in CCP™; however, evaluations of its progress are not glowing (see Burton 2007).
widespread understanding of the connections between climate change and issues of poverty, housing, health, security and wellbeing that are of concern to so many.

In the literature, people actively concerned about climate issues are positioned to play at least two important roles. The first is to mobilise for policy changes; the second is to enact personal lifestyle changes consistent with the requirements to manage climate risk (Hamilton 2006, Kent 2009, Moser 2009, Pearse 2007). The requirement to change everyday lifestyle practices to combat climate change is increasingly acknowledged. An example is the modelling that was undertaken for the Japanese prefecture of Shiga to determine how to reduce GHG emissions by 70 percent by 2050 (Shimada et al. 2007). It revealed that changes to greener technology alone would not achieve the reduction, and that lifestyle changes must be part of the solution. The interlinking of personal lifestyle change with socio-political transformation is a recurring theme due to the size of the emission reductions required. To engage people on climate matters, Moser (2006, 2007, 2010) and Moser and Dilling (2004, 2007) have written extensively on communicating about climate change and reducing barriers for people to engage in climate action.

Moser’s (2010) synthesis of a decade of research outlines what motivates and sustains people to engage with climate change issues. Effective communication about climate change requires messages that transmit more than facts and data or purely emotive appeals; they must incorporate narratives and values, and some hope for the future. In addition, Moser contends that there is a need to frame messages that contain a sense of urgency to act, as well as a close spatial proximity of climate change causes, impacts and actions. Equally important is the mode of delivery when communicating climate change messages: they need to be in a supportive setting and sustained over time. Ideal settings are small interactive forums where people can construct knowledge and capacity to take action. These features of the message and its delivery proposed by Moser are similar to those enunciated by Lakoff (2010). Lakoff outlines the features required to cultivate the new frames of a long-term strategy that speaks to people’s values, using narratives and audience-specific messaging.

The interpersonal practices of creating a supportive setting to communicate climate

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change have a longer term and broader function that plays a role in facilitating social learning as well as the increase of social capital and community cohesiveness. These features are considered important for building mitigative and adaptive capacity.\textsuperscript{33} The earlier work of Tompkin and Adger (2005) highlighted the prominent role of social capital in building adaptive capacity. Newman and Dale (2005) critiqued the use of the concept of social capital in Tompkin and Adgers’ work, arguing that social capital comprises ‘bridging’ and ‘bonding’ ties that need to be present in a dynamic interplay; too many ‘bonding’ ties can result in insular social systems adverse to change. From this, Newman and Dale posited an enhanced understanding of the form of social capital — a dynamic balance of social ties — that would enable management of climate risk. The benefits of social networks are their capacity to facilitate the flow of information, resources, and knowledge, and enable action (Adger 2003, Gunderson 1999, Newman and Dale 2005, 2010, Walker et al. 2004). In addition, Comfort (2005) contends that non-hierarchical network configurations of individuals and organisations that engage in continuous learning are superior to hierarchical structures, which are vulnerable in uncertain environments.

The findings outlined above with respect to the need for a dynamic balance of social ties, networked relationships and supportive structures to manage climate risk have many commonalities with Seyfang’s (2009b) social sustainability criteria described in the introduction to grassroots practices in Section 2.4, such as building cohesive communities. Moreover, Seyfang’s (2009b: 161) evaluation of alternative social currencies finds that ‘projects appear to work best when members all know each other, retaining a strong social bond’. On an individual scale, the benefits of being part of a community have been identified as an increased willingness to take personal environmental action (Jackson 2005). For Kent (2009), being part of a community, in this instance the grassroots climate movement, has other benefits. Kent argues that the undertaking of solely personal climate action aligns with neo-liberal capitalist individualist discourses; what is needed is for people to engage in both personal and political action. Kent (2009: 146) sees hope in those people who:

\textsuperscript{33} Adger (2003), Tompkin and Adger (2005), Smit and Wandel (2006), Adger et al. (2009), Collins and Ison (2009). Cuthill (2003: 375) defines social capital as encompassing ‘social networks and support structures, empowerment and community participation, civic and political involvement, trust in people and social institutions, tolerance of diversity, and altruism and philanthropy’.
seek out social and institutional relationships that can expand their individual authority through collective action. There is a growing range of promising societal projects, such as the Transition Town movement...Within Australia the burgeoning of over a hundred local community climate action groups over recent years provide similar optimism that democratic responses to the climate change crisis can transcend the dominant individualism discourse.

This review now shifts to those concrete actions advocated to manage climate risk. The need for comprehensive actions to manage climate risk is a dominant theme throughout the literature. Actions required are those that bring climate change mitigation and adaption benefits together, or at least do not negatively impact on each other (Klein et al. 2005, Laukkonen et al. 2008, Wilbanks and Sathaye 2007). An example of a beneficial climate action is the creation and enhancement of green spaces in urban areas. Increased urban greening reduces atmospheric levels of GHGs and adapts to increased summer temperatures by cooling urban areas (Bambrick et al. 2011, Shaw et al. 2007). A maladaptive action would be the use of air conditioners powered by coal-fired power stations to adapt to increasing summer temperatures, making climate mitigation action more difficult.

Seyfang’s (2009b) criteria of localising and building green infrastructure align with many insights from the literature on actions advocated to manage climate risk. The actions identified by Seyfang comprise greening and localising production and consumption, in addition to reducing consumption, while living more localised lives that are supported by the building of green infrastructure. These actions reoccur within the literature as mechanisms that could significantly redress climate risk.34 These authors focus on cities and the urban form due to the opportunities they offer to manage climate risk, as well as the predicted negative impacts of climate change (Beatley et al. 2009, Bulkeley and Betsill 2005). The emphasis in the literature on urban spaces is important in Australia due to the reality of Australia’s highly urbanised demography.

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34 See Adger et al. (2009), Bambrick et al. (2011), Beatley et al. (2009), Beatley and Newman (2008), Dubbeling and de Zeeuw (2011), Peters et al. (2010), Shaw et al. (2007), Shimada et al. (2007).
2.4.2 Grassroots Climate Practices

Theorists other than Seyfang (2009b) have also identified the innovativeness of grassroots practices. There is a history of grassroots practices paying heed to broader aspects of sustainability; for example, the practice of community gardens producing food that is grown locally and is ‘often organic’, and building social and cultural connections that disseminate ecological knowledge (Stocker and Barnett 1998: 180–181). Kapoor (2007) states that micro (grassroots) initiatives are often creative and involve transformed individuals who can be key actors that aid social change. Additional studies echoing the innovation of community-based responses and the role of community members in championing change include the work of Sharp and Luckin (2006) and Davies (2007, 2009, 2012). This section concludes the chapter by reviewing the literature specifically concerned with grassroots climate actor practices.

The literature concerned with how grassroots climate actors frame and respond to climate change has produced mixed findings, and has, on occasion, been based on limited empirical evidence. The benefits of grassroots climate practices have been found by North (2011), who concludes that United Kingdom climate actors and their practices are disseminating knowledge of climate change, developing prefigurative practices of organisational forms and technologies and cultivating the emergence of a conscience of responsibility. Overall, North argues that the grassroots is a site of innovative practices. Pearse (2011) and Moser (2009) also claim that grassroots climate actions are social laboratories for alternative practices and sites of critical ideas and visions. Moreover, Giddens (2009: 5) cites the potential for ‘dramatic initiatives’ to spring from individuals and ‘the energy of civil society’ while Adger et al. (2009) and Moloney et al. (2010) both cite the adaptive and/or mitigative capacity of community-led initiatives.

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35 Prefigurative and/or prefiguration are terms that will be revisited in the next chapter due to their presence in the eco-socialist discourse, especially that of Kovel (2002). North (2011: 1594-5) summarises the positions on prefigurative climate politics to be either seen positively as ‘inspiring, grassroots insurgencies developing new ways of living, or negatively as ultraliberal, utopian, and naive political practices with an extremely overoptimistic conceptualisation of the possibility of transforming the currently unsustainable economic practices associated with contemporary global capitalism through local, citizen-based action’ or as an ‘alternative reading is that the prefigurative politics of climate change is, as Melucci (1989) argued, that of laboratories for the construction of new ways of living and avoiding unnecessary confrontations with those more powerful than themselves’. North (2011: 1595) sways towards a positive view of prefigurative climate politics due to ‘people taking responsibility and finding new ways to respond to ecological challenges’.
Ambrosii (2010) notes the benefits of local climate actors in creating new cultural narratives of a local ‘realness’ of climate change\(^\text{36}\) that gives a spatial and temporal immediacy to the problem and capacity for climate action. This ‘realness’ overcomes the despondency of people to act on an issue that is so often framed as global. Concentrating on the Australian climate movement, Pearse (2011) argues that the entire Australian climate movement needs to put greater emphasis on climate justice. Creenaune (2011) expands on this theme to advocate for the whole climate movement to take a climate justice approach premised on issues of health, water, food sovereignty and economic justice. Creenaune charts how the grassroots climate movement in the United States splintered from the larger ENGOs seeking to win gains on climate action by being more radical and inclusive of social justice concerns. Creenaune contrasts the peak layer of the climate movement in Australia to that in the United States to argue that the demands from the peak layers in both countries are very different from the demands made by the grassroots. In fact, the peak layer in Australia is described as ‘un-ambitious – even allowing new coal-fired power stations’, in contrast to grassroots actors such as Climate Action Newtown that initiated the 100% renewable energy campaign (Creenaune 2011: 10).

Goodman (2010) is more critical of Australian climate movement than Pearse (2011) and Creenaune (2011), presenting a critique similar to Baer’s (2010). Using the outcomes of the 2009 Climate Action Summit, Goodman illustrates the broader shortcomings of the Australian grassroots climate movement, and is particularly critical of technological and economic actions that do not address the root causes of climate change: unlimited growth and over-consumption. Goodman proceeds to argue that advocating techno-economic measures stifles debate and that the debate could be revived if social theories of environmental change are drawn upon. The social theories Goodman cites are Harvey’s (1996) three distinctions: ecological modernization, eco-sufficiency and eco-socialism. Ecological modernization is characterised by growth and capitalism with techno-scientific optimism, while eco-sufficiency is characterised

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\(^{36}\) Ambrosii (2010) uses the term ‘realness’ to articulate the way that grassroots climate actors present climate change as occurring (real), and also provide the issue with a framing of local consequences, causes and solutions. Ambrosii positions grassroots actors’ ‘realness’ as different from the dominant framing of climate change. The dominant framing is that climate change is being debated at a global scale, hence the consequences and solutions are global and, subsequently, action is inconsequential on reduced scales.
by austere and ecological limits. Finally, eco-socialism or socialist eco-feminism seeks to re-embed society within nature and holds out the possibility of new types of societies characterised by more ecologically and socially harmonious relations. Goodman’s critique aligns with Baer’s contention that the grassroots climate movement predominantly advocates an ecological modernisation approach, which Baer considers limited in redressing the climate crisis. Baer also agrees with Goodman that capitalism is the root cause of climate change and needs to be directly addressed by the climate movement.

Pittaway (2008) examined the potential political effectiveness of five Climate Action Groups in New South Wales. Similarly to Goodman (2010) and Baer (2010), Pittaway concludes that the dominant climate action framing was an ecological modernisation approach. Unlike them, however, Pittaway takes a reflective stance by discussing the advantages and disadvantages of using various green discourses. Part of the discussion reflects on the strategic use of different green discourses by the five Climate Action Groups depending upon the objective and/or context. Pittaway’s stance towards the specific use of ecological modernisation, while considering the risks, also highlights the benefits of the ecological modernisation discourse as a strategic tool. The prime strategic benefit of the ecological modernisation discourse identified by Pittaway is that it builds on the existing foundations of a majority of people’s existing values and beliefs, therefore it could be extended to include more challenging changes. This is a similar contention to that proposed by Moyer (2001) and Diesendorf (2009). It should be noted that Pittaway’s study was small and included only five grassroots climate actors; it covered a small sample of the green discourses in circulation and therefore only a subset of the associated practices.

Another source of critiques of the way grassroots climate actors have been framing climate change has principally been directed towards the Transition Towns Movement. The first comprehensive critique of the Transition Towns Movement, and the most cited, is by Chatterton and Cutler (2008) for Trapese.37 The critique focuses on the United Kingdom’s Transition Towns Movement; the crux of the critique was

37 Trapese is a United Kingdom-based group concerned with social change, self-described as ‘TRAPESE stands for “Taking Radical Action through Popular Education and Sustainable Everything!”’ Trapese activities include producing and disseminating information, as well as offering training and workshops.
that the actions being undertaken and promoted by the movement do not challenge the root causes of unsustainability within the dominant societal power structures, identified as ‘free-market capitalism and ceaseless economic growth’ (Chatterton and Cutler 2008: 9). This is reminiscent of Baer’s (2010) and Goodman’s (2010) critiques of the climate movement not acknowledging capitalism as the root cause of climate change. Chatterton and Cutler (2008: 10) argue that, regardless of the actions taken, ultimately the Transition Towns Movement will fail as ‘only when the rules of the game are changed can carbon dioxide concentrations and all the associated problems be truly tackled’. An Australian critique by Trainer (2009) reinforces the call for the Transition Towns Movement to engage with the global struggle away from capitalist society.

The Transition Towns Movement’s founder Rob Hopkins (2008) advocates an apolitical approach as a means to attract broad public engagement. Chatterton and Cutler (2008: 24) counter with the question ‘if everyone can agree ... then what exactly is going to change, and how is it different to what went before?’ Their argument is that the Transition Towns Movement needs to recognise and challenge power so it then can ‘become a political force for change’ (Chatterton and Cutler 2008: 34). A similar concern has been raised by Mason and Whithead (2011: 23) — that the ‘commitment of inclusion towards a potentially unlimited local constituency of groups often makes it difficult to develop the oppositional energy that is actually needed to change the nature of a place’. In contrast, however, Connors and McDonald (2011: 3) state that the Transition Towns Movement is political as ‘challenge to an existing system is inherently political if it advocates a shift in the discourses of power within communities and society and between individuals’. North (2011: 1589) also supports the view that the Transition Towns Movement is political, asserting that ‘the small-scale, convivial, localist vision of transition initiatives is an inherently political vision’.

In the Transition Towns Movement, the individual activists’ practices of values and interpersonal interactions have been the focus of international research by Kenis and Mathijs (2009). Kenis and Mathijs’ qualitative research concentrates on the role of activists, termed ‘ordinary people’, in a transition towns group in Flanders, Belgium. Data from documentary sources, participant observations and in-depth interviews
indicated that the success of the movement in attracting members was based on the way people were addressed as subjects of change rather than objects to be changed. Furthermore, Kenis and Mathijs found that the Transition Towns framework enabled the participants to express and be supported in their vision of ecological citizenship with corresponding ecological values cultivated and taken seriously. An additional finding was evident in relation to social learning as participants learnt to effect community-scale change. Similarly, the study by Seyfang et al. (2010) of the United Kingdom Transition Towns Movement found that the movement enabled ‘second-order’ learning in participants for sustainability behaviour change.38

Research on social learning in the grassroots climate movement in Australia has been limited. Social learning was the focus of Hall et al.’s (2009) exploration of the grassroots climate initiative, Climate Action Coogee, in New South Wales. For over ten months, Hall was an active participant in Climate Action Coogee as they attempted to have a Federal Climate Action Bill put forward by their member of parliament and implemented (an action very similar to one that was successful in the United Kingdom). Hall initiated the Climate Action Bill with Climate Action Coogee in a participatory action research project designed to create double-loop learning — a form of learning that empowers individuals to reflect on their actions and adjust thinking and behaviours accordingly. The findings demonstrate that networks of climate action groups had exhibited a willingness to work together, share information and learn from one another, despite not achieving their primary objective of a Federal Climate Action Bill.

The networked interpersonal practices found by Hall et al. (2009) have been identified in other research on grassroots climate actors. Seyfang et al.’s (2010) research found that the United Kingdom Transition Towns Movement was cultivating strong bonding ties but only limited bridging ties. Strong bonding ties were evident as the movement was described as ‘very well networked internally’ (Seyfang et al. 2010: 13). The

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38 The model of ‘first-order’ and ‘second-order’ learning used by Seyfang et al. (2010) originates in the work of Shove and Southerton (2000). Seyfang et al. (2010: 13) describe the learning benefits from the Transition Movement as follows: ‘First-order learning might entail choosing more energy-efficient appliances such as fridges, what we see within the Transition Towns Movement is a tendency for people to question the need for those appliances in the first place, and to experiment with ways to live within modern society without fridges and freezers, items often considered “essential”’.
Transition Network was facilitating bonding ties by disseminating information and providing training and practical support to individual transition initiatives. Nevertheless, Seyfang et al. (2010: 13) found it lacked bridging ties in the form of ‘effective external networking’ with a ‘variety of stakeholders in society’ outside the movement.

Literature on individual practices that the grassroots climate movement has been undertaking and/or advocating is limited. Edmonds (2010), seeking to explore the knowledge versus behaviour gap, examined a collection of grassroots actors and practices. The author argued that even small change in everyday practices can create differences that flow on to creating more sustainable lifestyles. Edmonds asserted that group sharing programs, such as Go Get Car and Rentoid, spread notions of collective ownership over private ownership. The spreading of these alternative notions relate to the work of WWK UK (2010) and Lakoff (2010) on the values and frames required for ecological action, as well as the forms of community building practices Seyfang (2009b) has outlined. As well, Edmonds claimed that initiatives such as transition towns, permablitz, and guerrilla gardeners not only demonstrate more ecologically sustainable relations but also build social sustainability via the creation of trust and social capital. Along similar lines, McGrail (2011: 130), using a future studies perspective, lists some emerging ‘exemplar experiments and new practices’ in the climate change field, including the Zero Carbon Australia plan, but does not critique it in any detail.

39 The role of the Transition Network was a point of critique for Connors and McDonald (2011). Connors and McDonald studied the ‘first’ transition initiative, Transition Towns Totnes, through the discourses of community development and new environmentalism. Viewing the Transition Towns Movement through this framework, Connors and McDonald found a disjunction between creating autonomous community-led initiatives and what they term the Transition Towns ‘manifesto’. The ‘manifesto’ is a prescriptive primer written by the ‘founder’ of the Transition Towns concept, Rob Hopkins, on how to become an ‘official’ transition town. Furthermore, the organisational practices of the Transition Towns Movement were characterised as ‘quite rigid, top-down’ and as having ‘an inherently undemocratic management structure’ (Connors and McDonald 2011: 10).

40 Permablitzs will be discussed in greater detail in Chapter Five and Chapter Six, as the permablitz concept originated in Victoria in 2006. Briefly, a permablitz involves volunteers turning a garden into an edible landscape premised on permaculture principles. Guerrilla gardening is the planting of edible or beautifying plants in unused public, or sometime private land as a demonstration of the food growing potential of these spaces or as protests or, simply, to beautify the space.

41 The Zero Carbon Australia project consists of six transitions plans covering the six sectors of energy, buildings, transport, land use, industrial processes and coal exports. Zero Carbon Australia 2020 is an initiative of Beyond Zero Emissions and the University of Melbourne's Energy Research Institute and is supported by the Climate Emergency Network, Climate Positive and donations from the general public (Beyond Zero Emissions website 2011).
The Transition Towns Movement’s practice of relocalising production and consumption has received more attention than the other practices emerging out of the grassroots climate action mentioned thus far. James (2009) critiques the form of relocalisation advocated by the Transition Towns Movement as lacking safeguards, therefore perpetuating a space for local and global injustices to continue. Mason and Whithead (2011: 23) developed this point further when exploring the Transition Towns Movement via the ethics of place-making and social justice at a distance, focused on a single initiative, Transition Town Aberystwyth, in the United Kingdom. Their qualitative methodology encompassed participatory research analysed via geographical conceptions of space and spatial imaginaries of international municipalism, libertarian municipalism and relational urbanism. Mason and Whithead’s (2011: 23) conclusion was that the Transition Towns Movement created a paradox ‘between spatial ethics and ethical place-making’. This paradox results from the Transition Towns Movements advocating for localism ‘that could undermine its broad relational sense of care, but tends to support a strong sense of local empowerment and focus in changing the nature of a place’. To address the paradox, a call by Mason and Whithead’s to Beck’s (1997) Sub-Politics is made. Beck’s work concerns the changing nature of risk that has created new sites, actors and issues of contestation, or, as Beck (1999: 95) describes sub-politics, ‘the decoupling of politics from government ... it means the shaping and transforming of society from below.’

The final research on Australian grassroots climate actors and practice involves the actors’ personal motivations and values. Goodman (2009) conducted a small but relevant piece describing interviews with Climate Camp activists that captured their motivations for climate action. Climate Camps are highly political direct action events that commenced in Australia in 2008 (Pearse et al. 2010). Goodman’s research sought to capture the voices of the activists and portray a balance between the themes of ‘hope’, ‘despair’ and ‘morality’ as a motivating force for climate action. Pearse et al. used video ethnography to study climate agency, exploring dimensions of subjectivity in climate activism. Three pertinent themes were explored: activist trajectories, how climate activists maintain hope and motivation, and how activists see direct action as part of the strategy to redress climate change (Pearse et al. 2010). The insights are significant, as Pearse et al. (2010: 99) contend that:
Activists are producing a new language of moral protest in the face of a profound historical conjuncture. As such, they are actively generating the political tools for addressing the [climate change] crisis.

Hence, Pearse et al. revealed that climate actors are fashioning alternative values and were communicating them via direct action. Additional research on the values and motivations for climate action was undertaken by Hall et al. (2009: 74), who conjecture that ‘pro-environmental behaviour that motivated Coogee citizens to become Climate Action Coogee members was most likely a combination of knowledge and awareness about climate change, altruistic and biospheric values, and emotional concern’.

The literature above has demonstrated the need for a broader framing of climate change that mobilises a diversity of actors and a multitude of practices to combat climate risk. Questions left unresolved are the following: how is the Australian grassroots climate movement framing climate change? Is the grassroots layer creating new narratives and a sense of responsibility for the causes and management of climate change, as Ambrosii (2010) and North (2011) contend it should? Are the frames and values espoused closer to the emphasis of Lakoff (2010) and WWF UK (2010) on common good and inclusive approaches, or more akin to Slocum’s (2004) weak ecological modernisation? The review of the literature specific to the grassroots climate movement shows that while some Australian research has been conducted on the framing of climate change and specific practices, substantial gaps in knowledge remain. Research attention has tended to focus on a single ‘innovative’ action with little exploration or sweeping critiques of an ecological modernisation approach that will not be enough. Simultaneously, there is other research that has found the grassroots movement to be more inclusive of social justice concerns and advocating for action that reaches beyond an ecological modernisation approach, creating a distinct disjuncture in the research.

**2.5 Conclusion**

The literature reviewed in this chapter provides ample evidence that the research lacks a comprehensive assessment of the Australian grassroots climate movement. The
climate movement in Australia has only recently been the subject of research, a probable consequence of its recent emergence. The focus thus far has been on critiquing the political effectiveness and/or advocated practices from limited sources. To date, very little research conducted has included a deep exploration of the actors who compose the grassroots layer. In addition, the Transition Towns Movement has been treated as a separate phenomenon that has received minimal research attention in Australia. Other climate actors concerned with single climate issues, such as renewable energy projects, or those actors concerned with a broader sustainability agenda inclusive of climate change have been subject to very little research attention. A thorough, systematic exploration of what is occurring at the grassroots climate movement is thus required.

The knowledge deficit in terms of describing the grassroots climate actors and practices is important to overcome. For one, the exploration of social movements offers insights into the social world as well as an opportunity to uncover potentially new and/or redesigned practices to manage climate risk. Moreover, the grassroots climate movement offers an opportunity to explore how everyday people are active on climate change, as well as the associations they form, how they are construct (frame) the issue of climate change, and how they seek to redress it (particularly via personal and broader societal changes). Sustained research attention adds to theoretical knowledge, but also contributes to the search for innovative practices. As the management of climate risk calls for changes in everyone's lives and in the broader society, the examination of grassroots actors may uncover new and/or redesigned practices that may be more broadly applicable.
Chapter 3. Theoretical Framework: A Spectrum of Green Discourses

3.1 Introduction

The environmental movement has been defined as ‘a broad church with a diverse political congregation’ (Curran 2006: 98). Examining the discourses of the environmental movement and environmental matters more generally is one of the mechanisms used to make sense of this diverse and complex terrain. Dryzek (2005) uses a discursive approach to understand the many perspectives on environmentalism, including those of people promoting a green agenda as well as the perspectives of people who are overtly hostile to green concerns. Grist (2008) and McGregor (2004) have both deployed green discourses as a mechanism to make sense of environmental matters (global climate change policy options and strategies of the wilderness movement, respectively). While Grist and McGregor are pertinent to this chapter, the work of Dryzek is the foundational text. Dryzek covers the various green discourses in great detail and scope, in addition to offering critiques of various discourses in practice. Furthermore, Dryzek’s approach is particularly useful as a means of exploring the grassroots layer of climate action for this thesis. The framework for this thesis enables the conceptualisation of grassroots climate actors through a systematic exploration that situates them politically and ideologically and includes the movement’s practices, values, strategies, and direction (Grist 2008, McGregor 2004). The framework sets out the main storyline and key elements, with a concluding critique of the discourse in practice. The first section of this chapter reviews past attempts to classify green discourses to establish a foundation to build and describe the framework for this thesis. The second and third sections then use the framework to describe the reformist and radical ends of the green discursive spectrum.

3.2 The Framework: Historical Context and Description

Dryzek (2005) begins with industrialism, the dominant discourse within modern industrial society, and identifies the various green discourses’ response to it. The storyline of industrialism refers to the capacity for infinite economic growth,
continual technological and human advancement, and the binding of wellbeing and happiness to material consumption. Equally important, industrialism constructs humanity as separate from nature, and nature as existing for the sole use of humanity (Dryzek 2005). Dryzek (2005: 13) proceeds to argue that while competing ideologies such as socialism and liberalism have many differences, they are all committed to industrialism via the denial or marginalisation of environmental issues. Other theorists use different terms, such as modernity or status quo, but the essential elements of the dominance of economic growth, rationality and humanity’s uniqueness are the same.42

In contrast to industrialism, green discourses provide a space for critical reflection, resistance and re-imagining of a society that is inclusive of environmental concerns. The emergence of green discourses in the late 1960s coincided with other important changes across the globe, such as accelerating decolonisation, the intensification of economic disparities between countries, the Cold War and the rise of new social movements (Hague and Harrop 2001, Middleton and O’Keefe 2003, Redclift 1987, Reynolds 2000). These changes heralded challenges to industrialism, with green discourses considered some of the most formidable (Doyle 2005, Dryzek 2005, Shiva 1990). The challenge presented by green discourses was a means to speak ‘about the environment that before was not possible or even imaginable’ (Torgerson 2000: 6). A historical account is outlined below. Burr (1995) contends that discourses have a historic specificity, and green discourses are no exception. Therefore, it is important to situate green discourses within the contexts in which they arose and evolved. Coinciding with this history are also the many theorists’ attempts to describe and classify green discourses.

Concerns about wilderness preservation and conservation were being voiced prior to the 1960s, but these concerns were generally compatible with industrialism as they could be accommodated with a limited change to the socio-political system (Hay 2002, Reynolds 2000, Tyburski 2008). Hay (2002: 1) terms the 1960s emergence of green discourses as the rise of the ‘modern ecological impulse’, which was originally dominated by the survivalist narrative of impending ecological limits. Survivalism

42 See Baudrillard (1986), Beck (1992), Feindt and Oels (2005), Hopwood et al. (2005), Smith and Kern (2007).
directly confronted the unquestioned tenet of industrialism’s promised benefits of unlimited growth and the capacity to sustain it. Survivalism’s storyline was of non-negotiable finite ecological limits, with the requirement of radical change to avoid catastrophe. Carson’s (1962) book, *A Silent Spring*, was an important catalyst. Carson’s book was followed by other influential texts of dire warning, such as Ehrlich’s (1968) *The Population Bomb*, Hardin’s (1968) *Tragedy of the Commons* and Meadows et al.’s (1972) *Limits to Growth*. Pivotal events, such as the Cuyahoga River fire in the United States and the first pictures of Earth taken from space, added to the survivalist narrative.

The survivalist narrative was a stark warning about rapidly approaching ecological limits due to overpopulation, resource depletion and/or breaches of the earth’s assimilation capacity. The proposed solutions were harsh draconian eco-authoritarian measures motivated by the framing of an impending ecological and societal collapse. Survivalism receded due to multiple critiques and challenges, notably from the Promethean discourse (still in circulation) that denies ecological limits due to a steadfast faith in the capacity of human ingenuity and advancement (Dryzek 2005). The influence of survivalism, however, has not disappeared; the survivalist emphasis on ecological limits is a guiding assumption of radical green discourses (Dobson 2000). More recently, the threat posed by climate change has led to a distinctive resurgence of survivalist, catastrophic and alarmist discursive threads.43

The prime challenge to survivalism was not the Promethean discourse, but the discourse of sustainable development. It should be noted that sustainable development’s original conception was challenging to industrialism; however, it was soon turned into an expedient form that bypassed the ecological limits debate to overcome the survivalist rhetoric. Carruthers (2001) charts a scathing and insightful account of the rise of sustainability and sustainable development discourses. The origins of sustainability are found in the 1960s and 1970s, when it was a radical development discourse for the majority world (Carruthers 2001: 93). In this form, sustainability was a ‘discourse of resistance, fusing radical environmental consciousness with a critical rethinking of a failed development enterprise’ as it

43 For example, see Risbey (2008), Spratt and Sutton (2008); for a critique see Hulme (2008), Swyngedouw (2010).
‘provoked challenging questions about scarcity and limits, affluence and poverty, global inequity, and the environmental viability of westernization’ (Carruthers 2001: 93). Nevertheless, within a matter of a few short years sustainability was ‘transformed, stripped of its critical content’ and is now considered a hegemonic discourse that serves to ‘legitimize a grand universal project of neoliberal globalization’ (Carruthers 2001: 93).

Two historical events and resultant documents are pivotal to understanding the transformation of sustainable development. The World Commission on Environment and Development (WCED) took four years to produce the report *Our Common Future* (1987). This report, as Redclift (2005: 212) states, ‘led directly to the term “sustainable development” passing into policy discourse, if not into everyday language’. Within *Our Common Future* (1987: 43), sustainable development became famously defined as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. The second major transformative event was the United Nations Conference on Environment and Development (1992) and the resultant sustainable development implementation plan *Agenda 21: The United Nations Programme of Action from Rio* (Redclift 2005). The ambiguous definition of sustainable development used in both the WCED and UNCED reports has been the target of many critiques (see Jacobs 1999, Lafferty 1999, Luke 2005, Redclift 1987, 2005). Illustrative of this critique is Luke (2005: 228), who describes sustainable development as ‘intellectual emptiness’ that can be readily manipulated and asserts ‘whose needs in the present, and whether or not they are needs or desires, and how development is understood to prevail where and for whom, of course, are questions that are left hanging, if not entirely begged’ (Luke 2005: 229).

Sustainable development and survivalism are only part of a spectrum of green discourses. As well, the receding and re-emergence of survivalism and the altered meaning of sustainable development demonstrate the dynamic nature of discourses. Butler (1990, 1993) argues that discourses are never complete but in a constant dynamic process of formation, shaping and sometimes splintering. The plethora of green discourses has been a subject of theoretical and, to a lesser extent, empirical investigation. These past attempts can be clustered into those that create a dualistic
division based on radical to reformist changes required in society and/or in individuals’ consciousness, and attempts that create multifaceted spectrums that have sought to capture more of the nuance between the diversity of green discourses.

A dualistic radical to reformist divide characterises the earliest and still the dominant approach to understanding the plethora of green discourses.\textsuperscript{44} Næss’s (1973) paper is an early and clear example of this tradition as it articulates a division between shallow ecology and deep ecology. Shallow ecology is concerned only with reform of the current system, while deep ecology encompasses a fundamental values shift. Bookchin (1980) used the descriptors of environmentalism and social ecology to demarcate the different approaches. Environmentalism is characterised by reform, while social ecology seeks changes within the totality of social, economic, technological and cultural realms that cause ecologically destructive practices. These two theorists demonstrate the recurring emphasis in green discourses on the need for either reform or transformation to facilitate the creation of a sustainable society. This debate also encompasses the question of whether the change to an eco-centric orientation needs to be within every individual or whether a societal shift can occur while the domination of an anthropocentric perspective is maintained. Eckersley (1992: 26) surveys the dividing line between the anthropocentric and the eco-centric perspective, considering the former to be a human-centred orientation in which nature has instrumental value, in contrast to the latter that is focused on an ecology-centred perspective where nature has intrinsic value.

\textsuperscript{44} Another cluster of classification attempts has tended to be represented in typologies, spectrums and linear continuums to capture more of the differences between green discourses. O’Riordan (1989) created a widely used linear continuum of environmental views, which range from strong techno-centric to strong eco-centric orientation on the state of environmental issues and response mechanisms. The strong techno-centric position is characterised as supportive of the status quo, with an optimistic assessment of the capacity of technological development and human ingenuity to respond. Progressing along the continuum, away from the techno-centric position, is an increasingly eco-centric outlook that is also linked to concerns for social justice. The coupling of increasing ecological concerns with imperatives of social justice was critiqued (Dobson 2000), as concerns for social justice may override ecological concerns or, in the illustrative case of eco-fascists, ecological concerns may override those of social justice (Hopwood et al. 2005). To resolve this critique and capture more of the differences between green discourses other theorists have constructed a range of classification systems. These include McManus’s (1996) typology, which classified eight distinct approaches on criteria such as the role of technology, agents of change, means of transition, and questions about sustaining what and for whom. Additionally, a recent typology with similar guiding questions is provided by Clifton (2010). Clifton uses the framing device of a ‘sustainable world’ to describe the key features, mechanism and underpinning values of various approaches to achieve it.
Dobson (2000) bundles the degree of individual perspective and social change into the camps of environmentalism and ecologism. Dobson (2000: 3) argues that there are distinct differences between environmentalism and ecologism, which result in a fundamental incompatibility:

*Environmentalism* argues for a managerial approach to environmental problems, secure in the belief that they can be solved without fundamental changes in present values or patterns of production and consumption. ... *Ecologism* holds that a sustainable and fulfilling existence presupposes radical changes in our relationship with the non-human natural world, and in our mode of social and political life.

To Dobson ecologism can be considered its own ideology. The criteria the author uses to substantiate this claim are the need for an ideology to present a complete description of the social world, a program of change and the need for a vision of a future society. Ecologism includes a description of a social world that is in a dire state, with finite ecological limits. Therefore, the program for change is one of transformation in the perspectives of both individuals and the socio-political system, with a vision of a future society that can be ‘loosely described as a sustainable society’ (Dobson 2000: 202). Dobson does not consider it necessary to transform individual perspectives into an eco-centric worldview, as anthropocentrism, in the form of concern for future generation, would be sufficient. Pepper (1998) has a similar view that anthropocentrism could be sufficient. Pepper’s (1998:1) ‘homocentric’ perspective is defined as ‘strong sustainability: being essentially humanistic but also embracing stewardship of nature, environmentally benign but centered on social justice’.

### 3.2.1 The Framework: Structure

Dobson’s (2000) concentration on causes, means, agents of change and ends as a way to describe and categorise the ideologies of environmentalism and ecologism is mirrored in other attempts to capture more of the distinctions between green discourses. The approaches of Hajer (1996), Hopwood et al. (2005), Smith and Kern (2007) and Torgenson (2000) to ecological matters converge with Dobson’s work. The significance of the description of the state of ecological and/or social degradation is evident in the work of Hajer (1996: 247) who uses the descriptor *frames*, stating
‘the framing of the problem also governs the debate on necessary changes’. Hajer’s contention is shared by Smith and Kern, who argue that how a problem is conceived dictates the means and mechanisms considered to resolve it. Torgenson focuses on the means but also the ends. These are, Torgenson (2000: 1) states, the BIG questions in green political thought: ‘Ends: what are the appropriate green goals? and Means: how are they to be achieved?’ The end would seem to be soundly identified as sustainability, but (as noted earlier) definitions of sustainability are plentiful and often conflict, therefore, it is important to explore and build understanding and consensus (Olson 1995). A framework for this thesis can be created by combining these attempts with Dryzek’s (2005) work, but first how Dryzek classifies green discourses needs to be explained.

Dryzek (2005: 9) defines discourse as a ‘shared way of apprehending the world’ that constructs meaning and shapes practices. To begin to make sense of the complexity of green discourses, Dryzek imposes two points of division. The first division is whether the discourse is reformist or radical in its departure from industrialism. Reformist discourses are those that can coexist with the status quo, while radical discourses significantly alter the current socio-political and economic relations. The second division is whether the departure from industrialism is prosaic or imaginative. Prosaic discourses are those that take the existing order as a given, while imaginative discourses open up possibilities and significantly reformulate the status quo. These divisions result in four categorisations:

*Survivalism* — a radical yet prosaic discourse. It is radical due to the unyielding assertion of ecological limits, but prosaic due to the call for dramatic authoritarian-style intervention to avoid catastrophe.

*Problem-solving* — reformist and prosaic, weaving a tale of the management of ecological issues via the current system through either increased bureaucratisation, democracy or markets.

*Sustainability* — reformist yet imaginative, as it attempts to dissolve the conflicts between environmental, economic and, to varying extents, social justice concerns.
Green Radicalism — imaginative and radical due to the total rejection of the current societal order and advocating the transformation of self and society.

Within each of these categorisations Dryzek (2005) further deconstructs the different discourses by focusing on their storylines and discursive elements. The discursive elements focused upon are, first, the basic entities recognised/constructed: for instance, survivalism and green radicalism recognise the existence of ecological limits. The second element is assumptions about natural relationships: for example, sustainable development assumes natural relationships to be capable of cooperation. The third element is agents and their motives, as green radicalism acknowledges ‘every person can be an agent’ (Dryzek 2005: 195). The final element consists of the key metaphors and other rhetorical devices. Sustainable development and ecological modernisation contain the clearest illustration of this element in their use of the link to ‘the ever-popular notion of social progress’ via terms such as development and modernisation; both are, hence, ‘discourse[s] of reassurance’ (Dryzek 2005: 172).

The strength of Dryzek’s (2005) work lies in the thorough account provided of the plethora of green discourses, which includes detailing the origins, key contributors, composition of the discursive elements, junctures of convergence and conflict, and an evaluation of the outcomes these discourses have had in practice. This thesis, combines elements of Hajer’s (1996), Dobson’s (2000), Torgenson’s (2000) and Hopwood et al.’s (2005) approaches with Dryzek’s work to create a framework that facilitates a systematic exploration of the grassroots climate movement and the uncovering of innovative grassroots practices. This framework spans a spectrum of reformist to radical discourses. Dryzek’s comprehensive coverage would be impractical for the space and scope of this thesis. The reformist discourses to be discussed are sustainable development and ecological modernisation. The radical discourses encompass social ecology, eco-feminism, and eco-socialism, with elements of deep ecology, environmental justice and majority world movements.

The thesis’ spectrum of green discourses is visually represented in Figure 2 which is a modified version of Hopwood et al.’s (2005) mapping methodology. This methodology succinctly captures the diverse terrain of green discourses by placing techno-centred to eco-centred environmental concerns on the horizontal axis, and
socio-economic wellbeing and equality concerns (inequality to equality) on the vertical axis. This divides the space into Status Quo, Reform, and Radical. Each section has a clear description of the causes of problems, response mechanisms, and agents of change. Hopwood et al.’s approach has been modified to represent a useful visual aid for the discourses covered in this chapter. In the concluding section of the chapter, a table of the spectrum of green discourses is presented that summarises the elements of each green discourse.

Figure 2: Green Discursive Spectrum

The elements of reformist to radical discourses, therefore, are the main storyline, followed by a closer examination of the way different elements are framed. These elements are:

1. **Problem:** How ecological problems are described and the causal agents recognised.
2. **Means:** The change(s) or transition strategy required and agents identified as being capable of enabling this change.
3. **Ends:** The ends or vision represented of the possible future society.
The result is a framework capable of positioning and richly describing the grassroots layer of the climate movements’ actors and their practices. The previous chapter brought together a selection of practices deemed capable of managing climate risk. This chapter situates the actors and practices theoretically and discursively. The theoretical approach outlined above further facilitates uncovering innovative grassroots practices via deep interrogation.

We begin with the reformist discourses of sustainable development and ecological modernisation.

### 3.3 Reformist Green Discourses: The Main Storyline

The reformist discourses of sustainable development and ecological modernisation are ubiquitous in ecological affairs. Sustainable development has been cited as the ‘meta-narrative of environmental and development objectives’ (Meadowcroft 2000: 370). Under the umbrella of reformist discourses, it should be clear that it is the version of sustainable development discourse that arose out of *Our Common Future* that is being discussed in this section, not Carruthers’ (2001) radical alternative. Nevertheless, while sustainable development has prominence in policy rhetoric, others argue that ecological modernisation dominates in practice. There are differences between the two discourses, but first it is important to understand the main storyline that positions them within the reformist end of the spectrum. The storyline of each begins with an acknowledgement of ecological degradation, in contrast to the discourse of industrialism (Dryzek 2005). The storyline then proceeds to state that these problems can be handled within existing socio-economic and political relations with careful ecological and economic management. The storyline rests on, and embraces, the tenets of modernity, primarily continued advancement in science, technology and

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45 Baker (2007), Barry (2007), Berger et al. (2001), Dryzek (2005). Whether ecological modernisation is a reformist discourse at all is a point of contention. In Hopwood et al. (2005), ecological modernisation is positioned between the status quo and reform, as at its weakest it can be considered green capitalism, a technical re-tooling or a discourse designed to quell dissent (Christoff 1996: 467, Dryzek 2005: 168, also see Connelly and Smith 1999, Porritt 2007). The arguments for ecological modernisation being a reformist discourse are, however, persuasive. Weale (1992) contends that ecological modernisation does challenge the status quo due to its inclusion of ecological concerns, a point similar to that of Beck (1999: 92), who states that once ecological modernisation is internalised ‘alternative lines of action become thinkable.’ Christoff advocates for the capacity of ecological modernisation and perceives the possibility of stronger, more reflective forms of ecological modernisation capable of transformation.
human ingenuity, as well as the benefits of economic growth. Fundamentally, it posits that nature is knowable. As nature is knowable, it is therefore capable of being managed by current elites without major modification to the system. This storyline explains much of its reformist discursive appeal and its inclusion into economic and political power structures over multiple scales.46

3.3.1 Reformist Problem and Causes

Reformist discourses recognise the existence of ecological problems and frame them as significant. Ecological modernisation, for instance, does not hide away from the word ‘crisis’ to describe the current state of the environment (Spaargaren 1997: 25 and Mol 1995: 42). Sustainable development recognises a host of ecological issues as well as social issues. The greenhouse effect, poverty, and desertification were all noted by the WCED (1987) and have continued to be the topics of international discussions on sustainable development at various United Nations conferences, conventions and negotiations over the decades. Descriptive terms such as ‘degradation’ and ‘stress’ are attached to frame the extent of the threat posed, similar to the ecological modernisation framing of ‘crisis’. The reformist discourses therefore both acknowledge ecological issues and frame these as significant but are ambiguous on ecological limits.

Ecological modernisation is silent on ecological limits as it is primarily a production-oriented discourse; limits are omitted or constructed as something that can be ‘upgraded’ through human ingenuity and, in turn, overcome (Baker 2007, Dryzek 2005, Huber 2008). Sustainable development is slightly more cautious, evoking the language of limits in the form of resource depletion, assimilative capacity and carrying capacity, which indicates attention to the limits discourse. The ambiguity of sustainable development rhetoric, nevertheless, leads to contradictions. For instance, the WCED (1987: 8) states ‘sustainable development does imply limits — not

absolute limits but limitations imposed by their present state of technology and social organisation on environmental resources and by the ability of the biosphere to absorb the effects of human activities’. Therefore, sustainable development implies a similar ability to potentially overcome ecological limits. In practice, this has led to the critique that ecological limits are presented as able to be manipulated and what is to be sustained remains unspecified; nevertheless, critics state it is economic growth that is to be sustained overall (Banerjee 2003, Escobar 1995, Redclift 1987, 2005). Redclift (2005: 214) states ‘there is still considerable confusion surrounding what is to be sustained that different discourses of sustainable development sometimes fail to address’. The view of nature implicit in ecological modernisation and sustainable development is noticeably anthropocentric: both discourses present nature as scientifically knowable, controllable and for the use of humanity. The use of nature for humanity is evident in the use of the term ‘resources’ to denote nature. Ecological modernisation subordinates nature further by referring to nature in the language of business as ‘natural capital’.

The causes of ecological decline are acknowledged as rooted in the structures of modernity, including unsustainable production processes to which modernity gave rise and the social inequities that have accompanied them. Ecological modernisation identifies the root cause of the problems as ‘structural design faults’ on the production side (Mol and Spaargaren 2000a: 19). These ‘faults’, however, can be rectified in the system that gave rise to them. In fact, the rhetoric is that only the system that gave rise to these problems can solve them — an innovative twist. Before examining this twist, it is important to focus on the causes of ecological decline identified by sustainable development, as these are different from those identified by ecological modernisation. As Hajer (1996) and others have identified, how a problem is framed and the causes that are identified shape its overall response. Sustainable development constructs the causes and agents of ecological degradation as the current consumption and production patterns that involve everyone. The WCED (1987) originally cited ‘scarce resources and the pollution generated by the rising living standards of the relatively affluent’, as well as those in poverty who ‘pollutes the environment, creating environmental stress in a different way’ (WCED 1987). The construct of poverty as the cause of ecological decline is waning, but poverty is still intimately connected due

to sustainable development’s emphasis upon social justice. Just as ecological modernisation singles out the tenets of modernity as the cause and ‘solution’ to ecological decline, so too does sustainable development — but in a slightly different way, as explored below.

3.3.2 Reformist Means

Reformist green discourses advocate a transition strategy premised on technological innovation, guided by farsighted elites, without major changes or challenges to the current socio-economic and political system. While sustainable development’s rhetoric might encompass everyone, which creates calls for changes to governance with an emphasis on social justice, the strategy is primarily concerned with the promotion of technology, science and continuation of humanistic advancement. This focus places sustainable development well within the reformist discursive space.

The unwavering belief in technology, science and human progress is most evident in ecological modernisation. As identified earlier, ecological modernisation frames the causes of ecological issues as stemming from the structures of modernity, yet these structures are cast as the only means to resolve these issues. Hence, instead of de-industrialisation or a rethink of the modernist industrialist program — the propositions of survivalism and many radical green discourses — what is proposed is a ‘super industrialisation’ (Cohen 1997: 109). The result is the construction of a ‘win-win’ outcome, dissolving the environment versus economy conflict by placing them in partnership. This is the lynchpin of the seductive appeal of ecological modernisation, as ecological action becomes framed as a boon for the economy. This proposition is assembled on the rhetoric that addressing ecological problems will create new industries, new (higher skilled) employment opportunities, less resource use and less waste — the last two features constructed as business savings (Dryzek 2005). Environmental protection, therefore, becomes a ‘precondition for long-term economic development’ (Berger et al. 2001: 58). Ecological modernisation is a discourse that predominantly speaks to industrialised countries (Dryzek 2005). Fundamentally, the transition strategy is premised on a dual strategy of ‘ecologising the economy’ and ‘economising of ecology’; the former refers to internalising the
environmental costs into the economy while the latter, ecology, becomes a ‘hard-science to impact on business and industry’ (Huber 1982: 12, paraphrased from Spaargaren 2000: 50–51).

Sustainable development discourse differs in its means as it places emphasis on social justice concerns to alleviate poverty, something that is met with a silence within ecological modernisation (see Langhelle 2000, Baker 2006). The framing of a link between ecological degradation (problem) and poverty (cause) informs the need to respond with a notion of development that is simultaneously responsive to the needs of the poor as well as ecological concerns. Social justice and human equity concerns are part of sustainable development’s transition strategy, unlike ecological modernisation, thereby determining a different approach (Langhelle 2000). Even so, the notion of development is unquestioned and has a ‘utilitarian tendency to view development in terms of the level of consumption’ (Haque 2000: 13). The result is a re-convergence with ecological modernisation, as environmental protection becomes a potential saviour of economic growth, which in turn addresses the issues of poverty. In the words of WCED, environmental protection enables ‘the possibility for a new era of economic growth’. Economic growth is also cast as saviour in statements such as ‘growth [is] absolutely essential to relieve the great poverty that is deepening in much of the developing world’ (WCED 1987: 1).

The role of technology and science in the ecological modernisation transition requires further explanation, as it is its keystone, in addition to being a significant feature of sustainable development. Huber (2008: 360) states that ecological modernisation is:

Moving beyond its old-industrial stage, the modernisation of society now also entails ecological modernisation, i.e., readaptation of industrial society within the global geo and biosphere by modern means such as a scientific knowledge base and advanced technology in order to upgrade the earth’s carrying capacity and make development more sustainable.

The mantra is ‘decoupling’ and ‘delinking’ economic growth from resource use and ecological degradation (Hawken et al. 1999, Mol and Spaargaren 2000a, 2000b).

All types of technological innovations will drive the ecological modernisation
transition. These technologies include ‘photovoltaics, wind, hydro, tidal, wave ... solar and geothermal energy’ as well as ‘clean coal and carbon capture and storage’, in addition to ‘ultra-light, ultra-strong materials’ and ‘nanotechnology and micromachines’ (selected examples from Huber 2008: 361). The sciences are the means to create these new technological innovations as well as revealing optimal resource extraction rates and waste assimilation capacities. All the sciences have roles; natural sciences determine ‘critical loads’, while engineering sciences devise ‘technological equipment necessary to achieve the necessary ecological quality standards’ (Hajer 1996: 252). Even the social sciences have a role in developing an understanding of ‘how “anti-ecological” cultural patterns might be modified’ (Hajer 1996: 253). Anticipating instead of reacting is conceived around the idiom that prevention is better than cure; this evokes the precautionary principle, where scientific uncertainty is no excuse for inaction (Hajer 1995: 64, Dryzek 2005, Hay 2002). In practice, the strength of the interpretation of the precautionary principle has ramifications for the capacity of ecological modernisation to transform society rather than merely reform it.

In relation to science and technology, sustainable development follows a similar optimistic tone to ecological modernisation as:

Scientific knowledge should be applied to articulate and support the goals of sustainable development . . . to enhance understanding and facilitate interaction between science and society . . . strengthening the scientific basis for sustainable management . . . enhancing scientific understanding . . . building up scientific capacity and capability (Agenda 21 1992, article 35.3).

Technology will be deployed to ‘expand the stock of resources’ by increasing efficiency and the effective use of current resources, sustainably harvesting renewable resources and finding substitutes for non-renewable resources (Williams and Millington 2004: 100).

3.3.3 Reformist Agents

An apparent difference between ecological modernisation and sustainable development is in the societal actors they identify as change agents. This divergence
is evident in the governance arrangements necessary for transition. Ecological modernisation is elitist, in that it operates by fashioning a role for government and business, while sustainable development is more inclusive, constructing roles for civil society and citizens in more participatory governance arrangements (Baker 2006). Ecological modernisation’s role for government is to create an enabling context of ‘lawmaking and regulation’ to internalise ecological costs via incentive-based mechanisms rather than regulation, for instance performance standards, eco-audits, management systems, green taxes, emissions trading or subsidies, and voluntary agreements (Huber 2008: 361, also see Baker 2007). Business is constructed as the prime innovative agent; as Fischer and Freudenburg (2001: 702) state, ‘entrepreneurial agents and economic/market dynamics are seen as playing leading roles in bringing about needed ecological changes’. The capitalist system is assumed as a given, but as the ecological modernisation discourse has evolved, capitalism has become ‘neither an essential precondition for, nor as the key obstruction to, stringent or radical environmental reform’ (Mol and Spaargaren 2000a: 23).

Ecological modernisation requires a corporatist setting with farsighted and collaborative government and business relations (Buttel 2003, Curran 2007, 2011, Dryzek 2005). The agency of citizens derives from their purchasing power, as they are consumers of green products. Citizens, in their most active role, are supporters of governmental ecological policy and practices; no deeper changes to citizen’s values or lifestyles are required (Dahle 2007). The societal agent most marginalised by the ecological modernisation discourse is the environmental movement. Mol (2000) informs the movement that it has the choice of ecological modernisation discourse and, in turn, growing influence and support or relegation to the political wilderness (dwindling membership numbers, marginalisation from centres of power and limited financial resources) if other avenues are pursued (Mol 2000: 52, also see Cohen 2006).

An issue about which there is a concerning silence is where the power base for ecological modernisation change will come from. Without active citizens and civil society, the question is — who will push for change? (Dryzek 2005, Toke 2011). Significant pressure is therefore placed on business and government to be farsighted, a considerable assumption that becomes questionable once efficiencies and cost-
saving measures have been exhausted (Baker 2007, Langhelle 2000). In practice, theorists have highlighted a role for citizens in the form of ENGOs and cite the strength of civil society as a major predictor of ecological modernisation outcomes (Dryzek 2005). There is no disruption to current social power relations in ecological modernization; ecological modernisation bolsters those already in power as it supports the very structures that support them (Blühdorn 2000, Giddens 1998). Hajer (1995: 25) defines ecological modernisation as ‘the discourse that recognizes the structural character of the environmental problematique but none the less assumes that existing political, economic, and social institutions can internalize the care for the environment’.

Power is more directly acknowledged within the sustainable development discourse. Evidence of this is in the WCED (1987) report that finds ‘the distribution of power and influence within society lies at the heart of most environment and development challenges’. This acknowledgement enables an array of actors to have agency and proposes a variety of more participatory governance approaches. The mechanism that enables the meeting of multiple objectives of ecological and social justice opens avenues for redistribution, predominantly of economic and technological resources. Actions listed in *Agenda 21* are transfers of green technology, cooperation and capacity building (unidirectional from the minority to the majority world), science for sustainable development, and the promotion of education and public awareness (*Agenda 21*: 1992, section IV). While the new notion of development and economic growth can continue, there is a space created within the sustainable development discourse for redistribution, as ‘economic growth can continue but there is a need to redistribute the costs and benefits in a more equitable manner’ (Williams and Millington 2004: 101).

Agency is bestowed upon far more people under sustainable development than within ecological modernisation. *Agenda 21* (section III) demonstrates this recognition of others, including women, Indigenous communities, youth, workers, unions, local government, and ENGOs. Multi-scalar operations over ‘local, regional, national and especially international organisations dedicated to promoting environmentally sound approaches to economic development’ are evoked (Pezzoli 1997: 549). The more inclusive participatory rhetoric remained evident in the World Summit on Sustainable
Development (2002). However, in practice, concerns over power, representativeness, and accountability remain. Findings from Bäckstrand (2006: 494) on the World Summit on Sustainable Development indicate a largely symbolic participation of ‘others’ while industrialised states, business and peak ENGOs define the terms of engagement and control the agenda by dictating the topics and circumstances for negotiations to occur.

3.3.4 Reformist Ends

As shown in Figure 2 in Section 3.2.1, sustainable development and ecological modernisation can extend into the radical spectrum. ‘Strong’ and ‘weak’ prefixes are often applied to sustainable development and ecological modernisation to denote the scale of change that could result. Christoff’s (1996) tabulated summary from his seminal paper outlining the differences between ‘weak’ and ‘strong’ ecological modernisation is reproduced in Table 3 below.

<table>
<thead>
<tr>
<th>Weak EM</th>
<th>Strong EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>Ecological</td>
</tr>
<tr>
<td>Technological (narrow)</td>
<td>Institutional/ systematic (broad)</td>
</tr>
<tr>
<td>Instrumental</td>
<td>Communicative</td>
</tr>
<tr>
<td>Technocratic/neo-corporatist/closed</td>
<td>Deliberative democratic/open</td>
</tr>
<tr>
<td>National</td>
<td>International</td>
</tr>
<tr>
<td>Unitary (hegemonic)</td>
<td>Diversifying</td>
</tr>
</tbody>
</table>

(Sourced from Christoff 1996: 490)

Table 3 suggests that a strong ecological modernisation would create a plurality of dynamic political-economic and ecological development paths (Christoff 1996, Dryzek 2005). Strong ecological modernisation, in contrast to its weak counterpart, positions ecological concerns above economic ones, is concerned with systemic change and grants agency to a far greater array of societal actors to achieve change that accommodates experimentation and alternative socio-political arrangements (Christoff 1996, Dryzek 2005). Christoff argues that features of weak and strong ecological modernisation are not mutually exclusive binary opposites but can be
mixed. The potential of ecological modernisation to blur into a more transformative approach is also championed by Mol and Spaargaren (2000a: 34), who argue that ‘time-horizon of the process’ is the key determinant, as ‘what seems a slow, gradual but steady process of change today may turn out to be a wholesale restructuring of industrial society some decades from now’.

Hajer (1996) identifies a paradox in the ecological modernisation discourse, in that it can be used to disrupt the current status quo but it can also become co-opted. This can create a situation where governmental rhetoric advocates structural change, but only incremental changes occur in practice — a paradox applicable to much sustainable development rhetoric. In practice, individual cases of selected businesses and industries that have reduced waste and/or increased resource efficiency have not changed the unsustainability of the system, as any efficiencies and/or waste reductions made are eliminated due to continual growth (York and Rosa 2003). Issues of consumption are entering the ecological modernisation discourse (see Carolan 2004, Spaargaren and van Vliet 2000), but these remain marginal in this predominantly production-oriented discourse. Reducing consumption would disarm the seductive ‘win-win’ mantra that attracts business and government. The vision of the future would be green production practices premised on large-scale technologies, as ecological modernisation rejects outright the storyline of ‘small is beautiful’ articulated by Schumacher (Hannigan 2006). Hawken et al. (1999: 1–2) believe that once technological changes are implemented, social justice will follow; such optimism seems difficult to justify. Lacking attention to social justice issues across temporal (inter and intra-generational) and spatial scales (within and between countries), ecological modernisation evokes a future primarily limited to hyper green industrialism of large-scale greener production processes (Baker 2007, Barry 2003, Langhelle 2000).

Sustainable development evokes a multiplicity of futures: ‘no single blueprint of sustainability will be found, as economic and social systems and ecological conditions differ widely among countries ... [and] ... each nation will have to work out its own concrete policy implications’ (WCED 1987). Meadowcroft (2000) is optimistic that while sustainable development starts within the status quo, over the transition period there will be far-reaching ecological and social justice changes. The inability to
provide a blueprint leads to a plurality of possible ends. The prospect for conflict is present due to the multitude of incompatible goals. These irreconcilable goals include those that ‘revive growth, change the quality of growth, satisfy essential needs, ensure a sustainable level of population, conserve and enhance the resource base, reorient technology, merge environment with economics, restructure international economic relations, and make development more participatory’ (WCED 1987: 49).

3.3.5 Consequences of Reformist Discourses

Critiques of reformist discourses in theory and practice are scattered throughout the reformist literature. Blühdorn and Welsh (2007: 186–187) neatly summarise the foremost problems:

As the reassuring belief in the compatibility and interdependence of democratic consumer capitalism and ecological sustainability has become hegemonic, different and perhaps counter-intuitive lines of enquiry are not particularly popular. They appear disturbing, even counter-productive. As faith in technological innovation, market instruments and managerial perfection is asserted as the most appropriate means for achieving sustainability, empirical experience reveals the limitations of such approaches ... An abundance of eco-political measures are being considered and implemented. Yet the key principles governing western practices of production, circulation, exchange and consumption remain immutable.

Blühdorn and Welsh’s contention is provided some credence by empirical findings; the leading nations on ecological matters are failing to make improvements at the scale and speed required (Dryzek et al. 2003). The Netherlands, a past environmental leader, has embarked on a more ambitious attempt to facilitate a stronger version of ecological modernisation called Transition Management. Critiques are emerging of the Dutch Transition Management approach in practice (see Hendriks 2008, Meadowcroft 2005, Smith and Kern 2007). Smith and Kern’s (2007: 19) work is particularly insightful as it identifies problems in the inability of ecological modernisation to provide ‘an account of how such initiatives become a power base for change’. Ecological modernisation’s emphasis on economic growth over environmental concerns has been criticised by Pellow et al. (1999) and Schnaiberg et al. (2000). Pellow et al. and Schnaiberg et al. state that economic concerns are still the
overriding priority for businesses and governments, with ecological and social objectives undermined by the discourse. York and Rosa (2003) evaluate ecological modernisation to find that resource efficiencies made are not keeping pace with the increase in overall production; in addition, the case studies of individual companies indicate an increase in negative impacts.

Critiques centred on ecological modernisation’s approach to climate action have found that at the local scale the CCP™ campaign, underpinned by the ecological modernisation discourse, was unable to facilitate greater GHG reductions once initial cost-effective options had been undertaken and, in turn, hindered the adoption of the more radical measures required (Burton 2007, Lindseth 2004, Slocum 2004a). Similar findings have emerged at the national scale. Teräväinen’s (2010) study of national climate policy underpinned by the ecological modernisation discourse found that it narrowed the space for alternative ideas, while legitimising the dominant idea of continual growth. Curran’s (2007, 2009) explorations of Australian climate policy indicate that it follows a weak ecological modernisation approach, with a political reluctance to proceed into stronger and more transformative forms. At the international scale, Oels (2005) states that the current global climate change policy discourse is a weak ecological modernisation approach; this is evident in the prevailing emphasis on climate change as an economic issue that requires only cost-effective technological responses. The conclusion drawn is that the ecological modernisation approach would not be enough to respond to climate change at the speed and scale required (Oels 2005).

Sustainable development has been a prime target of critique in terms of both theory and practice. The failure of sustainable development is evidenced by continuing ecological degradation over the last two decades while it has been the meta-narrative in policy (Dryzek 2005, Meadowcroft 2000). Examples of continuing ecological degradation in Australia are outlined in the findings of the Productivity Commission (1999) and Yencken (2002), and more recently the 2011 State of the Environment Report (Australian State of the Environment Committee 2011). Together, these reports demonstrate that environmental systems are in decline, despite the policy rhetoric. Internationally, a survey of sustainable development policy progress by the OECD (2002) in five countries found limited effectiveness. The key criticisms were
that policy and programs were limited, ad hoc, reactive, partial and, at times, even contradictory (OECD 2002). Dovers (2005) concedes that some environmental gains have been made in areas such as nature conservation; however, these gains are not representative as the overall trajectory of degradation continues and the dominant, causal socio-economic system has not been altered (Dovers 2005).

While the vagueness and ambiguity of sustainable development has been the focal point of multiple critiques, the emphasis on growth and development receives an equal serve. Blühdorn and Welshs’ (2007) critical view of the emphasis on growth and development is an often cited critique of sustainable development (Banerjee 2003, Chatterjee and Finger 1994, Williams and Millington 2004). The WCED (1987) report states that the world’s economic output needs to grow five to tenfold. The acceptance of economic growth in the sustainable development discourse means many have come to perceive sustainable development to be ‘allied to a particular developmental worldview’, that is, an industrialised world development (Williams and Millington 2004: 100, also Escobar 1995, 2001, Sach 1993, 1999). The emphasis on development cannot be denied. Sneddon et al. (2006: 254) describe sustainable development as a ‘re-direction of the enlightenment project’, while others have stated that it is part of the ‘latest paradigm in development thinking’ (Williams 1998).

The focus on development is argued to take precedence over ecological concerns (Banerjee 2003: 153). This leads to a larger critique, which contends that ‘sustainable’ and ‘development’ are ‘based on incompatible assumptions’ (Banerjee 2003: 158). Chatterjee and Finger (1994: 16) state that the concept of sustainable development has been ‘blinded by the development myth’ and that there should have been more emphasis at the Rio Summit and in the Summit outcomes on redistribution and de-industrialisation. Following this line of thought, the last section of this chapter explores the transformative end of the spectrum that is concerned with redistribution of an array of resources, not just economic resources, and challenges many of the problematic features of the reformist discourses. To conclude on a positive note, Hay (2002) finds that the legacy of sustainable development is its creation of a harmonious interlocking of ecological, economic, social and political concerns within policy discourse and its status as the prevailing vision of a more sustainable world.
3.4 Radical Green Discourses: The Main Storyline

Radical Environmentalism has embarked upon a process of deep questioning that has led it beyond environmentalism, not only into a radical critique of the modern age and its motivations and ambitions but further into a critique of hierarchical and patriarchal civilization as such and finally even into an anthropological critique (Melle 1995: 120).

For Dryzek (2005: 225) radical green discourses, which emerged in earnest only three decades ago, encompass a comprehensive critique of industrial society that is ‘perhaps the most significant ideological development of the late 20th century’. ‘Radical’ is an apt descriptor, as the term is historically associated with going ‘to the root’ (Parker et al. 2007, Scruton 1982). The discourses of eco-socialism, eco-feminism, social ecology and deep ecology view the causes of ecological and social degradation as rooted in the structures of society. Radical discourses question the core tenets of modernity to identify systems, ideologies, and powers that have led to ecological and social degradation. The means advocated to redress social and ecological imbalance seek to transform society into a more socially just and ecologically attuned state, radically different from what we experience now. The descriptive and visual imagery presented is more expressive and passionate that anything in the reformist discourses. All the radical discourses construct a catastrophic present, which, with the necessary action, could be turned into a multiplicity of utopian futures.

As an introduction, the diverse ends of the radical green spectrum and their main storylines are described. The storylines are divided into two sections. The first explores environmental justice and majority world movements. Dryzek (2005: 224) describes these initial two discourses as having ‘achievement in practice without much in the way of theoretical reflection’ as they emerged at the grassroots to achieve certain objectives. The main storylines of social ecology, eco-socialism, eco-feminism and deep ecology are then described. These discourses are the opposite of the first two storylines. As Dryzek (2005: 224) states, these latter discourses are ‘intellectual achievements without much obvious accompanying political or economic practice’.

Environmental Justice and Majority World Movements

Environmental justice and majority world movements occupy the discursive space on the radical–reformist divide, represented in Figure 2, in Section 3.2.1. They have
arisen largely at the grassroots to address locale-specific concerns. As these movements have emerged, evolved and expanded over time, similarities in the framing of ecological and social concerns (and responses to these) provide them with a cohesive storyline. Environmental justice stretches into the radical realm due to its linking of ecological degradation with social inequality, resulting in calls for justice, redistribution and alternative approaches to production that are called for through enhanced participatory procedures. Environmental justice situates the environment in close proximity to peoples’ everyday lives — in people's homes, communities and workplaces — not ‘out there’ in a state of pristine ‘wilderness’. This proximity gives rise to the articulation of concerns over environmental health and community wellbeing.

The majority world movements’ storyline is more fragmented due to the limitations of constructing an overarching storyline for the majority world, which represents over 80 percent of humanity and many different cultural and linguistic backgrounds. Despite these limitations, there is a discernible narrative from majority world movements that revolves around the interlinking and inseparability of ecological and social justice. This narrative is hinged on the theme of rights to develop and/or to receive recompense for past injustices. These rights are framed in the language of ‘ecological debt’ or ‘carbon debt’ and described as the social injustices borne from power imbalances from a ‘history of ecological and demographic imperialism of Europe’.  

**Eco-Socialism, Social Ecology, Eco-Feminism and Deep Ecology**

The principal set of radical discourses — eco-socialism, social ecology and eco-feminism — all portray a dire state of social injustice and ecological degradation that requires urgent, radical redressing. The causal agents differ, hence different actions are advocated to address these causes. Turning to the main storyline of eco-socialism, Löwy (2005: 19) states that it rests on two essential arguments: that current society is unsustainable and that protection of the environment is a ‘humanistic imperative’.  


49 It should be highlighted that the initial Marxist response to ecological concerns was rejection. Marxists initially saw ecological concerns as a new, shrouded form of capitalist control (see Hay 2002 and his example of Fung’s 1970 paper *Ecology Movement Exposed*). Debates and attacks on eco-socialism have been apparent; two such notable critiques are those by Ekersley (1987) and Giddens.
Eco-socialism fuses Marxist ideas, socialism, ecologism and environmentalism (Dryzek 2005, Hay 2002); the result is that eco-socialism has its eyes firmly on the cause — capitalism — that must be annihilated and replaced with socialism for the salvation of the planet and people. Hence, the storyline is of a world in a grave ecological and social crisis created by capitalism’s relentless pursuit of profit and infinite growth, in turn leading to commodification and alienation. This leads to the ‘only’ solution being a large-scale transformation to an international socialist system. Dryzek (2005: 209) argues that in practice weaker streams of eco-socialism converge with administrative rationalism, a discourse characterised by faith in the ability of expert problem solving to overcome ecological problems via bureaucratic management within the existing socio-economic political structures (Dryzek 2005: 73-5).

Social ecology is the dominant eco-anarchic inspired discourse, with a radical storyline of grave peril similar to that of eco-socialism. The main storyline is evident in its definition: ‘Social Ecology 1: a coherent radical critique of current social, political, and anti-ecological trends’, and ‘2: a reconstructive, ecological, communitarian, and ethical approach to society’ (ISE 2011). The root cause of all ills is hierarchy; exposing and eradicating it will release the potential of technology, science and humanity, enabling a future harmonious society without want and all within biophysical limits (Bookchin 1987, Hill 2004, Marshall 2008). To Chodorkoff (1990), ‘the ultimate promise of social ecology is the reharmonization of culture and nature’ and that will lead to a ‘better’ future, which is democratised, re-scaled, and, importantly, free of domination and hierarchy.

Eco-feminism converges with social ecology in its identification of hierarchy and domination as the causes of ecological and societal ills. Therefore, similarly to (1991, 1994). Eckersley categorises Marx as Promethean—with unlimited growth, no limits and continued faith in human ingenuity and technological development—hence, a Marxist perspective with an ecological perspective become irreconcilable. Giddens (1991, 1994) takes aim at the reductionist tendencies of a Marxist critique of economics that means issues of life and politics are unable to be dealt with sufficiently. Löwy acknowledged these limitations, writing that ‘even today, Marxism is far from having corrected its shortcomings in this respect’ (Löwy 2002: 126). Feminism and eco-feminism are umbrella terms for a range of ideas, notions and values. Within eco-feminism, two distinct streams are discernible: cultural and social eco-feminism (Curran 2006). Cultural eco-feminism evokes and valorises women’s connection to nature and nature-based spirituality (Curran 2006, Hay 2002, King 1995). This stream has been critiqued as essentialist and acting to reinforce women’s own oppression by framing them as nurturers who will clean up man’s mess” (see...
social ecology, eco-feminism advocates localised transformation that spreads out horizontally, in contrast to the internationalist system eco-socialism would construct. The form of hierarchy and domination recognised by eco-feminism, however, is patriarchy and the androcentric perspective to which it gives rise. Sweeping actions are required to eliminate patriarchy and transform society and the self. Features of the main eco-feminist storyline are described in the following quotation:

Ecofeminism is concerned with the connections between the domination of women and the domination of nature. Although ecofeminism is a diverse movement, eco-feminist theorists share the presuppositions that social transformation is necessary for ecological survival, that intellectual transformation of the dominant modes of thought must accompany social transformation, that nature teaches us non-dualistic and nonhierarchical systems of relation that are models for social transformation of values, and that human and cultural diversity are values in social transformation (Howell 1997: 231).

Deep ecology’s main storyline is that of ‘pristine’ nature that has intrinsic value needing to be defended from excessive human encroachment. The means and the ends are the reinsertion of humanity within nature via individual consciousness changes and substantially increasing areas of ‘wilderness’ (Brulle 2010, Hay 2002, Melle 1995, Næss 1989). Deep ecology agrees with eco-feminism on the need for personal transformation, but the transformation is aimed at creating equity with nature, and is silent on issues of gender (for example, see Fox 1989, Salleh 1984, 1992). While deep ecology has evolved to be more inclusive of issues of social justice, it remains silent on some notable issues, for instance urban concerns, resulting in a weak socio-political program for change.  

The radical green discourses of eco-feminism, eco-socialism, deep ecology and social ecology all perceive the existence of strict ecological and/or social limits that are being breached. They are aligned with survivalism, but instead of the harsh authoritarian responses of survivalism to the ecological crisis their responses vary; as

Biehl 1989, Merchant 2006: 514). The social eco-feminist stream differs as it argues that there is a continuum of socially constructed ‘feminine’ and ‘masculine’ traits. These traits are needed in a dynamic equilibrium in the social, economic, political and intellectual realms (Birkeland 1993: 263, Davies 1988, King 1995).

Dobson (2000: 111) describes, ‘the possible political arrangements in a sustainable society seem to range all the way from radical decentralisation to a world government’. An underlying theme evident in eco-socialism, social ecology and eco-feminism is that all are highly critical yet reconstructive discourses. The end is premised on ‘transformation of people and the way they think about and relate to, and act in the non-human natural world’ (Dobson 2000: 111). These elements of the storylines are examined in the following sections.

3.4.1 Radical Problems and Causes

Radical discourses frame the world as being in dire ecological peril, with humanity’s survival positioned on a precipice. Dobson (2000: 20) states: ‘the radical green consistent use of an apocalyptic tone is unique’. This tone is evident in eco-socialism’s vivid descriptions of ‘ecological crisis’, ‘ecocide’, ‘ecological destabilization’ and ‘biological devastation and ecological catastrophe … ravaging the ecosystems sustaining life’, ‘climate chaos … dangerous tipping points’ and ‘ecological crisis … climate related catastrophes’. Social ecology evokes ‘nightmares of an ecological apocalypse … a catastrophic breakdown of the system that maintains the stability of the planet’ and holds that ‘the ecosphere is threatened to a degree unprecedented in humanity’s tenure on the planet’ (Bookchin 1990: 20, Chodorkoff 1983, respectively). Eco-feminism illustrates the gravity of the situation by deploying phrases like ‘environmental crisis’ and ‘environmental devastation’ (Merchant 2006: 514, Kirk 1997: 6, respectively). It is a matter of humanity’s very survival; as Plumwood (2002: 122) states, it is ‘our own and nature’s survival in an age of ecological limits’.

In radical green discourses, the social ills are many, multi-scalar and interlinked to ecological issues. The world is presented as not just on an ecological precipice but a social one as well. The lists of interconnected ills described by theorists are substantial and far greater than anything the reformist discourse recognises. Löwy (2005: 15), lists those of an eco-socialist stance to be:

Exponential growth of air pollution in big cities and across rural landscapes; fouled drinking water; global warming, with the incipient melting of the polar ice caps and the increase of “natural” extreme weather-related catastrophes; the deterioration of the ozone layer; the increasing destruction of tropical rain forests; the rapid decrease of biodiversity through the extinction of thousands of species; the exhausting of the soil; desertification; the unmanageable accumulation of waste, especially nuclear; the multiplication of nuclear accidents along with the threat of a new — and perhaps more destructive — Chernobyl; food contamination, genetic engineering, “mad cow” and hormone-injected beef.

When reformist and radical discourses do acknowledge similar issues, such as climate change, deforestation, and food scarcity, the acknowledgment of the risk associated with these problems is much greater within radical discourses.

Furthermore, radical discourses give primacy to multiple social injustices. These social injustices include ‘danger of war ... poverty ... hunger’, ‘proliferation of technologies of war ... destruction of indigenous cultures’, ‘unemployment ... alcoholism ... ethnic tensions ... sexual abuse of women’ and ‘crime ... suicide ... more people ... suffering’.

The environmental justice construction of environmental concerns is worth singling out. Environmental justice frames environmental problems as issues of ‘public health, worker safety, land use, transportation ... children’s health, housing ... community reinvestment, urban sprawl’ (Bullard and Johnson 2000: 556–557). The contribution to the construction of the environment is, therefore, portrayed as something more immediate to people’s everyday lives, providing a spatial immediacy and relevancy that has been omitted from some other green discourses.

Majority world movements incorporate a local to global focus that links ecological issues with issues of land rights, freedom of political expression, gender equality and access to education (Brownhill 2007, Guha 1997, Shiva 2010). These local to global, personal to societal, social to ecological concerns demonstrate a far more expansive tale of ecological and social ills than reformist discourses. Additionally, these concerns are presented as interlinked, inseparable and demanding urgent redress.

The construction of nature is a point of difference within radical green discourses. Eco-socialism is unashamedly humanistic; nature is conceived along anthropocentric

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lines to provide services such as ‘forests prevent floods, maintain soil health, defuse hurricanes and detoxify drinking water’ (Cohen 2008: 1). Social ecology and majority world movements blur the boundaries between eco-centric and anthropocentric. Social ecology has a dynamic conception of nature that is complex, evolving and interdependent. This understanding informs the means and ends, as nature is a source of hope given that it is constructed as ‘a participatory realm of interactive life forms: creative, cooperative, symbiotic and productive’ and, therefore, if ‘nature is a realm of freedom, participation, and mutual aid, human society can be the same’ (Dryzek and Schlosberg 2005: 383). Nevertheless, social ecology has no overt eco-centric credentials and fashions a difference between nature and humanity through ‘first’ and ‘second’ nature.\(^\text{54}\) Majority world movements bestow nature with intrinsic values. In *World People’s Conference on Climate Change and the Rights of Mother Earth* (2010a) ‘being’ is deployed to describe ‘ecosystems, natural communities, species and all other natural entities which exist as part of Mother Earth’. Mother Earth is stated to have rights and needs to be respected, and people have a responsibility to live in harmony with each other and Mother Earth. The evoking of Mother Earth is also overt in *Bali Principles of Climate Justice* couched in terms of ‘sacredness’, ‘unity’ and ‘interdependency’ (International Climate Justice Network 2002). Eco-feminism has waxed and waned on the ‘nature as mother earth’ rhetoric, but regardless of the changing fortunes of mother earth rhetoric, eco-feminism contains a strong current of nature being more organic and alive than currently regarded. Deep ecology presents nature in the most eco-centric form, a construction of nature that is ‘pristine’, with intrinsic value that elevates it to the value of humans (Brulle 2010, Hay 2002, Melle 1995, Næss 1989).

Regardless of the eco-centric or anthropocentric view, the dire state of the world would seem to require a deep-seated cause, which radical green discourses do not disappoint in delivering. Many of the causes cut to the core of modern society, hence the signifier ‘radical’. A common articulation is of unequal power relations that exist

\(^{54}\) First nature is akin to biotic nature, while second nature is human nature. Both natures share an evolutionary potential for greater subjectivity and flexibility. However, second nature is the way humans consciously adapt and create environments suitable to inhabit. Second nature is viewed problematically as it contains both hope and danger. The danger is destruction (the current trajectory of modern society); if nurtured, the hope is the resolution of ecological and social ills. Once ‘we see that hierarchy and domination in human society is institutional, rather than biological, we can work more symbiotically both among ourselves and with the rest of the natural world’ (Bookchin 1990: 25).
within large structural forces, between humans, and/or between humans and nature. Environmental justice flips the rhetoric of sustainable development to assert that it is not the poor exploiting their environment for survival, but the ‘many elected representatives, corporate decision makers, and corporate foot soldiers within government agencies’ or ‘industries and governments (including the military)’ that target these communities as sites for dirty industries due to their perceived powerlessness’ (Gibbs 2002: 100, Bullard n.d., respectively). Adding insult to injury, those with power are constructed as being able to escape the worst effects of the ecological problems by being able to move to cleaner neighborhoods and afford better healthcare, while poorer members of society cannot do the same. A demonstration of this is the treatment of Beck’s (1992) risk society assertion that ‘poverty is hierarchic, smog is democratic’ to which a possible response is that ‘in the reality of everyday life this is not the case’ as poor communities are always disproportionately affected (Bovenkerk 2003). Majority world movements construct the causes of ecological and social degradation over broader temporal and spatial scales. These causes include over-consumption by the rich, growing militarisation and past colonial exploitation. In addition, ‘multilateral development banks, transnational corporations and Northern governments, particularly the United States, [cause] the problem’ (International Climate Justice Network 2002, also see Guha 1989, Martinez-Alier 1991).

For eco-socialism, the cause of the dire state of the world is capitalism framed as ‘ecocide’ or ‘a kind of cancer on the earth’ (Belem Ecosocialist Declaration 2009, Kovel 2011: 4). Capitalism is argued to ‘have accelerated a two-fold destruction process: the process of destruction of our natural basis of life and, simultaneously, the process of exclusion of ever-larger sections of humanity from the economic and social bases of living’ (Sarkar and Kern 2008: 7). All the characteristics of capitalism — infinite growth, alienation, commodification, homogenisation, accumulation, private ownership and compression of space and time — are to blame (see Cohen 2008, Kovel 2002, 2011, Löwy 2005, 2007, Sarkar and Kern 2008: 26).55 The menacing

55 Multiple Marxist theoretical tools are employed to explain why and how capitalism destroys society and the environment. The most important are the concepts of metabolic rift, the second contradiction of capital and the treadmill of production and consumption (see Foster 1999, Foster and Clark 2004, Clark and Foster 2009). The metabolic rift is explained by capitalism that ‘…had, as he (Marx) put it, created “an irreparable rift” in the “metabolic interaction” between human beings and the earth’ (Foster and Clark 2004: 188). This rift continues to grow due to the globalisation of capitalism creating ‘temporal rifts between energy and resource consumption and their renewability, as well as rifts between the rate
imagery of capitalism is intense with descriptions of ‘drudgery ... inferno of rotten relationships ... rancid dreams ... hierarchy, domination, exploitation and patriarchy ... subjugation of Nature ... permanent destruction’ (Cohen 2008: 4).

While eco-socialism has themes of hierarchy and domination under the umbrella of capitalism, social ecology positions these as the prime causes and capitalism becomes positioned as only the most overt expression of hierarchy (Bookchin 2002). Anthropological and historical studies serve as the supporting evidence for this positioning. Bookchin (1971, 1990, 2002) delves into early human history to cast hierarchy as the destroyer of ‘organic societies’, which were non-hierarchical in their relations between people and nature. The emergence of hierarchy is hypothesised to have come from many sources — old age and seniority, the rise of agriculture, warfare, technological change or even natural catastrophes (Bookchin 1990). Regardless of the sources, however, the development of hierarchy has resulted in the emergence of states and the capitalist system, which both receive stinging criticism from social ecology.

Deep ecology and eco-feminism locate the cause of ecological and social degradation in humanity’s consciousness. Deep ecology names the cause ‘anthropocentrism’. Anthropocentrism has led to a state of human arrogance, separation and domination of nature (Devall and Sessions 1985, Dryzek and Schlosberg 2005). Eco-feminism identifies androcentrism as the culprit; this is not a human-centric view of the world but a male-centred view of the world (Curran 2006, Dryzek 2005). According to eco-feminism, an androcentric perspective is beset with harmful tendencies such as the desire for unlimited growth and military advancements, and has the effects of homogenisation and monopolisation (Hawthorne 2002, King, 1995: 20, Mies 1997: of waste production and the capacity of ecosystems to cope with it’ (Freund 2010: 113). The second contradiction of capitalism is similar to the first contradiction that theorises the capacity of capitalism to undermine itself via an eternal drive for profits undermining wages, hence undermining purchasing power. The second contradiction of capitalism expands upon this to theorise how capitalism undermines the very ecological basis of its existence (see O’Connor 1988, 1998, Pepper 1998). An example of this process is that the ‘warming of the atmosphere will inevitably destroy people, places, and profits, not to speak of other species of life’ (O’Connor 1988: 25). Finally, the treadmill of production and consumption is an explanatory tool of the ‘locked in’ nature of ever-more production and consumption under capitalist logic (see Schnaiberg et al 2000). Marxist and anarchist writings serve as the foundational texts, notably works by Marx, Kropotkin, Bakunin, and Mumford. Historical events and case studies readily cited include The Paris Commune, Ancient Greece (Polis), and Spanish Anarchist Actions. Recent attention has turned to majority world movements, such as the Zapatistas.
Eco-feminism outlines the dualism created by androcentrism that privileges the ‘masculine’ (rational, culture, mind, autonomous) over the ‘feminine’ (emotional, nurturing, body, connected), resulting in domination, hierarchy, separation and the creation of ‘otherness’, where the ‘other become valueless and exploitable as a “resource”’ (Plumwood 1991: 10–19). For those who dominate, men, the interconnection and dependency on nature and on those classed as ‘others’, women, children, is lost. Moreover, men are further fashioned as losers too, because the ‘denial of emotional needs that have been repressed in our androcentric culture has contributed to an excessive need for physical gratification and power’ (Birkeland 1993: 274, Hawthorne 2002, Plumwood 1991, 1993, 2002). Militarism and capitalism are held up as quintessential cases of an overt extension of the androcentric perspective of domination, oppression and hierarchy (Kirk 1997). The specific agents perpetrating ecological harm are often named and associated with features of maleness, whiteness, and privilege (Hawthorne 1997, 2002, Mies and Shiva 1993). The cause of ecological and social problems, therefore, is framed as so perilous and entrenched that there is ‘no other choice today but to look for radical alternatives to the present economic and social system’ (Mies 1997: 16).

### 3.4.2 Radical Means

Radical green discourses do diverge in the transition strategies they propose, although similarities exist in their construction of dramatic changes needing to occur by stealth and at speed, with agency bestowed upon everyone. Time is the essence due to the scale of ecological and social peril, but there is a ceded realism to the domination of capitalism. Hence, the radical strategy is one of stealth, by exploitation of opportunities, rather than revolution. This section explores the constructed transition strategies, and the actors capable and incapable of creating the change to a sustainable future.

Eco-socialism would seem to have the most ardent desire for revolution of any of the radical green discourses. However, the domination of capitalism presents little chance of a sudden fiery overthrowing of the capitalist order. The eco-socialist strategy for bringing about change, therefore, is one of ‘prefiguration’. Prefiguration consists of
the selection and/or support of practices that would facilitate the redefining of use-value over exchange-value, privilege quality over quantity and elevate the importance of non-market, non-commoditised aspects of life such as social relations. Löwy (2007: 13) accords this approach ‘to the logic of what Marxists call “a transitional programme” as each small victory, each partial advance, leads immediately to a higher demand, to a more radical aim’. This is framed as a revolution by stealth or a ‘withering away’ by building a new society in the shell of the old on an international scale (Foster 2000, Jakopovick 2007, Kovel 2000, 2002, Löwy 2005). Social ecology seeks the building of society within the shell of the old too, but this is to be undertaken differently by way of individual localised actions that spread into a web of horizontal networks. Eco-feminism is concerned with practices that ‘delink’ masculine power constructs and enable diversity to flourish through mechanisms of value change, grassroots action, non-violence, and, specifically, ‘wilder’ types of democracy and politics that are more personal and participatory.

Technology and Science

Technology and science are subjects to be questioned, re-valued, re-scaled, and, even, forbidden by radical green discourses; a stark contrast to the reformist discourses’ unquestioning and optimistic role for technology and science. Of all the radical green discourses, eco-socialism and social ecology are the most accommodating to science and technology. Kovel (2000: 19) states ‘ecosocialism is not a Luddite’, and in Bookchin’s (1971) writing there is the promise of ‘liberatory technology’. The language is utopian. Technology is described as having reached a point where it has the capacity to ‘make possible an immense expansion of free time ... basic means for eliminating toil and drudgery, for living in comfort and security, rationally and ecologically’ (Biehl 1999). To take advantage of this capacity, however, technology and science must be ‘freed’ from their ‘embedded history of exploitation, organization of production, class relations, the desecration of the natural environment and destruction of the Commons’ (Cohen 2008: 5, also see Chodorkoff 1990, Tokar 2009). Social ecology has extra caveats that technologies need to be re-scaled to human need, ecologically sensitive and, due to anarchist credentials of increasing autonomy and decreasing centralised power, they must increase community self-


Technologies and techniques recognised as able to facilitate the transition to a more sustainable future are clean renewable energy sources, public transportation, and alternative agricultural systems, such as aquaculture and permaculture (Belem Ecosocialist Declaration 2009, Bookchin 1971, Chodorkoff 1990, Tokar 2009). The ‘forbidden’ technologies are those that perpetuate or exacerbate unequal societal power relations, including genetically modified organisms, ‘clean coal’, nuclear power, biofuels, and hybrid vehicles. Eco-feminism agrees with the approved and forbidden technologies, but adds specific condemnation of mega-technologies that deny life, such as ‘biotechnology’, ‘green revolution’, ‘patented life-forms’ and ‘geo-engineering’ (see d’Eaubonne 1990, Hawthorne 2002, Shiva 1992, 2005, 2009).

Science is singled out by eco-feminism as reductionist, mechanistic and essentially a ‘form of monological and dualistic thinking, [where scientists] set themselves radically apart from objects of knowledge in a way that refuses objects elements of commonality, mind, or intentionality’ (Plumwood 2002: 45, also see Merchant 1980, Mies 1993 and Shiva 1993). Plumwood weaves an illustrative narrative of the ‘EcoGuardians’ who are ‘unable to recognize their own knowledge as politically situated, hence failing to recognize the need to make it socially inclusive ... and actively engaged with its boundaries and exclusions’ (Plumwood 2002: 68). The Eco-Guardians suffer from ‘remoteness’ — politically, culturally, personally — and, therefore, fail to create an ecologically sustainable world. Hence, the knowledge and the mechanisms required to generate it need to be contextualised and free of universalisms. Also needed is the valuing, incorporating and appropriate acknowledging of multiple ways of knowing, such as peasant, female and indigenous knowledge(s) (Hawthorne 2002, Mies 1993, Plumwood 2002). Majority world movements have been equally stinging in their critiques of science, arguing that science needs to be replaced by, or at least incorporate, ways of knowing that are

more inclusive of others and with re-scaled technologies that respond to humanity’s needs (International Climate Justice Network 2002, Guha 1988, Martinez-Alier 2002, Shiva 2008).

Production and Consumption

Under a radical green perspective, production and consumption are considered to require radical changes. Environmental justice advocates production practices that create a novel version of the precautionary principle. The meaning assigned to the precautionary principle within environmental justice is far more radical than within ecological modernisation and is encapsulated in the terms ‘just transitions’ and NIABY (Not In Anyone’s Backyard) (International Climate Justice Network 2002, Dowie 1995, Gibbs 2002). ‘Just transitions’ overcome the jobs versus environment impasse by insisting that where ‘industries cannot operate without polluting the environment then they should cease and programs be created to prepare the workforce for alternative jobs’ (Gibbs 2002: 99). The other radical discourses argue for far broader changes in order to green and democratise production processes, while reducing over-consumption and redistributing to those in need. The commonality underpinning eco-socialism, social ecology and eco-feminism, as well as many majority world movements, is the need to transition to a new economy based on needs rather than wants as well as a redefinition of wealth and equality in economic relations (Foster and Clark 2004, Kovel 2000, Sarkar and Kern 2008).

Eco-socialism is programmatic in its redefinition of wealth from ‘exchange-value’ to ‘use-value’ (Kovel and Löwy 2001). Fundamentally, use-value that provides for human needs must occur through a democratising process of the economy; in workplaces and communities it would occur ‘through direct citizen participation in economic decision-making’ (Pepper 1998: 6). Common ownership of the means of production and distribution, for eco-socialists, is the way for the transition to happen. The democratic opening of all sectors of society becomes a learning mechanism, allowing people to gain insights into their real needs and change the exchange-value to use-value (Kovel 2000). Shiva (2008: 125), a representative of majority world and eco-feminist discourses, argues for a paradigm shift from a ‘consumerist definition of being human to one that recognizes us as conservers and co-creators of wealth and
nature’. Often evoked is the Gandhi quote ‘the world has enough for everybody’s need but not enough for everybody’s greed’ (for example, in Guha 1997, 2003, Shiva 2000). The redressing of production and consumption injustices requires fair trade, redistribution of wealth from the rich to the poor, participatory democracy, local control, and enhanced social equity through improvements to literacy, health and education.59

Social Organisation and Governance

Expanding existing avenues for democratic practice and creating new forms of social organisation that are open to everyone play a significant role in the achievement of the changes required. Environmental justice seeks inclusion via expansive participatory changes to existing institutions that enable ‘the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evaluation’ (The First National People of Color Environmental Leadership Summit 1991, Principle 7). These demands upon the current system have the capacity to open up spaces for alternative views to be heard in multiple forms, potentially altering the system from within.

Social ecology also seeks to alter the system from within. Social ecology’s transition strategy to a sustainable society is premised on new governance arrangements that are to be built in the shell of current socio-political arrangements (Bookchin 1990). The strategy and desired ends is an anarchist-inspired meeting of the means with the ends via an ongoing project of ‘Libertarian Municipalism’ or ‘Communalism’, ‘Radical Cities’ or ‘Free Cities’ (Biehl 1999, Bookchin 1986, 1992, 2002, Clark 1998, Ward 1987). The expansion of democratic practice is to be undertaken by recognising that:

where such institutions (institutions of direct democracy: citizens’ assemblies, popular assemblies, or town meetings) already exist, their democratic potential and structural power could be enlarged; where they formerly existed, they could be revived; and where they never existed, they could be created anew (Biehl 1997).

The idea is not to take over the state but to re-open it to the public sphere, while at the same time taking control of the economic sphere (Bookchin 1987, 1990). The process will involve a ‘step-by-step reorganisation’, building individual Libertarian

Municipalism into larger networks spreading horizontally (Biehl 1997, Bookchin 1990).

Eco-feminism’s concerns with consciousness and societal change are also premised on open participatory forms of governance and social arrangements. Terms such as ‘wild politics’, ‘erotic democracy’, ‘perspective from below’, ‘wild democracy’ and ‘earth democracy’ pervade the eco-feminist literature, as well as elements of the majority world movements.\(^{60}\) Coinciding with these terms are themes of respecting and celebrating diversity, which enable creative forms of expression and the voices of the most marginalised to be heard (see Hawthorne 2002, Plumwood 1993). The exact question of how these processes should be enacted, or the totality of the eco-feminism transition strategy, is not uniformly addressed but transition themes are expressively non-violent, multi-scalar and faceted approaches premised on personal and political action that improves quality of life, redistributes wealth and creates common ownership.\(^{61}\)

**Consciousness Change**

Within the radical green end of the discursive spectrum is a point of division over the requirement for a green consciousness change. Environmental justice and eco-socialism pay limited heed to consciousness change, while social ecology has, at times, been very hostile to eco-centric formations of it. Social ecology prioritises the need for social change, yet in a conciliatory tone states that cultural and value shifts will occur, for ‘during the course of a political and social revolution, people’s personalities will doubtless be changed’ (Biehl 1998).\(^{62}\) Eco-feminism constructs androcentrism as the prime cause of ecological degradation, therefore changes in values and beliefs are required to enable egalitarian gender relations as well as egalitarian relations between nature and humans (Birkeland 1993: 271). Dualistic thinking has to be challenged and replaced, as well as the notion of ‘self’ that is separate from others, and ‘the basic philosophy of competitive, egotistic, growth-oriented capitalism’ (Mies 1997: 13, also see Sandiland 1997, Warren 1996). Values,

\(^{60}\) Hawthorne (2002), Heller (1993), Mies and Bennholdt-Thomsen (2000), Sandilands (1997), Shiva (2009), respectively.


\(^{62}\) See Bookchin’s (1987, 1990, 1995a, 1995b) vitriolic attacks throughout various writings on green discourses concerned with personal values and spiritual change.
attributes and principles to be cultivated are on the ‘feminine’ side of the continuum, including connectedness, care, cooperation, responsibility, love, friendship, solidarity and ethics.\(^6^3\) These values can begin to be cultivated by small, localised actions: ‘care and responsibility for particular animals, trees, and rivers that are known well, loved, and appropriately connected to the self are an important basis for acquiring a wider, more generalized concern’ (Plumwood 1991: 7). Self-change in values will begin to change actions (Mies 1997).

Deep ecology privileges ecological consciousness change as the means to address ecological destruction. Once ecological consciousness change has occurred, societal change will follow. The mechanism is a process of self-realisation termed ‘self-in-Self’. When the cultivation of an ecological consciousness leads to the realisation of ‘organic wholeness’, the realisation is made that the individual is part of a larger whole, and ‘in this light . . . ecological resistance is simply another name for self defense’ (Fox 1986: 60). Wilderness plays a vital role in the cultivation of ecological consciousness and sustainability. As Devall and Sessions (1985: 8) describe:

> We believe that humans have a vital need to cultivate ecological consciousness and that this need is related to the needs of the planet. At the same time, humans need direct contact with untrammelled wilderness, places undomesticated for narrow human purposes. Many people sense the needs of the planet and the need for wilderness preservation.

### 3.4.3 Radical Agents

Who is best placed to bring about the social change? A central characteristic of green political theory is that it has never consistently asked that question, principally because the answer is held to be obvious: everyone. (Dobson 2000: 146).

Radical discourses bestow agency upon many more actors than reformist discourse, but some actors are considered more capable than others. Environmental justice gives agency to all those affected. Gibbs (2002: 98) lists an extensive array of actors, including:

Workers, people of color, indigenous peoples, faith-based organisations, and rural and urban families; parent-teacher organisations concerned about pesticides and schools built near pollution sources; doctors, nurses, and other health professionals working to transform the health care industry; and those who make their living fishing or depend on fish as a primary food in their diets.

Those affected are exhorted to work collectively at the grassroots to change environmental policy and regulation.64

‘Conscious agents’ are the change agents within eco-socialism, social ecology and eco-feminism. ‘Conscious agents’ within eco-socialism are to ‘ruthlessly criticize the capitalist system and the widespread belief that there is no alternative to it’ (Kovel 2002: 222–3). No longer confined to the working class, although still privileged, are all people of ‘racial, gender, religious, and other forms of social oppression’ to form alliances (Panayotakis 2010: 31, also see Frank 2009: 43, Löwy, 2005: 18–21). Everyone is to act collectively, as all ‘forms of domination must be confronted by collective action and major social movements that challenge the social sources of the ecological crisis’ (Bookchin 1993). Akin to eco-socialism’s elevation of the working class, eco-feminism presents women as key change agents, as ‘it is up to women, now, to reclaim the voice of humanity’ (d’Eaubonne, 1990). Seager (2003: 167) frames women’s movements as full of ‘imagination, commitment and social cohesion’. Nevertheless, ‘others’ are important too. Hawthorne (2002) constructs the ‘diversity matrix’ that consists of all those oppressed by patriarchy to include the underclass, the disabled, the poor, the homosexual and the transgendered person. Salleh (2004) calls for a synergistic politics of a polyphonic voice that links ecological, socialist, womanist, peasant and Indigenous struggles. Men are agents of change too. Pragmatically, they are required as ‘it is not possible for women in our societies to break out of the cages of patriarchal relations unless the men begin a movement in the same direction’ (Mies 1997: 18). The involvement of men will not be driven by paternalism or pity but by ‘the desire to restore to themselves a sense of human dignity and respect’ (Mies 1997: 18).

Radical green discourses frame some actors as capable of being change agents and others as detrimental. Eco-socialism, especially in its weaker forms, portrays the state

as an actor to work with and as a site to protest and petition (Löwy 2005, 2007, Panayotakis 2010). The state can form part of the prefigurative apparatus, as people can ‘join the battle for immediate reforms’ such as ‘certain kinds of eco-taxes ... based on an egalitarian social logic (make the polluters pay, not the public)’ (Löwy 2005: 20). For all radical discourses, capitalists, and even the upper echelons of the environmental movement, are detrimental actors. Eco-socialism describes the environmental movement as ‘black holes of bourgeois naturalism, neo-Malthusianism, Club of Rome technocratism, romantic deep ecologism, and United Nations one-worldism’ that lacks a critique of ‘class exploitation, capitalist crisis, uneven and combined capitalist development, national independence struggles’ (O’Connor 1988:13, also see Frank 2009). Nevertheless, capitalists are the agents who most irk eco-socialists, because capitalism ‘cannot solve the ecological crisis because to do so would require setting limits upon accumulation — an unacceptable option for a system predicated upon the rule: Grow or Die!’ (Kovel and Löwy 2001). Eco-feminism frames scientists, economists, and others established within patriarchal power relations, even the environmental movement, as problematic (Birkeland 1993, Plumwood 2002). Eco-feminists fault the environmental movement for its androcentric perspective, which ‘inadvertently supports the status quo’ while producing defective strategies and ‘solutions’ (Birkland 1993: 263).

3.4.4 Radical Ends

Utopian vision provides the indispensible fundamentalist well of inspiration from which green activists, even the most reformist and respectable, need to draw from (Dobson 2000: 202).

The only possible assured end from radical green discourses would be one radically different from the current status quo. Eco-socialism promises a ‘New Civilisation’ conditional on its agenda being implemented (Löwy 2002: 133). Grounded in ecological limits, the economy would be ‘a zero-growth, zero-waste, steady-state, democratically planned socialist economy that puts planetary and human needs before profits’ (Frank 2009: 43, also see Löwy 2005: 20 and Panayotakis 2010: 27). Pepper (1993: 55) states there would be no static end-point, as ‘a socialist society, life could not be pinned down to any static ideal state’; instead, ‘human nature and human needs would be growing ever-richer while, at the same time, there would be no limits to
growth in the human inventiveness that would fulfill them’ (Pepper 1993: 55). To ensure future social and ecological sustainability the end must be an international eco-socialist system, as indicated in the mantra ‘ecosocialism will be international, or it will be nothing’ (Foster and Clark 2004: 198).

Social ecology creates a utopian vision too. Chodorkoff (2005) states ‘utopian thinking today requires no apology’ as ‘rarely, in history has it been so crucial to draw on the imagination in order to create radical new alternatives to virtually every aspect of daily life’. The ends are reharmonisation with nature, freedom from hierarchy and domination, and happiness. Fundamentally, the future society will be ‘a moral economy that moves beyond scarcity and hierarchy, toward a world that reharmonizes human communities with the natural world, while celebrating diversity, creativity and freedom’ (ISE 2011). Eco-feminism promises a post-patriarchal society that is ecologically sustainable, egalitarian, peaceful and autonomous (d’Eaubonne 1990, Mies 1997, Salleh 2004). Eco-feminism has many alignments with other radical green discourses, so that different visions can be constructed. For instance, Heller’s (1993: 240) ‘erotic democracy’ merges social ecology and eco-feminism to create a society that:

- decentralizes power and allows for direct, passionate participation in the decisions that determine our lives. We must establish a municipal economy that addresses the needs of all citizens by creating systems that include barter and worker cooperatives.
- We must rethink technology as a creative art form that can add to the splendor of both the social and natural worlds.

Mellor (2010) melds eco-socialism and eco-feminism, proposing a future economy based on ‘sufficiency’ that operates in an equitable and ecologically sustainable manner. The eco-feminist focus on changing values to incorporate more of the feminine spectrum of values has a particular impact on the ends. The result would be a dynamic balance of values where ‘reproductivity, sensuality, emotionality would be taken to be as fully and authentically human qualities as the capacity for abstract planning and calculation’ (Plumwood 1991: 18). New notions of the ‘good life’ and

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65 The rationale is justified on the premise that ‘only a revolutionary social solution that addresses the rift in ecological relations on a planetary scale and their relation to global structures of imperialism and inequality offers any genuine hope that these contradictions can be transcended’ (Foster and Clark 2004: 198).
happiness features strongly as people are portrayed as ‘satisfied by direct human interaction and mutuality instead of consumption’, and the doctrine holds that ‘non-commoditized satisfaction of human needs will be a greater source of happiness’ (Mies 1997: 17). The ends are vividly described along utopian lines with goals of happiness and justice for all embedded within ecological limits; a vividness missing from the reformist discourses. However, these promised futures are only possible with mass action undertaken now.

3.4.5 Consequences of Radical Discourses

Radical green discourses have varied in their impacts in practice. Majority world movements have stressed, and continue to stress, the interconnection of ecological and social justice. The recent conception of ‘Climate Justice’ has become a strong rallying point for majority world movements, national and international NGOs, and some states (World People’s Conference on Climate Change and the Rights of Mother Earth 2010a). The environmental justice movement has spurred grassroots groups and networks, such as the Centre for Environmental Health and Justice, West Harlem Environmental Action, and the Southwest Network for Environmental and Economic Justice in the USA. Pivotal outcomes of this movement have included the creation of new laws, for instance the Comprehensive Environmental Response, Compensation, and Liability Act (1980, a.k.a. Superfund), in addition to the closure of some landfills, increases in recycling, and changes to ‘right to know’ legislation (Bullard 2000, Dowie 1995, Dryzek 2005). Furthermore, the environmental justice movement reframes the environment as intimately connected to peoples’ lives, not just ‘wilderness’ that is ‘out there’, and brings the notion of environmental health to the fore, enfranchising a variety of different people (Dowie 1995, Krauss 1993, Schlosberg 1999, 2007).

Eco-socialism is rare in practice, yet some examples exist. The 1972 work of Barry Commoner, who advocates eco-socialist mechanisms, is the often-cited origin of eco-socialist discourse (Hay 2002). Additional influential theorists were Bahro and Gorz, as well as Walter and Luxemburg (Hay 2002, Melle 1995). The chief disseminators of eco-socialist discourses are the journals *Capitalism, Nature, Socialism* and *Ecologìà*
Política and the most prominent individual contributors are O'Connor, Salleh, Foster, Kovel, Mellor, and Löwy.

Eco-socialism has evolved to be more inclusive of eco-feminists and voices from the majority world. Some of the leading eco-socialists’ desires to internationalise led to the formation of the Eco-Socialist International Network. This network produced *The Ecosocialist Manifesto* (2001) and a recently updated ‘call to action’, *The Belem Ecosocialist Declaration* (2009). Political expressions of eco-socialist discourse have been made by organisations such as the UK Green-Left Party and, in Australia, Resistance, Green Left and the Socialist Alliance. The eco-socialist organisational form for change built in theory has emerged in practice, Jakopovich (2009) argues, in alliances such as Teamsters and Turtles. Jakopovich (2009) considers Teamsters and Turtles to be the birth of a new alliance between unions and environmentalists premised on eco-socialist principles that formed to protest the 1999 World Trade Organization meeting in Seattle. Jakopovich (2009: 90) also presents the Australian Green Bans of the 1970s as an example of ‘non-hierarchical, socially responsible and even altruistic democratic unionism’. Mulligan and Hill (2001) highlight the Green Bans too, and the charismatic union leader Jack Mundey for his capacity to interlink social and ecological justice concerns.

Eco-feminist discourse is apparent in initiatives such as the Greenham Common Women's Peace Camp, Women’s Environmental Network Australia, as well as the Chipco and Green Belt Movements (see Gibbs 1998, Kirk 1997, Mies and Shiva 1993). Policy impact can be observed through the inclusion of women, environment and development concerns within *Agenda 21, Chapter 24: Global Action Towards Sustainable Development and Equitable Action*, as well as other supra-national bodies (e.g. World Bank and European Union) and various national and sub-national policies (Buckingham 2004: 148). Attacks on eco-feminism have focused on its ‘hybridity’; that is, there are claims that its simultaneous attendance to ecological and feminist concerns weakens both sides. Plumwood (2006) retorts by arguing that hybridity

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unites diverse interests and is the only way to resolve ecological and social injustices as these have the same root cause in andocentrism. Additional critiques of eco-feminism have targeted the link of women as nurturers of the environment. The link has been argued to result in essentialism of feminine roles as protectors, as well as making women shoulder the increased burdens of being environmental protectors (Leach 2007).

In relation to climate change, recent gender studies indicate that women have smaller GHG emission footprints, yet are projected to be more burdened by the impacts of climate change (Haigh and Vallely 2010, Salleh 2008, 2009, Terry 2009). For example, a recent report for the Women’s Environment Network (2010) found that climate change would put women at greater risk of living in poverty than men, experiencing food scarcity, violence, ill health and mortality, while creating increased workloads and decreased incomes (see Haigh and Vallely 2010 for a full description). In addition, women bring different perspectives and hence alternative management options to climate action, which have been largely excluded in the dominant masculine framing of science and technology.67 These findings reinforce the need to include women in climate action. Internationally, eco-feminist discourse is evident in GenderCC–Women for Climate Justice, a global network of women and gender activists and experts from all world regions working for gender and climate justice.68

Social ecology is synonymous with its founding father, Murray Bookchin, a vitriolic and divisive character — which might be at least a partial explanation for the limited diffusion of social ecology (for commentary on Bookchin’s nature see Dryzek 2005, Hay 2002, Morris 2009, Watson 1997). In Vermont, Bookchin’s hometown, the Institute for Social Ecology continues to teach, write and work on various programs underpinned by the discourse of social ecology. Additionally, various majority and minority world institutions and programs embody the social ecology discourse, for instance, the European Social Ecology Institute.69

68 For additional information see http://www.gendercc.net/about-gendercc.html
69 For details of the European Social Ecology Institute, see http://www.europeansocialecologyinstitute.org/
Deep ecology competes with social ecology, in the United States of America, to be the most radical green position. Deep ecology’s direct action-inspired approach has gained the most attention in practice. Abbey’s (1975) novel *The Monkey Wrench Gang* gave prominence to direct action. Deep ecology activists see themselves as defending the Earth through direct action; a perception evident in terms such as ‘Earth Warriors’ (see Foreman and Haywood 1987, Watson 1993). Dryzek (2005: 185) states that deep ecology, other than the privilege of protecting wilderness, has much less to say of other ecological issues. On social justice issues emerging voices do exist with some groups and theorists being more inclusive of social concerns such as Earth First! UK and Macy (2007). However, as Devall (2001: 7) states, the overriding emphasis of deep ecology on ‘pure’ nature and ecological concerns over issues of social justice remains:

When the demands for redistribution of money, power, and wealth, in the short-term, between more wealthy and less wealthy societies, between genders, between age groups, between politically defined ethnic groups, and so forth, become the primary agenda of social activists, there is a danger, as George Sessions has concluded, of ‘the demise of the ecology movement’ because social justice concerns frequently replace concern for the ecological integrity of the Earth … While many social issues can be addressed simultaneously, even if a utopian social justice society could be established, it may be on a planet that is rapidly losing biodiversity, primary forests, and free nature.

The most pointed critique of deep ecology has been deep ecology’s construction of wilderness as ‘untouched’, ‘empty’ and ‘pristine’. The critique centres on the detrimental consequences that this construction has had on many majority world and Indigenous peoples. These consequences have been in the form of exclusion from ‘wilderness’ areas, which were their lands and the cascading consequences from dispossession. Additional critiques of deep ecology have been the framing of population as the cause of ecological destruction rather than consumption (see Guha 1989, 1999, 2003).

To recap the vast spectrum of green discourses covered, the key components of the green discursive spectrum are captured in Table 4.
Table 4: Spectrum of Green Discourses

<table>
<thead>
<tr>
<th>Discourse</th>
<th>Storyline</th>
<th>Problem</th>
<th>Cause</th>
<th>Means</th>
<th>Agents</th>
<th>Ends</th>
<th>In practice</th>
<th>Examples</th>
<th>Opportunities</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ecological Modernisation</strong></td>
<td>Reassurance that technology and science can solve ecological problems in tandem with an economic boom from a new super-green industrialism</td>
<td>Ecological degradation</td>
<td>‘Dirty’ and ‘outmoded’ production practices</td>
<td>Decoupling efficiencies, Green production, Science and technology, Market instruments</td>
<td>Government, Business, Green consumers</td>
<td>Super-green industrialism</td>
<td>Success on case basis, No change to overall system, Economic concerns privileged over ecological</td>
<td>Cleaner production, Energy-efficient audits</td>
<td>Consensus building, Win-win mantra seductive to business and government, Internalises green concerns, Over time transformative potential</td>
<td>Co-option rhetorical use, Within growth paradigm and buffers it from attack, Questionable basis for change after low cost options pursued</td>
</tr>
<tr>
<td><strong>Sustainable Development</strong></td>
<td>Environmental and social problems can be resolved by new form of development inclusive of these concerns</td>
<td>Ecological degradation and social issues of poverty and human development</td>
<td>Everyone exploiting resources and consuming unsustainably Unequal power relations</td>
<td>Participatory governance, Green production, Increased equity, Science and technology</td>
<td>Government, Business, Civil society, Citizens</td>
<td>Plurality of ends with potential for conflict, e.g., growth, environmental protection, equity</td>
<td>Policy adoption, Continuing ecological degradation coexists with meta-narrative of sustainability</td>
<td>Bruntland Report, Agenda 21, Ecological Sustainable Development</td>
<td>Consensus building, Vision of a new ‘development’ inclusive of environmental and social concerns</td>
<td>Ambiguity on ecological limits, Co-option, Within growth paradigm and buffers it from attack</td>
</tr>
<tr>
<td><strong>Environmental Justice</strong></td>
<td>Communities exposed to environmental health risk need to find resolution through empowerment and grassroots action</td>
<td>Risks to environmental health, community wellbeing and workers’ rights</td>
<td>Powerful unfairly targeting the poor / powerless degrading the environment</td>
<td>Redistribution NIABY, Enhanced participation ‘Just Transitions’</td>
<td>All those affected work together to affect government change, Multiple local ends</td>
<td>Specific successes on closing landfills, Superfund and ‘right to know’ legislation</td>
<td>Superfund Enhanced participatory governance</td>
<td>Build diverse grassroots networks, Engagement of disenfranchised populations</td>
<td>Highly specific, Lack of broader ecological agenda</td>
<td></td>
</tr>
<tr>
<td>Majority World Movements</td>
<td>Diversity — but themes of rights, injustice and need for redistribution from past (and continuing) ecological social and ecological injustices</td>
<td>Intimately linked social and ecological injustices over local to global scales</td>
<td>Legacy of ecological imperialism</td>
<td>Over-consumption of the rich</td>
<td>Redistribution from minority to majority world</td>
<td>Citizens of the majority world</td>
<td>Multiple nation to local ends</td>
<td>Policy inclusion of concerns</td>
<td>Climate justice</td>
<td>Clean development mechanism</td>
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<tr>
<td>Eco-Socialism</td>
<td>Capitalism’s relentless drive for growth has pushed the ecology and society to limits, therefore must be replaced with an international eco-socialist system</td>
<td>Social and ecological world on precipice</td>
<td>Capitalism</td>
<td>Social and ecological world on precipice</td>
<td>Tipping points</td>
<td>Ecocide</td>
<td>Alienation</td>
<td>Prefiguration exchange-values to use-values</td>
<td>Conscious agents</td>
<td>Oppressed working in broad alliances</td>
</tr>
<tr>
<td>Social Ecology</td>
<td>Loss of humanity’s potential due to hierarchy placing humanity and environment in peril which, if overcome, would result in reharmonisation with humanity and nature</td>
<td>Social and ecological world on precipice</td>
<td>Hierarchy and domination</td>
<td>State and capitalism most overt forms</td>
<td>Self-reliance</td>
<td>Re-scaled libertarian technology</td>
<td>Re-open public sphere by enhanced participation or creation of new ones</td>
<td>Libertarian Municipalism</td>
<td>Citizens</td>
<td>Community</td>
</tr>
</tbody>
</table>
| Eco-Feminism             | Patriarchy devalues women | Social and ecological | Androcentrism | Personal and Women | Transformatio n in self and Development projects e.g. | Enhanced participatory | Hybridity e.g. build diverse | Not on the
<table>
<thead>
<tr>
<th>and the environment to restore balance and live within ecological limits, patriarchy must be overcome</th>
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<tbody>
<tr>
<td>world on precipice</td>
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<tr>
<td>Multiple social ills for the scale of the individual body to planetary risks</td>
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<tr>
<td>political change</td>
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<tr>
<td>Challenges dualisms and patriarchy by ‘definking’ masculine power and valuing diversity</td>
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<td>Diversity matrix</td>
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<tr>
<td>Some role e.g. governments and men</td>
</tr>
<tr>
<td>society to non-dualistic, non-hierarchical state within ecological limits</td>
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<tr>
<td>Agenda 21 chapter 24 Grassroots movements Women’s Environment Network Australia</td>
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<tr>
<td>governance</td>
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<tr>
<td>coalitions</td>
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<tr>
<td>Alternative avenues to explore</td>
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<tr>
<td>horizon soon Divergences over ‘goddess’ worship</td>
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<tr>
<th>Deep Ecology</th>
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<tbody>
<tr>
<td>Humanity needs to realise it is one with nature to redress the destruction</td>
</tr>
<tr>
<td>Social and ecological world on precipice</td>
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<tr>
<td>Anthrophocenism</td>
</tr>
<tr>
<td>Protect wilderness</td>
</tr>
<tr>
<td>Cultivate eco-centric orientation ‘self in Self’</td>
</tr>
<tr>
<td>Individuals</td>
</tr>
<tr>
<td>Transformed individuals to eco-centric orientation</td>
</tr>
<tr>
<td>Direct action Earth Warriors</td>
</tr>
<tr>
<td>Wilderness preservation</td>
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<tr>
<td>Alternative avenues to explore</td>
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<tr>
<td>Cultivation of ecological self</td>
</tr>
<tr>
<td>Not on the horizon soon Weak socio-political program for change Construction of ‘untouched wilderness’</td>
</tr>
</tbody>
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<table>
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<tr>
<th>Survivalism</th>
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<tbody>
<tr>
<td>Eco-authoritarian action required preventing ecological and social collapse</td>
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<tr>
<td>Earth on precipice of ecological collapse</td>
</tr>
<tr>
<td>Depletion of natural resources surpassing capacity</td>
</tr>
<tr>
<td>Elite management Draconian measures of control</td>
</tr>
<tr>
<td>World government Elites scientists</td>
</tr>
<tr>
<td>Global elite control of ecological crisis Earth Institute ‘Limits to growth’</td>
</tr>
<tr>
<td>Population control</td>
</tr>
<tr>
<td>Control environmental problems (for a while)</td>
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</table>
In drawing the radical green discourses together, three key points are apparent: the apocalyptic use of ecological limits, strategic weaknesses and learning opportunities. Dobson (2000: 20) calls attention to concerns over the radical green use of survivalist rhetoric; his concern is that ‘apocalyptic tones have been used too often to mobilize people, but have resulted in pessimism and, furthermore, framed the message in a way that seemed so obvious that change was required that little strategy was developed’. These points align with many of the findings about climate change and the denial and disengagement to which climate apocalyptic scenarios have given rise (Hulme 2008). Dobson cites the lack of a coherent program for change or strategy from radical green discourses, something that is also problematic for Torgenson (2000) and Dryzek (2005). Nevertheless, Torgenson and Dryzek perceive an opportunity for learning arising from collective consideration, discussion, and experimentation with green discourses. The opportunity for learning and the potential for sustainability experimentation is a point similar to that made by Jamison (2001) on the benefit and need for green discursive public space. Finally, the benefits of radical discourses and practices are expressed by Carruthers (2001: 107), who states that:

They provide continuity with the efforts of earlier generations, articulating the enduring values of genuine sustainability. They stand as conceptual and practical bridges linking the local with the global. They share a guarded stance towards cooptive, mainstream environment and development enterprisers and organisations. The goal is often to create sustainability through actual practice, not through an explicitly political project. The quest for sustainable design frequently takes place not at the level of state policy, but in local pockets of creativity. However, to focus on the smallness of any given initiative is to miss the larger picture. Woven together, these movements present a rich tapestry of counter-hegemonic struggle. They are the most dynamic, vibrant, promising face of contemporary popular environmentalism. The discourse of sustainable development may have been usurped from its real-world practitioners. But the homogenizing globalisation it now portends is being met from below with a countervailing force of “myriad small resistances” -- local, diverse, sophisticated and visionary.

What radical green discourses offer, therefore, is resistance that enables a way to imagine and practice a more sustainable future.
3.5 Conclusion

The spectrum of reformist and radical green discourses presented is complex. While reformist and radical discourses are distinct from each other, there are convergences, as well as the potential for each discourse to be co-opted for more radical or reformist ends. The spectrum of green discourses outlined in this chapter facilitates an understanding of the grassroots climate movement by guiding analytical and comparative interrogation of the actors and their practices.

Before exploring the way the grassroots climate movement frames the problem of climate change, the response strategies and possible future(s), the next chapter outlines the methodology and methods. Chapter Four presents the key ecological and socio-political events that shaped the grassroots climate movement during the data collection period of August 2010 to November 2011 and outlines the empirical data collection and analysis.
Chapter 4: Methods

4.1 Introduction

Chapter One described this thesis’ methodological approach as divided into three interrelated layers: macro, meso and micro. The macro layer positions the research within critical political ecology. Critical political ecology provides a rich way to question environmental issues in a way that is inclusive of the biophysical and socio-political context (Forsyth 2003). Critical political ecology does not deny the existence of environmental problems but acknowledges, and seeks to understand, the social, cultural, economic and political framing of environmental problems that conditions how people experience environmental issues, define them as problems and seek to respond (Forsyth 2003). The overlap is evident between critical political ecology and this thesis’ aim to identify and then describe the grassroots scale of climate action in the Australian State of Victoria by understanding how grassroots actors are framing the problem of climate change and response strategies. The meso layer of the spectrum of green discourses within which the grassroots actors are situated was described in Chapter Three. Chapter Four is concerned with describing the micro layer of data collection, the context in which data collection occurred, and data analysis. As stated in the introduction, the research approach is qualitative. According to Kalof et al. (2008: 80, emphasis in the original) a qualitative approach allows for a focus on ‘how people make sense of their setting and experience through symbols, social roles, identities and other elements of culture and why people think and act as they do’. This description of the benefits of a qualitative approach encapsulates what this study seeks to achieve.

To grasp how grassroots climate actors understand and seek to respond to climate change, data were collected from multiple sources over an extended timeframe. A description of this process is set out in three sections. The first section describes the context in which data collection occurred. This context is important as qualitative research examines ‘phenomena or individuals in-depth and in their natural settings’ (Kalof et al. 2008: 82). The specific context of this study is significant as many external events impacted on the grassroots climate movement during data collection.
and revealed points of difference in climate actors and practices. The second section describes the four data sources and collection methods. Data were collected from documentary materials, group and individual interviews, an online survey, and observations of grassroots climate action events and activities. Full details on the data collection instruments are given in Appendix B. The final section describes the process of data management and analysis.

4.1.1 Ethics

Before discussing these individual sections, it is important to describe the ethical considerations when undertaking qualitative research involving people. The research project was submitted to and given clearance by the Griffith University Human Research Committee (GU Ref No: ENV/22/09/HREC). In addition to complying with the conditions of ethical clearance, the issue of ethical treatment of the research subject was an ever-present concern and consideration throughout the duration of this study. I sought to undertake research in a manner that treated people as I would wish to be treated. I have also offered to present my findings to interested grassroots climate actors with the intent of the research being potentially worthwhile to the subjects involved (Reinharz 1992, Punch 1994). Additionally, while a qualitative approach benefited the study by enabling multiple climate actors’ points of views to be captured on a topic previously not extensively researched and in a natural setting, there were some unique challenges leveled at such qualitative research. These challenges are the manifestations of issues of researcher subjectivity as well as reliability (measuring procedures) and validity (findings) (Lincoln and Guba 2005, Neuman 2006, Yin 2003).

4.1.2 Subjectivity, Validity and Reliability

Unpacking the issues of research subjectivity, all research is undertaken due to the researcher’s interest in and/or concern for a specific issue, so it is inevitably socially embedded; as Gould (1996: 53) states, ‘science, since people do it, is a socially embedded activity’. I took several steps to manage subjectivity by being aware of my position as a researcher and by engaging in a continuous and recursive process of
reflection and evaluation on my research and findings. Reflecting my position with respect to other theorists, North (2011: 1583) describes himself as an ‘academic who agrees that dangerous climate change is a clear and present danger, and who has been involved in climate activism as a result of this perception’. Similarly, Doyle (2005: 5) states to be ‘an environmentalist as well as an academic’ and motivated to ‘ascertain better pathways in which to hopefully resolve … environmental issues’. Many of the other authors cited thus far share a concern about climate change and play active roles in attempting to redress ecological and/or social issues. My position is similar to these theorists as one of my motivations is to contribute to a more ecologically sustainable and socially just world, therefore anthropogenic climate change is also concerning to me. Whether this concern positions me as part of the population I am studying (Neuman 2006, Patton 2002)—is a point I reflect on often, as I do identify myself as someone seeking to redress ecological and social issues. I have, nonetheless, endeavoured to bring ‘conscious partiality’ to the research task, by acknowledging that my personal position is similar to the subject in the desire for action on climate change, while retaining the capacity to view critically (Mies 1983: 123). The techniques employed to retain this critical capacity were continual reflection and evaluation throughout the research process on my findings through consultation with climate and sustainability literature, as well as building awareness and probing my own ideological and epistemological perspective.

The method of triangulation has been long advocated to manage issues of validity and reliability (see Denzin 1978 in Guba 1990). Constructionists among others have critiqued triangulation as it is premised on the positivist perspective that there is only one reality ‘out there’ that is knowable (Guba and Lincoln 1989, 2005). Hence, Guba and Lincoln argue for an emphasis on quality in qualitative research and focus on dependability, credibility, transferability and confirmability, rather than reliability and validity. Many of the methods of triangulation are still, however, applicable to the pursuit of quality. These include persistent observation, prolonged engagement and

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70 See, for example, Haxeltine and Seyfang (2009: 2) who describe themselves as “critical friends” to the Transition Movement, offering [their] paper as a stimulus to deeper thought about the growth and strategic development of the movement, in order to achieve wider influence.’

70 For a similar position, see Adler and Adler (1994), Erlandson et al. (1993) and Reinharz (1992).

71 Guba and Lincoln (1989) compare these criteria with traditional criteria: credibility (internal validity), transferability (external validity), dependability (reliability) and confirmability (objectivity).
awareness of context. Therefore, the methods for this study reflect the strengths of triangulation, with an understanding of potential limitations. As a consequence, I strove for enhanced quality of my research and completeness in the description of my findings (Guba and Lincoln 2005, Reinharz 1992). The research processes involved collecting data from multiple sources over an extended time period, with attention paid to the rapidly evolving field of climate change politics.

4.2 Context of Data Collection

It is important to recount Australia’s and Victoria’s broad ecological and socio-political context as well as specific climate change events. This context and events facilitate and add to the completeness of the description and understanding of grassroots climate actors and practices. Australia has unique ecological and social demographic features that make it particularly vulnerable to climate change. These features were described in Chapter One to demonstrate the risk of climate change, but as a brief reminder, Bambrick et al. (2011: 67S) state that:

Climate change in Australia is expected to increase morbidity and mortality from thermal stress, bacterial gastroenteritis, vector-borne disease, air pollution, flooding, and bushfires. The cost and availability of fresh water, food, and energy will also likely be affected. The more vulnerable urban populations, including the elderly, socioeconomically disadvantaged groups, and those with underlying chronic disease, will be most affected.

In addition to the risks posed by climate change, I described a socio-political context hindering climate action via elite obstruction, powerful vested interests, a reliance on primary and resource industries and a socio-political system not conducive to social movements.⁷² These features constitute the general context within which climate action is emerging and evolving in Australia. Additionally, significant climate action related events occurred during the data collection period. Important national and state-based climate action events are described below, as well as some background information on the Australian state of Victoria.

The data collection period from August 2010 to November 2011 was a time of

significant global and national political action on climate change. Internationally, there was a continuing backdrop of financial instability and the UNFCCC CoP16\(^{73}\) in Cancún, Mexico, failed again to deliver substantive outcomes (Morgan 2010, New et al. 2011). At the national level, in August 2010 the federal election resulted in a minority Labor-led government with the support of one Australian Greens Party member and three Independents. The Greens Party took control of the balance of power in the Senate in July 2011. On the 10th of July 2011, the government announced the Clean Energy Future plan, which was then introduced to Parliament as a package of 18 bills in September 2011. The 18 bills encompassed a range of tax reforms and legislative changes that apply a price of AUD$23 per tonne of carbon produced by the top 500 polluting companies. Overall, the dominant approach to climate policy was one of weak ecological modernisation approach, with economic concerns privileged throughout the package:

The Clean Energy Legislative Package includes the carbon pricing mechanism and delivers support for jobs and competitiveness and Australian’s economic growth, while reducing pollution. Households will be assisted through tax reform and increased payments (Australian Government 2012).

The objective is to switch to a cap-and-trade system in 2015. The plan has been supported by many national and state-based NGOs such as Get Up! and the Australian Conservation Foundation. These campaigns in support of a price on carbon have been the ‘Say Yes!’ that included a national rally on the 5\(^{th}\) of June 2010, followed by the ‘Stand Up for Climate Action’, with a national day of action on the 12\(^{th}\) of March 2011.

State governments are particularly important to climate action due to the distribution of powers under the Australian Constitution. The states have significant powers on issues of climate governance in areas such as planning, agriculture and transportation. The State of Victoria has a population of over 5.5 million people. The state is highly urbanised and the population density is comparable to the rest of Australia. Over 75 percent of the total population resides in the capital city of Melbourne while another 20 percent lives in inner regional areas, with the remaining population considered

\(^{73}\) United Nation Framework Convention on Climate Change 16\(^{th}\) session of the Conference of the Parties.
rural (ABS 2011). Energy production accounts for over 85 percent of Victoria’s total GHG emissions, followed by agriculture, industrial processes and waste (ABS 2011, CES 2008). While Victoria does not have the export-oriented dependence on coal of Western Australian or Queensland, it does have very large reserves of brown coal that it relies on for 95 percent of its power generation (CES 2008). This dependence on brown coal grants Victoria the dubious distinction of having one of the highest GHG emissions per capita profiles out of all the Australian states and territories, producing 22.5 percent of Australia’s GHG emissions (ABS 2011).

The state of Victoria’s natural environment continues to deteriorate in many respects. The causes are climate change, population growth, land clearing, urban sprawl and over-consumption patterns; these factors have also contributed to the degradation of waterways and soils, and significant biodiversity loss (CES 2008, Mercer et al. 2006). Victoria is vulnerable to the impacts of climate change and has experienced an increased intensity of bushfires, floods, and heat waves since the beginning of the 2000s (Climate Commission 2012b). Prior to the beginning of data collection for my research, a significant ecological event indicative of the predicted impacts of future climate change occurred. The Black Saturday bushfires in February 2009 resulted in the deaths of 173 people as well as significant loss and damage to flora, fauna and property (Victoria Police 2009). The cause was attributed to a combination of factors, including ‘very high temperatures following a 50 year warming trend, and very dry conditions following 12 years of below-average rainfall’ (CSIRO 2009). At the beginning of 2011 large areas of the state were flooded due to exceptionally high rainfall, an experience shared by much of the eastern seaboard (Climate Commission 2011). Causation has not been attributed conclusively to anthropogenic climate change, but these events do bear out the predicted impacts of climate change (see Climate Commission 2011, 2012b).

Federal political action on climate change affected Victoria during my data collection period, as ‘politicking’ between a Liberal-state government and a Labor-federal government was apparent, for example over carbon price.74 In addition, several state-

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74 The carbon price was a particularly pivotal event during the data collection period. The level of climate actors’ engagement (or lack of) with the political debates over the carbon price and its implementation revealed those climate actors intent on large scale political change, as well as highlighting the extent and form of government intervention desired.
specific events occurred, including a state election and the passing of state climate change legislation. The *Climate Change Act* was passed by the Victorian Parliament with broad support in September 2010 and came into effect on the 1st of July 2011 (The State Government of Victoria 2011). The main features of the Act are emission reduction targets of 20 percent by 2020 (based on year 2000 GHG emission levels), as well as a requirement for the government to develop a Climate Change Adaptation Plan every four years (The State Government of Victoria 2011). The Act passed under the Labor-led government prior to the November 2010 election, which resulted in a win for the Baillieu-led Liberal/National Coalition. The new government has already demonstrated indifference to climate change concerns as it placed stringent caveats on wind farm proposals that give property owners the right to veto construction within two kilometres of their property, as well as stating that the Climate Act targets of 20 percent are ‘aspirational’. The Baillieu Government has since withdrawn the target (Rood and Morton 2011). In addition, other programs such as Climate Communities,75 have been rolled back and there has been the refusal to address Hazelwood Power Station’s decommissioning, a project that should have been undertaken in 2009 (Fyfe 2011, Wakeham 2011).

### 4.3 Methods of Data Collection

Qualitative data were collected on the grassroots climate movement in Victoria from August 2010 to November 2011. To recap, the Australian State of Victoria was selected as the site for the research due to its rich diversity of grassroots climate actors. An initial review of Internet websites and academic literature identified an array of climate actors in Victoria. The literature review discussed the Australian climate movement as a whole, with much of the literature focused on grassroots climate action based in New South Wales (for instance Pittaway 2008, Goodman

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75 Climate Communities was a government grants program intended to ‘help to link existing community networks centred around local councils, service clubs, schools and environment groups’ and ‘encourage and support the establishment of new groups who wish to take environmental action at a local level’. The key objectives were to ‘support local communities to: (1) reduce emissions, (2) build community resilience to adapt to climate change, and (3) trial and/or promote new ideas to help tackle climate change’. Managed by the state government department *Sustainability Victoria*, grants of up to AUD$50,000 were available for community organisations and Climate Communities facilitators were appointed to work with local communities across the state to provide information, advice and assistance with grant applications (Victorian Government 2011). The program was axed in August 2011.
An Internet-based study of climate actors around Australia revealed that Victoria had a vibrant and diverse set of climate actors. Many of the Victorian climate actors uncovered had not been the subject of previous research. In Victoria, the grassroots climate movement included individual activists, single-issue groups, climate action groups, transition town groups, and sustainability groups with broader objectives concerned with climate change along with other ecological and social issues (for further details, see Appendix A). Therefore, Victoria was an appropriate site for research to capture the breadth and depth of grassroots climate actors and practices.

4.3.1 Data Collection

The choice of data collection methods was made after a review of the methods selected by previous researchers. In exploring various majority and minority world environmental movements, Doyle (2005) deploys an ethnographic approach with interviews, personal conversations and correspondence, as well as documentary materials. Other researchers discussed in the literature review, notably Kenis and Mathijs (2009) and Seyfang (2009a), use similar approaches which included interviews, documentary materials, online surveys and participant observations to research the Transition Towns movement. North (2011) too employed similar methods when exploring the United Kingdom’s climate movement, including documentary materials, discussions with participants and participant observations.

In this study, (1) documentary materials, (2) observations, (3) an online survey and (4) semi-structured individual and group interviews were all used to collect ‘thick’ data and enhance the dependability and credibility of the data. Appendix B details the data collection instruments and supporting documentation.

(1) Documentary Material collection spanned the totality of the data collection period (August 2010–November 2011). The initial stages involved examining grassroots climate actors’ websites and compiling data. The data compiled were content from climate actors’ websites and/or blogs as well as associated materials such as electronic documents and YouTube video postings. This stage also involved
signing up to e-bulletins, newsletters, e-mail alert services, and, specifically, the *Victorian Climate Action Calendar*.\(^{76}\) Website data were compiled at three points over the data collection period — at the beginning (August–September 2010), mid-point (April–May 2011) and end (October–November 2011). Additional documentary materials collected included non-electronic resources such as event flyers, posters, and information booklets circulated at events such as protests and workshops. These documentary materials contributed to identifying and describing the breadth of actors and their practices, as well as yielding contact details for potential interviewees and online survey participants. The following documentary materials were collected: 105 grassroots climate actors’ and climate movement associated websites,\(^{77}\) 718 images,\(^{78}\) 294 additional web documents,\(^{79}\) and numerous flyers, posters and other documentary materials collected at various activities attended.

**Observation** of climate actors commenced shortly after the documentary data collection and lasted for the duration of the August 2010 to November 2011 data collection period. To observe climate actors at work, I attended activities including direct actions, workshops, events, meetings, information sessions, training sessions, summits, planning events and door knocking campaigns, resulting in over 150 hours of activities attended. Observations were overt as I was open in explaining my research when queried (Reason 1994, Reinharz 1992). Details of each event were recorded in a systematic way that covered the time, date and location, and included an event description and reflection. Attendance at these activities, and the direct experience it provided me, complemented my understanding of the diversity of grassroots actors and practices (Adler and Adler 1994, DeWalt and DeWalt 2002, Reason 1994).

**Online Survey** was implemented with the intent to collect data directly from grassroots climate activists. Open-ended non-mandatory questions allowed

\(^{76}\) The Victorian Climate Action Calendar is a calendar of climate events occurring in Victoria compiled by a climate activist and e-mailed out to those who have signed up (averaging a weekly to fortnightly distribution).
\(^{77}\) The majority of these websites were those of Victorian-based climate actors; however, alliances of climate actors that crossed political boundaries, in addition to national and international climate-related actors, were also included.
\(^{78}\) The images included pictures, photographs and diagrams all taken from publicly available sources.
\(^{79}\) These included electronic documents such as e-bulletins, online documents, event adverts and the Victoria Climate Action Calendars.
respondents the maximum freedom to respond, as well as anonymity if desired (Erickson and Kaplan 2000, Miles and Huberman 1994). Over 80 requests for survey participation were emailed to addresses compiled from Victorian-based grassroots actors’ websites in mid-September 2010 and the survey questionnaire was later placed on the Victorian Climate Action Calendar in October 2010 to prompt additional responses. 21 complete responses were received.

(4) Semi-Structured Interviews were held with Victorian individuals and groups involved in grassroots climate actions. I conducted 11 interviews (two group and nine individual ones). Interviews commenced in February 2011 and concluded in July 2011. These interviews served to help me understand activists’ motivations, gain their perspectives on what practices have been effective, what has been learnt and future ideas for climate actions. Interviewees were purposively selected due to involvement in grassroots climate action (Yin 2003, Neuman 2006). Interviews ranged in duration from 20 to 60 minutes.

Appendix B contains the guiding questions for the semi-structured interviews, the online survey instrument and other data collection tools.

4.4 Data Analysis

The spectrum of green discourses that guides the exploration of grassroots climate actors and practices was outlined in Chapter Three. This section describes how the spectrum guided the data analysis. The approach that has been taken mirrors that of McGregor (2004), who used green discourses to explore the Australian wilderness movement in a two-step process. His intent was to ‘chart the progression of environmental philosophies beyond academic arenas into the social realm of lived experiences’ (McGregor 2004: 597) and to discuss the limitations and opportunities associated with the movement’s use of different green discourses. McGregor’s first step involved examining the data to identify the presence or absence of green discourses. The next step involved a more inductive approach of examining the data for discursive threads that ‘did not necessarily adhere to any particular academic philosophy, but instead represented mashed up versions of several discourses’ (McGregor 2004: 598).
I learnt from McGregor’s approach to refine gradually and explore potentially blended combinations of green discourses; as a consequence this thesis interrogated the empirical data in a similarly gradual process. Initially, the data were organised and entered into Nvivo.\textsuperscript{80} Once the data were entered, they were interrogated using the spectrum of discourses established in Chapter Three. The first step involved reading the data, followed by a deeper examination and application of the initial codes, termed ‘nodes’ in Nvivo. These nodes related to the various elements of the green discursive framework, categorised into the framing of the problem, causes, response mechanisms, agents of change and future(s) envisioned. With initial categories created, the second step involved revisiting the data to verify and refine the coding. An example of the coding process and refinement is as follows: within the category ‘means’ there is a node ‘technology and science’, which was then further refined to accommodate the data citing ‘forbidden’ technologies; these formed a sub-node aligned with many radical green discourses. The last step involved focusing on each facet of the framework to create the rich description presented in the next chapter. Appendix C contains the final list of the nodes and their descriptions, including the alignment of each node to the spectrum of green discourses and an example from the data.

Kalof et al. (2008: 82) states that ‘qualitative studies often weave together extensive quotes, detailed descriptions and a researcher’s observations of the subject matter to tell a story about an event, phenomenon or set of experiences or behaviours’. The term ‘thick description’ (see Geertz 1973, Ryle 1949) pervades qualitative research (Ponterotto 2006). The concept has been transferred from ethnography to numerous social science fields resulting in multiple meanings and some confusion. To make sense of this confusion, Ponterotto (2006: 543) draws central features of the concept together:

\begin{quote}
Thick description refers to the researcher’s task of both describing and interpreting observed social action (or behavior) within its particular context … Thick description captures the thoughts and feelings of participants as well as the often complex web of relationships among them. Thick description leads to thick interpretation, which in
\end{quote}

\textsuperscript{80} Nvivo is qualitative research software that enables the text and audio from interviews, discussions, surveys, websites and other documentary materials to be stored, organised and analysed.
turns leads to thick meaning of the research findings for the researchers and participants themselves, and for the report’s intended readership.

Chapter Five present an extensive array of material that, woven together, creates a thick description of how the grassroots climate movement in Victoria positions itself within our green discursive spectrum and frames the problem of, and solutions to, climate change.
Part 2: Empirical Results and Discussion

Chapter 5. The Grassroots Climate Movement

5.1 Introduction

This chapter presents a detailed description of empirical data collected on the grassroots layer of the climate movement in the Australian state of Victoria. It addresses the following questions:

1. Who comprises the grassroots layer of the climate movement?
2. Who are the grassroots climate activists?
3. What are the assemblages they form?
4. What practices are being undertaken and/or advocated by these actors to respond to climate change?

As discussed, the actors and practices are located within the spectrum of green discourses. The chapter is divided into four sections.

The first section introduces the grassroots climate movement in Victoria by briefly describing the actors and practices, then details the two discernible storylines uncovered. I have labelled these two storylines ‘refashioning’ and ‘remaking’. The point of division between the storylines arises over the perceived capacity of the current socio-political system to respond to climate change and, in turn, the response(s) considered. The refashioning storyline assumes the capacity to respond to climate change within the system but is dependent on urgent large-scale action. In contrast, the remaking storyline is premised on the assumption that the present system is incapable of responding to climate change, so collapse or significant shifting of society to much smaller structural forms due to climate change and other ecological problems is inevitable. These assumptions result in significant divergences in the practices employed to respond to climate change. The divergences and similarities between these two storylines are the focus of the rest of the chapter.
The second section concentrates on how grassroots climate actors are framing the problem of climate change and its causes. Grassroots climate actors are united in their grim casting of the problems of climate change. In addition, they all use science to demonstrate the scale of the problem and construct nature as at a dangerous precipice, where finite ecological limits are being breached. The grassroots actors identify the production and consumption of fossil-fuels, primarily oil and/or coal, as the major causes of climate change, but there are also themes of personal over-consumption and an unbalanced economic system. Links to survivalism are evident in these discourses, but as will be demonstrated, the transition strategies advocated by Victorian grassroots actors differ significantly from survivalism-styled authoritarian responses.

The third section examines how Victorian grassroots climate actors are framing the response to climate change and the actors recognised as change agents. Some similarities were identified between the two storylines, however, differing assumptions among the different actors over the capacity to respond to climate change within the current societal arrangements result in divergences. I first describe the *refashioning* storyline’s emphasis on large-scale technological and economic changes, with government as the key site for people to petition to implement these changes. I then describe the *remaking* storyline’s transition strategy, which is about rescaling society — technology, governance arrangements and the economy — to a more human and localised scale.

The final section presents the future possibilities envisioned by Victorian grassroots climate actors. The multiple futures range from large to small-scale visions from the whole of Australia to individual communities. Some actors expressed doubt about the capacity to achieve these futures. Nevertheless, all the grassroots actors share the radical discourses’ view of the grave peril climate change presents, and the reconstructive hope of a ‘better’ future if everyone gets involved.

### 5.2 The Terrain of Grassroots Climate Action

To introduce the grassroots terrain, it is important to note how the actors define themselves. The most commonly used descriptors are ‘concerned citizens’, ‘local citizens’ and ‘local residents’. Additional common descriptors are ‘not-for-profit,
non-politically aligned community group’, ‘a local community climate action group’, and ‘an independent non-party-politically aligned group of local citizens of all ages campaigning for a safe climate future’. Appendix A contains data on all the grassroots climate actors; an effort has been made to use self-description to avoid misrepresentation. Grassroots climate action began in Victoria in the mid–2000s, however, a few actors predate this time. These earlier actors were people with broader sustainability agendas that incorporated climate change.

My research showed that the Victorian grassroots layer of the climate movement exhibits the hallmarks of a social movement. The climate actors and practices operating in Victoria over the period of August 2010 to November 2011 present the problems of climate change as real and requiring urgent action. The repertoire of grassroots climate action tactics I observed is extensive, and all planned and implemented with an underlying adherence to non-violence. The range of practices includes personal to political changes in transport, dietary choices, as well as notions of what should be considered the ‘good life’ and humans’ relationships with each other and nature. Their organisational structure is collaborative, networked and largely autonomous from political parties and ideologies. Autonomy from traditional political parties was evident in the actors’ aforementioned self-descriptions as members of not-for-profit, non-politically aligned community groups and independent non-party-politically aligned groups. Furthermore, autonomy from political parties and traditional ideologies was exemplified in Malcolm Turnbull (a Liberal Member of Federal Parliament and Shadow Minister for Communications and Broadband) being an invited speaker at the Zero Carbon Australia’s ‘Stationary Energy Plan’ launch in Sydney on the 12th of August 2010.

Victorian climate activists are diverse, encapsulating many of the features identified by Moyer (2001), Dahle (2007), Jamison (2003) and Hopwood et al. (2005), although the grassroots climate activists did not fit neatly into these demarcated categories. Dahle’s categorisation of patient revolutionaries is evident in some activists’ discourse of creating examples of relocalised living that would eventually become future examples from which others could learn. At the other end of the spectrum are the reformists, who seek to work within the system. These categories of activists and the features of NSMs will become clearer when the storylines identified in the
grassroots layer are unpacked in more detail. Many activists engage in multiple forms of activism, which aligns with North’s (2011: 1582) contention that ‘climate activism is thus wide-ranging and diffuse’.

The shape and form of the grassroots climate movement in Victoria is diverse and dynamic. Practices include lower carbon lifestyle actions, such as personal journeys, evident in *The Greening of Gavin, Permapoesis* and *Carbon Reduction Actions Groups*. There are also actors focused on creating community-scale changes, such as *Transition Torquay* and *relocalise hepburn.* Many of the climate action groups undertake politically oriented activism by petitioning the state for stronger climate policy, in addition to undertaking public awareness-raising and efforts to influence personal and community change. Casting the net further are the sustainability initiatives concerned with climate change as well as other ecological issues and/or social concerns. Examples of sustainability-focused groups are the *Bendigo Sustainability Group* and the *Geelong Sustainability Group*.

Additionally, there are actors concentrating on single initiatives, for instance, the *Dandenong Ranges Renewable Energy Association*, which is concerned solely with campaigning for renewable energy to replace non-renewable forms. Many collaborative projects, alliances and networks form part of the grassroots climate action terrain; these include collaborations that produce demonstrative plans for Australia to be carbon neutral by 2020. Short-term and/or single-focus collaborations, such as *Vote Climate*, exist alongside long-term alliances, for instance, *Transition Decade Alliance*. The *Transition Decade Alliance* demonstrates the networked nature of the grassroots climate movement; it includes not only grassroots climate actors, but also other actors such as *Friends of the Earth* and the *City of Melbourne.*

Overall, whether through the refashioning or remaking storyline, the Victorian grassroots terrain is united in its concern over, and determination to address, climate change. The next sub-section describes these two storylines.

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81 Lower case in the original.  
82 Further descriptions of all of these climate actors and website links are available in Appendix A. Each climate actor description, in Appendix A, has its corresponding website listed and these websites are the data sources for all climate actor website quotes within this thesis.
5.2.1 The *Refashioning* Storyline

Throughout the grassroots climate movement in Victoria is an alignment with a radical green ‘apocalyptic tone’ that presents climate change as an immense, all-encompassing threat. As one interviewee states, ‘climate change, to me, is the mother of all issues really’ (Group interview 1, participant 5). The *refashioning* storyline assumes the capacity to respond to climate change within the current system. The term *refashioning* was chosen for this storyline as it assumes that governments, citizens and most businesses can collectively engage in significant reorientation of the contemporary socio-political system to a cleaner and greener future to halt climate change. Hence, ‘refashioning’ relates to the perceived capacity to re-adapt the current system to combat climate change.

The *refashioning* storyline tends to privilege climate change as the preeminent ecological issue; additional ecological and social issues are acknowledged, but these are chiefly subsumed under climate change. Overwhelmingly, climate science is used to present the issue of climate change and, consequently, the proposed response to climate change is informed by science. As science informs the knowledge base, science and technological innovation form a major part of the transition. The alignment of the storyline with reformist discourses, especially ecological modernisation, is evident in the belief in science and technology and through the linking of the ecological and economic benefits of responding to climate change. The ecological modernisation discourse presented is reminiscent of Christoff’s (1996) description of ‘strong’ ecological modernisation in its privileging of ecological — the redressing of climate change — over economic considerations. Even so, *refashioning* storyline actors offer subtle frames of reassurance about the capacity of human ingenuity via science and technology, as well as security, for example:

> Achieving 100% clean renewable energy is 100% possible. Australia is a land rich in solar, wind, wave and hot rock potential and with existing technology, combined with vision and leadership we can use these resources to create thousands of new jobs and clean safe power that will never run out (100% renewable energy website 2011).
More radical green discourses are also perceptible in this storyline due to the inclusion of social justice concerns. As well, the perceived role for government intervention is stronger than merely setting and enforcing standards to create the conditions for green business innovation. According to this storyline, government is petitioned with a list of actions reminiscent of eco-socialism’s prefigurative steps, and the state is seen as part of the prefigurative apparatus. In addition, citizens are constructed as active and required to make personal changes to reduce their ecological footprint and press for greater societal change. These features place elements of the storyline in the domain of the radical green discursive sphere. The change, therefore, is pursued through petitioning and educating government, elites, and the populace to build a groundswell for change. For instance:

Self-organise or organise in small groups but then actually participate in something much larger together is the only way, for me, we are going to get enough traction around climate change in the time frame that’s going to be useful (Interviewee A).

If the traction was achieved the result would be a reformation, at the very least, of the present day economic base of Australia, resulting in a considerably different future. Examples of grassroots climate actors embodying the refashioning storyline are the Beyond Zero Emissions and many of the climate action groups such as Darebin Climate Action Now.

5.2.2 The Remaking Storyline

In contrast to the refashioning storyline, the remaking storyline assumes a significant altering, even collapse, of the current socio-economic arrangement due to the inability of the system to manage the stress imposed by breached ecological limits. It therefore seeks to build more localised responses. The storyline holds that this altering or collapse will chiefly be due to diminishing world oil supplies impacting severely on an oil-dependent world economy. The term is ‘peak oil’, 83 with the descriptor ‘peak’ evoking a world at a precipice. An example of the way this assumed collapse is envisaged is the following:

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83 ‘Peak oil’ refers to the maximum point of oil extraction, after which it will irreversibly decline (Hirsch et al. 2005, McNamara 2008).

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I believe that the situation we will find ourselves in will force sustainability upon us, simply because the resources will not be available to do anything else (Survey respondent 6).

While the most common peak issue described on documentary materials and by interviewees was ‘peak oil’, there are other ‘peaks’ of concern, including food, water, phosphorus and fish. Hence, the term ‘remaking’ represents the storyline’s assumption of the inevitability of imposed change and the need to radically remake society into a more self-reliant system.

In the remaking storyline, climate change is presented on par with these issues of resource depletion, as well as being interconnected and inseparable from them. The Transition Towns groups are the main disseminators of the remaking storyline and illustrate the interconnections as treating both climate change and peak oil as one problem. It should be noted that Transition Towns initiatives are not the only grassroots climate actors who embody this storyline. The remaking storyline is reminiscent of survivalism’s evoked ‘world on the brink of collapse’. However, the responses proposed by these actors are not endorsing survivalism-style authoritarian actions. The approach is centred on creating smaller-scale social and ecology-inspired living, which frames the future as potentially ‘better’, for instance:

I don’t think it’s a case of how we’d like it to be. I think it’s a case of how we need to respond to how it’s likely to be [...] I think the Transition Movement really addresses [the] future of climate change and peak oil and what’s that going to mean for future society when it occurs, but I think the popular spin on things [is] that we could actually make it a better future with a fair bit of work (Group interview 2, participant 1).

The transition strategy, therefore, is for individuals and/or communities to become more locally ecologically sustainable, connected and resilient. This storyline is less concerned with large-scale political, economic and technological change than about people and local communities; interwoven with it is an optimistic message of the capacity of people to be creative and innovative to create a better future despite the looming crisis. For instance:

We are not a campaigning group and deliberately have no political affiliation; we are set up to initiate action. It is a positive, solutions-focused way of engaging the issues,
and helping to move (place) towards a post-oil world that is actually preferable to the present (Transition South Barwon website 2011).

The *remaking* storyline presents a narrative of hope and creativity as it is about ‘local food, local fun and vibrant local economies’ (Transition Bell website 2011). A recurring point in the Transition Movement rhetoric is that the ‘response to peak oil and climate change should look more like a party than a protest march’ (Transition Culture website 2011). The emphasis on creativity, ingenuity and adaptability to ‘create a vibrant, viable future for ourselves and the planet’ (Melbourne Inner Northwest Transition Initiative website 2011) is dispersed throughout the discourse. The transition strategy, therefore, is similar to radical green discourses in its articulation of the current society’s unsustainable trajectory, yet it offers a reconstructive vision of a future contingent on radical action being taken.

A neat divide between the two storylines is not always clear. Some Victorian grassroots climate actors take a ‘hedging’ approach, in which they will engage in petitioning the government for change while concurrently undertaking significant personal changes and/or community building. An example of a Victorian climate action group that mixes practices is the grassroots group *Yarra Climate Action Now*, which applies political pressure, such as re-branding protests staged outside political offices, writing submissions, and promoting and having a presence at larger-scale political events such as rallies. The group is part of broader alliances, including the *Transition Decade Alliance, Vote Climate*, and *100% renewable energy*. *Yarra Climate Action Now* members undertake public awareness-raising activities, including speaking at events and providing information on climate change and climate action via its website and e-newsletter. Finally, the group is involved in individual behaviour change and community-building approaches that include facilitating local urban agriculture, improving and extending bike path infrastructure and holding workshops on retrofitting existing homes to increase energy efficiency. Therefore, strict adherence to one storyline at the collective scale, and sometime even in a single activist, does not always occur. Climate practices are continually tried, tested, and modified to create and maintain momentum on climate action. Despite the fact that a neat division is not always possible, these storylines have the best explanatory power to communicate the overall themes within the grassroots climate movement. The discussion in Chapter Six revisits this hedging approach; in addition different
contexts produce the deployment of different languages for strategic advantage, for instance, to appeal to a greater audience.

The two storylines have similarities but also marked differences. An exploration of the elements that compose these storylines reveals these convergences and divergences in detail, as well as focusing attention on the practices of grassroots actors. The next section first describes how Victorian grassroots actors frame the problem and causes of climate change.

5.3 The Climate Change Problem and its Causes

Victorian grassroots climate actors universally frame the problem of climate change as immense, and never question the ‘realness’ of climate change. Those other societal actors who do question anthropogenic climate change are labeled ‘skeptics’, ‘fraudulent “experts”’, and are derided as having ‘vested interests’ (emphasis in the original, Climate Action Summit Communiqué 2011). Grassroots climate actors use words such as ‘crisis’, ‘emergency’ and ‘catastrophe’ in conjunction with climate change. Adding to the catastrophic framing of the problem are pronouncements such as ‘without action on addressing climate change our lives will be futile’ (Survey respondent 7), and ‘today's atmospheric levels of greenhouse gases are already resulting in a global climate disaster’ (Beyond Zero Emissions website 2011). In the rest of this section I show how grassroots climate actors in Victoria describe climate change as a problem, how they interlink it with other ecological and social issues, and how they view the causes of these problems and the scale of the challenge.

Science is the knowledge source that underlies the grassroots actor’s portrayal of the climate problem. A description of climate change from Sustainability in Stonnington (2011) blog illustrates the presentation of the climate problem in four steps. The first step is to identify climate change as a problem associated with an increase in atmospheric GHGs levels:

The current level of carbon dioxide in the atmosphere is 384.38 parts per million. This compares with a figure of some 315ppm around 1960. Carbon dioxide is a greenhouse gas that can persist for hundreds of years in the atmosphere, absorbing
infrared radiation and heating the atmosphere.

The second step is to demonstrate the anthropogenic causes of the increase in GHG emissions:

The biggest cause: 150 years of world energy growth driven by fossil fuel use. More than 80% of global energy comes from fossil fuels ... Deforestation is the second biggest driver.

The third step is to translate, with the support of reputable and predominantly scientific actors, this increase in GHG emissions into current and future consequences:

The Intergovernmental Panel on Climate Change’s last report states that 11 of the 12 years between 1995–2006 rank among the 12 warmest years on record since 1850. Most predictions suggest that global temperatures will rise by 2C to 4C over the century ... The IPCC estimates that rising temperatures will melt ice and cause ocean water to heat up and increase in volume. This will produce a sea-level rise of between 18 and 59 centimeters. However, some predict a far faster rate of around one to two meters ... Inundations of one or two meters would make the Nile Delta and Bangladesh uninhabitable, along with much of south-east England, Holland and the east coast of the United States.

This portrayal of climate change consequences leads to the final step, which acts as a motivator for action:

Rajendra Pachauri, the head of the International Panel on Climate Change (and joint Nobel Peace Prize winner with Gore in 2007) said recently that unless fundamental shifts were underway by 2012, the feedback loops driving climate change would take on an irrevocable life of their own (emphasis in the original).

This group of actors weaves together scientific evidence of rising GHG emissions, statements about climate impacts already occurring, and expected to increase in the future, into a case for climate action. The grassroots climate actors describe negative ecological and social impacts ranging from local to global scales that are as expansive and dire as those described within radical green discourses. The global consequences of unchecked climate change revolve around dramatic social and ecological impacts best illustrated by the surpassing of climatic tipping points. These tipping points are
predicted to be reached with a two to four degree temperature rise above pre-
industrial temperatures (Climate Emergency Network website 2011). The cascading
consequences of these temperature increases are sea level rises, melting glaciers,
ocean acidification, mass species extinction and people being forced to migrate or eke
out survival in formerly hospitable regions (for a particularly haunting account see ‘4
Degrees Hotter: A Climate Action Centre primer’ 2011). These concerns extend to
people around the world and other species, creating a moral and ethical motivation for
action:

A moral and ethical imperative ... If you simply look at the impacts of climate
change today which include species extinction, 150 thousand or more human deaths
per year, ecosystem collapse, catastrophic weather events, drowning Pacific Islands
and growing numbers of climate refugees, in any moral or ethical analysis it is
difficult to argue that we should allow the situation to remain the same or even get
worse (Zero Emissions Network website 2011)

The Australian consequences of climate change disseminated by grassroots climate
actors revolve around the country’s ecological, and in turn social and economic
vulnerability to reduced rainfall and increased incidence of drought, more frequent
extreme weather events, and sea level rises. Predicted social impacts include the
arrival of climate refugees from inundated neighbouring countries and negative
economic impacts on agricultural communities from decreased agricultural production
caused by extremes of drought or floods. The text and visuals in Figure 3
demonstrate some of these consequences.

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84 Scattered through the data are numerous references to the consequences of climate change. Some key
examples are from the Climate Action Centre (http://www.climateactioncentre.org/), as well as
initiatives such as Bayside Climate Change Action Group, Geelong Sustainability Group and
Beechworth Sustainability. Specific forums have been, for example, the Beyond Zero Emissions
discussion group titled ‘Climate Change and Floods’ held on the 7th of February 2011 in Melbourne.
Local impacts of climate change are generally local-specific environmental vulnerabilities. For instance, climate actors have held public forums and disseminated web-based information on the consequences of a sea level rise for the inner bayside suburbs of Melbourne, as well as seaside areas such as Geelong and Apollo Bay. In contrast, rural grassroots climate actors have disseminated information on the predicted increases in bushfires, heat waves and droughts. Climate actors construct local and personal narratives that anchor the predicted consequences of climate change to particular places, as the following rural climate activist’s blog describes:

A recent report by the Victorian Government using CSIRO data revealed that, for Beechworth, we can expect temperatures to exceed 40 degrees on only three days by 2070. The report also suggests that temperatures will rise by only 1.9 degrees by 2070. With eleven days over 40 degrees recorded on our verandah this summer, we have evidence enough that we are tracking well above the direst climate change predictions. Did you know that Beechworth’s average annual rainfall, up to 1990, was 1000mm? Since 2006, less than 600mm has fallen in our rain gauge each year. Even with the latest rain event (I can still hear the raindrops beating on the roof) we are tracking for a similar year to the last three.

There is less attention from grassroots climate actors to local-specific social impacts of climate change, but social concerns are present. These social impacts are presented in terms of negative consequences on food and economic security. Until now, the

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85 For example, the Bayside Climate Change Action Group. For an example of rural framed impacts see the Geelong Sustainability Groups website and Otway Climate Action Network website listed in Appendix A.
grassroots climate actors’ presentation of the problem of climate change has been described as united in this section’s description. However, there is a division over whether climate change was the preeminent issue (refashioning storyline) or whether it was on par with other ecological issues (remaking storyline). This division results in the remaking storyline giving greater prominence to local-scale social concerns.

The remaking storyline interrelates and places equal emphasis on climate change with other ecological issues to construct the social consequences of food insecurity and economic instability. The main concern is resource depletion issues that are signified with the term ‘peak’, the most prevalent being peak oil. The Transition Towns Movement’s central premise is the linking of climate change and peak oil issues, described as the ‘twin challenges of peak oil and climate change’ (Transition Hobson Bay Peak Oil Briefing Paper 2011). Interlinking these issues is the burning of fossil-fuels causing climate change. Climate actors argue that as oil supplies diminish, alternative fuels will be required and ‘any proposed alternative that exacerbates climate change (usually involving other fossil-fuels) is no alternative at all’ (Transition Hobson Bay Peak Oil Briefing Paper 2011). Therefore, the argument is made that ‘peak oil must be considered in parallel with climate change/climate chaos’ (Transition Hobson Bay Peak Oil Briefing Paper 2011). The consequences of peak oil and climate change will be ‘scarce food sources and instability’ (Transition Hobson Bay Peak Oil Briefing Paper 2011).

The interlinking of climate change with multiple resource depletion issues is clearly illustrated in the following statement:

Peak Food. It is the point at which food production must decline, because the current system that produces in such abundance is not sustainable: it relies on lots of fossil fuel (and we’ve probably hit Peak Oil), land that is limited, soil that it reduces in quality, and a predictable water source (and we’ve seen that with climate change, that doesn’t exist any more) (Yarra Climate Action Group Activist web post, 2011).

Ecological concerns are linked to social concerns to create a list of perils within the remaking storyline that aligns it to radical green discourse; for example:

Food security and economic stability related to peak oil, topsoil loss, climate change, water shortages, growing population ... concerned about suburban isolation, the
social side of community resilience, consumer values, lack of locally based cultures of place. We’re also concerned about children being unconnected to natural systems, while not having meaningful responsibilities around the home affecting their development (Survey respondent 15).

Other participants made statements about a deeper loss, including: ‘the gap between the natural world, and the ‘actual’ is gaping to the detriment of both ourselves and the environment’ (Survey respondent 16).

What all these Victorian grassroots climate actors reveal is a radical green assertion of finite ecological limits. Furthermore, they believe those limits are being breached and are non-negotiable, unlike the negotiable limits in the reformist discourses. The limits discourse is often stated outright, ‘the earth resources are limited’ (Transition Whitehorse website 2011) and ecological interconnectedness is stressed:

Sustaining the community of life and the well being of humanity depends upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters and clean air. The global environment with its finite resources is a common concern of all peoples (Climate Emergency Network website 2011).

In addition, limits are visually evoked in images reminiscent of spaceship earth rhetoric, as shown in Figure 4:

Figure 4: Images akin to spaceship earth rhetoric from Sustainability in Stonnington blog (2011).

In the refashioning storyline, climate change is presented as the breaching of the Earth’s assimilative capacity by anthropogenic increases in atmospheric GHG
concentrations. Initiative names such as *Beyond Zero Emissions* illustrate grassroots actors’ perceptions of the need to reduce GHG concentrations in the atmosphere.  

A ‘safe climate’ is another term used as a state to return to:

For a safe climate future, we must take action now to stop emissions and to cool the earth. The tipping points for large ice sheet and species loss were crossed when we exceeded 300–350ppm of carbon dioxide in the atmosphere, a point passed decades ago. It is no longer a case of how much more we can "safely" emit, but whether we can quickly enough stop emissions and produce a cooling before we hit tipping points and positive feedbacks — such as carbon sink failure and permafrost loss — that will take the trajectory of the earth’s climate system beyond any hope of human restoration (from the influential text Climate Code Red website 2011).

The *refashioning* storyline’s use of numbers produced by science to characterise a ‘safe climate’ demonstrates the theme that nature is knowable and manageable by humans. The *remaking* storyline also presents nature as knowable, but that knowledge does not enable total control:

I believe that the situation we will find ourselves in will force sustainability upon us, simply because the resources will not be available to do anything else. Two hundred years of the growth of power via fossil fuels have given us an illusion of power to change our environment as we see fit: when that power slips away we will be faced with the brute force of nature and nature will dictate the terms. Quite simply, if a culture is not sustainable it will not survive very long (Survey respondent 6).

In the *remaking* storyline the Earth’s ecological limits of the earth’s absorptive capacity are being breached, as atmospheric GHGs have built up with the consequence of climate change, as well as ecological limits are also evident in the unsustainable depletion of finite resources.

**The Causes**

All Victorian grassroots climate actors present the causes of climate change as

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86 In this instance, the group’s stated aim is a return to 300ppm (Beyond Zero Emissions website 2011).
87 Climate Code Red, by David Spratt and Philip Sutton, is an important text within the grassroots climate movement in Victoria that spurred much action; *Inner Northwest Climate Change Community* website (2011) states that it is ‘a book that has had a large influence on the grassroots Melbourne climate action movement’. Additional information on the text can be found at [http://www.climatecodered.org/](http://www.climatecodered.org/)
anthropogenic and as arising from numerous practices undertaken over multiple scales. The causes identified by grassroots actors are not limited to the ‘dirty’ practices or structural production design faults of ecological modernisation, but also place blame upon consumption habits, values, and the broader features of the socio-economic context. Dirty production practices do feature strongly in the grassroots discourse as a cause of climate change, but are embedded within broader socio-political circumstances. The ‘dirty’ production processes singled out most often are outmoded fossil and fuel-dependent technologies. While these technologies are demonised, climate actors do not indulge in eco-primitive demonising of all technology or radical green vitriolic denunciations of capitalism and/or hierarchy; nonetheless, questions are raised about the sustainability of a system premised on infinite growth in a finite world.

Uniting the two storylines are combinations of everyday micro-scale causes of the minority world’s consumption-based lifestyles. These practices contribute to and perpetuate climate change, as well as other sustainability issues. The day-to-day lifestyle practices identified by Victorian grassroots climate actors as causing climate change are most evident in the lifestyle changes they advocate to address climate change. Figure 5 indicates the multitude of everyday practices that contribute to climate change. Receiving a degree of the blame are people’s transport and dietary choices, as well as their consumption of goods and services.
A degree of private responsibility for climate change is identified in individual actors’ values:

I think we have become stressed, greedy and that we take for granted our right to have everything we want without consideration for people in poverty, with mental health problems, etc. who live in our own country but especially in third world countries who are providing us with the wealth we take for granted (Survey respondent 11).

While personal actions and values are identified as problematic for climate change, the larger socio-political context in which individual consumptive choices take place is also singled out as a cause. In the refashioning storyline, the burning, mining and/or exporting of coal are the dirty production processes that cause climate change. The key symbols and sites of protest portraying these causes have been Hazelwood Power Station, the proposed HRL plant and, more recently, coal seam gas. Hazelwood is

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88 During the data collection period, key protests were the ‘Rally to Replace all of Hazelwood’ and the more recent ‘Stop HRL Rally’. Hazelwood Power Station was constructed in the mid-1960s in the Latrobe Valley, Victoria. It is considered to be Australia’s ‘dirtiest’ large coal-fired power station, due to its reliance on the large-scale reserves of brown coal in the area. Overall, it contributes 25 percent of
decried as exemplifying coal’s contribution to climate change, for instance:

Hazelwood pumps out over 16 million tonnes of greenhouse pollution each year.
That’s almost 15 percent of Victoria’s greenhouse-gas emissions and 3 percent of
Australia’s greenhouse-gas emissions, all on its own (Replace Hazelwood website
2011).  

Hazelwood Power Station and the HRL proposal have been ongoing targets of protest
for climate actors. These production practices symbolise the causes of climate change,
but also represent a host of other ecological, social and health concerns. For instance,
the detrimental health impacts associated with coal-fired power stations are presented
in the campaign against the HRL proposal as:

... serious air and noise pollution concerns for the local community. The plant would
put more dangerous pollutants into the air — including particulates and other
contaminants known to cause cancer and to affect the lung development of children
(Stop HRL website 2011).

In the *remaking* storyline, the primary cause of climate change is the use of oil, the
‘oil-addicted treadmill that we find ourselves on today’ (Transition Banyule website
2011). Oil is identified as used in all modern transportation systems, energy systems
and agricultural practices, as well as consumption-based lifestyle practices. The
*remaking* storyline includes the burning of oil as contributing to climate change, but
oil is also perceived as a finite resource that is being depleted rapidly and hence its
coming scarcity will have dire consequences for a society dependent on it. These
causes of climate change related to fossil-fuel use — both coal and oil — are viewed
as illustrative of deeper problems in the current socio-political system.

Victoria’s baseload power and has the dubious title of the least carbon efficient power station in the
OECD (WWF Australia 2005). HRL Limited proposes a new $750 million Dual Gas Demonstration
project, again in the Latrobe Valley. The proposal is to use a mixture of synthetic gas (produced from
coal) and natural gas, resulting in a GHG emission profile akin to a black coal-fired power station. The
proposal received approval from the Victorian EPA in May 2011. There was a legal challenge to its
approval from *Environment Victoria, Locals Into Victoria’s Environment, Doctors for the Environment*
and an individual, however this legal challenge has since been lost. Whether the HRL plant will be
built is currently dependent on finances.

89 ‘Replace Hazelwood’ is a campaign of *Environment Victoria, The Victorian Climate Action Centre,
Friends of the Earth, The Alternative Technology Association, The Moreland Energy Foundation,
Yarra Climate Action Now, Bellaratta Renewable Energy and Zero Emissions, Locals Into Victoria’s
Environment, Climate Change Balmain Roselle, Wodonga and Albury Towards Climate Health,
Darebin Climate Action Now, Greenpeace, GetUp, Australia Youth Climate Coalition, Climate Action
Network Australia, Australian Conservation Foundation and The Vagabond* (Replace Hazelwood
website 2010).
Neither storyline embodies the polemic positions against capitalism, hierarchy, and/or patriarchy that are espoused in eco-socialism, social ecology and eco-feminism. Nevertheless, there is a shared view among some actors that the current economy will ‘continue to destroy its natural support systems until it destroys itself’ (Climate Emergency Network website 2011). That the root causes of these problems are in the economic system is also evident in the following statement: ‘the idea that we can grow the physical throughputs of the economic system indefinitely is silly … in my opinion, it is the root of the issues around climate change and peak oil’ (Bayside Climate Change Action Group website 2011). Furthermore, causal connections are made to an unbalanced economic system premised on continual growth and privileged in decision-making but lacking in environmental and social concerns: ‘Do we collectively care about our planet, our home, this Earth, or don’t we? When the economic bottom line rules decision-making, losses elsewhere can be staggering’ (Locals Into Victoria’s Environment e-bulletin 2011).

The framing of caring for Earth as our home is taken further by a small section of the grassroots. One initiative locates the cause of climate change and broader ecological and social justice issues to be in our outdated worldview:

It has become clear that our political and commercial institutions are unable to effectively address this crisis, primarily because they don’t realize that they are looking at an interconnected world through a fragmented lens. The villain here is not big business, the corporate media, the military-industrial complex, or even those who for personal profit seek to clearcut our forests, overfish our oceans, pollute our atmosphere or drain our aquifers. The villain is an outmoded worldview—a way of seeing the world in which such unthinkable acts appear reasonable, sensible, and even intelligent (Be the Change website 2011).

These causes, ranging in scale from individual consumption choices, to production methods and the current dominant worldview, are similar to those identified in radical green discourses. Hence, the challenge of reducing the impacts of climate change is not underestimated:

A titanic struggle is underway between the forces that want to maintain the current economy that is plunging the world into climate catastrophe and the forces that want
to create a new economy that will prevent climate catastrophe and urgently return the world to safe conditions (Climate Emergency Network Roundtable Invite 2011)

Even so, while the challenge is huge, grassroots actors are optimistic, believing that the ‘solutions are presently out there and not that bad’ (Interviewee I). The following section examines these solutions and the change agents who are involved in the two storylines.

5.4 The Means

Interviewee G demonstrates many of the diverse facets of the response strategies to climate change proposed by Victorian grassroots climate actors:

I want 100 percent renewable energy. I want to stop stupid importing of crap consumer goods made by tiny little hands in far away places, I want us to live harmoniously with a beautiful planet we are so privileged to be on ... I can see very clearly how we can get there. We value what’s real and not what’s not, and we put a price on the real cost ... I want to see us actually account and put a real cost, a very economic realistic perspective, cost on cheap consumer goods that are not cheap at all. I want to remove all subsidies on these sort of activities and have them redirected to local programs for us to grow our own food, to have cheap and efficient public transport, to nurture forest and to actually put our economy into valuing what is good for us ... because our economy is based around what we consider valuable, so if creating jobs and industries around nurturing and supporting our greatest asset, so why would we be losing out if we were supporting that, we would still have jobs, we would still have economy, and wealth. It would just be in protecting rather than destroying ... I don’t think that’s unreasonable or impossible at all, just a far cry from where we are now, but things happen quickly and things can change, can turn around really quickly (Interviewee G).

Elements of social justice, green infrastructure, closer connections and valuing of nature, localised living and an economic system that embraces these concepts are mixed together to create hybrid, reformulated versions of reformist and radical green discourses. The reformist themes of jobs, wealth and economy are present, but with radical discursive undertones apparent in themes of re-connecting with nature, localised living and concerns for ‘little hands in far away places’. The transition
practices being advocated and/or enacted have a strong underlying theme that if broadly applied would significantly alter present Australian society.

The following section proceeds in two parts. The first part examines the refashioning storyline’s transition while the next deals with the transition proposed by the remaking storyline.

### 5.4.1 The Refashioning Storyline Transition

The refashioning storyline’s emphasis is on large-scale change, predominantly technological and economic, that must be enacted throughout society. Grassroots climate actors’ response to the Federal Government’s introduction of the carbon price legislation was particularly revealing of the societal changes desired by actors who follow the refashioning storyline. These actors typically state that the carbon price is a ‘good first step (but only a first step)’, quickly followed by the caveat that it is ‘not science-based or visionary and won’t achieve much’ (Inner Northwest Climate Change Community website 2011). Refashioning storyline actors believe that what is required is for government to undertake far broader measures for structural change in transportation, energy production, buildings and infrastructure, subsidies, land use, and education and training, to ‘support a whole-of-society transformation’ (various climate action group’s e-bulletins, for example, Yarra Climate Action Now 2011). Government is not the only site to petition for changing society, as everyone must support and implement the necessary changes to respond to climate change in the crucial time frame of the next 10 years:

> When a significant proportion of the community accepts the climate emergency, we can build the political will to enable governments and business to respond to the shared goals of the Transition Decade. Our political leaders need to hear a clear message from the community that we must invest in policies and projects to achieve a social and structural transition ... It will take a determined effort from all levels of the community to remain committed to effective action until the task is completed (Transition Decade Alliance website 2011).
The *refashioning* storyline transition strategy can be described as a hybrid approach of strong ecological modernisation with elements of sustainable development and radical green discourses.

**Green and ‘Forbidden Technologies’**

All the grassroots climate actors agree on the need to transition to renewable energy sources, the forms of renewable energy, predominately solar and wind, and that transforming society to these energy sources is a first step in a long process of change. Technology has a smaller role to play in the *remaking* storyline, but it is the main driver of the *refashioning* storyline. The following quote demonstrates grassroots climate actors’ desire for renewable energy, while acknowledging the differences that exist between them:

> We may not all agree with the best path to 100% renewable energy but the question is: who does not want locally harnessed (read local jobs) 100% renewable energy that will be kinder on our climate, boost our economy, and ensure safe-energy security (read a free fuel future)? We acknowledge that other aspects of our economy (animal agriculture, for example) must be addressed as well, but let’s at least get the ball rolling with strong momentum now (Locals Into Victoria’s Environment e- petition alert, 2011).

This quote contains ecological modernisation’s lynchpin of the coupling of environmental benefits (‘renewable energy that will be kinder on our climate’) with economic benefits (‘boost our economy’), which is so prevalent in the *refashioning* storyline.

Before exploring the technologies advocated by those actors espousing the *refashioning* storyline, it is prudent to describe the technologies they reject — that is what radical greens describe as ‘forbidden’ technologies. Examination of the forbidden technologies reveal features of the *refashioning* storyline’s transition as concerned with reducing the ecological risk of climate change as well as eliminating the negative social, economic and health impacts of these technologies. The forbidden technologies predominantly involve non-renewable energy sources, and can be grouped into four categories: coal, nuclear, bio-fuels and gas.
Coal receives the brunt of grassroots climate actor’s rejection, as the mining, burning and exporting of coal is outmoded and needs to cease. Activities that illustrate the rejection of coal include the continued petitioning for the decommissioning of Hazelwood Power Station and the efforts to stop the construction of the HRL demonstration plant. Coal is rejected as the ‘most carbon-intensive energy source’ that is ‘driving dangerous climate change’ as well as ‘sidestepping renewable energy solutions’ (Darebin Climate Action Now website 2011). Furthermore, coal-fired power stations are portrayed as having substantial health impacts, such as cancer and impaired lung development in children (Quit Coal Collective website 2011). Carbon capture and storage technologies, termed ‘clean coal’, receive condemnation too, as ‘you can’t take carbon out of carbon’ (interviewee G). Equally important in the rejection of clean coal technology is the government’s expenditure on research and development of these technologies, which is perceived as a waste of economic resources, especially when so many alternative energy sources are available. Figure 6 shows how Victorian grassroots actors mix humour with their rejection of clean coal:

Figure 6: Clean Coal cartoon from Beyond Zero Emissions website (2011).

Nuclear power is rejected vehemently by grassroots climate actors on the grounds of ‘unacceptable risks’ and the availability of a ‘vast array of renewable energy options’, thus displaying solidarity with ‘communities across Australia fighting the imposition of nuclear projects’ (Climate Action Summit Communiqué, 2011). Bio-fuels are rejected on the grounds of justice, as creating ‘bio-fuels from converting food to fuel is obscene in a hungry world’ (Yarra Valley Climate Action Group website 2011).

The final forbidden technology is natural gas, which is rejected on three grounds. First, gas is not a renewable energy source or GHG emission free. Second, the ‘dash for gas’
will be a hindrance to the rapid transition to renewable energy sources by delaying the implementation of renewable energy projects by up to 20 years. This delay is dangerous due to the urgent need to respond to climate change and also the lost opportunities for green jobs emerging in the renewable energy industry; simply stated ‘we haven’t got time for gas’ (interviewee I). Third, gas is rejected due to concerns over the environmental, social and economic implications of coal seam gas production. These concerns include the undermining of farmland productivity, groundwater contamination and a lack of transparency in coal seam gas industry, evident in many grassroots climate actors’ solidarity with the Lock the Gate Alliance.90

The actors’ statements against forbidden technologies are inseparable from statements about what should replace them. For instance, the ‘Switch off Hazelwood, Switch on Renewables’ campaign, in which many grassroots actors took part, neatly juxtaposes the technologies that will and will not help to address climate change. This inclusion provides the refashioning storyline with a positive spin. These proposed renewable energy technologies are explored below.

Victorian grassroots actors are definitely not Luddites: the renewable energy projects they advocate are large-scale, including nationwide efforts. During the data collection, the nationally networked campaign 100% renewable energy, which involves over 30 Victorian grassroots climate actors and more than one hundred grassroots climate actors Australia-wide, indicated the range of renewable energy technologies desired. These energy sources included ‘rooftop solar PV, community wind and solar projects and large industrial-scale projects like solar thermal, wave and geothermal’ (100% renewable energy website 2011). The synergies with ecological modernisation discourse are apparent. The language couples economic benefits with environmental benefits, plainly illustrated in the 100% renewable energy campaign material:

Achieving 100% clean renewable energy is 100% possible. Australia is a land rich in solar, wind, wave and hot rock potential and with existing technology, combined with vision and leadership, we can use these resources to create thousands of new jobs and clean safe power that will never run out (100% renewable energy website 2011 and campaign flyers 2010).

90 The Lock the Gate Alliance is supported by many Victorian grassroots climate actors, in addition to a presence at the 2011 Climate Action Summit.
Significant renewable energy projects commenced or were underway during data collection, the largest being the *Hepburn Wind* facility at Leonards Hill, in regional Victoria. *Hepburn Wind* began in 2007 and is currently an operational collective with 1900 members who own two turbines with an output of 4.1 MW. Influenced by its success, a nearby initiative, *Mt Alexander Sustainability Group*, began a collaboration aimed at creating a similar project. Many actors in the *refashioning* storyline take a dual approach of engaging in political action, for instance, the *100% renewable energy* campaign, while also undertaking small-scale renewable projects. These small-scale projects include initiatives of organising the bulk buying of solar photovoltaic panels and hot water systems to reduce costs for households, and holding information nights about renewable energy options. As well, many actors undertake collaborative efforts for community and school solar installations. The climate actor *BREAZE*, with a solar photovoltaic panel and solar hot water bulk buy project, is illustrative of these practices.

The largest renewable energy transformation proposed by grassroots climate actors comes from the group *Beyond Zero Emissions*, whose collaborative *Zero Carbon Australia’s* ‘Stationary Energy Plan’ generated considerable interest. The plan contained a ‘fully costed and detailed system of concentrated solar thermal plants and large-scale wind farms to provide stationary energy to the whole of Australia by 2020’ (*Beyond Zero Emissions* website 2011). The plan attracted local, state and national media attention. Other grassroots climate actors promoted the plan as evidence that the pathway to renewable energy was possible for Australia. The plan takes a strong ecological modernisation approach, which is further evident when the ambitious report is considered in its entirety.

**Structural Transformation**

The *Zero Carbon Australia Stationary Energy Plan* is but the first of a set of six plans to make the Australian economy carbon neutral by 2020 (*Beyond Zero Emissions* website 2011). For example, grassroots climate actors held forums for speakers from *Beyond Zero Emissions* to promote the Stationary Energy Plan. Examples are the *Dandenong Ranges Renewable Energy Association* which held a ‘Renewable Energy Forum on the 17th of November 2010 where the plan was presented; as well, *WarrandyteCAN* held an evening forum titled ‘BZE Zero Carbon Australian 2020 Stationary Energy Plan’ on the 21st of July 2011.

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91 For example, grassroots climate actors held forums for speakers from *Beyond Zero Emissions* to promote the Stationary Energy Plan. Examples are the *Dandenong Ranges Renewable Energy Association* which held a ‘Renewable Energy Forum on the 17th of November 2010 where the plan was presented; as well, *WarrandyteCAN* held an evening forum titled ‘BZE Zero Carbon Australian 2020 Stationary Energy Plan’ on the 21st of July 2011.
Plans for buildings, transport, land use, industrial processes and coal exports will follow. The stationary energy report is highly technical, with detailed models that justify the cost and benefits of the plan in scientific and economic terms. The stationary energy plan and the future plans state that ‘individuals with expertise, knowledge and experience in relevant areas can work within a structured process to contribute to the transition plan’ (Beyond Zero Emissions website 2011). These features give the plans many commonalities with ecological modernisation. However, the foundational principles of the plans include sustainable development and more radical discourse themes, as they require that ‘social equity’ and ‘food and water security’ are ‘maintained or enhanced by the transition’ (Beyond Zero Emissions website 2011).

The Beyond Zero Emissions’ plans illustrate the breadth of sectors to be transitioned, and the underpinning principles of social justice espoused by grassroots climate actors. After the Federal Government’s announcement of the carbon price legislation, these themes were also evident in the proposed ‘additional’ or ‘commentary’ measures to respond to climate change alongside the carbon price for the Federal Government to implement. Indicative of these proposed measures is:

1. A long-term plan for a zero-emissions economy and a roadmap for how to get there;
2. An end to all direct and indirect fossil-fuel subsidies;
3. A feed-in tariff for large-scale renewable energy — particularly baseload solar thermal, which is commercially available right now;
4. An end to land clearing and logging of old growth forests;
5. A ban on new fossil-fuel infrastructure, including gas-fired power stations;
6. A transition plan and job guarantees for communities and workers who lose employment and economic activity due to the transition from fossil-fuels to renewable energy (renewable energy creates two jobs for every job lost in coal so it will not be that hard);
7. A mass roll-out of energy efficiency measures, particularly for residential and commercial buildings; and
8. A shift in investment from roads to public transport, including high-speed rail between capital cities (‘Carbon Price Statement’ from the Yarra Climate Action Now website 2011).

The 2011 Climate Action Summit Communiqué details ‘complementary measures’ to the carbon price that it urges government to initiate, including the ‘shift to zero emissions buildings ... transport ... land use ... food production’. The Communiqué also contains a host of other recommendations relating to building ‘sustainable communities’, ‘sustainable agriculture, forestry and land use’, ‘water security’, ‘sustainable consumption, growth and population’, and ‘climate justice’.

Themes of social justice are apparent and, for the most part, presented in economic terms. The 2011 Climate Action Summit Communiqué calls for international ‘climate justice’ that incorporates ‘recognition of an obligation to assist adaptation and mitigation in developing countries, in addition to emission reductions in Australia’. In Australia, the government is called upon to provide ‘generous support for a just transition for affected workers and communities via income redistribution and/or direct assistance.’ These concerns for justice were reintegrated in response to the carbon price legislation as many climate action groups posted similar statements online, such as that social justice and equity are ‘core to all our campaigns’ (Climate Action Moreland website 2011). Therefore, ‘in the short term social justice means ensuring householders are sheltered from businesses passing on the carbon price to those who can’t afford it, but in the long term, it means changing the polluting practices of those businesses, so we have a safe climate for all of us’ (Climate Action Moreland website 2011).

As part of the desired structural transition climate actors make calls for reducing consumption. At the 2011 Climate Action Summit, attendees called for a ‘review of the viability of economic growth, consumption growth and population growth in the context of sustainability and wellbeing, and consideration of alternative measures to GDP, including measuring social aspects such as human development and wellbeing’ (Climate Action Summit Communiqué 2011). This expanded notion of wellbeing is more akin to sustainable development than ecological modernisation. Some climate actors also pushed for changes to dietary choices; illustrated in the grassroots actor’s
presentation titled ‘Soy or Solar?’ on the contribution of a meat-based lifestyle to climate change and the substantial benefits of reducing meat consumption. The presentation recommended that individuals ‘consume fewer livestock products’ and ‘inform others’ of the impacts, but also for government and other societal actors to ‘make animal agriculture a high-priority’. Nevertheless, the emphasis on comprehensive transformation of consumption practices in the refashioning storyline is much smaller than the emphasis on technological changes. Most of the called for changes to consumption are scaled to the individual level, as illustrated in Figure 5.

Achieving Refashioned Change: The Agents

Who needs to be the instigator of this change - everybody! (Survey respondent 7)

As stated earlier, the refashioning storyline assumes that the structural change required to mitigate climate change can be achieved, with significant effort, within the current socio-political arrangements. To achieve this transformation, all societal actors have an important role to play, especially active citizens and government. The role for citizens is to impel the government to be an agent of change; for instance, ‘leadership from governments at all levels — pushed by local communities’ (Survey respondent 21). Within the refashioning storyline it is evident that everyone can be, and needs to be, an agent of change. The refashioning storyline aligns with radical green discourses, to the degree that the change agent role assigned for everyone is far greater than any role portrayed in reformist green discourses. Citizens have three key roles: to change one’s own practices to become more ecologically benign, influence others to undertake similar actions and engage in political activity. Political actions occur through existing democratic practices, such as letter writing and policy submissions, attending protests and joining or creating a local climate action group. Resources such as ‘How to Start a Climate Action Group’ (Climate Action Centre website 2011) are provided to help individuals to become active.

The citizen petitioning the state is a major activity of the refashioning storyline, most

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92 The ‘Soy or Solar?’ presentation notes are available from the Bayside Climate Change Action Group website.
evident in the promotion and attendance of protests such as ‘Stop HRL,’ in addition to national rallies such as ‘Say Yes!’ Imaginative twists on these practices were observed, such as the theatrics of ‘Deckchair for Democracy’ used to petition the state government through a quasi-protest that lasted for the whole month of May in 2011 (Locals Into Victoria’s Environment website 2011). Each day in May a large deck chair was placed on the steps of Parliament House to add visual impact. With the deck chair, ‘interested members of the public and Victorian Parliamentarians (state and federal)’ were invited to learn more about ‘various aspects of climate change science, economics, social justice and future justice’ (Locals Into Victoria’s Environment website 2011). ‘Politician rebranding’ events are another creative action used by a few inner Melbourne climate action groups. These protests involve state and/or federal members of Parliament’s offices being targeted with speakers and placards to push for climate action. The term ‘rebranding’ is used to demonstrate the reality of climate science versus the climate policy rhetoric from the targeted political offices. One dedicated climate action group held a ‘40th Rebranding Birthday Party’ complete with ‘comedy, live music and a big birthday cake’ after 40 weeks rebranding every Wednesday afternoon (Yarra Climate Action Now website 2011). In contrast to state government, local government is petitioned through less adversarial means. Indicative of this approach are statements such as ‘we were there to support Council on their submission on the Dept. of Transport’s proposed peak hour bus lanes’ (Yarra Climate Action Now e-newsletter 2011).

I identified civil society coalitions as another agent of change. Workshops held at the 2011 Climate Action Summit, such as ‘How to get unions to fight for renewable energy?’ demonstrate potential agents. Local connections were also seen as important, as one interviewee described:

I’ll go to meetings of Save Albert Park. I’ll go to a meeting of a gardener club. I’ll go to meetings of Transition Town Port Phillip. I’ll go to a meeting of a Jewish group that have a Rabbi speaking, and I’ll chat up the Rabbi (on climate change) ... It’s a very diverse community (Interviewee C).

The agency of women and ‘others’ prominent in eco-feminist discourse was

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93 The Stop HRL rally was held outside Parliament House on the 24th of May 2011; another Stop HRL action has been the ‘lock on’ on the 11th of May 2011 inside Treasury Place, the day after the end of the 2011 Climate Action Summit.
fragmented. Speakers at events were most often male, and the masculine discourse of science and technology dominated. However, attempts have been underway to redress the gender balance: the Climate Action Summit held an issues workshop titled ‘Building Women’s leadership in the climate movement’ (Climate Action Summit Program 2011). In addition, several interviewees spoke about local-scale efforts that had been undertaken to increase the climate movement’s engagement with ‘others’ such as culturally and linguistically diverse communities.

The refashioning storyline actors’ desire for government to be a lead actor on climate change is evident in statements such as ‘government must lead the community in making a commitment to prevent dangerous climate change and that commitment must be the cornerstone of all policy development’. The agency comes from:

a moral and ethical responsibility to combat climate change: all levels of all governments across the globe must recognise and work together to fulfill their responsibility to secure a safe climate; it is their moral and legal duty-of-care to their citizens ... Underpinned by legislation, governments must lead a large scale transformation of the economy to a post-carbon society (Yarra Valley Climate Action Group website 2011).

While government is viewed as an agent of change, grassroots climate actors in the refashioning storyline are nevertheless fully aware of its limitations. As one interviewee indicated:

I don’t what to be too cynical, but … we do live in a democratic society and government do have to be responsive, if we have 5000 people sitting up there saying these are our issues, I guess they have to do that (Interviewee C).

People who actively deny the existence of climate change are viewed as incapable of being part of the transition. For instance, the 2011 Climate Action Summit Communiqué called upon ‘all Australians to reject the denial of climate change science being promoted by media shock jocks, conservative politicians, those with

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94 See Otzelberger (2011) and Salleh (2009) as well as GenderCC website for insights into the links between gender and climate change. Of particular importance to this point is the dominance of science and technology that excludes alternative response mechanisms to climate change, in addition to excluding those who feel unable to speak on techno-scientific matters.

95 From Communities Combating Climate Crisis, Response to the Green Paper on Land and Biodiversity at a time of Climate Change, electronic document, 2008.
vested interests and fraudulent “experts”. Economic interests and unwillingness to relinquish power were the reasons identified for these agents resistance to change. The mining industry, Andrew Bolt and Lord Monckton are some of the specific agents singled out by grassroots actors as hindering climate action. The next quote supports the points above, as well as introducing the sort of future envisioned as possible:

Many progressive thinkers believe we are on the precipice of a new eco-industrial revolution, which will bring many opportunities for a more healthy and sustainable economy. The roadblocks to clean energy solutions and greater energy efficiency are no longer technological; they are political and bureaucratic. The fact is that today we have all the technology we need to halt climate change now—we are being held back by the immense political power of vested interests (Locals Into Victoria’s Environment website 2011).

The future(s) being constructed by Victorian grassroots actors are the focus of the final section of this chapter, but first I will outline the remaking storyline’s more localised transition.

**5.4.2 The Remaking Storyline Transition**

The remaking storyline assumes a significant transformation, or even collapse, of the current socio-political arrangements, brought on by dwindling oil supplies and impacts of climate change. Therefore, the storyline’s strategy does not involve macro-scale changes implemented by government (such as carbon price legislation) but relocalisation that requires significant personal and community action. The response strategy of relocating production and consumption, especially in the areas of food and energy, is undertaken with the intent to build local resilience. In contrast to the refashioning storyline, there is a pronounced emphasis on building alternative governance arrangements and altering consumption practices. Social justice is more

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96 During data collection a campaign was circulated to have ‘The Bolt Report’, a television programme presented by Andrew Bolt, a prominent Australian climate change denialist, removed from the programming schedule. In addition, when Lord Monckton, an English climate change denialist, visited Australia he received condemnation from grassroots climate actors (for example, Climate Change Our Future website 2011, Mt Alexander Sustainability Group website 2011, Climate Action Moreland website 2011 and Locals Into Victoria’s Environment website 2011).

97 The process of relocalisation will be described in detail shortly as it is the lynchpin of the proposed response.
visible at the community-scale, with a distinct emphasis on inclusionary processes and values. The *remaking* storyline, therefore, evokes radical discursive themes of human-scale technologies, greater interpersonal interaction, and localised living. It is a strategy akin to social ecology, with the intent of building a new society in the shell of the old. There are a few grassroots climate actors within this storyline who express the deep ecology discourse of encouraging people to adopt an eco-centric worldview, although, overall, most content that value change will follow systemic change.

**Food and Connecting**

Changes to food production and consumption feature in both storylines, but food is often the primary focus of the *remaking* storyline’s transition. The discourse around food rests on the implications of climate change (the reduction of food supplies via decreases in yields from adverse growing conditions) and peak oil (dramatically curtailing modern agricultural practices). In short, it promotes a radical relocalisation of food production and consumption. The change urges individuals and communities to act locally by producing their own food, hence ensuring supply and building community connections and resilience.

The emphasis on food is evident in the varied forms of information on ‘how to make great compost’ and ‘how to dry food with an electric food dryer’ (Baw Baw Sustainability Network website 2011). As well, information is provided at workshops on topics such as ‘Eat Your Balcony’, which was held on the 22nd of August 2010 at the Eco Centre, St Kilda. Community actions intended to increase food security also aim to build community connections. These community-scaled actions include: establishing new or taking part in pre-existing community gardens and/or working with local farmers to create community-supported agricultural schemes, creating edible streetscapes by planting nut and olive trees, establishing urban orchards, garden working bees, holding local food forums, and permablitzing. The ‘Sustainable Streetscapes’ project is another illustrative initiative that plants edible trees on nature strips (Transition Towns West Heidelberg website 2011). The aims of the project are to ‘bring together principles of sustainability and permaculture’. Within these aims are significant community-building objectives to ‘bring together neighbours’ and foster a ‘sense of community achievement that will ensure that neighbours look out
for each other and each other’s property and will ensure the more socially isolated in the street have connections and support’ (Transition Towns West Heidelberg website 2011).

Food serves to connect people and connecting people is the means by which social resilience and justice is built in the remaking storyline’s transition. The local scale is the main focus of addressing injustices; for example, ‘we have visited a berry farm in order to pick berries in season and have a shared lunch and to learn about the plight and difficulties of farmers in the 21st century’ (Survey respondent 11). Justice is not just about fairer distribution of economic resources; rather, it extends to personal practice and concern for future generations. This idea is illustrated in the following statement: ‘imagine being able to go to bed — perhaps for the first time in our lives — with the sense of a job well done, knowing our livelihoods did not come at the expense of distant workers, polluted ecosystems, or our own children’s future’ (Geelong Sustainability Group website 2011). Swapping food is an example of the storyline’s focus on the themes of justice, in addition to values change:

Food swaps contribute to redistributing excess and keeping the fresh food supply chain as local and low cost as possible. They provide a low/no cost way of obtaining a variety of fresh, locally grown (often organic) food and meeting like-minded people. Gardening tips, seeds and recipes are often exchanged as well as fresh produce. No money changes hands. Food swaps tend to motivate more people to grow more at home, leading to an increase in local food production (Transition Banyule website 2011).

Alternative Consumption and Production Practices

Swapping food is part of a broader set of alternative forms of exchange. These broader practices include creating and/or supporting existing alternative economic systems such as LETS,\(^98\) swapping food and clothes, sharing (for example, promoting

\(^98\) LETS is an acronym that can stand for combinations of the following ‘Local Energy Trading System’ or ‘Local Energy Transfer Scheme’, or ‘Local Exchange and Trading System’ or ‘Local Employment and Trading System’ (see Seyfang 2002, 2004, 2006b). As described by Geelong Sustainability Group (2011) ‘a LETS is a group of people who “buy” and “sell” things (anything) using their own currency. Most are locality based, so the effect is the creation of a small-scale local economy that is effectively independent of (or parallel to, depending on the size of membership) the national economy.’
and using *Sharehood*) and giving away unwanted possessions (for example, promoting and using *Freecycle*). Within the *remaking* storyline transition there is also a concern with reviving practical and eco-friendly skills, for example, knitting, sewing, bottling and bicycle maintenance. One initiative claims ‘our reskilling will cover anything and everything: gardening, animal husbandry, food preparation, preservation + storage, sewing, knitting, bicycle maintenance, energy generation and conservation, soap making, home brewing, the list goes on’ (Transition Baw Baw website 2011). The workshop titled ‘The Treasury — Fix Your Loot’ is indicative of the broader themes within many of the aforementioned projects centred on reskilling but also building community and social connections while changing consumption norms:

This initiative [The Treasure — Fix Your Loot!] is an opportunity to re-connect with the idea of community; to exchange skills, materials, thoughts and inspiration. Participants will sit around the table with tattered jewellery piled high and leave at the end of the day with a bundle of ‘new’ jewellery and a bunch of new friends. The Treasury is about sustainable fashion—moving away from ‘throw-away’ culture and leading back towards the way we used to live; where if something broke, you fixed it. Simple as that!’ (Transition Knox Inc. website 2011)

Grassroots climate actors attempt to raise public awareness of the ecological and social impacts of excessive consumption and the alternatives. Various grassroots actors hold film nights, showing features such as ‘The Economics of Happiness’, with the byline that it ‘fully illustrates how going local really is a choice strategy in leading us all to a more fulfilling, gentler and just society’ (relocalise hepburn website 2011). Many grassroots climate actors also recommend books on their websites, including *How the Rich Are Destroying the Earth*, *The Transition Handbook* and *Permaculture — Pathways Beyond Sustainability* (see, for example, Melbourne Inner Northwest Transition Initiative website 2011, relocalise hepburn website 2011, Transition Corner Inlet District website 2011). The theme of evaluating and reducing consumption is clearly demonstrated by one interviewee:

The idea of decoupling wellbeing from economic growth ... people still believe that they are going to be more happy if they have more money and more possessions, so it [is] really trying to show people [who] believe that, that maybe it’s not so true ... there are recent studies showing that if you focus on material world acquisitions that
Questioning current consumption practices and presenting and enacting alternatives pushes elements of the *remaking* storyline into radical green discursive terrain.

**Relocalisation**

The *remaking* storyline pulls together these threads of community connection and alternative consumption and production practices under the umbrella of relocalisation. Relocalisation is presented as ‘an inevitability’, and grassroots actors argue that a ‘positive vision can go a long way to making the transition enjoyable and dignified’ (Geelong Sustainability Group website 2011). The stated benefits of relocalising are many and include ‘a more active lifestyle’, ‘self-connection’, ‘an emphasis of quality over quantity’ and ‘a meaningful common goal and sense of purpose’ (Geelong Sustainability Group website 2011). As noted above, the *remaking* storyline is akin to social ecology in seeking to build an alternative society while the old crumples. The Transition Town Movement demonstrates the clearest intent to relocalise, but many other grassroots climate actors are undertaking and advocating similar practices. Permaculture features heavily in *remaking* storyline discourses as a source of ethical and design principles for relocalisation. Permaculture’s ethics and design principles are applicable to multiple scales, from producing a sustainable edible garden to how future society could be managed:

> As an integrated design science, however, food is just one part of the permaculture equation. Permaculture equally addresses and integrates water, energy, waste, shelter, community, local economy, governance and community facilitation, and all other aspects of sustainable living (Permablitz Melbourne website 2011).

Social ecology themes are evident in the *remaking* storyline’s language of building self-reliance not self-sufficiency, as ‘permaculturists do not generally advocate complete self-sufficiency’ (Permablitz Melbourne website 2011). Hopkins (2008) uses a cake analogy, in which the community should develop the capacity to produce essentials, such as food, energy and other daily necessities (i.e. the cake) locally, while importing only the inessentials (i.e. the icing). This capacity, Hopkins (2008) states, is the antithesis of the current situation where the icing is all that is produced.
locally, while the cake is imported. The Transition Towns Movement’s strategy of
relocalisation centres on the creation of an Energy Descent Action Plan (EDAP). A
condensed version of the EDAP process is presented in the following description.

1) Community education, consultation and networking: To write an effective plan and to
bring the community on board, we would need to embark on a dual education and consultation
process.

2) Research: Food mapping, researching wind flows, solar radiation, incomes, local skills,
current energy mix and vulnerability, existing groups and their potential to aid organisation
etc. etc. We need to audit the region as best we can, to figure out what skills and resources
and opportunities are available and what are lacking.

3) Community projects and having fun: Building on the ground projects, community exposure
and trust. Finding fun ways of building skills and investing in the future. Like the permablitz
concept, community gardens, community skills education, and wherever your interest or
opportunities may lie. We should tie in with existing efforts and networks, and get inspired to
start new ones.

4) Producing the plan: Creating a visionary but grounded document condensing all the best of
the feedback and our own, no doubt brilliant, ideas. Editing it into a cohesive whole.

5) Gaining council support: By this stage, we should be unstoppable and any council, which
resists would be foolish indeed! But a strategic approach to gaining support would be well
advised ... support and advice will be necessary throughout the process, and council should
have a sense of joint ownership over the project.

6) Implementation: The plan really doesn’t have to be followed step-by-step; its value is
showing us that a prosperous post-peak community is possible. But it will be a reference point
(Climate Activist Blog, Eat the Suburbs, 2009, also posted on Geelong Sustainability Group
website 2011).

The interpersonal and governance arrangements of the EDAP are premised on
inclusivity and reduced hierarchy. The organisational structure of an EDAP involves
an initiating group that eventually dissolves as community awareness is raised and
new groups are established to promote ecologically sound change in the food,
education, health, energy and transportation sectors. Individual Transition Towns
groups are part of the larger international Transition Network. One online survey
respondent described the spatial organisation of the Transition Towns Movement as
follows: ‘localised initiatives operate at the community and local government level,
linking in with transition towns groups, nationally and via the global network’
Within the *remaking* storyline is an identifiable underlying theme on cultivating more feminine values and behaviours that are characterised by inclusivity, flexibility and fluidity. The modes of interaction between climate actors and other people in the community revolve around concerns for others and social connectedness. For instance, one initiative identifies a broad range of desired organising principles and skills: ‘sharing with youth ... maintaining social connections ... welcoming ... helping ... using non-threatening messages ... dealing with anxiety, stress, grieving ... co-operating’ (Transition Corner Inlet District website 2011). Similar principles are apparent in the way another transition group describes its values, ‘[the] following values shall be supported and modelled: integrity, autonomy, synergy, diversity, collaboration, flexibility, adaptability and efficiency’ (Transition Knox Inc. website 2011). The Transition Towns Movement has a focus on what is termed the ‘heart and soul’ of transition, which involves recognition that ‘the change from an unsustainable to a sustainable human presence on this planet arguably involves a big shift in human consciousness’ (Transition Network website 2011). The initiative *Be the Change* is focused on a consciousness shift designed to translate into individuals taking part in collective action. *Be the Change* is part of a global network of initiatives that mixes Indigenous perspectives with green theories and activists. A four-hour workshop, the ‘Changing the Dream Symposium’, concentrates on questioning the Western world’s perspective of unlimited growth and economic development (essentially industrialism) and asking where that perspective is leading society, and what can be done to make the world a more ecologically sustainable, spiritually fulfilling and socially just place.

Some actors also propose the developing of eco-centric values and connectedness to nature in individuals and society as a whole. One interviewee describes the need for ‘an environmental culture, [one that] affects all the major ways we think about the world and have organised ourselves as human beings — education, law, politics, religion’ (Group interview 2, participant 2). Similarly, Interviewee D stated that her motivations were ‘nature, [and I am] inspired by other people who contribute so much, who do so much, who gave up so much to defend nature’. Others invoke eco-
feminists and deep ecology values as part of the *remaking* storyline (Transition Network website 2011, Be the Change website 2011).

**Creating the Change: Remaking Agents**

The *remaking* storyline largely constructs local-scale agents, and privileges people acting in their communities and communities coming together to affect change. Government and business have a role, but these two actors tend to come with the prefix ‘local’ — local government and local business. Again, the *remaking* storyline has many similarities with radical green discourses as it grants agency to more people than the reformist green discourses. In addition, it is similar to ‘conscious agents’ so privileged in radical green discourses. The difference between the *remaking* and *refashioning* storylines is over the degree and definition of political action. In the *remaking* storyline, the role of conscious agents is to change one’s own practices to be more ecologically benign, help others to undertake similar actions and take part in limited local political activity. The treatment of government is nuanced, as it is evident that some grassroots climate actors consider government as problematic or irrelevant.

As the *remaking* storyline is concerned with local resilience, agency is located, fundamentally, within the community. A prime example is the Transition Towns Movement mantra of ‘if we wait for the governments, it’ll be too little, too late, if we act as individuals, it’ll be too little, but if we act as communities, it might just be enough, just in time to make a difference’ (Hopkins 2008, Transition Network website 2011, Transition Banyule website 2011). Community-scale action gives a degree of agency to women and others. For instance, seniors are a source of knowledge and skills; with craft classes undertaken by ‘some seriously crafty senior citizens, Craftshare is a program designed to give craft newbies some excellent tips, tricks and advice!’ (Transition Knox Inc. e-newsletter 2011). Local businesses, local government and other community organisations are also viewed as part of the transition process. An illustrative example of local networking is *Transition Torquay*, which has built links to business via the creation of a local business directory ‘Live local, ... Shop Local’; this directory supports and rates local businesses on ecological
and social indicators. *Transition Torquay* has links to other local groups such as *Green Mums*, demonstrating its desire to reach all sectors of society.

There is a concern in the *remaking* storyline about the capacity of government to act as a change agent, which fits with the assumption that the transition to a more sustainable society will not be undertaken within the timeframe required. For instance, ‘it [the transition] needs to be socially led, because so far waiting for governments to act has got us nowhere fast’ (Survey respondent 3). Government is even constructed as a potential hindrance to change:

The community is already instigating this change. Governments need to get out of the way and trust communities. We need a bottom up approach rather than a top down approach (Survey respondent 1).

Nevertheless, much of the storyline employs a pragmatic tone that gives agency to government (propelled by people) in the transition.

We acknowledge that political leadership re: the environmental crisis has been lacking and that we can lead and build will from the community, developing links to local, state government, business and education. Our attitudes need to change - what we think we need and what we actually need to be happy can often be two different things. I believe that this needs to start with everyday people - the more voices down here, the more business and government respond. We ultimately hold the power to make them change. It is, therefore, important to have strong links with everyone and to understand their motivations (Survey respondent 20).

### 5.5 The Ends: Super Green Industrialism to Localised Living

[I have] two visions of the future: one is Armageddon (comparable to post-apocalyptic film), one vision, I see, I think, well I’m going to be dead, so it doesn’t matter, and there’s a good chance that’s going to happen, and then I think, there’s lots of movements that have succeeded, the women’s suffrage, the India Independence, the Civil Rights Movement, then you think, when, Obama gave his speech in Chicago ... Jesse Jackson crying ... it can happen (Interviewee C).
The above quote presents the two future visions of the future I found to be common within the grassroots climate movement in Victoria. The interviewee’s distress at the thought that responses to climate change may not be swift enough is evident. Nevertheless, the quote also conveys a positive outlook: if urgent and concerted action is taken, then a ‘better future’ is possible, as posited in radical green discourses. Grassroots climate actors present the future as undecided and capable of being changed. This change is dependent on people making the right choice to act: as one e-newsletter proclaims, ‘it is ultimately our choice’; the same concept is evident in the titles of events such as ‘Rewrite the Future’ ... ‘reclaim our future’ (Lighter Footprints for Climate Emergency Network 2010).99 The choice for the refashioning storyline is exemplified in the following quote:

Right now, Australia faces a choice: we can continue our dependence on fossil fuels, keep mining and burning coal, keep polluting our air and water. We can keep damaging our farmland and health, be left behind the rest of the world on investment and face an uncertain future with an unstable climate. Or, we can make the switch to 100% clean renewable energy, creating a safer, healthier happier future for all (100% renewable energy campaign materials repeated on website and flyers 2011).

The type of future constructed by the refashioning storyline has strong ecological modernisation themes of a considerably restructured Australia, with zero emission technologies, high-speed rail, and cessation of coal mining, burning and exporting. The additional proposals of addressing social justice during the transition; as well as the situating of citizens as politically active within a strongly interventionist government context, gives the refashioning storyline vision for the future a radical green tinge.

At the other end of the spectrum is the remaking storyline and a future underpinned by the assumption of collapse: ‘once the energy from fossil-fuels fades, and we fall off that cliff it’s going to be pretty wild’ (Interviewee B). At the extreme, this storyline evokes the creation of relocalised examples from which other communities

99 Rewrite the Future: Climate Conversations 2010 is a package of materials developed by Lighter Footprints for Climate Emergency Network members and others to assist in holding community forums that build public knowledge on the science of and possible responses to climate change. There was a ‘Rewrite the future: climate conversations’ forum held at Melbourne Girls College on the 9th of October 2010.
can learn (Transition Network website 2011, Hopkins 2008). Even so, all is not lost, as the future is envisioned to be composed of communities more connected to place and each other:

I don’t think it is a case of how we’d like it to be. I think it’s a case of how we need to respond to how it’s likely to be, that’s where I think the Transition Movement really addresses the future of climate change and peak oil and what that’s going to mean for future society when it occurs, but I think the popular spin on things we could actually make it a better future with a fair bit of work … a society-wide concerned effort … paradigm shift in thinking and for me it’s about being more caring for each other, [the] planet, less caring about possessions and status and money and religion and that sort of stuff and a much more reflective approach to how we live. I think it will be a lot more nurturing to ourselves and our emotions … definitely improve our connection to the land and other species on the planet, but I don’t really think we’re going to have much of a choice (Group interview 2, participant 4).

Between these ends of the refashioning storyline’s super green modernised society and the remaking storyline’s localised future sit many other possibilities espoused by many other actors. These intermediate positions between the two ends share similarities with sustainable development in evoking a plurality of futures integrating economic, social and ecological concerns. These multiple futures are characterised by the following vision:

There are net zero carbon emissions … Biodiversity and natural systems are restored, preserved and enhanced … The ecological footprint of residents is fair by global measures … buildings and streetscapes have been re-designed for a low energy future that enlivens communities … There is a vibrant economy with meaningful and varied employment opportunities in sustainable industries or organisations … There is a well-serviced and regular zero-emissions public transport system … There are strong bonds between neighbours and communities based on acceptance, appreciation and respect for diversity (Geelong Sustainability Group website 2011).

Table 5 presents a summary of the refashioning and remaking storylines, showing the elements that compose each storyline and examples of the corresponding grassroots actors.
<table>
<thead>
<tr>
<th>Storyline</th>
<th>Problem</th>
<th>Cause</th>
<th>Means</th>
<th>Agents</th>
<th>Ends</th>
<th>Alignment</th>
<th>Climate Actors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Refashioning</strong></td>
<td>Climate change is a catastrophic threat that requires large-scale urgent action to redress, which is possible in the existing socio-political system with significant actions from all sections of society</td>
<td>Climate change breaching the assimilative capacity of the Earth with local to global consequences on people, other species and environments</td>
<td>Fossils-fuels, especially the mining, burning and exporting of coal. Host of additional practices including lifestyle choices and broader issues of an unbalanced socio-political system</td>
<td>Major conversion of all sectors of the economy, for instance energy production and transportation. Large-scale renewable energy the starting point. Economic redistribution via compensation and creation of green jobs.</td>
<td>Citizens: personal changes and push political change. Civil society to build momentum. Government to implement strong climate policies, programs and projects. Business to innovate and help build the green economy.</td>
<td>Restructured economy that is carbon neutral, more ecologically sustainable and socially just.</td>
<td>Strong ecological modernisation. Sustainable development. Elements of radical green discourses.</td>
</tr>
<tr>
<td><strong>Remaking</strong></td>
<td>Climate change in tandem with other ecological issues will result in a significant altering of socio-political relations, with cascading consequences that require communities to be self-reliant</td>
<td>Climate change on par with many other ecological issues, predominantly, peak oil. Earth’s assimilative capacity being breached and resources depleted at unsustainable rate, with major consequences.</td>
<td>Fossil-fuels, especially oil. Host of additional practices from lifestyle choices to broader issues with socio-political system premised on unsustainable growth and values.</td>
<td>Relocalise consumption and production, especially food. Cultivating community connections and feminine values. Energy descent action plans. Guiding principles of permaculture.</td>
<td>People: personal changes and influence others. Communities to build resilience. Local government and local businesses to be part of the process to relocalse.</td>
<td>Relocalised living that is more connected and socially sustainable, as well as connected to other communities by means of horizontal networks.</td>
<td>Radical green, especially social ecology. Elements of eco-feminism.</td>
</tr>
</tbody>
</table>
5.6 Conclusion

The grassroots terrain of climate action in Victoria spans a diversity of discourses and arrangements without an official adherence to any traditional ideology. My examination of the framing of climate change by the Victorian grassroots climate movement generated a description of a social world that positions humanity in a perilous state requiring radical action, that privileges ecological considerations over economic ones. Despite the peril, grassroots climate actors are optimistic about the future if everyone acts together to undertake urgent action. The grassroots climate actors’ visions of a ‘better’ future invoke key elements of radical green discourses, as well as revealing a broad range of new and/or redesigned practices. Chapter Six describes those innovative practices and outlines possibilities for their broader societal application.
Chapter 6: Discussion

6.1 Introduction

The prior chapter’s detailed description of the grassroots climate movement in Victoria, Australia, presents a vibrant assortment of actors and practices spanning the spectrum of green discourses. The array of actors and practices operating in Victoria from 2010 to 2011 was greater than previously identified in the literature review. This may be explained by the fact that most previous research concentrated on the broader Australian climate movement and mainly on its political demands, thereby masking ‘a range of vibrant ... more localactivisms’ (North 2011: 1583). The array of green discourses revealed by my research suggests opportunities for and limitations of grassroots climate action. The argument put forth is that the present diversity might be the grassroots climate movement’s strength and that such strength should be cultivated. My study uncovered a variety of innovative practices with potential for application in climate action more broadly. This chapter is concerned with answering the subsequent research question (originally listed in section 1.3 Aims and Significance): what insights emerge for the management of climate change risk? This question seeks to move the research beyond conceptualising the grassroots climate movement to answer the following sub-question: are there innovative practices emerging within the movement that could be available for broader societal application?

This chapter examines specific Victorian grassroots climate practices in three parts. The first part describes the innovative grassroots practices in terms of the elements associated with framing, communicating and supporting climate action. This part will focus specifically on some of the beneficial climate action framing practices being undertaken by grassroots actors, in addition to the personal behavioural changes grassroots climate actors are implementing, and the interpersonal practices to support change. The second and third parts examine innovative practices distinct to the two storylines identified. In the second part, the innovative practices within the refashioning storyline are described, particularly the proposed energy futures and

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ambitious plans to create zero carbon economies. The third part, goes onto examine practices from the *remaking* storyline, specifically focusing on relocalising and the novel application of permaculture principles. All these practices have the potential for the management of climate risk and will be described in detail. Identification of these practices is important, because as the impacts of climate change manifest themselves and increase in the future, these practices offer ways to combat climate change as well as other ecological issues in a manner inclusive of social justice concerns.

### 6.2 Innovative Practices: Framing, Communicating & Supporting Climate Action

As revealed in Chapter Five, the two storylines with the grassroots climate movement share some overarching similarities. These similarities centre on the framing of climate change as a dire threat, which has causes within many of the core structures of modernity; and the idea that everyone can be, and should be, part of the transformation required to respond to climate change. The storylines also share a number of innovative practices, particularly of the broad framing of climate change, as well as specific communication practices and supportive climate action mechanisms.

We can begin to examine the innovative grassroots climate practices with a neat juxtaposition that references Slocum’s (2004a, 2004b) research. Slocum is critical of the ecological modernisation approach being pursued via the *Cities for Climate Protect Program*, and the large ENGOs campaign images of polar bears, to mobilise climate action. These reformist approaches frame climate impacts as remote and the means to respond as requiring only low cost energy efficiency measures, such as changing to energy efficient light bulbs. These reformist approaches position citizens as green consumers, with no momentum for further action once these options are taken. Contrast the imagery of these reformist approaches to the imagery employed by the grassroots climate movement in Victoria, which depicts the broader systemic changes required to combat climate change that is driven by active citizens. The prevalent grassroots images are of the decommissioning of the coal-fired Hazelwood Power Station and shining renewable energy installations, intermixed with images of people joining together to garden, learn and advocate for change. Figure 7 portrays
In addition, grassroots climate actors blend the issue of climate change with other concerns such as energy and food security, health, wellbeing and social justice, all revealing a strong reformist approach to radical green orientation. This more expansive framing of climate change, in contrast to Slocum’s (2004a, 2004b) findings, presents a possibility of building a larger base of actors for change and offers a wider array of practices to redress climate risk.

The grassroots climate actors’ broad framing of climate change results in a multitude of radical to reformist green climate practices; this diversity creates a space for discussion and experimentation with alternative practices. Dryzek (2005) advocates the benefits of ecological democracy as a means to engage in social learning on ecological matters. The grassroots is a site of ecological learning via the sharing of knowledge between climate actors, as well as attempts to share knowledge with others in society on climate change causes, consequences and potential responses. Victoria’s
grassroots climate actors are demanding a greater public space via the inclusion of climate concerns in government policy-making, often by novel means, in addition to creating their own arrangements and experiments to manage climate risk. These multiple practices demonstrate much diversity. Diversity is deemed to be an important feature of resilient systems (Folke 2006). Homer-Dixon (2006) claims that multiple stressors in current modern society are rapidly converging, but if the right moments are leveraged and there are alternative practices already being undertaken, even if only on a small scale, then these might represent a pathway to a better future.101 The benefits of a diversity of actors and practices are described by Carruther (2001: 107) in the ‘local pockets of creativity’ and the ‘countervailing force of “myriad small resistances”’ of sustainability experiments that exist in the shadow of the dominant interpretation of sustainable development.

A diversity of practices was evident, however, apparent was a strategic use of the framing of climate action at the grassroots. The framing of climate action differed over the personal, community and wider public scales, something that brought benefits but also risks. My study highlighted an alignment with Pittaway’s (2008) research on five grassroots climate action groups. Pittaway’s research elaborated on the strategic use of green discourses to frame climate action, particularly ecological modernisation, which enabled climate actors to achieve objectives to suit their context and audience while other green discourses were in circulation. The strategic framing of climate action is innovative in the ways it gains public appeal and media attention; this characteristic will be discussed when examining the innovative practices in the remaking storyline. The strategic use of green discourses has been previously described by Hopwood et al. (2005) as green actors will engage in context-specific use of discourse to achieve objectives and/or deflect criticism. Dobson (1995: 21) describes the ‘discursive paradox of environmentalism’, a situation that arises when eco-centric beliefs are toned down to empower activists in the public arena. Evident in the data collected for this thesis is a discernible difference between the public climate action discourses and those disseminated at localised scales and in more personal

101 The stressors are: (1) energy stress from increasing scarcity of conventional oil, (2) economic stress from greater global economic instability and widening income gaps between rich and poor, (3) demographic stress from differentials in population growth rates between rich and poor societies and from expansion of poor megacities, (4) environmental stress from degradation to land, water forests, and fisheries and (5) climate stress from climate change (Homer-Dixon 2006).
settings. Presentations to the public, for example, have a strong ecological modernisation theme, clearly expressed in campaign slogans of ‘green jobs’ and ‘renewable energy that never runs out’ (100% renewable energy website 2011). In contrast, the data collected on the individual scale, via my questionnaire, interviews, and activist blogs, presents a more radical green tone. Personal accounts from activists converged on themes of ‘concern for the environment for not only future generations, but the current generation as well — especially people in more vulnerable situations’ (Survey respondent 19). Similarly, Jamison (2001) contends that green activists often have a personal ethical belief yet present to others a more reasoned, science-backed position. These insights from Dobson and Jamison describe the difference in findings between this thesis and the work of Baer (2010) and Goodman (2010), who were critical of the predominance of the ecological modernisation discourse. Overall, my study highlights the importance of examining the discourses in circulation over a variety of scales and settings.

To McGregor (2004: 604) there is a risk of only using green reformist language in public as narrows what is considered acceptable practices and ‘ecocentric beliefs become increasingly disempowered and unimportant even in these more private interpersonal arenas’. The silencing of more radical pronouncements is important when considering the role of social movements as change agents, as well as imagining innovative practices for climate action. Burgmann (2003) contends that the role of social movements is to be radical so that reformist demands seem palatable and can be implemented. The limiting of radical demands and tactics can result in the normalisation of acceptable behaviours and, in turn, the marginalisation of others (McGregor 2004: 603). A consequence can be the limiting of the ‘range of issues or causes’ that can be championed, as well as corresponding behaviours being reflected back to government and society, a process that further constrains what is considered acceptable (McGregor 2004: 603–604). For example, McGregor’s research uncovered the dominance of ‘weak’ sustainable development discourse in the Wilderness Movement, which he argued was detrimental to the cause of achieving gains for wilderness protection:

Whilst it gives the movement a unified front it also engages with sometimes better-

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102 Baer (2010) and Goodman (2010) critiqued the grassroots layer of climate action for disseminating the ecological modernisation lynchpin of technology and green jobs within the growth paradigm.
resourced stakeholders on a common linguistic ground that can be constructed in ways that are very sympathetic to economic development over environmental values ... the growing widespread acceptance of sustainable development principles has undoubtedly assisted many environmental campaigns; an unintended impact is the silencing and de-legitimising of alternative views (McGregor 2004: 604).

The normalisation of acceptable practices to more reformist-oriented forms has the capacity to result in the loss of ‘the vibrant actions and individualism that epitomised, empowered and radicalised the early direct action-type activities of the Australian environmental movement’ (McGregor 2004: 604). While mainstream attention may be given to strong ecological modernisation approaches, radical demands and attention-seeking direct actions have also had an impact. For instance, the Hazelwood Power Station is known to the broader community, in no small part, due to the efforts of grassroots actors staging actions such as a ‘community decommissioning’ and unfurling banners with pronouncements of ‘Quit Coal’ and ‘Stop HRL’ in daring locations, including from a building rooftop across from Victoria’s Parliament House.103 Therefore, maintaining a diversity of approaches could be a useful tactic for the grassroots climate movement and applicable to other sectors of society to build momentum for climate action.

At the community and personal scales the more radical green tones of the grassroots climate movement is cultivating internal frames of responsibility as well as intrinsic values and engagement in political action, just as described in the work of Lakoff (2010) and WWF UK (2010). The location of the onus of responsibility for climate change, and a belief in the capacity to act, is evident in the array of climate actions, described in Chapter Five. These actions range from personal lifestyle changes to people being politically active citizens. The changes to personal lifestyle practices advocated by Victorian grassroots climate actors transcend merely being green consumers; they include reducing consumption, considering the ecological and social costs of everyday actions, and also extend to informing others and/or engaging in political action. These are not the atomistic individualised activities that Kent (2009)

103 The Quit Coal Collective website has descriptions of all the direct action stunts, in addition to embedded videos of media coverage from all the major news channels (channel 7, channel 9, channel 10 and ABC). Additional information is available from the Quit Coal Collective website with links to the numerous news stories at http://quitcoal.org.au/2012/04/quit-coal-locks-on-and-wins-meeting-with-baillieu-chief-of-staff/
criticised, as they require a degree of community and/or political engagement. This is clear in both the *refashioning* and *remaking* storylines, as grassroots actors are either attempting to use existing governance arrangements through submission writing and attending community consultations and/or creating new arrangements, such as the Transition Towns initiatives seeking to engage directly with other community members, local government and business.

The grassroots climate actors themselves undertake many greener personal practices, and propagate these as social norms by creating a space where more sustainable practices are encouraged and supported. Throughout the grassroots climate movement there are norms of cycling, consuming and/or growing organic food, sharing and cooperating, along with leading less consumerist-based lifestyles. At permablitz events people are encouraged to bring their own seedlings, knowledge and tools to share; a practice many permablitz volunteers engage in. At most events the catering is vegetarian and/or vegan fare and these dietary choices are discussed publicly at events, such as the presentation titled ‘Soy or Solar’. The interviewee choice of the interview locations, was also revealing, as these locations were predominantly owner-run organic cafés or other community/alternative spaces. Furthermore, Victorian grassroots climate actors espouse ethical motivations for acting on climate change issues far different from the economic benefits or opportunities for action in the Federal Government’s Clean Energy Future (Australian Government 2011). For example:

I think we need a huge seachange in our thinking about our values and ethics in life. We need governments who function with an ethical attitude towards their job of providing the country with leadership. We all need to contribute to thinking about and creating a safe, clean, sustainable future for us and for future generations (Survey respondent 11).

The above quote demonstrates the commitment of grassroots climate actors to communicating and cultivating a sense of responsibility and duty at the personal and collective levels. The grassroots climate movement manifests important features identified in WWF UK (2010) related to the cultivation of a common interest over individual interest and privileging of participatory democracy. Such a cultivation of values could assist the creation of ‘social, political and economic conditions where
citizens choose to act in a sustainable and just way’ (Dobson, 2003: 103). These values are reminiscent of Dobson’s model of an ecological citizen who recognises a responsibility to act in an ecological way that transcends the divide between personal and political space in addition to being inclusive of justice. While Dobson’s model of ecological citizenship has been criticised, the cultivation of responsibility and the creation of new norms has the capacity to assist the management of climate change and the generation of ecological gains. Hence, the Victorian grassroots climate movement is creating innovative green social norms within the movement and demonstrates these alternatives to the general populace.

Another innovative grassroots practice is the presentation of climate change as a real and pressing issue of concern. Ambrosio’s (2010) and North’s (2011) assertion that grassroots climate actors provide ‘realness’ to climate change was confirmed in my research. The grassroots climate actors I studied never doubted the existence of anthropogenic climate change, and presented to the public a multitude of local to global, and current and predicted, climate impacts with a sense of urgency to act. Most importantly, they believed in the capacity of people to respond. Moser’s (2010) description of how to effectively communicate climate change ideas is embodied in the Mt Alexander Sustainability Group e-newsletter. The regular e-newsletter contains a sustained message about the risk of climate change from local to global scales. It also promotes multiple events for people wishing to take climate action that range from individual behaviour change to community-scale change, as well as political activity. The Mt Alexander Sustainability Group e-newsletter has another pertinent feature of stories of climate action successes, for instance, it highlights a report that found investment in renewable energy worldwide had grown substantially to $243 billion in 2010. This provides a positive story of hope for the future, something regarded by Moser (2010) as particularly valuable.

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104 For instance, MacGregor (2007) criticised its lack of gender-sensitivity, which would result in increased responsibilities for women already burdened with more responsibilities than men. For an additional critique see Hayward (2006).
105 This Mt Alexander Sustainability Group e-newsletter, titled ‘MASG news on solar, surveying and having fun’ (24-03-2011) also contained information on individuals improving home sustainability. It promoted people getting involved with the activities of a local gardening group, as well as solar hub plans for the PV bulk buy community of Goldfields. Furthermore, the newsletter contained information and encouragement for people to engage in the 100% renewable energy campaign door knocking. The inducement to door knocking was accompanied with a supportive personal narrative addressing peoples’ fears to remove barriers to engagement, for example, ‘it’s a beautiful autumn Sunday afternoon in Castlemaine, and we are ready to go out door knocking for the 100% renewables
A practice that the Victorian grassroots climate movement implemented widely, also reminiscent of Moser’s (2010) criteria, was the regular presentation of a sustained message on the risks of climate change in small, informal and supportive settings. Disseminating knowledge and information to the public is done in multiple ways. Mechanisms include more traditional approaches such as word of mouth, community events, forums, workshops and local media, as well as online means such as climate actors’ websites, blogs, e-bulletins, Twitter accounts, and YouTube postings. Forums often use participatory approaches, such as open spaces or world cafés, and undertake activities such as ‘The Second Big BREAZE Brainstorm’ held on the 6th of February 2011 in Ballarat, which invited anyone to initiate their own projects and/or support existing projects while garnering feedback on BREAZE activities and future suggestions.

In my study of the grassroots, I observed two specific emerging innovative practices for clearing barriers to engagement and supporting those undertaking actions on climate issues. The first is the initiative Psychology for a Safe Climate, which is concerned with overcoming barriers to climate action, especially climate denial. The rationale for the group is:

(1) To contribute psychological understanding within the community to support and facilitate strong and urgent action on climate change.
(2) A particular focus will be the psychological defence of denial.
(3) Throughout our work our intention and hope is that people will become free to act rather than react or withdraw in despair (Psychology for a Safe Climate website 2011).

Psychology for a Safe Climate undertakes socio-dramas, which are described as

campaign. I am nervous, I always am until I’ve had a few doors under my belt …’

106 Moser’s (2010) criteria of effectively communicating climate change are outlined in Chapter Two. Moser points to the need for effective communication of climate change to include narratives that speak to peoples’ values, and offer hope for the future, that also have a sense of urgency to motivate people to act, as well as a close spatial proximity of causes, impacts and actions to respond to climate change. Equally important is the mode of delivery when communicating climate change messages: it needs to be in a supportive setting and sustained over time. Ideal settings are small interactive forums where people can construct knowledge and capacity to take action.

107 The first ‘Big BREAZE Brainstorm’ was held on the 21st of April 2007 in Ballarat, soon after BREAZE was formed (BREAZE website 2011).
‘dramatic role play in which participants take on roles for the purpose of studying and remedying problems in group or collective relationships’ (Psychology for a Safe Climate website 2011). The approach also enables people to explore the hopes, fears and other emotions associated with climate change from different peoples’ perspectives within society, including politicians, parents, youth, and business people. The second innovative practice is the Transition Towns Movement advocating the formation of subgroups concerned with the ‘Heart and Soul’ of transition (Hopkins 2008). This practice is materialising in transition groups such as Transition Riddells Creek, which is seeking to establish a ‘Health and Wellbeing Group’, which will include ‘helping community members to come to terms with the [climate-change-related] changes to come’ (Transition Riddells Creek website 2011). These practices, Psychology for a Safe Climate and Transition Riddells Creek, draw attention to and create mechanisms to handle the deeper complexities of emotions and values that could counter issues of climate denial and provide a sustained mechanism to support individuals to change.

The interpersonal practices of enhanced participatory techniques and the building of networks and alliances premised on ‘bonding’ and ‘bridging’ ties operate in tandem to communicate and support climate action. These practices of building social capital combine to facilitate the dissemination of knowledge, learning and action. My research reveals the existence of an emergent innovative framing of climate change as broader than an environmental issue, in the networked alliances forming at the grassroots. The agreed-upon goal of addressing climate change and the widespread ability to coordinate actions and events demonstrate bonding ties within the grassroots climate movement. These actions and events include short-term collaborations for projects such as Vote Climate, longer-term ventures such as the Transition Decade Alliance and annual Climate Action Summits. Also included are one-off events such as the SE Australian Transition Convergence 2011 for Transition Towns initiatives, which create ‘semi-structured space for us to connect with other Transitioners, share our experiences, explore how the network can better support Transition Initiatives, and celebrate all that we have already achieved’ (Permaculture Out West website 2011).108 While the bonding ties are present, a dynamic balance with bridging ties is

108 Website details and descriptions for the Transition Decade Alliance and Climate Action Summits can be found in Appendix A.
required to facilitate knowledge transfer and social learning, while avoiding climate actions from becoming insular.

The current assemblages being generated by the building of bridging ties are best conceptualised as ‘communities’. Fritze et al. (2009: 12) define the multiple forms of communities:

‘Community’ can refer to people brought together due to geographical proximity, shared characteristics, beliefs or interests. Communities can interact and communicate both face-to-face and/or remotely using a variety of media, including the Internet.

Several communities are emerging in each of these categories within the Victorian grassroots climate movement. Communities of geographical proximity and place-based bridging ties are evident in the proposal ‘Beyond Carbon Bendigo Project’ (Bendigo Sustainability Group website 2011). This project seeks to create a ‘partnership with many organisations across the city’ with the promise of ‘employment, manufacturing, public spaces, liveability, health, the welfare sector, tourism and government can all be big winners from a concerted citywide effort to embrace ecological sustainability’ (Bendigo Sustainability Group website 2011). Additionally, Transition Torquay with the support of the Surf Coast Shire and Torquay Community Enterprise, undertook the initiative of producing a ‘Live Local’ guide. The guide rated local businesses on criteria related to issues of efficiency (power and water), renewable energy, materials, labour and waste, then disseminated the information via the guide titled ‘Live Local … Shop Local’ (Transition Torquay website 2011). In addition, Transition Torquay forms part of a regional network titled The Surfcoast Transition Network, which was launched in June 2009. The network is composed of Transition Bell, Surf Coast Energy Group, Social and Environmental Justice Anglesea and Surf Coast Otway Ecovillage, Danawa Community Garden, Barwon Heads Community Garden, Wellsprings, and Wathaurong Aboriginal Cooperative (Transition Town Anglesea website 2011).

Communities of interest in areas such as arts and health are emerging around climate issues, and these are development networks that can provide significant ‘bridging ties’ to the diversity of communities that exist within the modern state that may
not consider climate change an issue of priority. Recent initiatives include CLIMARTE: Arts for a Safe Climate and the Climate and Health Alliance. Importantly, these projects employ horizontally networked practices of sharing knowledge and resources, features deemed important for climate action (Adger et al. 2009). The Climate and Health Alliance, founded by a Victoria-based activist, ‘is a coalition of organisations and individuals from a broad cross-section of the sector, including health care professionals, health care service providers, institutions, academics, researchers, and health care consumers’ (Climate and Health Alliance website 2011). CLIMARTE brings together artists with concerns about climate change and disseminates climate change information through the arts to the public. Each of these examples expands the frame of climate change beyond an environmental issue and potentially allows more actors to become engaged. Furthermore, CLIMARTE is innovative in its imaginative means to communicate the problem of climate change and mechanisms to respond. An example disseminated via the CLIMARTE e-bulletin is ‘The Reincarnated McMansion Project’. The project seeks to ‘audit, dismantle and rebuild a single McMansion dwelling reincarnating it into two or three best practice, zero emissions smaller green homes using the existing McMansion building materials’ (CLIMARTE e-bulletin April 2011).

The next section examines specific innovative practices within the refashioning storyline. The storyline has a parallel to eco-socialism through its advocating of the state to fund many of its proposed large-scale energy projects, as well as its strategic approach of working in steps towards the larger goal of a ‘safe climate’.

### 6.3 Innovative Refashioning Practices

In the refashioning storyline, energy technologies feature strongly in the transition mechanisms proposed. These technologies are the crux of the identified innovative climate practices to be discussed in this section. First, the energy projects being implemented are described, namely Hepburn Wind; further, the advocated energy projects to be avoided will be discussed. The focus then falls on the proposed large-scale energy transformations as the first step in a comprehensive process of structural change. The benefits of the refashioning storyline taking a ‘strong’ ecological modernisation approach are evident in the mainstream media attention and political
traction generated over the data collection period. Furthermore, this approach has been able to attract more people to climate action. *Beyond Zero Emissions*, to be discussed shortly, demonstrates this appeal by being mentioned specifically by one interviewee for its capacity to attract a broad array of actors:

I think that the Beyond Zero Emissions work is very successful. Because it is really getting an audience outside the usual environmental sort of crowd of people who are concerned about environmental issues, um, and it speaks to people who might have reservations about actions towards sustainability because of economics, who are inherently more conservative. Beyond Zero Emissions really structures their appeal, really structures their message around technology, economic development and economic resilience (Interviewee A).

*Energy Futures*

*Hepburn Wind* is an especially noteworthy energy project due to its power as an example of a large-scale community-owned renewable energy source. The initiative is claimed to have ‘inspired more than 40 communities around Australia to begin planning their own solar, wind and mini-hydro initiatives’ (*Hepburn Wind* website 2011). One such inspired community, which emerged during data collection, is the *Mt Alexandra Sustainability Group*. *Mt Alexandra Sustainability Group* is currently collaborating with other organisations to create its own community wind farm in the Mt Alexandra region. *Hepburn Wind*, like so many of these innovative practices to be described, is attentive to multiple environmental, social and economic concerns; as online *Hepburn Wind* members’ web posts about the wind farm indicate:

I live in Daylesford and of course, I invested in the wind farm. It’s surreal looking at this crane high up in the skyline lifting huge pieces of tower into place, I’m overjoyed! Who wouldn’t be when you’ve got a visionary, practical, ethical, safe, community owned project to invest in, right on our doorsteps.

What’s great is that locals who are low income earners can even be part owners for as little as $100, and they have the same vote as everybody else — that’s inclusiveness and democracy at its best. I don’t have much money but I invested all I could in it.

I love the idea of the community owning our own energy resource. I also love that
the project is environmentally, socially and financially sustainable.

*Hepburn Wind* has gained national and international attention. In Australia, it has been recognised ‘as a one of nine Australian cooperatives selected to be on Australia Post stamps commemorating the United Nations International Year of Cooperatives’ (Hepburn Wind website 2012). Internationally, it recently won the World Wind Energy Award 2012, awarded by the World Wind Energy Association at the 11th World Wind Energy Conference 2012 in Bonn, Germany. In the press release of the award announcement the smallness of the project was noted — in comparison to international wind projects — but more importantly, what was noted was the fact that it happened at all, given the dominance of the Australian fossil-fuel industry. Moreover, *Hepburn Wind* was considered an important step in Australia, beginning the transition to renewable energy sources and inspiring other communities.

*Hepburn Wind* is a symbol of an alternative renewable energy future that starkly contrasts with the energy technologies that grassroots actors are protesting against. These rejected technologies warrant attention as the rationale for rejection demonstrates long-term thinking about the sort of future possible. There is innovativeness in the grassroots actors’ ideas of the rejection of certain energy technologies, notably, ‘clean’ coal and natural gas. The rejection of ‘clean’ coal is pertinent as ‘clean’ coal perpetuates the use of coal as an energy source. The use of coal is outrightly rejected by grassroots actors as it is a significant contributor to GHG emissions, as well as having local health and environmental impacts, for instance, increased cancer risk and depletion of local water supplies. Furthermore, clean coal is considered a massive waste of government and, to a lesser extent, private sector resources, given that these technologies have thus far failed to produce a single large-scale demonstration plant. Grassroots climate actors advocate that this money would be better spent on implementing already available renewable energy technologies.

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111 This focus on ‘clean’ coal and natural gas is not to discount the importance of grassroots climate actors’ other rejected energy technologies of nuclear and bio-fuels. Many actors in the environmental movement have long rejected these latter technologies for the reasons climate actors provide. Hence, the innovativeness is the attention to, and rationale for, rejecting ‘clean’ coal and natural gas that climate actors are attempting to bring to mainstream attention to have these technologies ceased.

112 For instance, in 2010 the Federal Government created an AUD$1.68 billion Carbon Capture and Storage Flagships program to get major projects off the ground (Australian Government, Department of Resources, Energy and Tourism 2010).
technologies, such as wind and solar.

Why natural gas should be rejected has many parallels to ‘clean coal’ and is aptly outlined in the following excerpt from Yarra Climate Action Now’s ‘Natural Gas Statement’ summary:

The climate and energy crises that we face demand solutions that fit the scale of the problem. Natural gas is a fossil fuel, which produces large amounts of carbon dioxide when burnt to make heat and electricity. Its extraction pollutes land and water and destroys precious farmland. While gas fired power stations, cogeneration and trigeneration may appear attractive at the moment; there are plenty of zero emissions alternatives available, which do not involve locking our society into decades of risky and polluting gas infrastructure. Gas is not a transitional fuel; it is a dangerous detour (Yarra Climate Action Now website 2011).

Yarra Climate Action Now (2011) statement argues that there are several reasons for the rejection of gas. These reasons include the fact that natural gas is not a zero GHG emission energy source, as well as having associated environmental and social costs, but the most important one is that the use of natural gas as an energy source delays the society-wide transition to zero emissions energy sources. The latter point is a pertinent consideration for policy-makers if the rapid timetable for GHG emission reductions cited in Chapter One is to be taken seriously.

**Proposed Zero Emission Futures**

The innovative proposals to create zero emission futures have been the visionary and ambitious ideas of the 100% renewable energy campaign, Transition Decade Alliance and Beyond Zero Emissions. The 100% renewable energy campaign creates a vision of 100 percent renewable energy for Australia and seeks to build community support. The Transition Decade Alliance expands outside the domain of energy production to propose ‘a ten year timeline for action; guided by a goal of a sustainable world, in response to the climate emergency, recognising the social and structural transition scale required to restore safe climate conditions’ (Transition Decade website 2011). To achieve this goal a timeline is set out in three stages.

Stage 1: 2010–2012 ‘Community Commitment’: which seeks to build a
groundswell of community demand for the transition through a process of building alliances of climate actors to create a ‘mass “social will” to adopt a transition decade target’.

Stage 2: 2012–2014 is the ‘Government Commitment’: which involves government creating policy and legislative reform ‘to provide a framework for new economic development and innovation’.

Stage 3: 2014–2020 ‘Intense Transition Mode’: which is described as ‘Economic Reorientation’ to produce ‘shifts in the current economic system [which] will be vital in providing the stimulus and capacity for the design, construction and production of necessary systems, services and goods’ (Transition Decade website 2011).

Part of the Transition Decade Alliance is Beyond Zero Emissions, which has spearheaded the creation of the Zero Carbon Australia plans. These plans are innovative detailed blueprints of potential sectoral pathways to a zero carbon future in Australia. The first Zero Carbon Australia plan presents a proposal to meet all of Australia’s stationary energy requirements from renewable energy sources by 2020. Zero Carbon Australia’s stationary energy plan is daring, costly (AUD$370 billion over 10 years) and applicable at national scale (see Figure 8).
Zero Carbon Australia’s ‘Stationary Energy Plan’ involves a mixture of commercially available renewable energy sources, predominantly solar thermal and wind energy, which could provide all of Australia’s stationary energy needs by 2020. Three important points must be made about the plan’s projected cost. The first is that the price of oil used in the modelling is probably an underestimate. Second, the plan replaces infrastructure that will need to be soon refurbished or replaced in any case. Third, the plan will generate significant employment. Therefore, while the overall cost might seem high, it includes modernisation of the existing infrastructure, builds employment and results in a more resilient energy future. The project has been dismissed as unable to be implemented on grounds of cost and the difficulty of overcoming vested interests, as well as murmuring reminiscent of radical green discourses on the maintenance of centralised power and the inherent instability of centralised systems. Nevertheless, it is visionary and has changed perceptions of the capacity of renewable energy, garnering widespread attention. The forthcoming plans on buildings and infrastructure, land use, agriculture and transportation will potentially facilitate visions of tangible examples of the green infrastructure Seyfang (2009b) states is needed to support greener lives. The benefits are not only accrued in
proposing that such a feat is possible, these grand plans also envisage alternatives in a manner reminiscent of Beck’s (1997) discussion on the power of ecological modernisation to internalise ecological concerns that can then expand ways of thinking, as evident in the following quote:

The ZCA plan is generating a much-needed debate about our energy future. It has the potential to capture the imaginations of Australians and generate much more than the electricity we need. It offers a vision for making Australia a global leader in sustainable energy solutions (Spoehr 2011).

These innovative renewable energy practices have managed to garner mainstream media attention and political traction from deploying the green reformist discourse of ecological modernisation. Most media attention has focused and bestowed accolades on the strong ecological modernisation discourses of Beyond Zero Emissions and the 100% renewable energy campaign. Examples of this are the Executive Director of Beyond Zero Emissions (Matthew Wright) winning the EcoGen Clean Energy Young Industry Leader Award, as well as the 2010 Federal Environment Minister’s Young Environmentalist of the Year. A clear instance of mainstream media attention to the ecological modernisation discourse was when Dr Karl, a well-known science communicator, promoted the Zero Carbon Australia’s Stationary Energy Plan as ‘the big idea Australia needs’ on the country’s highest-rating national morning television program. The 100% renewable energy campaign achieved some success when a total of 14,000-strong Renewable Energy Conversations were tabled in Parliament by Independent Member of Parliament Rob Oakeshott (100% renewable energy website 2011).

The successes of these two climate actors, Beyond Zero Emissions and the 100% renewable energy campaign with over 800 volunteers from 72 local community groups between February and June this year [2010], with a small number occurring towards the end of 2010’ (100% renewable energy 2011).

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113 See Beyond Zero Emissions website for a full description. Some examples of the successes of Beyond Zero Emissions were described in their monthly e-newsletter of December 2010, which summarised 2010 highlights to include the release the Zero Carbon Australia’s Stationary Energy Plan, which received over 30 endorsements from leading Australians. In addition, there was the ‘launching the Stationary Energy Plan to capacity crowds in Melbourne, Canberra, Sydney, Newcastle, Hobart, Brisbane, Lismore, Wollongong and Adelaide’ and the ‘welcoming hundreds of wonderful new volunteers and donors’. Finally, we should note ‘media coverage all over Australia, including TV, national radio and major newspapers’ and being recipients of ‘two Banksia Awards and an EcoGen Award’.
114 Dr Karl promoting the plan can be viewed at http://www.drkarl.com/media-centre/sunrise
115 The 14,000 renewable energy conversations were surveys undertaken as part of the national 100% renewable energy website for a full description. Some examples of the successes of Beyond Zero Emissions were described in their monthly e-newsletter of December 2010, which summarised 2010 highlights to include the release the Zero Carbon Australia’s Stationary Energy Plan, which received over 30 endorsements from leading Australians. In addition, there was the ‘launching the Stationary Energy Plan to capacity crowds in Melbourne, Canberra, Sydney, Newcastle, Hobart, Brisbane, Lismore, Wollongong and Adelaide’ and the ‘welcoming hundreds of wonderful new volunteers and donors’. Finally, we should note ‘media coverage all over Australia, including TV, national radio and major newspapers’ and being recipients of ‘two Banksia Awards and an EcoGen Award’.
renewable energy campaign, and the reformist line they promote, reinforces Mol’s (1995) contention about the power of ecological modernisation discourse to increase environmental group membership, revenue, political power and, ultimately, having its objectives implemented. This view was borne out by my observations in both these initiatives over the data collection period. The 100% renewable energy campaign was joined by more grassroots climate actors and has since commenced a new campaign titled ‘Big Solar’ (100% renewable energy 2012). Beyond Zero Emissions has increased its number of volunteers, frequency of media appearances and its profile in other States of Australia, most notably in New South Wales and Queensland (Beyond Zero Emissions website 2011).

Dryzek (2005: 232) asserts that what is needed for success on ecological matters is ‘a dynamic, structural-level analysis of the liberal capitalist political economy, where it is headed, and what realistically can be done to alter this trajectory to more ecologically benign ends’. In regard to the Zero Carbon Australia’s ‘Stationary Energy Plan’, this criterion is met. The plan is fully costed, creating employment, while transitioning to 100 percent renewable energy by 2020 (Zero Carbon Australia 2010). A cautionary note, however, is that if the assumption of a significant disruption of the socio-political system due to declining oil supplies transpires, then that structural-level analysis would be incorrect as it is built on the assumption of continual growth without limits imposed from these potentially disruptive forces. This next section explores the remaking storylines and the innovative practices that have been built on the assumption of societal disruption.

6.4 Innovative Remaking Practices

The remaking storylines’ response to climate change would result in smaller-scale societies characterised by urban spaces as sites of production and consumption,

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116 The ‘Big Solar’ campaign commenced with the ‘Big Solar Bootcamp’ that was held in New South Wales and attended by over 120 climate activists from around Australia to undertake in training to launch the nationwide campaign in their communities. Victorian climate actions groups such as Darebin Climate Action Now and Emerald for Sustainability are taking part in the Big Solar campaign, which aims ‘to apply pressure of government to invest in Big Solar energy projects funded by the AUD$10 billion renewable energy fund, which is part of the Federal Government Clean Energy Futures Legislation’ (100% renewable energy 2012).
shorter supply chains and more closed-loop systems of energy, water and resource use. Three innovative practices proposed to create this future are permacultures, food maps and Energy Descent Action Plans. This approach is primarily advocated under the banner of relocalising, which at its core is modelled on the novel application of the ethical and ecological design principles of permaculture.

Permablitz and Food Maps

A small-scale innovative practice that has emerged in Victoria in recent years is the ‘one-garden-at-a-time’ approach of a ‘permablitz’ (Permablitz Melbourne website 2011). A permablitz involves any garden, from an inner urban to rural property, being transformed into an edible permaculture landscape. Prior to the permablitz a permaculture design is created for the property, and materials organised, such as mushroom compost, vegetation and equipment, then volunteers create a new edible landscape over a day or two, depending on the scale of the transformation. Social learning takes place as garden design features and underpinning principles are explained to all in attendance. Additional workshops and discussions are held on topics ranging from single design facets, such as the principles of planting fruit trees or irrigating with household grey water, to related topics of interest such as the Transition Towns concept. Social cohesion and trust are built as people work together and share a meal provided by the host. One survey respondent demonstrates the themes of learning:

We see a lot of happy enthused people at blitzes, many of whom take the enthusiasm and skills back to their yards and workplaces. We just got some surveys back, which show overwhelming positivity from the hosts of permablitzes (Survey respondent 15).

The innovative approach of a permablitz has a proven capacity for rapid diffusion. In 2006 the permablitz idea was conceived, and since then the original group, Permablitz Melbourne, has undertaken over 120 permablitzes. The Permablitz Melbourne email list has grown to a few thousand people, and by 2011, permablitz events were attracting more volunteers than could be accommodated. The permablitz concept has spread from the Melbourne metropolitan region to other areas of Victoria and

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117 See Permablitz Melbourne website for images and description of all the permablitzes that have been undertaken.
Australia, and internationally. Permablitzes have occurred in countries as far away as Chile, and permablitzes can be viewed in numerous YouTube posts. The value of *Permablitz Melbourne’s* efforts was recognised when the organisation won the Yarra Sustainability Awards in 2011 (Community Action Category); the award was shared with the earlier discussed *Beyond Zero Emissions*.

The innovativeness of permablitz in a climate action context, apart from its ability to build social connections and learning, lies in its focus on enhancing green spaces and agriculture in urban spaces. Shaw et al. (2007) state that green spaces in urban areas reduce atmospheric levels of GHGs as well as provide adaptation benefits that include reduced summer temperatures and improved stormwater management. A further benefit is derived from creating edible landscapes, as urban agriculture delivers climate change and peak oil adaptation benefits of increased food security (Dubbeling and de Zeeuw 2011). Increasing urban agriculture means greater localisation of production and consumption, which is one of Seyfang’s (2009b) key criteria for sustainability. The permablitz is just a small part of a larger discourse about the impacts that climate change and peak oil will have on food supply and security. These issues are interconnected with other issues of negative health impacts and the unsustainable nature of modern industrial agricultural systems; for instance:

There is also a significant need to expand the quantity of food that is being produced. The need is driven by global issues of climate change and peak oil and the destructive and unhealthy agricultural practices that condition the majority of the food that we eat (Melbourne Inner Northwest Transition Initiative website 2011)

The practice of grassroots climate actors reimagining and recreating urban areas as more productive spaces has given rise to the revival of old urban agricultural practices and the creation of new ones. These practices include establishing and supporting community gardens, holding local food forums, creating edible nature strips and community orchards, guerrilla gardening and the creation of local food maps. A food map shows where local food is grown, who is producing it and identifies additional places where it could be grown (Melbourne Inner Northwest Transition Initiative website 2011). A grassroots climate actor’s concept of a food map is:

A Food Map would capture the ‘edible’ gardens and gardeners that already exist
within the ‘town’. This information would enable sharing of produce and expertise.
The map would also capture those public areas that are ripe for production
(Melbourne Inner Northwest Transition Initiative website 2011).

The intent of the Melbourne Inner Northwest Transition Initiative’s local food map project is to identify local food resources, engage a broader audience in the issues of food production, climate change and peak oil, and to work with councils to change laws to allow more food to be produced in urban areas; for instance, the planting of edible street trees.

The desire to engage a broader audience is also undertaken by way of more inclusive engagement practices, again demonstrating the importance of building social cohesion, trust and community connection (Seyfang 2009b). Inclusive practices were demonstrated at the Transition Darebin’s ‘Local Food Forum’, which incorporated open spaces techniques and activities for children as well as providing a feast of regionally produced food. Community gardens are especially relevant to the social aspects of sustainability. Community gardens have been demonstrated to improve nutrition and physical and mental health, and build tolerance across divisions of race, gender, and age (Armstrong 2000, Firth et al. 2011, Turner et al. 2011). Therefore, management of climate risk via urban agriculture brings co-benefits of building community cohesion and improving health. Furthermore, Dubbeling and de Zeeuw (2011) state that returning agriculture to the city has a significant role in building resilient cities by creating shorter supply chains and decreasing food insecurity.

**Energy Descent Action Plans (EDAPs) and Permaculture**

Alternative exchange systems are an important component of urban agricultural practices. At the core of these processes are practices of lessened consumption and non-monetary forms of exchange. Refashioning old clothes and jewellery, and learning sewing and other crafts reduce consumption, and are activities used by Transition Knox Inc. as a mechanism for people to learn from seniors on issues of sustainability. Sharing is scaled to whole neighbourhoods with activities such as the Sharehood, as well as clothes swaps and produce swaps. These practices of sharing and swapping have spread into more climate actors’ practices and, as activities, they increased in frequency of occurrence throughout the data collection period,
demonstrating their capacity for diffusion and acceptance by an even wider public. Many of these practices fall under the umbrella of the Transition Towns Movement’s emphasis on relocalising and the creation and implementation of an EDAP.

An EDAP is intended to reduce oil dependency and, in turn, a community’s carbon footprint. An EDAP is created through several steps that demonstrate the benefits of managing climate risk. These steps are raising awareness of climate change and peak oil; the formation of working groups enabling interested community members to assess their locale’s resources; and the creation of long-term visions and action plans in many different sectors — such as education, agriculture, energy and medicine — to reduce energy consumption and build more resilient communities.118 After undertaking these actions, actors bring these plans in the areas of health, education, food, etc. together to create a holistic EDAP for their locales, and finally set about implementing it (Brangwyn and Hopkins 2008, Hopkins 2008). An EDAP focuses on multiple facets of mitigating and adapting to climate change at local scale, while enhancing community participation. Key areas related to climate action are evident in the creation of ‘groups in all the key areas such as food, transport, energy, housing, education’ and the host of associated practices such as ‘community-supported agriculture, car clubs, local currencies, neighbourhood carbon reduction clubs, urban orchards, re-skilling classes’ (Mirboo North Transition Towns website 2011).

The benefits of more localised living align strongly with Seyfang’s (2009b) sustainability criteria of shortening supply chains and building community connections. The debates in green theory and practices over the ecological, social, and economic benefits and limitations of localism have been extensive (see Albo 2007, DuPuis and Goodman 2005, North 2009). Nevertheless, there is evidence of attempts to create a dynamic balance of social ‘bonding’ and ‘bridging’ ties by the Transition Towns Movement through its globally networked structure, as well as the discourse of self-reliance, as opposed to self-sufficiency, that the movement seeks to achieve. The Transition Towns Movement, and the practice of an EDAP, have diffused horizontally since inception in 2005, when a group of permaculture students, under the direction of Rob Hopkins at Kinsale Further Education College, developed an EDAP for the town of Kinsale, Ireland (Hopkins 2008). Hopkins proceeded to build

upon this work and in late 2005 created the first group, *Transition Town Totnes*. Although the Transition Towns Movement is strongest in the United Kingdom, Transition Towns groups now also exist other countries such as Germany, Canada, Chile, Spain, Belgium, Japan, New Zealand, and Australia (Transition Network 2012). The Transition Towns discourses have gained traction on a local scale in Victoria. The Municipal Association of Victoria has a program ‘Councils and Communities in Transition’ with over 40 councils involved; one example is the Whitehorse Council’s creation of *Transition Whitehorse* (Municipal Association of Victoria 2011, Transition Whitehorse website 2011).

Permaculture is the underlying philosophy of the aforementioned practices of permablitz, EDAPs and the Transition Towns Movement. The originator of the Transition Towns discourse, Rob Hopkins, was a permaculturalist, and the ethics of permaculture and its design principles pervade the Transition Towns Movement discourse, as well as having a presence in many other grassroots climate actions. Within the grassroots climate movement in Victoria, the original conception of permaculture is presented and applied from urban to rural contexts, covering many areas of consumption and production, as well as social organisation, as a basis for a sustainable society. The ethics of permaculture are (1) care for the earth, (2) care for people and (3) fair share (Holmgren 2007, Mollison 1988). These principles involve care and respect for the natural world and diversity coupled with equity, taking only what one needs and ensuring that everyone’s basic needs are met (Holmgren 2007, Mollison 1988). The 12 permaculture design principles have ecological, social and economic benefits (King 2008). As material created by one Transition Towns group describes, the breadth and depth of potential novel application of permaculture is clear:

Permaculture is about sustainability, which includes much more than food, however since providing food is a key aspect of sustainability; it is a major focus of permaculture. Permaculture entails much more than just food production. Energy-efficient buildings, wastewater treatment, recycling, and land stewardship in general are other important components of permaculture. More recently, permaculture has expanded its purview to include economic and social structures that support the evolution and development of more permanent communities, such as co-housing projects and eco-villages. As such, permaculture design concepts are applicable to
urban as well as rural settings, and are appropriate for single households as well as whole farms and villages (Permablitz Melbourne website 2011)

Permaculture, as grassroots actors promote it, offers an ethical design system scalable from individual households to entire communities, and is entirely compatible with the goals of climate change action. Permaculture is considered an innovative climate change practice due to the attention it gives to multiple ecological and social sustainability concerns, while mitigating climate risk.

The *remaking* storyline has a focus on cities and suburbia as being key sites of climate practices and proposes a novel application of permaculture principles to these sites. For instance, climate actors advocate and undertake permaculture practices that seek to reform, re-imagine and recreate these urban spaces. For instance:

Suburbia is often seen as the antithesis of sustainability. James Howard Kunstler has called it “the greatest misallocation of resources in human history”. Suburbia however, has roughly the population density of some intensive self-sufficient South East Asian cultures, while it also has the benefit of many hard surfaces for water catchments. While permaculturists do not generally advocate complete self-sufficiency, we can grow a sizable proportion of our food in our suburban yards. We can show you living examples (Permablitz Melbourne website 2011).

In the past, urban environmental concerns have been neglected in Australian environmental movements in favour of wilderness concerns (Davison 2006, 2008, Doyle 2005, Mulligan and Hill 2001, Pakulski and Tranter 2004). Davison (2008: 2) argues that:

The prime achievement of this false consciousness [the privileging of wilderness] has been to render cities—and especially the suburban environments that have been home to the majority of the population for several generations now—banal, uninspiring and unnatural.

The urban is not uninspiring in the *remaking* storyline, or in the *refashioning* storyline, and this urban focus offers a particular advantage for seeking innovative climate practices due to the demographic reality of Australia’s highly urbanised form making these practices applicable. Hence, the *remaking* storyline contains innovative practices to re-imagine the urban form and social relationships within it, while the
refashioning storyline contains innovative practices of a host of possible green infrastructures to support the greener lifestyles required to combat climate change.

6.5 Conclusion

In this chapter I demonstrated that the Victorian grassroots climate movement is a more diverse space of climate action than has been recognised in previous research. The findings of my research are important, because they contain a deeper understanding of the grassroots climate movement in Victoria. This, in turn, provides insights into the emergent themes of social justice and urban concerns that are becoming a focus of the movement. The diversity of actors and practices produces opportunities for social learning and numerous ways to engage others that open a multiplicity of future avenues for grassroots actors to build climate action. I observed a host of innovative micro to macro-scale practices aimed at restructuring technological, economic, planning, and governance arrangements for managing climate risk. Many of these practices meet Seyfang’s (2009b) criteria for innovative sustainability practices. Given the potential consequences of climate change and the current lack of urgency in addressing it, these practices warrant deeper research. Proposals for future research are given in the final chapter, as well as some concluding remarks.
Chapter 7: Conclusion

7.1 Introduction

We are already feeling some impacts of climate change when the increase so far is less than 1°C since pre-industrial times. How will Australians in future manage 2°C? ... Even an increase of 2°C above pre-industrial levels would have significant implications for the distribution of rainfall in Australia, the frequency and intensity of flood and drought, the intensity of cyclones and the intensity and frequency of conditions for catastrophic bushfires (Garnaut Review Update 2011: 8).

After extensive reading I fear for the future of much human and other life on the planet if urgent action is delayed on climate change mitigation. I believe climate change will be the greatest threat to human health this century (Survey respondent 5).

In Chapter One I detailed the significance of the threat posed by climate change, and the scale and speed of the response required to address it. The agreed goal of stabilising the global climate by limiting global warming to a 2°C rise above pre-industrial temperatures by 2100 seems certain to be breached as international negotiations stall (Anderson and Bow 2011, New et al. 2011). The consequences of a 2°C rise for Australia are severe, yet political traction for climate action is proving difficult to achieve. Due to its unique environmental and demographic vulnerabilities, Australia will experience many of the challenges of adapting to climate change long before similar minority world countries (Palutikof 2010). The negative consequences of climate change for agriculture, biodiversity, coastal infrastructure, health and social wellbeing are substantial. The Federal Government’s Clean Energy Future legislation has come into affect, but it is far from the dramatic action required, and its survival is not ensured, as the federal opposition has pledged to revoke the legislation if elected. Climate action is waning in some states and territories, and as mining becomes even more firmly fixed in the nation’s psyche, the potential for climate action will diminish further. Hence, as my research indicates, the grassroots climate movement and the
broader climate movement are important actors to promote social change and innovative climate practices.\textsuperscript{119}

The research presented in this thesis aimed to produce a comprehensive understanding of the grassroots climate movement in Victoria, as well as to identify and describe innovative practices for climate action. It sought to answer the questions: who comprises the movement for action on climate change at the grassroots in Victoria, what assemblages do these activists generate, what practices do they advocate and/or undertake, and could these practices provide insights for new and/or alternative courses of action on climate change? Answering these questions has expanded what was already known about the grassroots climate movement, garnered additional knowledge on the state of grassroots climate action and revealed innovative climate action practices. The next section summarises the contribution of the thesis, explores the implications of this research through several proposals and outlines some future research directions.

7.2 The Contribution

This thesis contributes to the state of knowledge on the grassroots layer of climate actors and practices in the State of Victoria, Australia, in three respects. Its first contribution is the breadth of actors it identifies as part of the Australian grassroots climate movement. I confirmed that the grassroots layer includes actors previously identified, such as climate action groups and other vocal groups petitioning the government for change. However, I also identified additional actors and practices, including Transition Towns, broader sustainability groups concerned with climate change action and numerous collaborations and alliances composed of various grassroots climate actors. In addition, I identified and described the actions of individual climate activists and single-issue actors concerned with particular aspects of reducing climate risk. For some of the grassroots climate actors it was the first time they had been included as part of the grassroots layer of climate action and for others,

\textsuperscript{119} An example of the waning of state-led climate action is the Baillieu Government’s announcement that the target of a 20 percent state GHG emission reduction by 2020 would be scrapped (Jenkins and Iaria 2012). As well, the recently elected Queensland Premier Newman has ordered the scrapping of the state’s green energy programs (Bita 2012). An insightful account of where the mining boom is taking Australia is available in Pearse (2009).
the first time they had been a subject of research. Finally, the data collection methods and duration of investigation of the research were more extensive than previously undertaken, enabling a more comprehensive identification and description of the actors and practices.

The second contribution of this thesis is its finding that grassroots climate practices in Victoria were highly diverse. The actors and practices uncovered mirrored those described in the comprehensive study by North (2011) on the United Kingdom climate movement. Viewed through the lens of a spectrum of green discourses, it becomes apparent that not only did the grassroots climate movement consist of more actors than previously considered, but that a diversity of green discourses is circulating in Victoria. These green discourses include strong ecological modernisation mixed with a sustainable development focus on social justice; radical demands on government akin to an eco-socialist prefigurative strategy with government serving as part of the prefigurative apparatus; and radical green localised social ecology-inspired approaches with interpersonal practices premised on ‘feminine’ traits and cultivation of value change.

The diversity of Victorian grassroots climate practices uncovered in this thesis leads to its third contribution: the identification of practices with potential for broader societal application to redress climate risk. The innovative practices uncovered include those involved in framing, communicating and supporting climate action. Communication practices aim at cultivating awareness of the ‘realness’ of climate change and the responsibility and capacity to act. Climate actors’ interpersonal practices of disseminating knowledge and coordinating action are characterised by inclusion and non-hierarchical forms. From the remaking storyline, innovative practices and plans are place-based such as permablitzes, food maps, sharing and swapping, and EDAPs – all underpinned by the ethical and design principles of permaculture. From the refashioning storyline, there are larger scale innovative practices advocating the rejection of certain energy sources, creating community-owned renewable energy projects, and proposing plans to repower and restructure the whole of Australia to a zero carbon economy by 2020. In summary, these practices seek to deal with climate change, while also handling a host of other ecological and social justice issues.
These findings highlight the fact that the grassroots layer of climate action – as identified in this thesis – is an important and vibrant space for the management of climate risk. The following proposals and future research directions are premised on consolidating and dispersing these climate practices more broadly throughout society, as well as highlighting alternative avenues for action.

7.3 Proposals

The following proposals are directed at Australian governments — federal, state and territory, and local — the academic sector and the grassroots climate movement as a whole. Overall, these proposals seek to create an enabling environment for grassroots climate actors and climate practices. Governments are urged to open avenues of authentic public participation; implement, expand and reinstate policies and programs to facilitate climate action; and strengthen local government capacity and resolve to work with grassroots climate actors. The academic sector and grassroots climate movement are encouraged to strengthen their engagement with grassroots climate innovations, in addition to giving more active consideration to the capacity of green discourses to expand the range of climate practices available. I kept two considerations firmly in mind when developing these proposals. The first is that the autonomy and capacity for climate actors to remain agents of change should be maintained. Assistance from outside parties, such as government, can result in over-dependence and change agents may become tempered and subdued (O’Toole 2006, Whelan and Lyons 2005). The second consideration was the hostility of the Australian socio-political context to climate action. Hence, these proposals have a realistic and pragmatic tone, which is mindful of current limitations within prevailing climate governance arrangements.

The first proposal — the creation of more authentic avenues for public participation in governance — is applicable to all layers of government. Beierle and Konisky (2000: 589) argue that evaluating participatory approaches encompasses analysing the quality of the engagement process, the extent to which certain interest groups have their interests represented in the outcomes, and the extent to which broader societal goals are achieved. To achieve genuine participation, Horlick-Jones et al. (2006: 272,
emphasis in the original) outline the need for transparency, being ‘inclusive of all relevant views’ and with ‘sufficient resources with which to achieve ... objectives; and effective and fair dialogue’. Similarly, Dovers (2005: 97) outlines principles for public participation in environmental matters:

Identify actors in society interested in and/or likely to be affected by decisions (stakeholders); enable participation in policy through multiple and flexible means; ensure transparency and accountability of policy-making processes; and emphasis the participation and empowerment of marginalized groups.

These principles of authentic participation have not been apparent in government decision-making to date. Grassroots climate actors have vented their frustrations; for instance, at the 2011 Climate Action Summit’s ‘Golden Carrot Smoking Pen Award’ they used the line ‘consult and ignore process’ to describe governmental consultation processes. Therefore, to enable governments to consult effectively with grassroots climate actors, it is proposed that the criteria outlined by Beierle and Konisky (2000), Dovers (2005), and Horlick-Jones et al. (2006) be implemented as part of policy and action at all levels of government. The emerging example of Netherland’s transition management approach could be a model to adopt and adapt to the Australian context (see Kemp et al. 2007, Loorbach 2010, Shove and Walker 2007).

The innovative practices of grassroots climate actors could be diffused more broadly if authentic participation is created. Authentic participation would mean that the grassroots layer’s proposals to invest in renewable energy technologies, high-speed rail networks, as well as education and training in these emerging green industries, could be heard, discussed, considered and potentially implemented at the federal

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120 The ‘Carrot Awards’ were instigated at the 2011 Climate Action Summit by the 100% renewable energy campaign team as a means to have fun and recognise the variety and efforts of different climate actors.

121 An additional example was one interviewee’s frustration, as ‘exceedingly well researched’ policy submissions are ‘going nowhere’ (Interviewee G). This lack on genuine inclusion was also clear in the disjuncture within the Victorian Climate Change Green Paper (2008). The Green paper included a description of the outcomes of community consultation in the box ‘What Victorians are Saying’, which included a concern for climate change, increased public transport, green planning, GHG emission reductions, switch to renewable energy and support for community climate initiatives. Much of this was not forthcoming, as the paper hinged on the failed CPRS and, ultimately, the green paper was revoked.
level. The mining super profit tax could provide a stream of revenue that would ensure the monetary benefits of the mining boom are more evenly spread and continue after the boom is over. Authentic avenues of participation would offer similar benefits at state level too. Additional benefits could accrue to society more broadly as more authentic avenues of participation can increase trust, legitimacy, transparency and accountability in government (Edwards 2009).

The second proposal is for the creation of policies and conditions, such as the (axed) Climate Communities Grants Program, that enable some grassroots climate actors and practices to flourish. This program had considerable potential to support some grassroots climate actions. I observed evidence of willingness on the part of the grassroots climate movement to engage with the program; for example, the Mt Alexander Sustainability Group held grant writing workshops. Similar programs could be created and implemented at all levels of government to facilitate climate action.

My third proposal is to strengthen the capacity of local government to work with grassroots actors. Given its jurisdiction over issues such as waste, planning and the organisation of public space, local government is a key site in which to undertake climate action. Some local government bodies are taking the lead: as noted earlier, Whitehorse City Council is engaging in transition discourses by being one of the initiating actors in Transition Whitehorse. In addition, Melbourne City Council, as part of the C40 cities group, has contributed examples such as the CH2 building. Another example is the City of Yarra, which is actively working on energy issues with the establishment of the Yarra Energy Foundation, and has recently employed an urban agricultural facilitator (City of Yarra 2012). Victorian Regional Greenhouse Alliances are also becoming important; the state government supports these with funding under the Greenhouse Regional Partnership Program. These alliances exist across Victoria and involve local governments, businesses and community groups. A few grassroots climate actors, such as BREAZE, already take part in these alliances,

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122 C40 Cities was created in 2005 to be ‘a network of large and engaged cities from around the world committed to implementing meaningful and sustainable climate-related actions locally that will help address climate change globally’ (C40 Cities 2012). CH2 stands for Council House 2 that conserves energy and water, in addition to being designed to improve the health and wellbeing of those who work there.
but by opening additional avenues, these alliances could broaden their scope and reach considerably.

The *fourth proposal* does not involve government. If the overwhelming body of climate science is to be believed, then Whelan’s (2002, 2003) call for activist academics to engage on important issues and work with other activists to facilitate action is more pertinent now than ever. The *100% renewable energy* campaign was community-led with some initial support from The Change Agency, of which Whelan (an academic) is the director. In addition, *Zero Carbon Australia* is another project spearheaded by the grassroots, but is a joint collaboration composed of *Beyond Zero Emissions* and the University of Melbourne's Energy Research Institute. These two examples demonstrate the power of cross-fertilisation when grassroots climate actors and knowledge institutions collaborate. They show that grassroots actors do not lack ideas but need additional resources (time, facilities and funding) to develop and implement these ideas in practice. The research directions outlined below develop this theme of academic engagement.

The grassroots climate movement could also engage more extensively with the array of green discourses in order to expand both its actor base and its tactical armoury. For instance, grassroots actors’ general concern with social justice as critical to climate action presents an opportunity to build future collaborations with other sectors in society. Greanau (2011) contends that the inclusion of social justice concerns expands the reach of the grassroots climate movement in the United States by engaging more constituents in climate action. The theme of social justice is evident in the Victorian grassroots climate movement’s concern with the creation of green jobs and compensation measures. Environmental justice constructs the environment as an issue that impacts directly on everyday life. This includes issues of ‘public health, worker safety, landuse, transportation, housing, resource allocation, and community empowerment ... children’s health, pollution prevention, housing ... community reinvestment, urban sprawl’ (Bullard and Johnson 2000: 556–557). These diverse settings represent opportunities for new actors to engage with climate risk. In addition, environmental justice’s conception of ‘just transitions’ and NIABY, especially in the economically depressed coal regions of Victoria, could offer a strategic approach that is responsive to social justice concerns.
From an eco-feminist perspective, Plumwood’s (2006) advocates the importance of adopting a dual focus on feminism and ecology. She considers this has the capacity to attend to multiple concerns and expand the predominantly environmental frame of climate change. Climate change is increasingly acknowledged as having a gender dimension, and that the socio-economic risks of climate change fall disproportionately on the poor (Brownhill 2007, Haigh and Vallely 2010, Johnsson-Latham 2006). Attending to these multiple concerns helps expand the options for action and assists the building of diverse coalitions. An additional opportunity lies in the prefigurative strategy of eco-socialism, which could provide a range of mechanisms potentially useful for achieving climate change objectives. I am not necessarily advocating an eco-socialist future, but consider that some of its ideas may provide a way to think about the overall climate action campaign and its underpinning values and objectives.

7.4 Research Directions

In keeping with the above proposals, this study raises a number of future research directions, all premised on the relative novelty of the grassroots climate movement in Australia and the pressing need for innovative climate change responses.

The thesis uncovered some innovative practices but its scope meant that it was unable to explore the potential of these practices in sufficient depth. These practices included alternative communication and interpersonal strategies; novel consumption, production, and relocalisation practices; as well as grand-scale visions of zero carbon societies. A future research direction could hence undertake more detailed studies of these climate practices and pose the following questions: ‘What is the capacity of this practice to address climate risk?’; ‘Can this practice be enhanced to achieve greater GHG emission reductions or climate change adaptation benefits?’; and ‘What methods can be used to facilitate the application of these climate practices more broadly?’ Research into the last question could draw on Seyfang’s (2009b) work on mechanisms to facilitate broader societal diffusion and transpose it into the Australian context.
Researchers could also pursue participatory action research with grassroots actors. There are precedents: Hall et al. (2009), for example, undertook action research with grassroots actors in Australia with the intent of creating double-loop learning while producing a Climate Bill. This type of research could be expanded to other areas: for instance, to investigate the implementation of innovative wastewater treatment options in line with grassroots urban agricultural practices. Practices such as permablitz can enhance the ecological sustainability of wastewater management and, simultaneously, explore new applications of recycled water. Action research could involve working with community practitioners on the incorporation of permaculture principles into larger scale urban planning, or a sociological and psychological exploration of grassroots climate practices aimed at changing consumption norms.

7.5 Final Thoughts

The thesis’ underpinning premise is that climate change is real and that urgent action is required to redress it. The task is daunting but the innovative grassroots practices identified by this thesis demonstrate that alternatives for climate action are being created, experimented with, and are available for broader societal application. The grassroots climate movement is only one component of a larger social force seeking to address climate risk, but it exists in a broader social context of indifference and even hostility to climate change concerns. Despite the considerable forces aligned against the grassroots climate movement, I found my study of it inspiring. The practices it generated, as part of reimagining a sustainable society, were plentiful and in operation every day. I encountered many people, perspectives and visions determined to change the world for the better, if only in a small way. This determination gave me hope for the future. Nevertheless, more action is required from all sectors of society to deal with the problem of climate change in a socially just and ecologically sustainable way. The grassroots climate movement may constitute a relatively small element of the necessary response to climate change, but its diversity, impetus and innovation makes an important and invaluable contribution to this goal.
Bibliography


Pearse, G. (2007) High & Dry: John Howard, Climate Change and the Selling of Australia’s


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World People’s Conference on Climate Change and the Rights of Mother Earth (2010a) Working Group 3: Rights of Mother Earth proposal universal declaration of the rights of mother earth available from
World People’s Conference on Climate Change and the Rights of Mother Earth (2010b) Final Conclusions working group 8: Climate Debt, available from http://pwecc.wordpress.com/2010/04/30/final-conclusions-working-group-n%C2%BA-8-climate-debt/#more-1637


Appendix A: Grassroots Climate Actors

Victorian Grassroots Climate Actors (listed alphabetically)

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Website</th>
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<tbody>
<tr>
<td>Ararat Greenhouse Action Group</td>
<td>Formed in 2007, <em>Ararat Greenhouse Action Group</em> is based in a rural region and composed of ‘a broad range of members from Ararat, Stawell and surrounding areas, all of whom wish to promote a sustainable future for the local area’. The aim is ‘to promote activities to lessen the effects of climate change through community education and action and through advocating abatement of Greenhouse Gas emissions’. Practices promoted are a mixture of personal behaviour changes (for example, getting people to switch to green power and/or join Freecycle) and political actions, for instance, being part of <em>Replace Hazelwood</em> campaign.</td>
<td><a href="http://www.agag.org.au/Site/Home.aspx">http://www.agag.org.au/Site/Home.aspx</a></td>
</tr>
<tr>
<td>BREAZE</td>
<td>Formed in 2006, <em>BREAZE</em> stands for ‘Ballarat Renewable Energy And Zero Emissions’. It is based in the rural Victorian township of Ballarat. The group is ‘a non-profit grassroots organisation, which has come about because members of the Ballarat community want to demonstrate that individual and community-based actions can make a difference in our response to climate change’. Practices include raising public awareness of climate and sustainability-related issues through in-person events, such as forms and media, including the local newspaper, and online. Also undertaken are personal change and community-building approaches of a Food Coop, ‘BREAZE Local’, and a bulk solar of photovoltaic electricity and Solar hot water. BREAZE engages in political actions on a local to national level, in addition to taking part in networks over these scales with climate action groups, local governments, peak environmental organisations, educational institutions, and local businesses.</td>
<td><a href="http://www.breaze.org.au/">http://www.breaze.org.au/</a></td>
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<tr>
<td>Barwon Heads Sustainability Group</td>
<td>Formed in 2006, there are 40 active members of <em>Barwon Heads Sustainability</em>, which operates under the auspice of the <em>Barwon Heads Community Arts Garden</em>. The concerns are climate change and peak oil, with the aim to build localised resilience and increased sustainability, informed by the Transition Towns model. Practices are predominantly local raising awareness of climate change and community-building actions. The initial stage of an energy descent action plan is underway and a directory of people with skills and knowledge to share has been created. The topics contained within the directory are: home food production, home energy audit, sustainable house design, solar power and hot water, alternative transportation and water conservation. There is also a Local Energy Transfer Scheme (LETS), which enables points (or ‘Barwon Bucks’) to be traded for services, goods and access to resources. Links have been made to other regional groups such as <em>Geelong Sustainability Group</em>, <em>Transition Bell</em>, and <em>Transition South Barwon</em>.</td>
<td><a href="http://www.transitionnetwork.org/initiatives/barwon-heads-community-arts-garden-sustainability-group">http://www.transitionnetwork.org/initiatives/barwon-heads-community-arts-garden-sustainability-group</a></td>
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123 All quotes are from the websites listed.
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<tr>
<th>Name</th>
<th>Description</th>
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<td><strong>Baw Baw Sustainability Network</strong></td>
<td>Formed in 2007 by a ‘group of ordinary people’ due to concerns ‘with the environmental situation of the planet’. The <strong>Baw Baw Sustainability Network</strong> has over 70 members operating in a rural context. It is ‘an independent not-for-profit group run by volunteers’. The aims are to ‘promote sustainable lifestyles and technologies for community, households and business, increase community awareness about climate change, inform and educate the community about sustainable living practices through various media, implement community projects that promote environmental sustainability, monitor and measure progress toward achievement of sustainable practice in the community’. Practices cover being part of alliances and political actions, such as the <strong>100% renewable energy</strong> campaign. In addition, local activities of re-skilling, clothes and produce swaps, and workshops on domestic energy and wicking bed are promoted. Website: <a href="http://www.bbsn.org.au/">http://www.bbsn.org.au/</a></td>
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<tr>
<td><strong>Bayside Climate Change Action Group</strong></td>
<td>Formed in 2006, <strong>Bayside Climate Change Action Group</strong> is an inner urban ‘non-profit, community organisation’ with 50 active members. The aim is to ‘reduce the human contribution to, and the impact of, climate change by creating and delivering information, facilitating actions and influencing decision makers’. Practices incorporate raising public awareness of climate change through forums on climate science, the consequences of meat consumption, as well as movie nights, recently the movie ‘Home’. The undertaking of political actions is also prominent on the agenda. These actions have included supporting political demonstrations, such as <strong>Say Yes!</strong> and writing policy submissions. <strong>Bayside Climate Change Action Group</strong> also has links with other local and national climate actors. Website: <a href="http://www.bccag.org.au/">http://www.bccag.org.au/</a></td>
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<tr>
<td><strong>Be The Change</strong></td>
<td><strong>Be the Change</strong>’s mission is to ‘deepen the commitment of Australians to care for, heal and sustain the natural environment and the community of life, contributing to a positive shift in humanity’s global tipping point by 2014’. The group is composed of a nine-member Guardianship Council. The council ‘supports Symposium events, designed by The Pachamama Alliance with the collaboration of some of the finest scientific, Indigenous and activist minds in the world’. The Symposium ‘explores the current state of our planet from a new perspective, and connects participants with a powerful global movement to reclaim our future’. The main activity is the symposium ‘Awakening the Dreamer, Changing the Dream’, as well as training offered to people interested in becoming Symposium Leaders. Website: <a href="http://www.bethechange.org.au/">http://www.bethechange.org.au/</a></td>
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<td><strong>Beechworth Sustainability - as of March 2011 Beechworth Urban Landcare and Sustainability</strong></td>
<td><strong>Beechworth Sustainability</strong> merged with the local Landcare group in March 2011 to become <strong>Beechworth Urban Landcare and Sustainability</strong>. The stated concerns cover the issues of climate change, food security and biodiversity. The intended aim, in relation to climate change, is ‘to make participants and town (Beechworth) more sustainable by reducing carbon by 80 percent’. Practices have been the establishment of working groups, for instance, groups on the topics of food and energy, as well as community</td>
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<tr>
<td>Name</td>
<td>Bendigo Sustainability Group</td>
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<td><strong>Description</strong></td>
<td>Formed in 2007, <em>Bendigo Sustainability Group</em> is based in the rural Victorian region of Bendigo with over 500 group members. The group is described as being composed of ‘simply local folk interested in sustainable living, be it by bulk buying of solar power, sustainable gardening, capturing carbon, sustainable transport, community education or even sustainability policy development’. The concern is for ecological sustainability, with an emphasis on climate change, biodiversity and water conservation. The aim is to ‘create a supportive culture for understanding, inspiration, action and hope from which the wider Bendigo Community can grow a sustainable future together’. Practices have been the establishment of action groups on ‘Sustainable Foods’, ‘Sustainability Education’, ‘Solar Technology’, ‘Biodiversity’, ‘Art and Craft’, ‘BendiGo Tap’. As well, the group undertakes public awareness-raising activities on sustainability issues and has run a solar bulk buy scheme.</td>
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<tr>
<th>Name</th>
<th>Beyond Zero Emissions</th>
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<td><strong>Description</strong></td>
<td>Formed in 2006, <em>Beyond Zero Emission</em> is ‘a not-for-profit, volunteer run organisation’ that originated in Melbourne and has now spread into other Australian states. The ‘core goal is to facilitate the implementation of the social changes and technologies that will reduce the impacts of climate change and give our society and global ecosystems a chance of surviving into the future’. Practices are raising public awareness and political actions through ‘Beyond Zero Radio’, holding a monthly discussion group on ‘presentation from national and international experts on climate science and solution’, ‘meeting with state and federal politicians and representatives’ and ‘presentations to corporate-interests, the general public and community groups’. Furthermore, there has been the creation of zero emissions plans, which are the ‘creation of blueprints to decarbonise Australia by 2020 in the areas of energy, transport, housing and construction, land use, and industrial processes in collaboration with University of Melbourne Energy Research Institute’; thus far the stationary energy report has been released.</td>
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<th>Name</th>
<th>Brimbank Climate Action Network</th>
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<td><strong>Description</strong></td>
<td>Formed in 2008, the <em>Brimbank Climate Action Network</em> is composed of ‘a loose network linking like-minded people and community groups in Brimbank and Victoria’. The aims are ‘to encourage behaviour change in residents, ratepayers, businesses and industry to reduce greenhouse gas emissions by providing information about climate change and what can be done to help reduce emissions, lobby Brimbank City Council to regulate for energy efficiencies for residential, commercial and industrial developments, and to take greater action in reducing the council’s own emissions, promote forums, rallies, events, conferences and media about climate change, ecological biodiversity and environmental sustainability, and organise local forums and meetings on climate change and alternative technology’. Practices have been promoting personal behaviour change and supporting various large-scale climate action-related</td>
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demonstrations, such as Rally to Support Climate Action and Clean Energy and Replace Hazelwood.
Website: [http://brimbankean.wordpress.com/](http://brimbankean.wordpress.com/)

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<th>Name</th>
<th>Description</th>
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| **Carbon Rationing Action Groups** | Formed in 2008, Carbon Rationing Action Groups are ‘a group of people who have decided to act together to reduce their individual and collective carbon footprints and reach a higher level of domestic sustainability’. The program is about personal and household behaviour change by calculating GHG emissions and energy, setting targets to reduce GHG emissions and energy use and raise awareness about climate action to the broader community (latter optional). In Victoria, Carbon Rationing Action Groups have been established in the rural and urban areas of Mount Alexander, City of Manningham and Inner West Melbourne.  
Website: [http://www.climateactioncentre.org/how-to-crag](http://www.climateactioncentre.org/how-to-crag)  
| **CLIMARTE**                  | Formed in 2010, CLIMARTE is ‘an independent not-for-profit body that brings the arts community together to tackle climate change’. The aims are to (1) ‘create a broad alliance of arts practitioners and organisations that support a call for immediate and effective action on climate change. (2) Provide a forum for the exchange of ideas and information on sustainable arts practice at an individual and organisational level. (3) Create a representative body that will advocate to policy-makers at all levels. (4) Promote climate change and sustainability related arts events’. Practices are predominantly raising public awareness and awareness in the arts community of climate change and using the arts as a medium to communicate climate action. Specific actions have been speaking at the Sustainable Living Festival and Climate Action Summit, as well as disseminating information, supporting and promoting climate change-related art events.  
Website: [http://www.climarte.org/](http://www.climarte.org/) |                                                                                                                                                  |
| **Climate Action Centre**     | Formed in 2008, the Climate Action Centre was designed as a mechanism to support community-led climate action groups and climate activists in Victoria. Practices include disseminating information on climate change through a daily twitter service and weekly e-service of a summary of media climate stories in the categories of energy, strategy, politics and science. Furthermore, it includes the dissemination of climate action resources and ideas for the public and the climate movement. The initiative ‘Groundswell’ has recently commenced, focusing on everyday people building public demand in their communities for climate action.  
Website: [http://www.climateactioncentre.org/](http://www.climateactioncentre.org/) |                                                                                                                                                  |
<p>| <strong>Climate Action Monash</strong>     | Climate Action Monash is ‘an open on campus climate action group designed to inspire students and staff to put their knowledge into action’. The concerns are stated to be climate change and species loss; it aims to be an outlet for student and staff wishing to be active on these issues. Practices include applying pressure to university management to implement campus-wide renewable energy and support of political actions, such as Replace Hazelwood. |                                                                                                                                                  |</p>
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<td>Climate Action Moreland</td>
<td><em>Climate Action Moreland</em> is composed of ‘just regular people from Brunswick, Coburg, Fawkner and Glenroy—wanting action on climate change’. The group is a ‘non-profit group that is community-based and not affiliated with any political party’. The aims are to ‘put pressure on political leaders to take serious action on climate change via activities such as protests, attending rallies and engaging in discussion with local politicians, and to show that there is a strong community support for serious action, provide a focus and outlet for residents wanting to take action, provide community education and awareness on climate change and what we can do about it on individual, local and national levels, and create networks with other community-based organisations as part of a broader, more coordinated environmental movement’. Practices have been support for <em>Replace Hazelwood</em>, and taking part in larger networks and campaigns, such as the <em>Transition Decade Alliance</em> and the <em>100% renewable energy</em> campaign. Furthermore, it has been raising public awareness on climate action by activities such as Politics in the Pub, door knocking, and leafleting. Recently, <em>Climate Action Moreland</em> has begun a large-scale community-owned solar initiative.</td>
<td><a href="http://climateactionmonash.wordpress.com/">http://climateactionmonash.wordpress.com/</a></td>
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<td>Climate and Health Alliance</td>
<td>The <em>Climate and Health Alliance</em> is an ‘alliance of organisations and people in the health sector who wish to see the threat of climate change and ecological degradation to human health addressed through prompt policy action.’ The intended aim is ‘to protect and promote health by acting, encouraging and empowering organisations and individuals in the health care sector and the wider community to contribute to developing effective political, sectoral and community responses to climate change.’ Practices to achieve this aim involve raising public and healthcare professionals' awareness of the relationship between climate change and adverse health impact, as well as the ‘solutions available to reduce risks and improve health’. In addition to writing policy submissions and reports, as well as being involved in campaigns concerning renewable energy, the health impacts of coal and greening the health care system.</td>
<td><a href="http://caha.org.au/">http://caha.org.au/</a></td>
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<tr>
<td>Climate Change Our Future</td>
<td><em>Climate Change Our Future</em> is ‘a local community climate action group’ that operates in the Melbourne urban area of Glen Eira and Monash. Concerned about climate change the group aim is to spread local community awareness, and undertake political (local, state and federal) action and personal behaviour change on climate change. Practices have included raising awareness of the consequences of climate change with forums and promoting events such as ‘Kiribati: putting a face to climate change’. As well, <em>Climate Change Our Future</em> has undertaken personal behaviour change activities, as well as political actions such as supporting the Say Yes! and <em>Replace Hazelwood</em> demonstrations.</td>
<td><a href="http://www.ccof.org.au/">http://www.ccof.org.au/</a></td>
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<td>Communities Combating Climate Crisis C4 Healesville</td>
<td>Formed in 2007, <em>Communities Combating Climate Crisis C4 Healesville</em> is a rural-</td>
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based group composed of ‘a diverse group with interests and expertise in local business, environmental issues, biodiversity conservation, music and the arts, community well-being, horticulture, agriculture, permaculture, political advocacy, behaviour change, IT and media.’ The aim is ‘reducing GHG emissions at a local and regional level’. The listed concerns are climate change as well as biodiversity, conservation, ecology, and sustainable living. Practices encompass: ‘raising awareness via communication issues to our community, with relevant stakeholders and through the media, advocating political change at all levels of government, working with local business to reduce energy consumption and promote local products, building alliances and working with stakeholders to develop regional alliances to decrease GHG emissions associated with industry and transport, and a focus on food production promoting the use of permaculture systems and a reduction in distance from field to plate by the promotion of local, in season, fresh food’.

Website: [http://www.supergreenme.com/CommunitiesCombatingClimateCrisisC4Healesville](http://www.supergreenme.com/CommunitiesCombatingClimateCrisisC4Healesville)

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<tr>
<th>Name</th>
<th>Dandenong Ranges Renewable Energy Association</th>
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<tr>
<td>Description</td>
<td>Formed in 2007, the Dandenong Ranges Renewable Energy Association is a ‘not for profit, not politically aligned community group’. The aim is to ‘initiate community based renewable energy projects, in the Dandenong Ranges and adjoining areas, via the promotion of the innovative application of renewable energy technologies, while create opportunities to invest in renewable energy projects, which deliver environmental and educational benefits to the community’. Practices have been local actions, such as a community solar program, a 2.9kw system on school, carbon compensators, and emerald solar village. Alongside there are also practices of engaging in raising community awareness and political action, for instance, being part of the 100% renewable energy campaign and supporting Replace Hazelwood. Website: <a href="http://www.drrea.org.au/">http://www.drrea.org.au/</a></td>
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<tr>
<th>Name</th>
<th>Darebin Climate Action Now</th>
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<td>Description</td>
<td>Formed in 2008, the Darebin Climate Action Now is ‘an independent non-party-politically aligned group of local citizens of all ages—campaigning for a safe climate future’. The aim is ‘to work together at emergency speed to restore in a just way a safe climate in time for all people, all species and all generations’. Activities are raising public climate change awareness through the provision of web-based information on climate change, door-knocking, leafleting and offering forums with speakers such as David Spratt presenting ‘Climate and Lies’ and on the ZCA Stationary Energy Plan. Moreover, political actions have involved being part of campaigns such as 100% renewable energy and Greenpeace’s ‘Dirty Banks’ campaign. At state level political action has included awareness events such as ‘Q and A’ in the lead up to the state elections. Other political actions have been demonstrations such as ‘pushes for a safe climate’, which engaged parents to bring their children in pushes (prams) to demonstrate the intergenerational impacts of climate change. Website: <a href="http://darebincan.wordpress.com/">http://darebincan.wordpress.com/</a></td>
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<th>Name</th>
<th>Eat the Suburbs</th>
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<td>Description</td>
<td>A Melbourne-based activist blogger ‘devoted to urban and suburban adaptations to</td>
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peak oil and climate change, looking towards the positives and opportunities we have available’. The main content of the blog is a description and advocacy of the concepts of relocalisation, permaculture and the Energy Descent Action Plan. The blog commenced in 2006 but has not been updated since July 2009. However, it is still referred to on other climate actors’ websites.

Website: [http://www.eatthesuburbs.org/](http://www.eatthesuburbs.org/)

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<th>Name</th>
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<td>Eco Centre</td>
<td>Formally launched in 1999, the Port Phillip Eco Centre ‘is a not-for-profit, community-managed, environment group’. The aim ‘is to preserve and enhance our natural heritage and sustainably manage our environment and resources’. Practices take the form of forums and workshops, for instance, sewing and cooking classes; as well, there is an onsite community garden. The Eco Centre also serves as a base for a number of affiliate groups involved in a range of activities that promote biodiversity, environmental sustainability and community action: the St Kilda Indigenous Nursery Co-Operative, The Community Pulse, Transition Town Port Phillip, and Friends of Westgate Park.</td>
<td><a href="http://www.ecocentre.com/">http://www.ecocentre.com/</a></td>
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<td>Emerald for Sustainability</td>
<td>Formed in 2008, Emerald for Sustainability is ‘a not-for-profit, non-politically aligned, community action group’ with 40 active members operating in a rural context. The group formed ‘in response to the community need to establish a grassroots organisation to tackle the problem of climate change and to empower the community to take action’. The aim is ‘for residents, businesses and community groups in the Emerald district to reduce their water and energy consumption, minimise waste and increase the biodiversity; with an aim to live a low carbon or carbon neutral lifestyle’ and to ‘facilitate change to greater sustainability before it is forced’. Practices have been mainly local actions against plastic bottles and plastic bags, as well as forming partnerships with other groups for solar and establishing a Transition Towns initiative.</td>
<td><a href="http://www.emfsus.org.au/">http://www.emfsus.org.au/</a></td>
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<td>Families for a Safe Climate</td>
<td>Formed in 2006, Families for a Safe Climate was originally called ‘Families Facing Climate Change’. The group is composed of ‘a group of families concerned that our governments (state and federal) weren’t doing enough to reduce our greenhouse-gas emissions … we come from different backgrounds yet share the common goal of preserving our world for subsequent generations’. The aim is to ‘increase community awareness and knowledge of solutions to the climate crisis, to engage the community in actions to bring about implementation of viable solutions and to lobby local, state and federal governments on climate change’. Practices have been mainly political and supportive of campaigns such as No New Coal and Stop HRL.</td>
<td><a href="http://www.climatechange.org.au/">http://www.climatechange.org.au/</a></td>
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<td>GRAND STAND for the Environment</td>
<td>Formed in 2007, GRAND STAND for the Environment is ‘a non-political, active group of people from the Manningham area and beyond’. The concerns are the feeling of ‘responsibility for the environmental crisis and seek to play our part in bringing about change’. Further description is “‘Grand Stand” is a vision initiated by some Melbourne-</td>
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based Uniting Church members and the web page is proudly sponsored by the Warrandyte Uniting Church, in addition the forum venues are provided by the Templestowe Uniting Church’. However, the membership is stated to be from both religious and secular backgrounds. The shift is to be brought about via personal and political change. Activities carried out are mainly public forums described as being ‘to faith communities, and all others who see the need to care for the natural environment, an opportunity to share in heartfelt reflection on our connection to the Earth, through listening, dialogue and ritual, via a series of public forums’.

Website: http://www.agrandstandfortheenvironment.org/

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<td>Geelong Sustainability Group</td>
<td><em>Geelong Sustainability Group</em> is ‘politically independent, however, reserves the right to work with state, federal or local government representatives where this furthers the mission of <em>Geelong Sustainability Group</em>. The aim is to work ‘towards an environmentally and economically sustainable, spiritually fulfilling and socially just human presence on the planet’. Practices cover an array of approaches that involve raising public awareness of climate-related and sustainability issues, and promoting personal, community and political change. Specific practices have been support of the <em>Replace Hazelwood</em> campaign, as well as forming networks, and acting to support other groups, such as a local LETS scheme, a permaculture group, and <em>Transition Geelong</em>. *</td>
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<tr>
<td>Website</td>
<td><a href="http://www.geelongsustainability.org.au/">http://www.geelongsustainability.org.au/</a></td>
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<td>Hepburn Wind</td>
<td>Formed in 2005, <em>Hepburn Wind</em> is ‘the owner and operator of Australia’s first community owned wind farm, at Leonards Hill, just south of Daylesford Victoria’. The initiators were <em>Hepburn Renewable Energy Association</em> (now <em>SHARE</em>) in conjunction with Future Energy Pty Ltd. The aim of the project was to establish ‘a renewable energy project that would supply a significant portion of the local electricity demand’. The process has involved the initial consideration of several technologies, making the decision on wind turbine technology (due to advantage of local wind resource availability in combination with the stated maturity and viability of the technology), then engaging the community, and gaining project approval and construction. *</td>
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<td>Inner Northwest Climate Change Community</td>
<td><em>Inner Northwest Climate Change Community</em> is ‘a community initiative where locals living in Kensington, Flemington, North Melbourne and Carlton are coming together to act on climate change.’ The overriding concern is climate change. However, the group also promotes and takes part in a variety of actions, including; ‘The Robinhood Tax’, Greenpeace’s ‘Dirty Banks’ campaign and the Wilderness Society’s ‘Ethical Paper’. It is part of the <em>Transition Decade Alliance</em>, the 100% renewable energy campaign and <em>Vote Climate</em>. Actions are primarily political, such as a door knocking about decommissioning Hazelwood Power Station and delivering <em>Vote Climate</em> scorecards. *</td>
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<tr>
<td>Website</td>
<td><a href="http://www.inc3.info/">http://www.inc3.info/</a></td>
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<td>Lighter Footprints</td>
<td>Formed in 2006, <em>Lighter Footprints</em> is ‘a group of concerned residents from Surrey Hills, Canterbury and the local neighbourhood (Victoria, Australia) who came together in late 2006 to see where we might focus our energies in response to the pending</td>
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changes to our climate’. The group has 100 active members based in an urban setting. The aim is to reduce their ecological footprint ‘to address the issue of the continued survival of life on this planet from a local perspective focused around the overall reduction of green-house gas emissions.’ Practices include promoting personal behaviour change, for instance, the compilation of a skills inventory, which encompasses information from vegetable growing to installing solar panels with contact details. Additional practices are raising public awareness on climate change and engaging in political actions such as letter writing, organising pre-election forums and lobbying local government for climate action.

Website: [http://www.lighterfootprints.org/](http://www.lighterfootprints.org/)

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<th>Name</th>
<th>Locals Into Victoria’s Environment</th>
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<td><strong>Description</strong></td>
<td><em>Locals Into Victoria’s Environment</em> is ‘an independent, non-partisan and non-profit’ group that is concerned by the ‘detrimental human impacts on the planet, especially the threat of climate change’. It aims to raise awareness of the ‘need to protect our world’s vulnerable ecosystem and halt climate change; encouraging our society’s transition to a more healthy and sustainable economy; and motivating and supporting others in our community to collectively minimise our ecological footprint’. Practices are ‘to apply polite pressure to all levels of government and industry to demand that meaningful, effective measures be taken immediately to ensure that all environmental costs are accounted for and that Victoria’s unacceptable greenhouse gas emissions, a major contributor to climate change, are reduced starting now’. Practices include raising public awareness about climate change, as well as taking part in political actions through writing policy submissions and supporting demonstrations such as <em>Say Yes!</em> This is in addition to cultivating local networks and taking part in larger campaigns such as <em>100% renewable energy</em>. It was also a part of the legal challenge against the construction of the proposed HRL plant.</td>
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<th>Name</th>
<th>Mt Alexander Sustainability Group</th>
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<td><strong>Description</strong></td>
<td><em>Mt Alexander Sustainability Group</em> is ‘an incorporated, not for profit organisation on the Register of Environmental Organisations with the Department of Environment and Heritage’. The group is based in rural Victoria and is composed of over 1,000 voting members, with four paid staff. The aim is to nurture positive responses to climate change and peak oil. Practices range from promoting individual behaviour change to raising public awareness about climate change by way of activities such as ‘Sustainability in the Pub’ nights and an e-newsletter. These practices occur alongside political actions, including supporting climate action demonstrations and taking part in larger alliances, for instance, the <em>100% renewable energy</em> campaign. Furthermore, the group undertakes many local actions such as PV bulk buy initiatives, being part of many regional-scale networks, ‘comfy homes’, and is currently involved in getting a community-owned wind farm constructed in the region.</td>
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<th>Name</th>
<th>Mansfield Environment and Climate Action Group</th>
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<td><strong>Description</strong></td>
<td>Formed in 2007, the <em>Mansfield Environment and Climate Action Group</em> is ‘a not for profit apolitical organisation to act as a community voice for influencing policy at all levels of government and to identify local actions to reduce our carbon footprint’. Practices are intended to ‘create events that are fun and informative; educate the local community about climate change through dissemination of information; facilitate...’</td>
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community feedback; empower individuals to make positive changes; create a resilient and sustainable community; establish relationships with other climate action groups; provide hands-on information sharing; engage youth and promote responsible lifestyle choices and business practices’.


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<th>Name</th>
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<td>Description</td>
<td>Formed in 2007, the Maroondah Climate Change Action is composed of ‘a diverse group with interests and expertise in teaching, art, project management, community development, small business, corporate business, IT, music, dance, environment, psychology, renewable energy, social work, nursing, ecology and alternative therapies’. The reason for the group forming was that ‘not enough is being done in Australia to combat dangerous climate change’. The aim is to promote the development and switch to clean renewable and sustainable energy, with the specific caveats that this does not include nuclear or sequestered GHG options. The group advocates for changes at all levels of government to influence policy and promote sustainable practices, as the science requires. Practices consist of promoting individual behaviour changes, for instance, promoting recycling, listing farmer markets, lobbying for political changes via encouraging letter writing and supporting larger demonstrations.</td>
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<thead>
<tr>
<th>Name</th>
<th>Melbourne Inner Northwest Transition Initiative</th>
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<tbody>
<tr>
<td>Description</td>
<td>Formed in 2010, the Melbourne Inner Northwest Transition Initiative ‘is in its first stages of emergence in the Flemington, Kensington and North Melbourne area’ and is a ‘non-profit un-incorporated association, which aims to develop community resilience by building a local response to the challenges of peak oil and climate change in an uncertain economic climate’. The aims are comparable to other transition initiatives with significant interest in finding creative ways to respond to the challenges and opportunities posed by peak oil and climate change. Practices range from the promotion of personal to community-scale change, including a Local Food Map Project, creating a theme song, fashion swap, film nights and workshops, and collaborating with a community garden.</td>
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<tr>
<th>Name</th>
<th>Melton Sustainable Living Group Inc</th>
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<tr>
<td>Description</td>
<td>Formed in 2009, the Melton Sustainable Living Group is composed of 10 active members based in a suburban setting. The key concerns are climate change, peak oil, and community resilience. The aim is for a cleaner, greener and more resilient community for all. Practices mainly involve promoting personal behaviour change and raising public awareness about climate change and broader sustainability issues, for instance, workshops and taking part in ‘Sustainable House Day’.</td>
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<tr>
<th>Name</th>
<th>Mirboo North Transition Towns</th>
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<tr>
<td>Description</td>
<td>Formed in 2010, the Mirboo North Transition Towns is ‘a community-led response to the pressures of climate change, fossil fuel depletion and increasingly, economic contraction’. The group is based in rural Victoria and has five active members who identify as part of the international Transition Towns Movement. The aim is the ‘transitioning to sustainable society within 10 years’. Practices have a focus on</td>
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<td>Name</td>
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<tr>
<td><strong>Moonee Valley Climate Action</strong></td>
<td>Formed in 2008, the <em>Moonee Valley Climate Action</em> is ‘a local climate action group in an inner urban suburb of Melbourne’. The overriding concern is climate change and creating action on climate change. The aims are to (1) ‘empower through participation and practical initiatives like bulk solar purchasing, (2) Inspire through seeing what others are doing, and (3) Inform through interesting talks by members and invited speakers’. Practices have been raising public awareness about climate change impacts and energy, as well as political actions such as door knocking and providing information on effective letter writing. Website: <a href="http://www.mooneevalleyclimateaction.org/index.php/Moonee_Valley_Climate_Action">http://www.mooneevalleyclimateaction.org/index.php/Moonee_Valley_Climate_Action</a></td>
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<tr>
<td><strong>Murrindindi Climate Network</strong></td>
<td>Established in 2007, the <em>Murrindindi Climate Network</em> ‘is a not for profit apolitical organization, uniting a wide variety of different organisations (for profit and not for profit) and individuals’. Practices predominantly have a focus on the local-scale. Some of these practices are raising public climate awareness, building local networks, as well as promoting personal behaviour and values change, for instance, by holding <em>Be the Change</em> symposiums and promoting the use of <em>Freecycle</em>. Website: <a href="http://www.murrindindiclimatenetwork.org.au/">http://www.murrindindiclimatenetwork.org.au/</a></td>
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<tr>
<td><strong>Nillumbik CAN - Climate Action Now</strong></td>
<td><em>Nillumbik CAN</em> is ‘made up by a growing number of concerned locals’. The aim is ‘to influence and educate people and legislators to ensure a safe climate future’. The organisation states that ‘change comes from a community groundswell, which in turn influences policy change for a sustainable future’. A target is set of achieving carbon neutrality in the region through education and action projects within the local community. Practices span the spectrum from promoting personal behaviour and political change to specific actions like the hosting of ‘How Big is Your Footprint Stalls’, and co-hosting a ‘Meet the Candidates’ pre-election forum. Website: <a href="http://greenmapcommunity.org.au/directory/nillumbik-can-climate-action-now">http://greenmapcommunity.org.au/directory/nillumbik-can-climate-action-now</a></td>
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<tr>
<td><strong>Otways Ranges Climate Action</strong></td>
<td><em>Otways Ranges Climate Action</em> has an active member base of 100 people operating in rural Victoria. The prime concern is climate change, and the aim is for ‘100 percent renewable energy and 50 percent energy reduction in energy use by 2020’. Practices include personal, community-scale and political action. More recently, it has been involved in protests and community action to raise awareness against proposed coal seam gas exploration and production in the region. Website: <a href="http://orcaction.org/">http://orcaction.org/</a></td>
</tr>
<tr>
<td><strong>Permablitz Melbourne</strong></td>
<td>Formed in 2006, <em>Permablitz Melbourne</em> is a collective that is entirely volunteer run. Since forming the collective has undertaken over 120 permablitzes in Melbourne and surrounding areas. The membership base is over 800. The main practice is undertaking community-building and personal behaviour change, through actions such as skill sharing of gardening and knitting, and the support of a food cooperative. Website: <a href="http://groups.yahoo.com/group/Mirboo_North_Transition_Town/">http://groups.yahoo.com/group/Mirboo_North_Transition_Town/</a></td>
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A ‘Permablitz’. A permablitz involves the transformation of an ‘ordinary backyard’ into a food producing system designed on the principles of permaculture. Running concurrently with creating edible backyards are also workshops on building aquaponic systems to Transition Towns to pruning fruit trees. The focus is ‘to create sustainability one backyard at a time’ with a focus on edible gardens and ‘our ultimate aim is to make the suburbs edible enough such that should food become unaffordable, we don’t even notice’.

Website: [http://www.permablitz.net/](http://www.permablitz.net/)

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<tr>
<th>Name</th>
<th>Description</th>
<th>Website</th>
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<tr>
<td>Permapoesis</td>
<td><em>Permapoesis</em> is a blogger who is ‘concerned with sustainability in its broadest sense—economic, social, spiritual, personal, and ecological’. The definition of <em>Permapoesis</em> ‘is the portmanteau for permanent meaning making, a term I’ve developed, incorporating permaculture principles, to define a practice of art that participates in what it represents; that is of its environment; that generates little or no waste’. On the blog are philosophical musings on sustainability, as well as poetry and snippets of insights from other people’s writings and visual works.</td>
<td><a href="http://permapoesis.blogspot.com.au/">http://permapoesis.blogspot.com.au/</a></td>
</tr>
<tr>
<td>Portland Sustainability Group</td>
<td>Formed in 2007, <em>Portland Sustainability Group</em> has five active members based in a coastal rural region. Climate change is the core focus, followed by peak oil and local environmental issues. The aim is to help people and the community to become more sustainable. Practices include holding workshops, undertaking a solar PV bulk buy, lobbying politicians for climate action and raising public awareness on sustainability issues.</td>
<td><a href="http://www.psg.org.au/">http://www.psg.org.au/</a></td>
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<tr>
<td>Psychology for a Safe Climate</td>
<td>Formed in 2011, <em>Psychology for a Safe Climate</em> is ‘a group of psychologists and helping professionals working together to contribute psychological understanding within the community to support and facilitate strong and urgent action on climate change’. Practices include the establishment of working groups on ‘(1) writing papers and articles about the psychological response to climate change, (2) games to engage people at an emotional level, and (3) sociodrama to provide action-research’.</td>
<td><a href="http://psychologyforasafeclimate.org/">http://psychologyforasafeclimate.org/</a></td>
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<tr>
<td>Quit Coal Collective</td>
<td>Formed in 2009 with the ‘Switch off Hazelwood, Switch on Renewables’ campaign, the <em>Quit Coal Collective</em> is campaigning to ‘inform the broader Victorian community about plans for coal expansion in Victoria, and pressure government to stop investing in new coal projects at a time when we have the technological capacity to move to 100% renewable energy’. Practices comprise of peaceful direct action, petitions, and raising public awareness of the health, environmental and social impacts of coal mining and burning. <em>Quit Coal Collective</em> has since become an officially part of <em>FoE Melbourne</em>.</td>
<td><a href="http://quitcoal.org.au/">http://quitcoal.org.au/</a></td>
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<tr>
<td>relocalise hepburn</td>
<td>Based in rural Victoria, <em>relocalised hepburn</em> is concerned with the ‘urgent realities of</td>
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peak oil and climate change and are responding by raising awareness about how these issues affect our community, and how we can respond to these realities with a plan for the future’. Practices involve raising public awareness of social and ecological sustainability issues through films such as ‘The Economics of Happiness’. These have been undertaken alongside personal to community-scale actions such as a veggie box scheme, ride share, and events such as Solstice dinner and Transition Towns training.


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<tr>
<th>Name</th>
<th>Riddells Creek – now Transition Riddells Creek</th>
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<tr>
<td>Description</td>
<td>Formed in 2010, <em>Transition Riddells Creek</em> has an active member base of 20. The group’s concerns are ‘issues facing human society, particularly Climate Change and Peak Oil’. As part of the Transition Towns Movement, the aim is to ‘move in the direction of making our town more sustainable and less dependent on fossil fuels’. Practices include undertaking various awareness-raising events, such as film nights, a talk by David Spratt and Rod Quantock’s show ‘Bugger the Polar Bears—This is Serious’. Community-scale practices are collaborative actions with the Farmers Market Committee on a Local Food Fair, an extension of the monthly market with displays and demonstrations related to growing, cooking and preserving food. In accordance with the Transition Towns guidelines, there has been a ‘Great Unleashing’ with David Holmgren as the guest speaker.</td>
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<tr>
<th>Name</th>
<th>Stawell Climate Action Group</th>
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<tr>
<td>Description</td>
<td><em>Stawell Climate Action Group</em> ‘meets irregularly on as needs basis and uses email as normal means of communication’. Issues of concern are climate change, sustainable development and sustainable living. Practices have been the creation of an action plan, public awareness-raising and input into the development of Northern Grampians Shire sustainable living plan.</td>
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<tr>
<td>Website</td>
<td><a href="http://100percent.org.au/content/stawell-climate-action-group">http://100percent.org.au/content/stawell-climate-action-group</a></td>
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<tr>
<th>Name</th>
<th>Sustainable Hepburn Association – Renewing the Earth (SHARE)</th>
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<tr>
<td>Description</td>
<td>Formed in 2005, <em>SHARE</em> has a membership base of 500 operating in rural Victoria. The group is ‘a not-for-profit, non-political community association run by volunteers’. The intent is ‘providing space that promotes the growth of communities that are environmentally responsible, socially connected and economically vibrant now and into the future’. The strategy is premised on ‘making the organisation sustainable, to communicating sustainability, network and facilitate others working in the sustainability space, and build capacity’. Practices undertaken include running personal change workshops, political action through engaging in campaigns such as 100% renewable energy as well as local actions, for instance, supporting <em>Hepburn Wind</em>.</td>
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<tr>
<td>Website</td>
<td><a href="http://share.asn.au/">http://share.asn.au/</a></td>
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<tr>
<th>Name</th>
<th>Sustainability in Stonnington</th>
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<tr>
<td>Description</td>
<td><em>Sustainability in Stonnington</em> is ‘a not for profit, non-political community group’ that is ‘thinking globally and acting locally to stop climate change’. The aim is to educate and promote environmentally sustainable practices within the local community and work with others to achieve sustainability. Practices are oriented to influence individual behaviour change, via the provision of information as well as taking part in political activities such as <em>Replace Hazelwood</em>.</td>
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<td>Name</td>
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<td>takethelowroad</td>
<td><em>takethelowroad</em> is a climate activist blog of a journey ‘from Australia to Scotland overland and musings about climate change along the way’. The blog highlights the contribution of the aviation industry to climate change through blogging on the journey undertaken without planes (using local transport). The intention is also to ‘explore some of the attitudes to and impacts of climate change in each of the countries we visit and try to meet some of the inspirational people that are taking action to prevent it occurring’.</td>
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<tr>
<td>The Greening of Gavin</td>
<td><em>The Greening of Gavin</em> is a personal blog of ‘an ordinary Australian man who has a green epiphany’. The spark for this epiphany was while watching Al Gore’s ‘An Inconvenient Truth’. A regular blog is maintained with all his, and his family’s, endeavours; including getting solar PV panels, a hybrid car, making cheese, growing vegetables and keeping chickens.</td>
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<tr>
<td>Transition Bell</td>
<td><em>Transition Bell</em> was the first Victorian Transition Town. It ‘is about local food, local fun and vibrant local economies. It’s about creating a resilient community in the face of climate, energy and economic change.’ Activities have been local-scale practices of building connections to local government, business and community members. The initiator of the group has been a significant player in raising the awareness of the Transition Towns concept in Victoria by speaking at many Transition Towns and sustainability events.</td>
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<tr>
<td>Transition Brunswick</td>
<td>Formed in 2010, <em>Transition Brunswick</em> is a ‘grass roots community initiatives that build networks for moving to a low carbon, energy efficient society’. The concerns are the ‘twin challenges of peak oil and climate change’. The overarching aim is to connect people and organisations in the community to share ideas and skills to build a more connected, resilient and adaptive community. Practices consist of public awareness-raising of climate change and peak oil and initiating local projects that ‘include food production, water management, energy, transport, waste or planning and design—all in our Brunswick community’.</td>
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<tr>
<td>Transition Baw Baw</td>
<td><em>Transition Baw Baw</em> is ‘a grass roots initiative to build resilient communities’ in rural Victoria. The concerns are climate change and peak oil, to be redressed via ‘transitioning from oil dependency to local resilience’. Practices centre on raising public awareness of climate change and peak oil and holding personal skill-building activities such as making wicking planters and growing shitake mushrooms workshops, as well as local-scale actions, including the creation of the ‘Baw Baw dollar’ and a food swap.</td>
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<tr>
<td>Name</td>
<td>Transition Corner Inlet District Inc.</td>
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<tr>
<td><strong>Description</strong></td>
<td><em>Transition Corner Inlet District Inc.</em> formed over concerns about climate change and peak oil with the intent to ‘stay a vibrant and healthy community through the decline of the oil age’. Practices include raising public awareness, for instance, with film the ‘The Power of Community’. Furthermore, there has been the promoting of personal behaviour change, for instance ‘GreenHome’ sessions were held in conjunction with the <em>Australian Conservation Foundation</em>. Other practices have been local-scale actions such as permablitzs and the creation of a local food map.</td>
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<tr>
<td>Website</td>
<td><a href="http://www.transitionbawbaw.net.au/">http://www.transitionbawbaw.net.au/</a></td>
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<tr>
<th>Name</th>
<th>Transition Darebin</th>
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<td><strong>Description</strong></td>
<td>Formed in 2009, <em>Transition Darebin</em> is composed of eight active members and identifies as a Transition Town. The aim is ‘to catalyse our community’s response to peak oil and climate change—a transition towards a relocalised and resilient Darebin’. Essentially, the desire and associated practices are ‘about helping the Darebin community to prepare for peak oil and climate change through practical solutions like local food growing, energy efficient homes and buildings, fossil-fuel-free transport, local production of goods and services, and reuse and recycling’. Practices include local actions of permablitzs, re-skilling workshops on making relish with local foods, and a ‘Local Food Forum’. Additionally, raising public awareness has been undertaken with films such as ‘The Power of Community’ and gaining media attention by helping someone move house with only bicycles.</td>
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<tr>
<td>Website</td>
<td><a href="http://transitiondarebin.org/">http://transitiondarebin.org/</a></td>
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<tr>
<th>Name</th>
<th>Transition East Geelong</th>
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<tr>
<td><strong>Description</strong></td>
<td>Formed in 2010 <em>Transition East Geelong</em> is ‘a group of local residents working together to decrease our reliance on fossil fuels and increase our reliance on each other in fun and healthy ways’ with 32 active members. Key issues of concern are climate change and peak oil and the aim to ‘demonstrate living examples (as the Latin acronym “e.g.” suggests) of how we can gracefully shift through the imminent and unknown changes that climate change and peak oil will demand of our society to a more positive future’. Practices have comprised of promoting community building and personal behaviour change such as a ‘Green Your Home’ course.</td>
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<tr>
<th>Name</th>
<th>Transition Hobsons Bay</th>
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<td><strong>Description</strong></td>
<td><em>Transition Hobson Bay</em> has 92 members and is part of the Transition Towns ‘growing international grassroots movement with a positive vision for a relocalised future’. Key issues of concern are peak oil and climate change. The aim is to ‘create and support initiatives that make our local neighbourhoods more vibrant, interesting and liveable’. Practices enacted include personal behaviour change and local actions, for instance, home energy and sourdough workshops and ‘Glut and Glean’, a local food project undertaken with funding from the local council.</td>
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<tr>
<th>Name</th>
<th>Transition Knox Inc</th>
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<tr>
<td><strong>Description</strong></td>
<td>Formed in 2010, <em>Transition Knox Inc.</em> is ‘a not for profit group committed to assisting</td>
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people within Knox live more sustainable lives’. It is part of the Transition Towns Movement and concerned over peak oil leading to ‘an increased cost in consumer goods and potentially limited supply of things we all now take for granted like imported foods, petrol and everyday consumables’. The aim and practices are ‘building local resilience to future price hikes by learning new skills such as growing your own vegetables or keeping chooks as well as adopting more sustainable practices such as recycling clothes, purchasing local produce or installing energy saving devices at home’. Actions have been the establishment of regular clothes swaps, a community garden and re-skilling by means of craft classes led by seniors.

Website: [http://transitionknox.wordpress.com/](http://transitionknox.wordpress.com/)

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<tr>
<th>Name</th>
<th>Transition Phillip Island</th>
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<tr>
<td>Description</td>
<td><em>Transition Phillip Island</em> is ‘a community of people with a positive vision for a sustainable future. We are part of the Transition Town Network, a global movement which promotes the development of resilience, inclusiveness, creativity, innovation and action on peak oil and climate change’. The motivation for forming is to facilitate action on peak oil and climate change. Practices have local-scale focus covering community transition training, permablitzs and re-skilling workshops on topics such as fruit bottling.</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://transitionphillipisland.wordpress.com/">http://transitionphillipisland.wordpress.com/</a></td>
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<tr>
<th>Name</th>
<th>Transition South Barwon</th>
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<tr>
<td>Description</td>
<td><em>Transition South Barwon</em> is ‘a local grassroots community project exploring ways that the region of South Barwon (Geelong, Victoria) can transition to a more sustainable, and resilient future’ with over 120 members. Further description of the group entails ‘we are not a campaigning group and deliberately have no political affiliation; we are set up to initiate action. It is a positive, solutions-focused way of engaging the issues, and helping to move South Barwon towards a post-oil world that is actually preferable to the present’. The issues of concern are framed as interconnected ‘twin problems of climate change and peak oil’. The concerns inform the aim of a ‘transition to a resourceful, connected community with a sustainable future’. Transition South Barwon has embarked on the formation of sub-groups to work on different components of the transition, covering the ‘Heart and Soul’ (focused on the psychological aspects of transition), ‘Belmont Community Gardens’ (food and community building), ‘Art’ (creative) and a ‘Radio Show’ (awareness).</td>
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<tr>
<th>Name</th>
<th>Trentham Sustainability Group</th>
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<tr>
<td>Description</td>
<td><em>Trentham Sustainability Group</em> aims to ‘inspire, inform and support our local community to meet their needs without compromising the needs of future generations’. Practices have consisted of personal behaviour change and raising public awareness, for instance ‘One Million Homes’, and ‘Carbon Rationing Action Group’. Furthermore, local community actions have been a public transport trial, a community garden and exploring the potential for local green jobs opportunities.</td>
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<tr>
<th>Name</th>
<th>Transition Torquay</th>
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<tr>
<td>Description</td>
<td><em>Transition Torquay</em> is ‘made up of a group of people motivated to act locally around the</td>
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challenges of peak oil and climate change’. As part of the Transition Towns Movement the intent is to build ‘resilient, localised, low carbon, thriving and abundant communities’. The concerns are that ‘we are living in an age of unprecedented change, with a number of crises converging: climate change, global economic instability, overpopulation, erosion of community, declining biodiversity, and resource wars, have all stemmed from the availability of cheap, non-renewable fossil fuels’. Practices include collaborations with other local groups concerned with sustainability issues, as well as the creation of a local business directory, ‘Live local, ... Shop Local’.

Website: [http://www.transitionnetwork.org/initiatives/torquay](http://www.transitionnetwork.org/initiatives/torquay)

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<tr>
<th>Name</th>
<th>Transition Towns Albury Wodonga</th>
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<tr>
<td><strong>Description</strong></td>
<td><em>Transition Towns Albury Wodonga</em> is an official Transition Town and has a membership base of over 100 situated in rural Victoria. The concerns are climate change and peak oil. The aim is ‘to strengthen community resilience by creating a network of local groups and providing a forum where members can contribute knowledge, ideas and resources while working together to develop a shared vision’. Other members in the local community (community members, local councils, educational institutions and businesses) are sought for collaboration to facilitate the transition. To begin the transition sub-groups have been established in the areas of: (1) Arts and Crafts, (2) Business &amp; Economics, (3) Education, (4) Energy, (5) Food, (6) Health, (7) Inner Transition, (8) Housing, (9) Local Government and (10) Transport.</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.transitionnetwork.org/initiatives/albury-wodonga">http://www.transitionnetwork.org/initiatives/albury-wodonga</a></td>
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<tr>
<th>Name</th>
<th>Transition Town Anglesea</th>
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<tr>
<td><strong>Description</strong></td>
<td>Formed in 2010, <em>Transition Towns Anglesea</em> has an online membership base of 179. It is an official transition town and states to be ‘embracing the opportunity and challenge of Peak Oil and Climate Change with passion, commitment and optimism’. Further description states ‘we are a hands on, action oriented group, so please come to a tangible gathering and forgive the lack of energy dependent technological communication’. Practices consist of the intent to commence Energy Descent Projects, including the establishment of Anglesea Community garden and Anglesea Primary School garden, training in transition psychology, an initiative titled ‘Solar Panels on Anglesea Rooves’ and group trading using Surf L.E.T.S.</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.transitionnetwork.org/AngleseaVIC/AngleseaVIC">http://www.transitionnetwork.org/AngleseaVIC/AngleseaVIC</a></td>
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<tr>
<th>Name</th>
<th>Transition Towns Banyule</th>
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<tr>
<td><strong>Description</strong></td>
<td>Formed in 2009, <em>Transition Towns Banyule</em> has an active membership base of 30 operating in a suburban context. The stated concerns are wide-ranging and inclusive of food security, climate change, peak oil, and general environmental and social concerns. The aim is to ‘work with the community to create a sustainable future’. Practices have comprised of raising public awareness on peak oil and climate alongside holding permablitzes, information days, discussions, and fruit and nut tree plantings.</td>
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<tr>
<th>Name</th>
<th>Transition Towns Boroondara</th>
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<tr>
<td><strong>Description</strong></td>
<td>Formed in 2009, <em>Transition Town Boroondara</em> has a membership of 45 people operating in an urban setting. The key concerns are climate change and peak oil, with the aim to build community resilience to the impacts of climate change. Practices have been locally focused on raising community awareness with film nights on issues of</td>
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<td>Name</td>
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<tr>
<td>Transition Town Port Phillip</td>
<td>Formed in 2009, <em>Transition Town Port Philip</em> is concerned with peak oil and climate change. The aim is to ‘inspire sustainable living in our community, to enhance community resilience and raise awareness of peak oil and climate change’. Practices have spanned the development of local food and resilience maps, alongside raising community awareness on a host of sustainability issues, especially food, through monthly film nights, and the building of networks with other community members and local government.</td>
</tr>
<tr>
<td>Transition Towns West Heidelberg</td>
<td>Formed in 2010, <em>Transition Towns West Heidelberg</em> members are operating in an inner urban context. The Transition Towns status is as a ‘muller’ and aligns with the Transition Towns Movement’s intent to ‘respond to the challenges and opportunities of peak oil and climate change’. The aim is ‘to bring community, sustainability, permaculture and a sense of pride in the local environment’. Practices are predominantly local actions, for instance establishing sustainable streetscapes on nature strips and community gardens.</td>
</tr>
<tr>
<td>Transition Town Yarra</td>
<td>Formed in 2010, <em>Transition Town Yarra</em> has six active members operating in an inner urban context. The sustainability issues of concern are climate change, peak oil and the consequences of both on food and social instability. The aim is to ‘build resilient community to withstand shocks of climate change and peak oil’. The activities have been the undertaking of community awareness-raising activities and establishing local food swaps.</td>
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<tr>
<td>Transition Whitehorse</td>
<td>Formed in 2010, <em>Transition Whitehorse</em> formation was driven by the local government and ‘part of an international community development movement (Transition Towns) to build localised sustainable communities in response to climate change and peak oil’. The concerns are the need to ‘learn to live more sustainably, reduce consumption of energy and goods as the earth resources are limited’. The aims are to build ‘greater community awareness of climate change, need to reduce CO2 pollution, reduce fossil fuel consumption, growing interest in permaculture, restrict population growth, work towards a Carbon Tax to change-over to renewable forms of energy’.</td>
</tr>
<tr>
<td>WeCAN: Western Community Action Network</td>
<td><em>WeCAN</em> formed earlier but lulled then re-emerged in 2011 with an active membership of nearly 100 people. The concern is for ecological, economic and social sustainability. The aim is to be a network of sustainability and social justice groups under the mantra of ‘Together, we can build a great future for the West!’ Practices consist of the</td>
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</table>
formation of sub-groups: (1) ‘Food Projects’, which revolves around practical local actions, such as a fruit and veggie swap, (2) ‘Western Climate Action Network’, (3) ‘Sustainable Transport and Advocacy’, (4) ‘Footscray CAD’ and (5) ‘Political Action’, such as attending the rally Replace Hazelwood.


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<tr>
<th>Name</th>
<th>Description</th>
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<tr>
<td><strong>Warrandyte Climate Action Now</strong></td>
<td>Formed in 2007, <em>Warrandyte Climate Action Now</em> has eight members based in rural Victoria. The concern is climate change, which informs the ‘principal objective’ to ‘communicate to our community the urgent need to take immediate action on climate change, to raise awareness and empower people to act to significantly reduce greenhouse gas emissions’. Practices have covered community awareness-raising activities through information evenings, stalls at festivals and sustainability expo. This is in addition to political actions such as campaigns for a ban on plastic bags and single serve plastic bottles in Warrandyte, alongside enacting projects of bulk buys for discounted energy prices and solar deals.</td>
</tr>
<tr>
<td><strong>WATCH: Wodonga Albury Towards Climate Health</strong></td>
<td><em>WATCH</em> is ‘a local, non-political, community group. <em>WATCH</em> actively advocates for action on human-induced climate change. <em>WATCH</em> assists people of the Albury/Wodonga region to clarify concerns about climate change and effectively express them to community leaders and decision-makers’. There are 10 core members and over 200 on the email list. The aim is to resolve the problem by ‘raising awareness on issues of climate change’. Practices are primarily to build community awareness of climate issues though social evenings to discuss climate change issues (‘Climate Conversations’). A monthly e-mail information bulletin titled ‘WATCHWORD’ is disseminated to an estimated 5,000 people.</td>
</tr>
<tr>
<td><strong>Yarra Climate Action Now</strong></td>
<td>Formed in 2007, <em>Yarra Climate Action Now</em> is ‘a community group made up of people concerned about climate change’ who got ‘together because we realised that this is the best way to make a difference in our local communities and also get real action from our governments.’ The concern is climate change and the aim to create action to redress climate change at a local, state and federal government level. Political actions have been a focus, for instance, direct actions, ‘Re-branding’ events, as well as engaging in action around <em>Switch off Hazelwood</em>, 350.org’s ‘International Day of Action’ and Greenpeace’s ‘Dirty Banks’ campaign. Personal change and community-scale activities are also undertaken, such as engaging with local government, facilitating urban agriculture, and community awareness-raising through talks, stalls and forums.</td>
</tr>
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</table>
| **Yarra Valley Climate Action Group** | Formed in 2006, *Yarra Valley Climate Action Group* is based in rural Victoria with 20 members. *Yarra Valley Climate Action Group* is ‘a Climate Action Group of concerned citizens based in the beautiful Yarra Valley in Melbourne, Australia … composed of citizens from various walks of life who are deeply concerned about the threat to Humanity and the Biosphere in general from man-made global warming arising from..."
greenhouse gas pollution.’ The main concern is climate change. However, a deeper concern is evident for biodiversity, water resources and the majority world. The aim is to ‘create action on climate change from the personal to the societal’. The group advocates for citizens to take political action, for instance, by letter writing, as well as raising public awareness about climate change via the Internet and holding lectures on climate change.

Website: [https://sites.google.com/site/yarravalleyclimateactiongroup/](https://sites.google.com/site/yarravalleyclimateactiongroup/)

### Additional Climate and Sustainability Actors, Collaborations and Actions

<table>
<thead>
<tr>
<th>Name</th>
<th>100% renewable energy</th>
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<tr>
<td><strong>Description</strong></td>
<td>The New South Wales-based group Climate Action Newtown initiated the 100% renewable energy campaign in 2010. It is a nationwide campaign that involves over 100 grassroots groups. The aim is to create political pressure for renewable energy. The campaign has categorised its approach in a number of steps. The first step was stated to be ‘a clean energy bonus scheme (feed-in tariff)’ then ‘energy efficiency, a moratorium on new coal power and the end of fossil fuel subsidies, a price on carbon, research and development, smart grid upgrades, direct investment and more’. Community awareness-raising and political actions have been petitions, door knocking and encouraging people to talk to their members of Parliament about climate action. Training resources, in person and online, are also provided.</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.100percent.org.au/">http://www.100percent.org.au/</a></td>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Australian Youth Climate Coalition</th>
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<tr>
<td><strong>Description</strong></td>
<td>The Australian Youth Climate Coalition is a nationwide youth climate initiative that comprises of 30 organisations, amounting to over 55,000 individuals. The intent is to build a ‘generation-wide movement to solve the climate crisis… We do this by educating, inspiring and mobilising young people across the country.’ Practices include public awareness-raising and political actions, for instance petitions and stunts to gain media attention. As well, there is the annual ‘PowerShift’ youth summit and more recently there has been an emphasis on the impacts of climate change in the majority world with links to World Vision.</td>
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<tr>
<th>Name</th>
<th>Carrotmob Melbourne</th>
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<tr>
<td><strong>Description</strong></td>
<td><em>Carrotmob</em> Melbourne is part of the growing Carrotmob movement worldwide. A <em>carrotmob</em> is a ‘method of activism that uses consumer power to make the most socially-responsible business practices also the most profitable choices.’ Businesses are approached to take part in being rewarded with consumers for making changes to their business practices. Hence, the use of the term ‘carrot’ instead of the usual ‘stick’ of consumer activism, such as boycotts. An example is the Albion Budget Supermarket in Victoria being ‘carrotmobbed’ for the day, and the profits generated being invested into green improvements for the business.</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://carrotmobmelbourne.wordpress.com/">http://carrotmobmelbourne.wordpress.com/</a></td>
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<thead>
<tr>
<th>Name</th>
<th>CANA (Climate Action Network Australia)</th>
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<tr>
<td><strong>Description</strong></td>
<td>Formed in 1998, CANA consists of over 70 Australian non-government groups working for action on climate change. CANA has a network structure that forms the Australian</td>
</tr>
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</table>
arm of Climate Action Network International. The concern is climate change, and the aim is for ‘a strong, united and sustainable civil society working collaboratively for climate action in Australia’. Additionally, ‘CANA sees its role as providing the behind-the-scenes work necessary to ensure that such cooperation is possible’. Practices include holding an annual summit, as well as organising and disseminating climate change information to member groups and others interested in climate action.

Website: [http://cana.net.au/](http://cana.net.au/)

### Name: CERES

**Description:** Formed in late 1970s, the Centre for Education and Research in Environmental Strategies (CERES) is a not-for-profit, environment and education centre and urban farm located by the Merri Creek in Brunswick. CERES aims ‘to be a model for a possible future where innovation, sustainability, equity and connectedness are valued. Both as a place and a community, CERES is striving to create a new way of being’. It boasts an Organic Farm, Market, Shop, Co-ops, Café and Permaculture and Bushfood Nursery, which are all social enterprises. There are on-site community groups, such as ‘the Bike Shed, Community Gardens and Chook Group’. Additionally, on-site features are recycling of waste and water, as well as the site being powered by renewable energy such as wind and solar. Other activities are offering education activities for school students to adult learners.


### Name: Climate Action Summit 2011

**Description:** Formed in 2009, the annual *Climate Action Summit* is attended by hundreds of groups and individuals around Australia. The Summit is organised by the National Community Climate Network, which consists of a network of over 100 climate action groups across Australia. The concerns and aims are stated as ‘We face a climate emergency. Our vision is to work together at emergency speed to restore in a just way a safe climate in time for all people, all species and all generations’. The purpose of the summit is to ‘build a diverse, participatory grassroots climate action movement; support the exchange of knowledge, skills and resources; implement the outcomes of national Climate Action Summits; and to facilitate major campaigns’.

Website: [http://climatesummit.org.au/](http://climatesummit.org.au/)

### Name: Climate Camp 2010

**Description:** *Climate camps* ran annually from 2008–2010 as a five-day camp. The 2010 camp was a ‘sustainable community living and peaceful direct action targeting Australia’s largest source of domestic emissions—Bayswater Power Station’. The target in 2010 was ‘we are coming together to draw attention to the denial, greed and carbon polluting agendas of government and big business. We are showcasing the strong community motivation for a different direction’. Practices over the five days were a commitment to non-violent direct action against the power station, as well as activities for kids and workshops on tactics and sustainable living.

Website: [http://www.climatecamp.org.au](http://www.climatecamp.org.au)

### Name: Climate Coolers – first campaign 1 Million Women

**Description:** Formed in 2009, *Climate Coolers* is ‘a not-for-profit, non-partisan women’s organisation that exists to engage the women of Australia on climate change and drive practical action to cut greenhouse gas pollution’. The first campaign to drive climate action has been the
national initiative, *1 Million Women*. The campaign aims to ‘inspire, empower and mobilise 1 million women of Australia to cut 1 million tonnes of CO2 pollution, the main greenhouse gas pollutant causing global warming’. To date, nearly 50,000 women have signed up and are encouraged to undertake over 50 personal and household behaviour change activities—in areas such as food, shopping and transportation—to reduce their GHG emissions by one tonne.

Website: [http://www.climatecoolers.com/](http://www.climatecoolers.com/)

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<th>Name</th>
<th>Description</th>
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<tr>
<td><strong>Environment Victoria</strong></td>
<td>Formed in 1969, the organisation’s name was changed to <em>Environment Victoria</em> in 1994. <em>Environment Victoria</em> is the largest environmental group in Victoria and has collaborations with over 150 groups. The core concern is sustainability and the current key campaigns on (1) safe climate, (2) diverse and healthy ecosystems, with a spotlight on healthy rivers and wetlands, and (3) communities living and consuming more sustainably. Activities are politically focused on lobbying and engagement (at all levels of government), alongside working with individuals, communities and CALD communities to undertake personal and community-level sustainability behaviour change.</td>
</tr>
<tr>
<td><strong>Freecycle</strong></td>
<td><em>Freecycle</em> began in 2003 in Arizona, USA. Since formation, it has spread to over 85 countries with thousand of individual groups in operation. The philosophy is ‘people helping people and ‘changing the world one gift at a time’. The ecological benefits are stated to be that ‘we are currently keeping over 500 tons a day out of landfills!’ And the social and environmental benefits together are ‘by giving freely with no strings attached, members of The Freecycle Network help instil a sense of generosity of spirit as they strengthen local community ties and promote environmental sustainability and reuse’.</td>
</tr>
<tr>
<td><strong>Friends of the Earth Melbourne (FoE Melbourne)</strong></td>
<td><em>FoE Melbourne</em> is the Melbourne branch of the <em>Friends of the Earth</em> network that has 12 branches in Australia and around 5,000 local groups worldwide. The philosophy is that social and environmental issues are interconnected and, therefore, works to improve both to achieve a socially just and ecologically sustainable future. The current climate and climate-related campaigns being undertaken are (1) Climate Justice, (2) Anti-Nuclear and Clean Energy and (3) Sustainable Cities.</td>
</tr>
<tr>
<td><strong>GetUp!</strong></td>
<td><em>GetUp!</em> is a not-for-profit organisation, which in regard to climate change is concerned with ‘Climate Action’, as part of a platform of economic fairness, social justice and environmental sustainability at its core. Political and awareness-raising practices revolve around gaining media attention for issues, prompting members to send emails to a Member of Parliament and/or attend demonstrations and/or give donations to purchase television airtime for advertisements.</td>
</tr>
<tr>
<td><strong>Inner North Urban Harvest</strong></td>
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<tr>
<td>Name</td>
<td>Description</td>
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<tr>
<td>Inner North Urban Harvests</td>
<td>Formed in 2008, <em>Inner North Urban Harvests</em> take place once a month in Brunswick, Victoria. Its ‘companion harvests in the east and west have so far enjoyed tremendous success with home gardeners trading a huge variety of seasonal fruit and veggies, even some more exotic items like almonds, honey, eggs and sheep poo’. The exchange is also facilitated with an online blog where people can post recipes and other community information. Website: <a href="http://innernorthurbanharvest.wordpress.com/">http://innernorthurbanharvest.wordpress.com/</a></td>
</tr>
<tr>
<td>Journeys for Climate Justice</td>
<td>Launched in 2011, <em>Journeys for Climate Justice</em> has 18 founding members, who elected a Committee to govern the Association and an Advisory to steer the organisation in its development. The aim is ‘to address the inequitable impacts of climate change, which fall on peoples who have contributed the least to the problem and have the least resources to deal with them’. The means to achieve this is to offer a carbon offsetting program (sliding scale priced from $30 tonne to over $200 tonne), where the money generated goes to fund programs that build awareness of the impacts of climate change on people and biodiversity in the Asia-Pacific region and build capacity in the region to respond. Furthermore, there is an emphasis on raising public awareness of climate change as an issue of global justice. Website: <a href="http://www.journeysforclimatejustice.org.au/">http://www.journeysforclimatejustice.org.au/</a></td>
</tr>
<tr>
<td>Lock the Gate Alliance</td>
<td>Established in November 2010, the <em>Lock the Gate Alliance</em> has rapidly grown to now be composed of over 120 groups. The alliance is against coal seam gas exploration and production. The objections to coal seam gas span health impacts, such as the fracking chemicals used, in addition to the salts and other contaminants, fumes and dusts, as well as damage to underground water sources and depletion of aquifers, declining land values, risks of gas leaks, lack of transparency in the industry, negative experiences with mining companies, impact on soil condition and interruption of farm operations. Website: <a href="http://lockthegate.org.au/">http://lockthegate.org.au/</a></td>
</tr>
<tr>
<td>Moreland Energy Foundation Limited (MEFL)</td>
<td>Established in 2000, the <em>Moreland Energy Foundation Limited</em> was funded by the Moreland City Council to facilitate the uptake of energy efficiency measures and reduction of greenhouse gas emissions. It is ‘an independent not-for-profit organisation … (that) acts as a connection between the Moreland community and the broader climate change action movement.’ Funding comes from the Moreland City Council, as well as government grants, to deliver projects and services within Moreland. Additional income is derived from training and consultancy services outside of Moreland on a fee for service basis. The vision is that Moreland will be ‘an active, inspired community tackling climate change with sustainable energy solutions’. Five key areas are targeted: (1) climate policy, (2) energy efficiency, (3) energy supply, (4) urban development and (5) community action. Website: <a href="http://www.mefl.com.au/">http://www.mefl.com.au/</a></td>
</tr>
<tr>
<td>power4community – ceased 2007</td>
<td>Formed in 2006, <em>power4community</em> activity seems to have ceased around 2007 (neither website updates nor references can be found). At the time, there were 20 active members. Concerns were climate change mitigation pursued through the promotion of the uptake of</td>
</tr>
<tr>
<td>Community-owned renewable energy projects.</td>
<td></td>
</tr>
<tr>
<td>Website: <a href="http://groups.yahoo.com/group/power4community/">http://groups.yahoo.com/group/power4community/</a></td>
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<thead>
<tr>
<th>Name</th>
<th>Replace Hazelwood</th>
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<tbody>
<tr>
<td>Description</td>
<td>Replace Hazelwood has been an ongoing collaborative campaign run and supported by a diversity of groups, including: Get Up, Environment Victoria, Greenpeace, L.I.V.E, Australian Youth Climate Coalition, Friends of the Earth, Darebin Climate Action Now, Yarra Climate Action Now, Australian Conservation Foundation and many others. The stated concern is that Hazelwood Power Station is the ‘dirtiest power station in the country, but one of the worst in the industrialised world’. The demand is for Hazelwood Power Station to be decommissioned and replaced with renewable energy generation.</td>
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<tr>
<th>Name</th>
<th>Say Yes! Campaign</th>
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<tbody>
<tr>
<td>Description</td>
<td>The Say Yes! campaign was initiated by Australian Conservation Foundation, Australian Council of Trade Unions, Australian Youth Climate Coalition, Climate Action Network Australia, The Climate Institute, Environment Victoria, GetUp!, Greenpeace Australia Pacific, and Worldwide Fund for Nature. Since its launch, other groups and individuals have signed in support, including some grassroots climate actors. The thrust of the campaign has been to support legislation and policies for a price on carbon pollution. Various online and direct actions rallies have been undertaken, as well as a more recent version of ‘Mums Say Yes!’.</td>
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<tr>
<th>Name</th>
<th>Sharehood</th>
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<tr>
<td>Description</td>
<td>Formed in 2008, Sharehood was created with the intent to ‘build joyful, sustainable and resilient communities by encouraging people to get to know their neighbours and share with them’ and ‘we want to build empowered, secure, active, inclusive and environmentally sustainable communities where composting and community gardens are common and resources are shared locally’. This will result in ‘less production, less consumption and less transportation—all of which are good for the environment. And of course, sharing will save you money’. The Sharehood also incorporates an alternative currency, which can be used for bigger trades with the aim of creating ‘local non-exploitative community economies’.</td>
</tr>
<tr>
<td>Website: <a href="http://www.thesharehood.org/">http://www.thesharehood.org/</a></td>
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<thead>
<tr>
<th>Name</th>
<th>Socialist Alliance</th>
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<tr>
<td>Description</td>
<td>Formed in 2001, Socialist Alliance is composed of eight socialist groups around Australia. The alliance desires ‘a democratic society run by and for working people, not the greedy, destructive elite that now rules', where people are 'put before profit'. The societal transformation is ‘necessary if humanity and the planet are to survive’. Campaigns include ‘workers' rights’, ‘global warming’, ‘civil liberties’, ‘refugee and gay and lesbian rights’ as well as ‘justice for Aboriginal Australia’ and ‘international solidarity’. The Socialist Alliance Climate Change Charter sets out stringent reductions in GHG emissions. To achieve these reductions, advocated climate actions span forestry, coal, waste, transportation, production and consumption, and public ownership.</td>
</tr>
<tr>
<td>Website: <a href="http://www.socialist-alliance.org/">http://www.socialist-alliance.org/</a></td>
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<p>| Name | Sustainable Living Festival |</p>
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<tr>
<th>Description</th>
<th>The Sustainable Living Festival occurs annually in the Federation Square in the City of Melbourne, with additional smaller events happening in suburbs and rural areas around Victoria. During the two-week long festival there are talks, workshops, performances, artworks, exhibits, demonstrations and films, all focused on sustainability-related awareness-raising and facilitating people and organisations to take sustainability actions. Website: <a href="http://festival.slf.org.au/">http://festival.slf.org.au/</a></th>
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<tbody>
<tr>
<td>Name</td>
<td>Transition Culture</td>
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<tr>
<td>Description</td>
<td><em>Transition Culture</em> is a blog by Transition Towns founder Rob Hopkins. The blog comprises of essential information on the Transition Towns Movement, Transition Towns reports from around the world and related sustainability news. Furthermore, offered is an e-newsletter subscription service, the availability to purchase the various Transition Towns books (for example, <em>The Transition Companion</em>, <em>In Transition</em>, <em>Local Money</em>, and <em>Transition in Action</em>), as well as announcements of upcoming events. Website: <a href="http://transitionculture.org/">http://transitionculture.org/</a></td>
</tr>
<tr>
<td>Name</td>
<td>Yarra Energy Foundation</td>
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<tr>
<td>Description</td>
<td>Formed in 2010, <em>Yarra Energy Foundation</em> is ‘a non-profit organisation solely dedicated to making the City of Yarra carbon neutral by 2020’. It was established by the Yarra City Council to fulfil the council’s goal of a carbon neutral city by 2020 via leading and facilitating projects that work with residents, businesses and the wider community to achieve its aims. The first major activity has been the CitySwitch Green Office Program in Yarra to reduce energy use, which is part of the larger program CitySwitch. Website: <a href="http://yef.org.au/">http://yef.org.au/</a></td>
</tr>
<tr>
<td>Name</td>
<td>Yarra Urban Harvest</td>
</tr>
<tr>
<td>Description</td>
<td><em>Yarra Urban Harvest</em> is ‘a network of people growing food in the City of Yarra’ that includes ‘backyard veggie growers, community gardeners and school gardeners. The idea of the network is to support people growing food across the municipality with workshops, garden tours, advice and social events as well as to provide a strong voice to advocate for more food growing opportunities within the City of Yarra’. Practices have been guerrilla gardening, garden produce swap table and ‘Tree For All’, where the aim of the project is ‘to get food trees into the streets and public places around Yarra’. Website: <a href="http://collectiveaction.com.au/events/1359">http://collectiveaction.com.au/events/1359</a></td>
</tr>
<tr>
<td>Name</td>
<td>Zero Emissions Network</td>
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<tr>
<td>Description</td>
<td>The <em>Zero Emissions Network</em> ‘supports the global campaign to reduce humanity’s net greenhouse gas emissions to zero and below as fast as possible, with the view to reducing atmospheric greenhouse gases to a level that will enable humanity and our natural environment to thrive and flourish’. It structure is composed of an independent alliance of groups, designed to provide opportunities to share ideas, link campaigns and support each other. The desired climate action is for rapid decarbonisation and increased sequestrations (98% GHG emissions reduction are advocated and what emissions are left (2%) are stated to be needed for food production). Practices centre on community awareness-raising, with stalls at festivals, and speaking engagements on climate change such as at the Melbourne Social Forum, as well as building networks through tours to Tasmania and New South Wales. Website: <a href="http://www.zeroemissionnetwork.org/">http://www.zeroemissionnetwork.org/</a></td>
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Appendix B: Data Collection Tools

Appendix B. Documentary Materials

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<th>Initiative</th>
<th>Website</th>
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<tr>
<td>Description</td>
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<tr>
<td>Main Content</td>
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<tr>
<td>Additional details</td>
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B. Selection of Online Documentary Materials
B. Selection of Non-Electronic Documentary Materials

Appendix B. Example of Participant Observation Record Sheet

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<td>Location:</td>
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<td>Time:</td>
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<tr>
<td>Duration:</td>
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<tr>
<td>Stated Content</td>
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<tr>
<td>Notes / Reflections</td>
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<tr>
<td>Additional Information</td>
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Appendix B. Online Survey

<table>
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<tr>
<th>Chief Investigator</th>
<th>Student Investigator</th>
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<tbody>
<tr>
<td>Dr Giorel Curran</td>
<td>Meghan Bond</td>
</tr>
<tr>
<td>School of Government and International Relations</td>
<td>School of Government and International Relations</td>
</tr>
<tr>
<td>(07) 3735 7826</td>
<td>0419 262 110</td>
</tr>
<tr>
<td><a href="mailto:g.curran@griffith.edu.au">g.curran@griffith.edu.au</a></td>
<td><a href="mailto:meghan.bond@griffithuni.edu.au">meghan.bond@griffithuni.edu.au</a></td>
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Why is the research being conducted?
This project is being undertaken as part of a Doctor of Philosophy (PhD) degree through Griffith University. The student researcher is Meghan Bond and the principal supervisor is Dr Giorel Curran. The intent of the project is to explore community-led climate change initiatives to understand the motivations of the people involved, whether there are new and/or re-designed sustainability practices being undertaken and/or advocated and, if that is the case, assess potential avenues for wider societal application. Given the need to transform society for greater sustainability this research is important.

What you will be asked to do and why you have been selected
You will be asked to talk about your motivation and insights on climate change and sustainability issues and the initiative of which you are a part via a focus group and/or semi-structured interview. There will be questions pertaining to:

- The community-led initiative you are a part of, such as why and how it was formed, and what some of the key actions, successes and disappointments have been, as well as insights along the way on why (or why not) actions have succeeded.
- Personal reflections on why you are involved in sustainability issues, the sort of changes you would like to see for future sustainability, how this could be achieved and what role you and other societal actors will and/or could play.

You have been selected because you are an active member within a climate change and/or broader sustainability-based community-led initiative occurring in Victoria, Australia.

The expected benefits of the research
The major expected benefit of the research is to develop a deeper understanding of the community-led climate change initiatives. Focusing on the practices being advocated, personal motivations and insights gained will enable the researchers to draw together this knowledge and gain understanding of what drives sustainable practices throughout society more broadly. Findings will be disseminated in written pieces, such as journal articles, a PhD thesis, and verbally to interested community initiatives and other interested parties.

The ethical conduct of this research
Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research. If potential participants have any concerns or complaints about the ethical conduct of the research project they should contact the Manager, Research Ethics on 3735 5585 or research-ethics@griffith.edu.au

Additional important information
1) The survey contains three sections and should take 10 to 20 minutes depending on the level of detail you wish to enter. Also please be aware that there are no right or wrong answers and the survey has been designed to provide maximum freedom of response; you can provide as little or as much information as you would like.

2) None of the questions are mandatory, so if there are any questions you would prefer not to answer, just leave them blank. Please remember that your confidentiality is ensured as no identifying data will be linked to individual questions in section three.

3) Participation in this study is completely voluntary. And if you choose to not to click ‘submit’ at the end any information you have entered will not be retained.

4) If you have any questions about the survey please contact me, via email on meghan.bond@griffithuni.edu.au or by phone on 0419 262 110. Furthermore, I can be contacted on these details if you would like to hear about the research and its findings at a future time.

5) The email addresses for this survey have been gathered from the following websites: (1) Transition Towns WIKI, (2) Climate Emergence Network, (3) Climate Action Centre, (4) Sustainable Living Foundation, and (5) Google searches for individual initiatives. These email addresses will only be used for the purpose of this research and IP addresses will not be collected.

6) Please click here for a pdf. version of the above information for your future reference.

Thank you for your time taken to complete this survey. Your time and insights are greatly appreciated.

There are 12 questions in this survey

General details (section 1)
This section is designed to collect general details of the Community-Led Climate Change Initiative, including aspects such as the date of formation and number of active members.

1. Please state the name of the initiative you are involved in.
Please write your answer here:

2. In what year was the initiative formed?
Please write your answer here:

An estimation is sufficient.
3. Please estimate the number of active members.
   ‘Active’ refers to the members who regularly contribute skills, time and/or resources. An estimation is sufficient.
   Please write your answer here:

4. Does the initiative concentrate on a specific location (place-based)? If so, please provide a general location of the main membership base.
   A town, suburb, postcode, or location name is sufficient.
   Please write your answer here:

5. Please describe the context that the initiative is operating in.
   Please write your answer here:

Focus and Actions (section 2)
This section is designed to develop a richer understanding of the initiative by exploring its focus and actions undertaken and planned for the future.

6. What are the ecological and/or social concerns of the initiative and at what scale does it seek to influence change?
   Please write your answer here:

7. What have been some of the main actions that have been planned and implemented thus far?
   Actions can include any number of activities from community awareness raising, research, direct political action and/or practical actions such as solar bulk-purchase.
   Please write your answer here:

8. Would you judge the actions to have been undertaken thus far as successful, why or why not?
   Please write your answer here:

9. Are there any future initiative actions being planned that you would like to mention?
Involvement, Vision and Motivation (section 3)
The intent of this section is to develop a richer understanding of the people involved in these initiatives. For instance, your answer could include the motivation behind involvement and what visions exist for a sustainable future. Data collected will not be linked to the initiative listed and all efforts will be made to protect the respondents’ anonymity.

10. Please describe what motivates you to be involved in climatic change and/or sustainability issues.
Please write your answer here:

11. What do you think needs to change to create a more sustainable future and tackle climate change? And who needs to be the instigator of this change? For instance, does technology or society or both need to change? And is it the role of government, business, leaders, community, individuals, etc. to instigate this change?
Please write your answer here:

12. What personal insights do you have as to how society could become more sustainable? Feel free to add any ideas you might have that could aid the transformation of society to greater sustainability.
Please write your answer here:

Thank you for completing this survey.
Appendix B. Semi-Structured Interview Questions

INFORMATION SHEET

<table>
<thead>
<tr>
<th>Chief Investigator</th>
<th>Student Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Giorel Curran</td>
<td>Meghan Bond</td>
</tr>
<tr>
<td>School of Government and International Relations</td>
<td>School of Government and International Relations</td>
</tr>
<tr>
<td>(07) 3735 7826</td>
<td>0419 262 110</td>
</tr>
<tr>
<td><a href="mailto:g.curran@griffith.edu.au">g.curran@griffith.edu.au</a></td>
<td><a href="mailto:meghan.bond@griffithuni.edu.au">meghan.bond@griffithuni.edu.au</a></td>
</tr>
</tbody>
</table>

Why is the research being conducted?
This project is being undertaken as part of a Doctor of Philosophy (PhD) degree through Griffith University. The student researcher is Meghan Bond and the principal supervisor is Dr Giorel Curran. The intent of the project is to explore community-led climate change initiatives to understand the motivations of the people involved, whether there are new and/or re-designed sustainability practices being undertaken and/or advocated and, if uncovered, assess potential avenues for wider societal application. Given the need to transform society for greater sustainability this research is important.

What you will be asked to do
You will be asked to talk about your motivation and insights on climate change / sustainability issues and the initiative of which you are a part via a focus group and/or semi-structured interview. There will be questions pertaining to:

- The community-led initiative you are a part of, such as why and how it was formed, and what some of the key actions, successes and disappointments have been, as well as insights along the way on why (or why not) actions have succeeded.
- Personal reflections on why you are involved in sustainability issues, the sort of changes you would like to see for future sustainability, how this could be achieved and what role you and other societal actors will and/or could play.

The basis by which participants will be selected
You have been selected because you are an active member within a climate change and/or broader sustainability-based community-led initiative occurring in Victoria, Australia.

The expected benefits of the research
The major expected benefit of the research is to develop a deeper understanding of the community-led climate change initiatives. Focusing on the practices being advocated, personal motivations and insights gained will enable the researchers to draw together this knowledge and gain understanding of what drives sustainable practices throughout society more broadly. Findings will be disseminated in written pieces, such as journal articles, a PhD thesis, and verbally to interested community initiatives and other interested parties.

Risks to you
The potential risks have been minimised via the following strategies:

1. All efforts will be made to ensure confidentiality (additional information listed below).
2. Location of interviews and/or focus groups will be held at a place of your choosing, potentially prior or post a regular initiative meeting, to avoid any
inconvenience.
3. Participation is entirely voluntary (additional information listed below).

Your confidentiality
Your confidentiality is high priority and will be ensured as comments made by you will not be made traceable to you within the research project. This means that comments provided by you will not specifically be attributed to you as an individual in the publication and reporting of data.

The reporting will include a PhD thesis and possibly academic publications such as journal articles. With your consent, the focus group and/or semi-structured interviews will be digitally recorded to ensure accuracy, then transcribed. Once transcribed the digital recording will be erased.

Data will be stored on a single computer and backups made to a single hard drive. On your request, I will provide you with a copy of notes relating to the content of your interview and/or focus group so you can provide comments about the following:

- Identifying information you would prefer to be kept confidential;
- Correcting or clarifying facts or points of information; and
- Suggesting an alternative interpretation.

You will have four weeks to provide written comments and if comments are not received within that time, I will telephone you for any verbal comment. If any subsequent publication uses the same material as the PhD thesis you will not be contacted again for written comment, but you will be sent a copy for your information. If, however, any subsequent publication uses different material from your interview you will be provided with a draft for comment.

Your participation is voluntary
Your participation is entirely voluntary and you are free to withdraw from the study at any time without question or comment.

Questions / further information
You can also contact either researcher at any time for additional information about the project:
Meghan Bond - email meghan.bond@griffithuni.edu.au ph. 0419 262 110
Dr Giorel Curran - email g.curran@griffith.edu.au ph. (07) 3735 7826

The ethical conduct of this research
Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research. If potential participants have any concerns or complaints about the ethical conduct of the research project they should contact the Manager, Research Ethics on 3735 5585 or research-ethics@griffith.edu.au.

Feedback to you
The researcher (Meghan Bond) will offer to verbally present summary of research findings to any interested community initiatives. In addition, you can request to receive a summary of the results.

Privacy Statement
The conduct of this research involves the collection, access and/or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal or other regulatory authority requirements. A de-identified copy of this data may be
used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University’s Privacy Plan at http://www.griffith.edu.au/about-griffith/plans-publications/griffith-university-privacy-plan or telephone (07) 3735 5585.
CONSENT FORM

Research Team
Dr Giorel Curran (senior investigator)
School of Government and International Relations,
Griffith University
Meghan Bond (student researcher)
School of Government and International Relations,
Griffith University
Phone: 0419 262 110
Email: meghan.bond@griffithuni.edu.au

By signing below, I confirm that I have read and understood the information package and in particular have noted that:

- I understand that my involvement in this research will include completion of a one-off 30-45 minute group and/or individual semi-structured interview;
- I have had any questions answered to my satisfaction;
- I understand the risks involved;
- I understand that there will be no direct benefit to me from my participation in this research;
- I understand that my participation in this research is voluntary;
- I understand that if I have any additional questions I can contact the research team;
- I understand that I am free to withdraw at any time, without comment or penalty;
- I understand that I can contact the Manager, Research Ethics, at Griffith University Human Research Ethics Committee on 3735 5585 (or research-ethics@griffith.edu.au) if I have any concerns about the ethical conduct of the project; and
- I agree to participate in the project.

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Signature</td>
</tr>
<tr>
<td>Date</td>
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</tbody>
</table>
Guiding Questions of Semi-structured Individual and Group Interviews

1. Why and when did you decide to become involved in sustainability issues?
2. What is your role in the initiative(s) you are involved in?
3. What are some key approaches and actions your initiative(s) has been involved in?
4. Why have you selected these particular actions and how successful or effective do you think they have been and why?
5. Why you think some approaches and actions have been successful or unsuccessful?
6. What sort of society would you like to see in future and how do you think this could be obtained?
7. Is there anything further you would like to add?
## Appendix C: Nodes: Explanation and Example

### Category: Problem and Causes

<table>
<thead>
<tr>
<th>Problem</th>
<th>Explanation</th>
<th>Alignment</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Change</td>
<td>Description of climate change and consequences, for instance, rising sea level, drought, social disruption</td>
<td>Reformist and radical, dependent on severity</td>
<td><em>What is missing is a compelling heart narrative about the impacts of global warming. The story is not being told of families who will live in a hot world, with more dangerous climate extremes, heat stress and ill-health, with less secure food and water supplies, and of children and grandchildren who will live less well than their parents, and may struggle to survive (Climate activist writing for Crikey and disseminated by Climate Action Centre e-service)</em></td>
</tr>
<tr>
<td>Depletion and Assimilative</td>
<td>Description of depletion issues identified with depletion of finite resources and/or renewable resources depleted at an unsustainable rate, e.g. peak oil and biodiversity loss. Also, assimilative issues identified with breaches in the assimilative capacity of the earth, e.g. pollutants</td>
<td>Reformist and radical, dependent on severity</td>
<td><em>As a non-renewable resource, there are geological constraints on the quantity of oil. In the past 150 years, we (globally) have used up one third to one half of all supplies. We are now using four times more oil than we are finding ... Peak oil presents a real challenge to us as a society – oil has become such an integral part of our society and the end of it’s abundant and cheap supply is bound to create serious disruption around the world and not least in the west of Melbourne. (Transition Hobson Bay - Peak Oil Briefing)</em></td>
</tr>
<tr>
<td>Social and Ecological</td>
<td>Social and ecological issues linked together</td>
<td>Sustainable development to radical, similarly</td>
<td><em>If we continue business as usual we shall be driving our own cars for most of our personal transport. We shall continue the social alienation that results. We shall have to put up with increasing</em></td>
</tr>
<tr>
<td>Ecological Limits</td>
<td>Survivalism and radical</td>
<td></td>
<td></td>
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<tr>
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<td>------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecological limits stated through outright statements or strongly implied</td>
<td>The global environment with its finite resources is a common concern of all peoples (Transition Banyule website 2011)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promethean</td>
<td>Weak reformist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denial or assumption of no limits to growth—examples are the citing of continuous expansion of the economy into the future</td>
<td>We know that renewable energy can provide six times more power than the world’s current energy needs entirely from natural energy—the sun, the wind and waves (100% renewable energy website 2011)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Causes</th>
<th>Explanation</th>
<th>Alignment</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective: Anthropocentrism</td>
<td>Identifies anthropocentrism as the cause</td>
<td>Deep ecology</td>
<td>But the issues of food security, poverty, political stability, adaptation/mitigation, trade, economic systems, commodity trading, third world development, credit access, land tenure, population growth, education, etc. these are the issues that have grown out of ‘globalization’ and are propelled by our basic human relationships with our environment (Beechworth Sustainability website 2011)</td>
</tr>
<tr>
<td>Perspective: Forms of Domination and Hierarchy</td>
<td>A dual focus of domination (identified as andropcentrism) and hierarchy as the causes; specifically cites power differentials between people as a causal factor</td>
<td>Eco-feminism and social ecology</td>
<td>Your support adds to the people power needed to confront the polluting and powerful vested interests whose activities are fuelling dangerous climate change and compromising our democratic systems (Locals into Victoria’s Environment e-bulletin 2010)</td>
</tr>
</tbody>
</table>

1 This quote was the closest approximation that could be found.
<table>
<thead>
<tr>
<th>Economic System</th>
<th>Identifies the economic system, e.g. capitalism, as the cause</th>
<th>Mainly eco-socialism but other radicals too</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-Political System</td>
<td>Identifies the current socio-political system as the cause</td>
<td>Radical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Governments focus on citizen satisfaction and short-term economic growth, especially in democracies with 3–5 year electoral cycles. This is compounded by powerful business lobbies, notably the fossil fuel lobby ... and oligopoly media (Yarra Valley Climate Action Group website 2011)</td>
</tr>
</tbody>
</table>

**Category: Transition Strategy and Agents**

<table>
<thead>
<tr>
<th>Means</th>
<th>Explanation</th>
<th>Alignment</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overarching Strategy: Reformist</td>
<td>Promise of economic and technological means with minimal other social, personal, and similar changes</td>
<td>Reformist</td>
<td>The transition begins with the full costing and accounting for corporate externalities—costs created by industry but paid for by society, such as pollution. Once environmental costs are accounted, the market place will initiate ecological innovations very quickly, bringing many new job opportunities (Locals into Victoria’s Environment e-bulletin 2011)</td>
</tr>
<tr>
<td>Overarching Strategy: Radical</td>
<td>Overarching strategy required in multiple spheres, more than technical and economic change</td>
<td>Radical</td>
<td>VISION a 10–year social and structural transition that enables the restoration of a safe climate (Transition Decade flyers and website 2011)</td>
</tr>
<tr>
<td>Justice</td>
<td>Concerns with social justice issues in the transition</td>
<td>Sustainable development and radical</td>
<td>A transition plan and job guarantees for communities and workers who lose employment and economic activity due to the transition from fossil fuels to renewable energy (renewable energy creates two jobs for every job lost in coal so it won’t be that hard) (Yarra</td>
</tr>
<tr>
<td><strong>Science and Technology Lynchpin</strong></td>
<td>Technologies advocated as capable of ‘solving’ the climate change with minimal adjustments in other areas</td>
<td>Ecological modernisation</td>
<td><em>It’s actually possible to achieve the complete switch to renewable power in just a decade, Australia-wide. The model is based on using the naturally occurring sources of solar and wind energy because they’re already fully costed, proven and operating in many countries (WarrandyteCAN website 2011)</em></td>
</tr>
<tr>
<td><strong>Science and Technology Questioned and/or Re-Scaled</strong></td>
<td>Technologies forbidden or at least questioned and/or advocated on a human-scale appropriate to local conditions</td>
<td>Radical</td>
<td><em>Nuclear power is too slow &amp; too expensive to be an option for replacing our polluting coal energy generation...aside from the safety and other issues (Mt Alexandra Sustainability Group e-newsletter 2010)</em></td>
</tr>
<tr>
<td><strong>Political Change</strong></td>
<td>Pressure the governments to change current practices via introduction of legislation, policies, plans, and programs</td>
<td>Ecological modernisation to eco-socialism</td>
<td><em>A long-term plan for a zero emissions economy and a roadmap for how to get there that has built-in mechanisms for public inclusion, monitoring and altering as deemed necessary: An end to all direct and indirect fossil fuel subsidies; A feed-in tariff for large-scale renewable energy—particularly baseload solar thermal, which is commercially available right now; An end to land clearing and logging of old-growth forests; A ban on new fossil fuel infrastructure, including gas-fired power stations ... a shift in investment from roads to public transport, including high-speed rail between capital cities (Yarra Climate Action Now website 2011)</em></td>
</tr>
<tr>
<td><strong>Economic Change</strong></td>
<td>Pressure the economic system to change current practices by internalising environmental costs and/or being radically restructured</td>
<td>Reformist to radical green discourse dependent of the type and degree of change</td>
<td><em>Shifts in the current economic system will be vital in providing the stimulus and capacity for the design, construction and production of necessary systems, services and goods (Climate Action Moreland website 2011)</em></td>
</tr>
<tr>
<td><strong>Increase Participatory</strong></td>
<td>Changes to increase and/or alter to more inclusive forms of participation within</td>
<td>Varying degrees of reformist (sustainable)</td>
<td><em>If you’ve never been to a local Council Meeting, you should go. It’s much more entertaining than CSI Alaska or My Cooking’s</em></td>
</tr>
<tr>
<td>Practices</td>
<td>current socio-political system</td>
<td>development) to radical</td>
<td>more Pretentious than Yours. It's democracy at work, and you can take part in it (Yarra Climate Action Now website 2011)</td>
</tr>
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</tr>
<tr>
<td>Create New Forms</td>
<td>Create new forms of social organisation, e.g. collectives, etc., not seeking to pressure government, business, but build new organisational forms</td>
<td>Social ecology and elements of eco-feminism</td>
<td>Self-organises in groups in all the key areas such as food, transport, energy, housing, education, textiles etc., and creates practical projects in response to that big question (such as community-supported agriculture, car clubs, local currencies, neighbourhood carbon reduction clubs, urban orchards, reskilling classes) (Mirboo North Transition Towns website 2011)</td>
</tr>
<tr>
<td>Personal Change:</td>
<td>Calls to change personal behaviours. This includes advocating for green purchases, to consuming less, to altering lifestyle habits, e.g. dietary choices. In addition to advocating change personal values and worldview to revalue relationship with nature and to adopt intrinsic not extrinsic values</td>
<td>Spectrum: ecological modernisation’s green consumers to radical deep ecology and eco-feminism</td>
<td>At a local level I think transition towns would like to see a really local level-like mindedness on living more sustainably, in terms of less consumerism, less waste, less needless energy use and less reliance on, I don’t know, I guess more connectedness with the things that actually sustain us, so where our food actually comes from, um where all our resources come from and learning a respect for that and I think through that awareness will switch the way people behave (Interviewee E)</td>
</tr>
<tr>
<td>Behaviours and Values</td>
<td>Calls on citizens to influence others by educating them to make personal and political changes.</td>
<td>Eco-socialism, social ecology and eco-feminism</td>
<td>‘How to Start a Climate Action Group’ can help you form your own Climate Action Group in your neighbourhood, workplace, union, professional association, community group or school (Climate Emergency Network website 2011)</td>
</tr>
<tr>
<td>Influence Others</td>
<td>Calls for society to green production processes, e.g. renewable energy instead of coal-fired power stations</td>
<td>Reformist</td>
<td>Work on the plan commenced in early 2009 and encompasses stationary energy, transport, housing and construction, land use, industrial processes and replacing coal export revenue (Beyond Zero Emissions website 2011)</td>
</tr>
<tr>
<td>Green Production</td>
<td>Calls for society to green consumption</td>
<td>Reformist and radical</td>
<td>We have to learn to live more sustainable, reduce consumption of energy and goods, as the earth resources are limited. Steps</td>
</tr>
<tr>
<td>Green and/or Reducing</td>
<td></td>
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<tr>
<td>Agents</td>
<td>Explanation</td>
<td>Alignment</td>
<td>Example</td>
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<tr>
<td>-----------------</td>
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</tr>
<tr>
<td>Government</td>
<td>All layers of government (local, state, federal) as the agents to facilitate change</td>
<td>Reformist and radical (dependent on degree of demands and level of government intervention)</td>
<td>The Government must lead the community in making a commitment to prevent dangerous climate change and that commitment must be the cornerstone of all policy development (Communities Combating Climate Crisis policy submission)</td>
</tr>
<tr>
<td>Business</td>
<td>Business, industry, and other 'profit motivated' actors in society as the agents to facilitate change</td>
<td>Reformist – mainly ecological modernisation</td>
<td>Switch to companies not investing in coal or other fossil fuels such as Bendigo Bank or MECU Credit Union (Darebin Climate Action Group website 2011)</td>
</tr>
<tr>
<td>Whole of Society</td>
<td>All actors in society working together (citizen, business, governments, etc.)</td>
<td>Strong reformist to radical</td>
<td>The challenge is to shift rapidly to a model of sustainable development and the speed in which we achieve this will depend on effective engagement with and between governments, corporations and civil society (Locals into Victoria’s Environment website 2011)</td>
</tr>
<tr>
<td>Citizens</td>
<td>Everyday citizens acting individually or collectively</td>
<td>Radical</td>
<td>What can individuals do? Silence kills and silence is complicity. Educated people have an obligation to inform others about the worsening climate emergency. You can vote appropriately, be environmentally correct and also join a local Climate Action Group … so that you can say that you have done something collectively to avert climate catastrophe (Yarra Valley Climate Action Group website 2011)</td>
</tr>
<tr>
<td>Category: Future Envisioned</td>
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<tr>
<td><strong>Future Evoked</strong></td>
<td><strong>Explanation</strong></td>
<td><strong>Alignment</strong></td>
<td><strong>Example</strong></td>
</tr>
<tr>
<td>Utopian Vision</td>
<td>Utopian-type vision of future without caveats—Promethean</td>
<td>Industrialism</td>
<td>None found</td>
</tr>
<tr>
<td>Utopian Vision Conditional</td>
<td>Utopian-type vision of future IF advocated means is undertaken</td>
<td>Radical</td>
<td>Working towards an environmentally and economically sustainable, spiritually fulfilling and socially just human presence on the planet. This would involve a region where: There are net zero carbon emissions; biodiversity and natural systems are restored, preserved and enhanced; the ecological footprint of residents is fair by global measures; the city (buildings and streetscapes) have been re-designed for a low energy future that enlivens communities; there is a vibrant economy with meaningful and varied employment opportunities in sustainable industries or organisations; there is a well-serviced and regular zero-emissions public transport system; there are strong bonds between neighbours and communities based on acceptance, appreciation and respect for diversity (Geelong Sustainability Group website 2011)</td>
</tr>
<tr>
<td>Dystopian Vision</td>
<td>Survivalist rhetoric of future socio-political collapse</td>
<td>Survivalism and radical</td>
<td>We're facing changes in our situation due to the decline in fossil fuels and the financial crisis whether we like it our not. We have to take steps to safeguard ourselves and our community (Transition Corner Inlet District website 2011)</td>
</tr>
</tbody>
</table>