Final Report

Decision Taking in Times of Uncertainty: Towards an efficient strategy to manage risk and uncertainty in climate change adaptation

Jens Zinn and Patricia Fitzsimons

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Towards an efficient strategy to manage risk and uncertainty in climate change adaptation

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Executive summary

Decision making and planning in climate change adaptation is challenged by complex, uncertain and contested knowledge. In expert debates the problem being addressed is often narrowed down to a problem of knowledge (often identified as a lack of knowledge) and/or the problem of understanding the degree of uncertainty involved in models and scenarios. Strategies employed to manage these issues move from embracing complexity, for example by systems thinking approaches, to dealing with the unknown by focussing on strengthening the resilience of communities. There might still be a tendency to focus on complexity rather than to develop new strategies to deal with the unknown as well as the surprises. There is strong evidence identified in the research literature on the importance of including and acknowledging local knowledge in this process.

However, this is only half of the story. The focus on knowledge tends to underestimate the social dimensions of the decision making process and conceptualises them as being separate from the production of 'objective' knowledge. Because—as social science research has shown—knowledge is inseparable from values, power and vested interests, they can only be dealt with together. Thus, in order to deal successfully with 'wicked problems', the decision making process cannot be purely about knowledge. There is increasing evidence that new decision making structures are required (that combine assemblages of different tiers of government, NGOs, the community and the economy) to deal successfully with complex problems such as climate change.

Case study: A case in point, under investigation in the VCCCAR project, was the former Latrobe Valley Transition Committee, which met to discuss the transition of the Latrobe Valley industry sector from its dependence on brown coal power generation – a complex regional problem with clear implications for the government sector. The transition committee's formation was triggered by legislation that put a 'price' on carbon, the potential closure of 'high polluting' coal fired power stations, and the potential opportunity of financial incentives from both state and federal governments to mitigate the foreshadowing impacts on the valley and its community. The change in government federally saw the decision to move to repeal the carbon legislation and a reverse any decision on the power station, leaving the region to further uncertainty about its future.

Our research shows that setting up good governance structures so that they can foster successful decision making and strategic planning outcomes depends on a number of factors. On the basis of our extensive literature review and some recent work with a group dealing with considerable complexity and change, some key aspects have been identified to better enable decision making within a context of uncertainty:

- gaining inclusive governance approaches and effective stakeholder participation;
- develop and managing knowledge to support potential actions and implementation;
- managing power and political uncertainty to achieve effective change, and

- fostering innovative approaches to inject new ideas and solutions to deal with the matters at hand.

Effectively dealing with 'wicked' policy problems that span generations or are not capable of being dealt with by one agency or government body alone, requires governance structures that combine a broad range of stakeholders and tiers of government. Difficulties emerge in addressing the various agendas of different levels of government, diverging perceptions of authority and differences in understanding of the decision making processes. Ensuring appropriate and adjustable representation from all major stakeholders will provide for a greater degree of surety when dealing with complex issues that can transcend generations and economic perspectives.

Knowledge is a central resource for planning and decision making. A lot of time and resources are spent on gathering knowledge or 'evidence' to support decisions. The type of knowledge needed, and advice about its potential or best source, is often limited, uncertain, complex and contested. This is a common issue in politics, planning and governing risk. The lack of appropriate knowledge is often considered a barrier for adaptation, but can be addressed through a variety of strategies.

While evidence-based planning and decision making is generally put forward as a key principle for good governance in decision-making, power and politics usually underpins the process and final decision. Political and policy uncertainty can stifle longer-term thinking required for issues such as adaptation to climate change. Long-term commitment to solutions, ideally involving all interested parties and potential stakeholders, is required to enable longer term transitions to better functioning societies.

Climate change adaptation requires new attitudes, perspectives and ways of thinking about the future. Climate change and its impacts, particularly at the regional or local level, remain uncertain. Therefore strategies are required to look at problems in new ways and deal with unexpected events as they emerge.

Typically, strategic decisions are often driven by routine approaches that fall back on past ideas and pet-projects. Innovative approaches and ideas are generally considered financially and politically too risky. It is important in embracing new ways of dealing with complex problems that the wider expertise within the community, industry, local government and higher education are used effectively in the development of creative and effective options.

Adaptation involves engaging with the knowledge of science and social science and collaborative learning processes that foster exchanges between those with local knowledge and those with relevant expertise. There are a range of strategies which could assist in developing innovative plans and build capacity to respond to complex issues.

The final section four of this report provides a summary with detailed policy advice.

VCCCAR project background

Decision Taking in Times of Uncertainty was funded by the Victorian Centre for Climate Change Adaptation Research to develop advice on decision-making in the context of climate change adaptation.

Under the framing of current research literature in decision making, knowledge management, regional planning, and risk studies the project analysed as a case study the decision making processes of an existing body - the Latrobe Valley Transition Committee (LVTC). The LVTC was established in October 2011 to support the transition of the Latrobe Valley economy. A MoU launched a Joint Ministerial Forum between the Victorian and Federal Government, a Mayoral Reference Group and the LVTC. The LVTC was tasked to provide: advice on the challenges and opportunities facing the region; a long term direction for industry development and employment growth; and processes to support coordinated planning and investment between levels of government, regional institutions and businesses.

The LVTC included representatives from Victorian and Commonwealth Governments, three local councils, Regional Development Australia Gippsland committee, VECCI, Gippsland Trades and Labour Council, Monash University, Latrobe Community Health, the CFMEU and Skills Victoria.

1. The research project

Summary: The Decision Taking in Times of Uncertainty research project

We sought to identify key issues for planners and policy makers in decision taking under uncertainty for climate change adaptation and strategies for dealing with them. The project involved two stages:

1) A literature review focussed on different research streams spanning debates on risk communication, risk perception and risk governance to urban and regional planning, communicative planning and questions of governing (section 2 and Zinn & Fitzsimons 2014).

2) A case study on the Latrobe Valley Transition Committee (LVTC), an inter-agency collaborative process aimed at responding to the challenges facing the regional economy to achieve growth and diversification (section 3).

The project developed over a two year period as we worked in collaboration with Local, State and Federal Governments to gather background information on the Latrobe Valley Transition Committee and to interview members of the Committee, members of the broader Gippsland community, specialists in sustainable technologies, climate change adaptation, health and state government policy.

The research combined a range of disciplines and expertise to understand complex decision-making processes to assist policy advisers and planners to be better equipped to deal with the challenges posed by climate change (section 4).

We recognised that risk aversion is detrimental to innovation. The inter-agency decision making process for this region was grappling with issues that had high levels of political, economic, environmental and social uncertainty. The process drew together a broad range of stakeholders in a strategic planning process that established a clear frame of reference, a process for knowledge development, established timelines and institutional support.

Policies on which the deliberations were based changed dramatically over the course of the study. This provided us with opportunity to observe planning under conditions of significant political uncertainty. This had consequences for the ultimate outcomes of the process and for the research project.

1.1 Aims of the research

The research project Decision Taking in Times of Uncertainty. Towards an efficient strategy to manage risk and uncertainty in climate change adaptation set out to improve our understanding of complex processes when dealing with the challenges posed by climate change. It sought to develop advice for good governance in climate change adaptation for decision-makers at different levels of government, in industry and the community (compare section 4).

Climate change challenges governments and stakeholders at local, regional, national and international levels due to the uncertainty of its environmental, social and political impacts. The negotiation of knowledge on which decisions are based is an important part of debates among experts, the public and political decision-makers. As part of these debates complex

models such as climate scenarios, land suitability analysis and population growth projections are used to mediate decision-making. However, different stakeholders (e.g. industry, the public) follow different rationales when responding to the challenges of climate change and when managing the political and economic risks. Our research supports the view that to improve the management of climate change related decision-making and planning requires a better understanding of the social processes through which knowledge is generated and decisions are made. Social processes include the different values that inform planning practice, the power relationships that underpin decision-making, the (local) historical knowledge that shapes social reality, and the specific economic and social structures and the availability of natural resources.

We addressed a number of key research questions to shed light on these complex social processes:

- What are the negotiated processes of decision-making? (e.g. What is accepted as the knowledge base? How is responsibility shared or shifted?)
- At what level of government are decisions made in relation to adaptation to climate change and who is involved?
- What are the identifiable rationales of the stakeholders involved in the decision making process?
- How are the views of the public incorporated into decision-making?
- How does uncertainty in climate change projections, economic modelling or population projections and other forms of uncertainty influence planning?

The project selected a case study on a specific governance structure to examine decision-making processes – the Latrobe Valley Transition Committee (LVTC). The LVTC was set up and developed as a strategic planning process to manage the economic transition of the Latrobe Valley in response to climate related policy developments and expected impacts on the region. The LVTC was established in October 2011 as part of the Commonwealth and Victorian Government's Agreement for Cooperative Arrangements for the Gippsland Region aimed at supporting the transition of the Latrobe Valley economy.

1.2 The policy context

In March 2013 the Victorian Government launched its Victorian Climate Change Adaptation Plan. The Plan placed emphasis on the management of risks associated with public assets and services in the context of a changing climate that included rising temperatures and rising sea levels. A feature of the policy was that it recognised that all portfolios had to be involved in managing these risks by integrating climate change planning into their own policy settings; in addition, it recognised the importance of building partnerships with local governments and the broader community by identifying the risks and prioritising actions.

Whilst state government policies focused on adaptation, the policy settings for the

Commonwealth Government were prioritising mitigation strategies through the Clean Energy Act 2011. This policy gave effect to Australia's support of the Climate Change Convention and the Kyoto Protocol and aimed at reducing Australia's net greenhouse gas emissions to 80% below 2000 levels by 2050 by placing a price on greenhouse gas emissions and encouraging investment in clean energy industries. The carbon pricing system commenced on 1 July 2012 with a fixed price leading to a flexible pricing system from 1 July 2015. To complement the price on carbon, two Renewable Energy Targets were established, one for larger scale renewable energy such as power stations and the second for smaller scale renewable energy, such as hot water heaters and solar panels. A change in government in September 2013 saw a policy shift away from placing a price on carbon towards a Direct Action plan where businesses will compete to undertake emission reduction projects. The policies of both the Commonwealth and State Governments provided the policy context for the establishment of the La Trobe Valley Transition Committee.

The LVTC contributed to the Latrobe Valley Industry and Employment Roadmap published in 2012 (State Government of Victoria 2012a). The Roadmap was developed in response to two significant economic events in Australia. The first being the introduction of a carbon pricing system on 1 July 2012 by the Commonwealth Government to which the Roadmap was largely designed to respond. The other was the Commonwealth's contract for closure process to buy out the highest polluting coal fired power stations designed to bring forward the targeted and phased closures planned from 2015 to 2020. This also occurred within the context of the 2010 Global Economic Crisis resulting in the deterioration of economic conditions within Australia caused by events in Europe and North America. However, the contract for closure negotiations were rescinded on 6 September 2012 due to an inability to reach a viable price with the eligible parties.

1.3 The research process

The research process is important in developing an understanding of the co-learning process between researchers, planning experts, and public administrators that became part of and were directly affected by political and administrative changes that challenged repeatedly the aims of the project, the conduct of research and engagement with regional stakeholders.

The project was originally set up as collaboration between the Department of Primary Industries, represented by Patricia Fitzsimons whom at the time was Project Manager, Spatial Segmentation and the University of Melbourne represented by Associate Professor Jens Zinn, an expert in interdisciplinary risk studies. This design was purposefully developed to enable a co-learning process between government and university experts who brought particular expertise to the project. While this was partly a challenge it also provided the

opportunity to bring together complementary ways of understanding and to consider the different practices of each of the researchers.

In particular, when we organised workshops at the VCCCAR annual meetings it became clear how important the complementation of the academic and applied expertise has been for the co-learning process. We were always best as a team and struggled a bit when required to present our project without the other dimension of the expertise.

The research process was, through its duration, influenced by ongoing social and political changes that required us to shift the research objective (see below). These involved significant shifts in the policies of the Federal Government and some uncertainties over time by the State Government including a reorganisation of the public service.

When we decided to take the Latrobe Valley Transition Committee as our case study the aim was to be closely involved in the ongoing process, with the potential to observe decision making in situ. However, soon after commencing our research we were faced with the reality of the current governmental dynamics, particularly from the Federal level, as the original plan to observe the implementation process of the Roadmap became impossible with the withdrawal of the contract for closure policies that would have led to the potential closure of two high polluting coal fired power plants in the Latrobe Valley and the direct requirement for the long term economic transformation in the region.

Also access to the interviewees—members of the Latrobe Valley Transition Committee—became more difficult than expected. After an early openness and willingness to share information concerns about the purpose and use of the research lead to some reticence (compare below) that reduced the available representation for interviews in particular of people highly exposed to public scrutiny. However, the data is sufficiently rich to provide good evidence for the dynamics of the process. The views expressed in the quotes throughout this report represent the views of those individuals interviewed and may not reflect those of the committees or groups mentioned in this report.

1.4 Continuing the research process

Whilst the purpose of the research project was to develop guidelines for good governance in climate change adaptation through a case study, the process involved extensive collaboration with members of the LVTC, policy advisers from the State Government, Local Government leaders and members of the broader community. The reason for this approach was that our experience indicated that the co-production of knowledge requires a process of engagement by the researchers with people in the region that goes beyond a single research project. Such engagement requires the development of trust that can only unfold over time.

We are uncertain as to whether we have been successful but our attempts have been sincere. What we hope to achieve is to provide a report that discusses and describes the

difficulties faced by regional stakeholders in developing a visioning process for the region that is broadly enough supported by the community to inform a successful long term economic and social transition process of the region as well as identifying a range of structural factors that might compromise attempts to build the basis for long term sustainable planning and engagement.

2. The literature review

Summary: Key outcomes

The literature review has shown that key issues for strategic regional planning are the uncertainty of knowledge regarding the local impacts of climate change, the need for legitimacy of the planning process and shifts within public administration towards New Public Management. At the same time there is an increased public scrutiny that makes good planning even more important.

This would affect good policy practice in a number of ways:

- Policy outcomes are improved by continuous inclusion of local knowledge, vulnerable groups, and the (social) sciences that is captured in the notion of the coproduction of knowledge.
- Good governance structures require an effective organisation of public debates and decision making processes indicated by the inclusion of diverse stakeholders.
- There is a need to broaden planning processes beyond short term financial/economic risk management towards the development of long term positive strategies that are driven by the region and supported by the state and federal governments.
- Every (innovative) planning process has to be based on the region and its complexity- its identity, resources, and history. But it has to be inclusive and sensible for new developments.

In terms of policy: Literature in many realms such as planning, risk governance and public management has argued that a stronger engagement with the public can improve the quality of planning and decision making. That requires:

- a more direct and ongoing exchange of knowledge and information between the public and decision makers (e.g. using social media, ongoing visioning process).
- conflict and controversy valued as a resource to be heard and considered as it broadens knowledge and the legitimacy of strategic planning.
- stronger focus on positive values and inclusive visions rather than narrow (financial) risk management.

2.1 Reviewing the literature

Our literature review was driven by a particularly difficult attempt to integrate insights from a diverse range of disciplines such as psychology, sociology, economics, and (human) geography. Therefore, the purpose was rather to review the central insights from a particular research area, presented by authoritative authors and representing whole traditions of research rather than giving representative overviews about publications in a number of journals. The Literature Review (Zinn and Fitzsimons 2014) was driven by expertise in regional planning and risk studies. These areas are largely interdisciplinary covering diverse disciplines such as human geography, politics, organisation studies,

sociology, social psychology, cognitive psychology. The literature review evolved as the project progressed and was informed by the research process and the analysis of the data obtained through the interviews. Therefore the final policy advice (section 4) goes beyond the findings of the literature review to build on the ongoing learning process that occurred over the life of the project

The literature review constitutes the conceptual basis for the research project. It revealed that in order to find out how decision making and planning for climate change adaptation can be improved it is necessary to see climate change adaptation in the context of more general changes in public management and planning as well as in society. Therefore, the literature review combines a number of different streams of research, spanning the debates on risk communication, risk perception and risk governance to urban and regional planning and questions of governance and community engagement. For the purpose of accessibility we have structured our review around five key themes (compare Zinn & Fitzsimons 2014):

- Understanding and using complex and uncertain knowledge;
- Strategies to engage with the public and multiple stakeholders;
- The framing of decision making by (media) discourses, (local) history and local institutions
- Changing boundaries of decision making from bureaucracies to networks and hybrid organisations;
- Deliberative planning processes.

2.2 Understanding complex knowledge and risk in climate change adaptation

The provision of authoritative knowledge about climate change and its effects at regional and local levels and good practice in risk communication are important. There is a long debate about how to best to communicate scientific knowledge and risk that has led to a number of crucial insights. For example, when using natural frequencies rather than probabilities we can more easily understand the meaning of numbers (Gigerenzer 2002). Since science is a process that produces knowledge that is continually revised, uncertainty is an inherent quality of scientific knowledge (Fischhoff & Kadvany 2011). As a result the successful communication of uncertainty is as important as the provision of knowledge itself. Even though lay people might have biased views of the world (Tveryky & Kahneman 1974), communicating risk successfully to the public requires an acknowledgment that knowledge and values cannot be separated (Douglas 1985). The sources of controversy are often differences in values rather than the availability or proper comprehension of knowledge (Douglas & Wildavsky 1982; Yannow 2003). As a result of both uncertainty of knowledge and differences in values, successful risk communication has shifted from providing knowledge to involving the people affected by that knowledge (Fischhoff 1998; Renn 2008; Rosa, Renn & McCright 2014). This does not mean that the provision of

knowledge is no longer important; instead there is an increased understanding that knowledge is not an absolute entity. Authoritative knowledge is the result of a social process during which knowledge is negotiated and becomes authoritative. It has also become obvious that people are less judgemental about the knowledge but are focussed more on the trustworthiness of the provider of the knowledge (e.g. Wynne 1996; Rosa, Renn & McCright 2014). Trust, however, is the result of good practices that involve and inform the public about decisions that affect them and their lives.

Seeing knowledge as a process of production shifts our attention to the processes that lead to the inclusion and exclusion of specific kinds of knowledge and helps us to be more aware of the weaknesses and strengths of different kinds of knowledge such as scientific, tacit, intuitive or local knowledge. As a result, decision making regarding climate change has to go beyond issues of dealing with probabilistic and uncertain knowledge. The increasing success and importance of deliberative processes results not only from a desire to create and verify knowledge, it supports the development of trust and social legitimacy in the process of knowledge generation when considering local knowledge, public concerns (even from an expert perspective) and tacit knowledge (e.g. Wynne 1996; Renn 2008; Rosa, Renn & McCright 2014).

2.3 Engaging with multiple stakeholders and the public

There are a number of reasons for greater involvement of stakeholders and the public (e.g. local communities) in the development of public policy (e.g. risk communication, planning). The need to integrate local knowledge and to organise multiple stakeholders for efficient decision making (e.g. when problems cross jurisdictional boundaries as in the case of natural resource management in the Murray Darling Basin), to foster legitimacy of and trust in planning processes to prevent public resistance or secure public engagement, and the need to mediate between complex and contradicting interests and values in a region and on different social levels (e.g. global, national, regional, local). There is also a strong normative argument brought forward by the planning profession that highlights the need for participation in democratic societies to protect and give voice to vulnerable social groups (e.g. March & Low 2005; Fincher & Iveson 2012). Evidence regarding the benefits of greater community involvement are contradictory as some scholars claim that the need for greater community involvement has been acknowledged and incorporated into public management and therefore appropriate strategies are being developed (Hess & Adams 2002) others argue that a shift towards outsourcing and streamlining in public management has brought about a need to consider how social groups, stakeholders and communities integrate into the decision making process (March & Low 2005).

Participative governance is not an easy process since the social realm is characterised by stakeholders with contradicting interests and a public that is diverse and fragmented (Fischer 2003; Forester 1999; Hajer 2009; Healey 2006; Innes & Booher 2003; Renn 2008;

Rosa, Renn & McCright 2014). It is important to acknowledge that this is a normal condition of modern industrialised societies rather than an exception (Luhmann 1989). People hold very different worldviews depending on their upbringing and their social position (e.g. as banker, farmer, hairdresser or carpenter) and what opportunities are open to them. As a result they are very differently affected by social and environmental changes and have different opportunities to respond. Therefore, consensus as the most effective strategy to respond to the challenges of climate change is unlikely to be achieved. Instead, the appreciation of difference and controversy is as important as consensus. Often it is more important to develop strategies that enable collaborative decision making while accommodating differences of opinions, values, world-views, etc. rather than ignoring or suppressing them (e.g. Corburn 2009; Fung 2009; Hedger, Connell & Bramwell 2006; Thompson, Ellis & Wildavsky 1990; Japp & Kusche 2008; Thompson 2008).

As a result recent approaches to inclusive risk governance (Renn 2008; Rosa, Renn & McCright 2014), communicative planning (Healey 2006a; Forester 1999; Fischer 2003) or the co-production of knowledge (Yanow 2003; Innes & Booher 2003; Hager & Wagenaar 2003) have emphasised to different extents the need to engage expert knowledge, economic rationality, political legitimacy and communities in processes of sustainable social decision making.

2.4 Significance of historical context and (media) discourses

There is good evidence for how decision making and planning take place within historical social contexts. Past planning decisions have impacts on communities and will be well remembered in particular when they fail. For example, Wynne's study (1996) on sheep farmers in North Cumbria has shown that covering up a major accident in the nuclear power plant of Sellafield (England) in 1957, though many decades ago, it was still evident in local knowledge in 1986 when experts discussed the impact of the Chernobyl disaster on sheep farming in the region. When experts again made mistakes in assessing the situation and ignored the concerns and local expertise of the farmers, old resentments were re-activated and unexpected aggressive resistance surfaced.

The media have been broadly identified as influential in framing perceptions of risk and planning processes as they keep historical failures alive (Wynne 1996; Flynn, Slovic & Kunreuther 2004; Mairal 2008). The way in which problems are communicated, reported, formulated and presented (how things are framed) is significant in politics and planning. Framing guides how and what we think and it is often difficult to go beyond the ways of thinking that we are used to or is presented to us in the media every day (e.g. Scheufele 1999).

Policy making is viewed as being much more about performance under conditions of uncertainty as decision makers have to perform on the public stage to create meaning. Hajer (2009) argues that whilst governance is about the "authoritative enactment of

meaning", politicians have to accept that what they say is interpreted and re-interpreted in radically different ways by a broad public seeking to mobilise and act on what it believes it has heard (Moser 2012; Berkhout 2010; Hajer 2009; Carvalho & Burgess 2005). Policy makers can also contribute to the erosion of trust when bad practices become obvious. Public debates, such as those in the media, are the spaces where new ideas manifest and become commonplace but also where stigmas stick (Flynn, Slovic & Kunreuther 2001).

Hajer (2009) identified an obvious tension between the mediatised forms of policy and decision making and networking that occurs behind closed doors that enables complex decision making (e.g. Jones, Hesterly & Borgatti 1997; Provan & Kenis 2007). Participative approaches in planning might even put more pressure on procedural quality and openness where public servants and planners are much more in the role of networker, provider of information and organiser of debates and decision making processes between different stakeholders and the public rather than decision makers themselves (e.g. Hess & Adams 2002). They might even enjoy authority and public trust for keeping the interests of the public where politicians are prone to partisan practices or even corruption (e.g. Clean Energy Council 2013; Hajer 1995).

There is good support for the claim that new authority can be gained by planners through successfully organising good decision making processes that bring together all relevant stakeholders whilst protecting and giving voice to commonly excluded social groups (e.g. Thompson 2008). This does not only improve decisions making processes but would also support the normative commitment of many planners to foster good democratic processes (e.g. Considine 2005; Hajer & Wagenaar 2003; Healey 2010; Innes & Booher 2003)

Empirical evidence shows that experts recommend (e.g. Tomkins et al. 2010) that climate change adaptation works best where it can be integrated in common planning processes with short term advantages and where long term climate change adaptation or mitigation is a secondary side effect rather than the major driver for planning and behavioural change.

2.5 Organisational, political and administrative decision making

Decision making and strategic planning are regularly confronted by significant public scrutiny. The response is often to muddle through as Lindblom (1959, 1979) described so aptly. Whilst this response alleviates short-term pressures and dissipates the urgency of the problem, it does not provide long term strategic planning (Luhmann 1971). Some research argues that path-dependency and routinized practices can be overcome by windows of opportunity (e.g. Meijerink 2006) that have the capacity to trigger quite dramatic political decisions with long term effects such as those in response to election commitments or natural disasters.

A lack of capacity or the competence of lay people and decision makers to process complicated information may have an impact on effective decision making (Kahneman &

Tversky 1973; March & Simon 1958). An insight from Brunsson (1990: 48), that "organisations have more problems than choice" is central. Organisational decisions are informed by other purposes such as (1) mobilising organisational action, (2) distributing responsibility, and (3) providing legitimacy. The consequences could be that when high-risk decisions are required, parliaments, councils and governments refrain from organisational actions to focus on producing decisions (Brunsson & Jönsson 1979). With an increasing reliance upon economic management strategies and their emphasis on efficiency and cost control, alternative approaches, including deliberation with the public, have increasing potency.

New public management theories highlight a shift away from strategic planning towards risk management. Described by Barlow & Roberts (1996) as a shift from rowing to steering to secure cost efficiencies, in practice the process shifts the role of planning towards the generation of piece meal project based knowledge. A remedy to this approach could involve systems thinking and organisational learning to overcome more narrow perspectives on planning and decision making. Another tendency is to focus on organisational risk at the expense of complex government-wide and societal risk. Once again strategies to overcome this narrow focus could involve complex decision making that includes an understanding of systemic risks by ensuring a focus on the broader social picture (compare Hood & Rothstein 2000).

The consequences of not involving people affected by the decision can manifest into outright opposition. An increasing emphasis to counter this opposition in planning is to give adequate attention to the process of decision making by identifying the sources of motivation, power, expertise and legitimacy as highlighted by Ulrich (2003) and to consider the scope of the discussions to clarify what is included and excluded. Organising the production of knowledge and mediating between different groups as well as organising debates and collective decision making is important to decision making processes as is giving voice to marginalised social groups.

Strategic planning is driven by ideas and visions. Healey (2010) cautions on drawing directly from international comparisons and suggests a focus on identifying the specific institutional and social-cultural tradition in which planning takes place. Through a network based approach to decision making, Considine et al (2009) seeks to understand the relationship between power and innovation. Their interest in discovering how actors are linked to one another and how hierarchies form within networks is focused on identifying new forms of governance and innovative practices of decision making that are valuable in identifying problems and finding appropriate solutions.

To create places in which people want to live appropriate governance arrangements are needed to counter the prevalence of diffuse and fragmented decision making. Good governance relies upon the quality of local policy cultures and institutional arrangements

(Healey 2010), key elements of which include integration across scales and jurisdictions, the inclusion of a range of voices and being well informed whilst having the capacity to gather and interpret a wide range of knowledge. Truly integrated responses to complex issues such as climate change adaptation requires clear priorities to be established for the market, the environment and the community to achieve clear solutions and improve decision making.

2.6 Communicative planning

Debates in the planning literature follow similar trends as in other areas such as risk communication, risk governance or public management which acknowledge the importance of communication as an interactive process among a number of stakeholders and the public (Healey 2006; Fischer 2003; Forester 1999; Innes & Booher 2003).

Shift from provision of services to steering processes and from top down regulation to interactive organisation are reflected in the planning literature which we have summarized under communicative planning. Key issues are:

Deliberative processes or deliberative democracy requires a shift from top down planning to planning as an interactive process among multiple stakeholders. The outcome of these deliberations is a stronger focus on setting-up networks and hybrid organisations as public participation that contributes to the shaping of ideas can lead and guide strategic developments that transform regions. The co-production of knowledge builds trust in a time when planners are increasingly aware of that in rapidly changing and turbulent environments it is necessary to justify the role and purpose of public planning and plan making in our society. Harper and Stein (2006) are part of a liberal normative tradition that suggests planners have a moral obligation to influence the public agenda and argue for a more democratic planning process that promotes justice and fairness.

Communicative planning involves a consideration of the role of political involvement in designing and implementing planning strategies and the tactics used to overcome any resistance to change. The concept is focussed on bringing together experts and experiential knowledge to enhance the prospect of innovative outcomes through institutional and procedural change. What Harper and Stein (2006) refer to as social learning.

Other authors are more concerned about the development and application of knowledge. March (2013) explains that whilst knowledge is used to steer collective and individual action, whether acquired through scientific methods or deliberative processes, its application can explain the successes and failures of urban planning. For Laws and Rein (2003) questions such as: to what extent has the knowledge penetrated policy making and culture to guide action; how and who set the agenda; how has knowledge been developed and distributed; require consideration. Advocates of communicative planning such as Irwin (2006) argue that public dialogue should be viewed as symptomatic of the science-society relations and not criticised for its inadequacies.

Advocates of deliberative policy processes such as Hajer and Wagenaar (2003) highlight the role of planners as bridge builders, negotiators and mediators whose role is to consider trade-offs to achieve their aims. Others such as Ostrom (2010; 2012) argues that communicative planning encourages learning from experience whilst Fisher & Forrester (1993) draw attention to the important role of persuasion and argument in decision making. Healey (1996; 1998; 2006) emphasises the importance of governance arrangements that move beyond traditional power elites to recognise different forms of local knowledge as well as building institutional capacity that influences decision making for decades. Another aspect of communicative planning highlighted by Innes and Booher (2003) is the way in which dialogue is at the core of collaborative rationality, a place where ideas and knowledge can be transformed from confusion and conflicting views into something that is both rational and meaningful. The aim is to transform "done-to into doers, spectators and victims into activists, fragmented groups into renewed bodies, old resignations into new beginnings (Forster, 1999, p117).

Much of our planning processes consist of positivist policy approaches that emphasise the importance of rational scientific knowledge. Hajer (2003; 2012) seeks to emphasis a new approach to policy development that adds a more nuanced understanding of society, one that appreciates a multiplicity of values and rules. In an account of a deliberative policy process that reviews one section of an IPCC Report, he sought to make scientific debates more transparent. The process showed how local events can affect decision making processes and a more open process can change the dynamics when controversial and contested knowledge is in play. The link between knowledge formulation and policy outcomes is fundamental as planning seek practical solutions to social problems.

3. The case study

Summary: Key issues

- The case study approach provides a detailed analysis of a single case using a variety of methods such as document analysis and qualitative interviews to improve a better understanding of how different forces influence social processes such as decision making in the context of regional planning and climate change adaptation.
- Our project received broad support and interest by policy makers and planners.
- The difficulty to fully ensure anonymity has influenced the availability of interviewees in particular when they had been still highly exposed to political pressure.
- The presented interview data provide illustrations for issues that were indicated by a number of interviewees from different perspectives. Thereby they not only illustrate different points of view. They also provide a complementary data for a comprehensive picture of the process.

3.1 Methodology

The project followed a case study approach which is common for research where representative surveys cannot be applied and the major aim is the detailed exploration and better understanding of highly complex social processes such as decision making in regional planning. The rationale of a case study approach rests on a multi-method research design that brings together various data about the context of the case (here the national, state and regional context and how that influenced the set-up and work of the Latrobe Valley Transition Committee) and detailed analysis of the processes (here we are using interviews with members of the committee and some complementary interviews with the community to develop a good understanding and broad picture of the governance structure and how it worked in social practice). This is complemented by regional context analyses which include the history of collaboration and governance structures in the region, social and economic drivers and how they have changed over time as all these underpin and structure the processes we are observing. Since they are part of common background knowledge of our informants they often remain implicit in interviews when not addressed directly. Therefore this context knowledge was not only important for understanding the region but to inform our interviewing.

In the following we outline the character of the case study approach before we describe in more detail the process of finding and changing the case study that seems to reflect the endemic uncertainty involved in regional planning. We also review the changing support our project found depending on the degree people are still exposed to political pressure and risks involvement with our research could bring. This is particularly the case when researching a relatively small group such as the members of the Latrobe Transition Committee where anonymity is very difficult to retain even when narrations are fully anonymised. As a result interviewees often tried to communicate issues by examples from

other contexts to raise issues rather than exemplify issues by the Latrobe Valley Transition Committee. However, not all felt that political pressure and provided rich material and deep insights into the planning process.

3.1.1 The case study approach

The case study approach is used to answer the question "What is going on?" through the study of a single case or entity over a period of time (Bouma and Ling 2010). The LVTC provides a highly suitable case study as described through the five components that Yin (2006) considers are important for research design. These are:

The central research question - Generally the case study approach is recommended for "how" and "why" questions. In our research they are secondary to the main "what" question: What are the negotiated processes of decision-making? (e.g. What is accepted as the knowledge base? How is responsibility shared or shifted? The question is intended to identify key features of the case study applicable to climate change adaptation. Secondary questions are:

- At what level of government are decisions made in relation to adaptation to climate change and who is involved?
- What are the identifiable rationales of involved stakeholders?
- How are the views of the public incorporated into decision-making?
- How does uncertainty in climate scenarios or population projections and other forms of uncertainty influence planning?

Its propositions - the proposition was based on the perceived success of an inter-agency planning process so the aim of the research is to identify any legacy issues in relation to inter-agency decision-making processes.

Its unit of analysis – the LVTC case study provides us with clearly defined spatial and temporal boundaries. The study is focused on the Gippsland region and there are different phases to the deliberations. The analysis shows how the LVTC changed over time to focus on different objectives – developing the Latrobe Valley Industry and Employment Roadmap, then the Advice to Governments whilst responding to changes in Federal Government policies in relation to the contract for closure process and a price on carbon and to consider the consequences for Gippsland.

The logic of linking the data to the proposition – this is the challenging component of the research as scholars have a wide range of approaches to addressing issues of how we approach and improve decision-making processes as well as broad ranging opinions on how to adapt to climate change. The authors have addressed these issues by complementing a review of the literature on regional planning, communicative planning and risk studies with the findings of the case study. The responses of the people interviewed have been carefully

analysed through a process of identifying key themes to interpret their understanding of the decision making process and how the knowledge base was incorporated into their decision making.

The criteria for interpreting the finding – the case study approach expresses our response to the research questions. It is presented through a series of themes and describes patterns of interactions and patterns of power and submission between members of the LVTC. Whilst we do not set out to describe a successful process to manage risk and uncertainty in climate change adaptation, the research seeks to develop guidelines for good governance in climate change adaptation through an examination of the planning processes of the LVTC.

3.1.2 Finding a case study

Our original research plan involved collaborating with the ongoing project "Agriculture industry transformation – Gippsland" (Faggian et al 2014) by evaluating its process and its impacts. Our intention was to go beyond the parameters of this project by engaging with a number of stakeholders not involved in the process to highlight the broader governance context in which the research was being developed. Since this project was placed on hold for a period of time, we sought another case study that would allow us to observe the use of knowledge and processes of decision-making.

When searching for an alternative we became aware of a major strategic planning process that promised to allow us to observe planning in action. At the time coal based energy production in the Latrobe Valley was under scrutiny as Hazelwood was identified as the least carbon efficient power station in the OECD because of its outdated technology. International pressure for climate change mitigation requires a long term transition of the region's economy. Thus, we decided that the Latrobe Valley Transition Committee (LVTC), established in October 2011 to support the transition of the Latrobe Valley economy, would be an excellent case study for the practice of climate change adaptation policy. In particular with the introduction of the carbon pricing system on 1 July 2012 by the Commonwealth Government and the Commonwealth's contract for closure process it was likely that the Latrobe Valley would require considerable economic transformation in a relatively short time period.

3.1.3 Gaining access and information

A successful research outcome requires an honest and open process of engagement to ensure that each party is clear on the objectives and intended outcomes. The project experienced a number of delays as a consequence of the role of gatekeepers who made it difficult or delayed access to information or to people involved in the LVTC. Some State Government personnel, integral to the establishment and planning processes of the LVTC, were not prepared to engage with the project due to the perception that the knowledge generated through the project may contradict or in some way challenge current government policy. As a consequence a lot of time had to be spent discussing the research

process and the intended outcomes to ensure a high level of comfort with the potential outcomes.

Federal Government

Regional Development Australia was an important collaborator in the LVTC process. Their priority was on developing the Advice to Governments paper to clearly establish the strategic basis for planning in a low carbon economy. Members of this group had recently left their former positions and were now working in new roles within different organisations. However, they did agree to being interviewed and provided valuable insights into the processes from a Commonwealth Government perspective. In addition, they were particularly reflective on the process given they had new responsibilities and wanted to ensure a legacy of their contribution endured.

State Government

Regional Development Victoria was central to the decision making process as its role was to provide the secretariat for the LVTC. This involved developing the agendas and preparing all the documentation for the meetings as well as commissioning expert advice. Some RDV personnel who were members of the LVTC declined to be interviewed. However, members of the secretariat provided background information and documentation on the LVTC and agreed to be interviewed to discuss its establishment.

Regional Government

The Gippsland Regional Plan Leadership group (GRPLG) combines key decision-making bodies in Gippsland. The group is made up of: Gippsland Local Government Network; Gippsland Regional Managers Forum; and Regional Development Australia (Gippsland). The Group is chaired by the CEO of East Gippsland Shire and is supported by an Executive Officer and four thematic strategic advisory groups. These being:

- Economic Development—Chaired by members of the Committee for Gippsland
- Low Carbon Economy Transition—Chaired by members of the Gippsland Local Government Network
- Environment and Natural Resource Management—Chaired by members of the State Government's Regional Managers' Forum
- Health and Community Wellbeing—Chaired by members of Regional Development Australia, Gippsland

The project team gained the support of the Gippsland Regional Plan Leadership Group and some members provided ongoing advice and support to the project as well as participation through the interviews. It was important for the project team to work collaboratively with the GRPLG as they are currently undertaking a review of the Gippsland Regional Plan (GRPPCG 2012), a significant strategic planning document aimed at guiding the future

development of the region. A presentation was made to the group in November 2013 where negotiations commenced as to whether or not the project team could support the GRPLG in engaging with the community in a visioning process that would feed into a review of the Gippsland Regional Plan. This did not eventuate due to a perception that multiple approaches to a visioning process would not be helpful and that an in-house process was more appropriate. Our aim was to empower groups who were not part of the previous decision making process to participate in the negotiation of policy outcomes. It was intended as a democratic process aimed at enabling new visions of the future to emerge and new ideas to be raised.

The review process for the Gippsland Regional Plan spanned the first half of 2014 and finding a time that did not conflict with multiple activities planned by the GRPLG was difficult. In the end no member of the GRPLG was available to attend the Project's final workshop due to other commitments. However, a series of side meetings and discussions were held to identify the next steps and to ensure the outputs of the project would be available for their reference. This process of engagement provides a significant lesson in relation to the co-production of knowledge. When embedded local processes are already underway and new processes are being developed, there is the need to build trust over a long period of time and to explore the potential to utilise expertise other than the one you are most familiar with such as supporting input from people from different disciplines, backgrounds, organisations that are directly impacted by the decision but do not have direct responsibilities for decision making, different points of view etc. It was not so much a lack of commitment or effort that the parties could not come together in a workshop aimed at creating a new vision of Gippsland, rather it was a lack of ability to engage in two different social worlds – that of research and the practice of policy making.

Local Governments

The leadership team of the Latrobe City Council and the East Gippsland Shire provided important advice and information to the project and were actively engaged throughout the process whilst the Wellington Shire became involved towards the end of the research process. Their deep commitment to achieving long-term benefits for their communities was clear and they provided every support to ensuring a productive and beneficial research outcome by agreeing to be interviewed and providing introductions to their networks.

Policy vs politics

The project highlighted the chasm between the development of policy by the public sector and the role of politics in setting and changing the agenda. The significant change in the political landscape impacted on the ability of those involved in the policy development process to achieve clear policy outcomes. Once the contract for closure negotiations ceased one of the main drivers for a quick and effective strategy was lost. The second significant political dimension was the election of the Liberal National Coalition Government that had

as a major platform to repeal the carbon tax. Therefore, the two main policy drivers were no longer of relevance to the planning process. This effectively ended the deliberations of the LVTC, which by that time had already developed the Advice to Governments document outlining their policy objectives.

Although the political landscape changed significantly, it remains relevant that the Latrobe Valley is likely to continue to transition its economy over the long-term in response to global imperatives to reduce greenhouse emissions. Of importance to any discussion on policy vs politics in the Latrobe Valley is the need to create spaces within regional institutions to enable discussions on issues ranging from the lifespan of high polluting coal fired power stations to investment in renewable energy to carbon sequestration and the role of new industries not connected to the coal sector. Creating opportunities to discuss challenging issues both within regional institutions and with the public assists in building community support rather than political alienation or a climate of fear. Otherwise grievances will continue and manifest themselves in a number of ways that cannot be predicted and resistance may build up over time towards policies that have beneficial outcomes to the region.

3.1.4 Interviews and anonymity

It is difficult to secure anonymity in a case study with a small sample size. Some interviewees sought to obtusely describe issues or were reluctant to provide more obvious examples to highlight moments of potential conflict, or to describe decision-making processes. Some interviewees also felt bound by the confidentiality of the meetings and chose not to provide examples of current opinions or to describe policy stand points.

Altogether six members from the committee representing different affiliations were interviewed. Although we have tried to accommodate a level of anonymity, it may be possible for those involved to appreciate the position of these interviewees in terms of their perspective in explaining the process. We have not set out to provide a preferred view in this study.

We have complemented the interviews with members of the LVTC with State Government policy experts and members of the broader community. The purpose of selecting some community members was not to provide a representative sample but to gain insights about some of the differing views that were not considered as part of the LVTC though they represent large groups of the community (e.g. Gippsland women, medical practitioners, Local Government professionals, young people).

The National Statement on Ethical Conduct in Human Research (NHMRC) sets out the national guidelines for ethical conduct in research involving human participants. The University of Melbourne's Human Research Ethics Committee uses these guidelines as the basis for approving research. An application was submitted and approved by the Human Research Ethics Committee and the project was designed in accordance with the guidelines.

It included the presentation of a Plain English statement outlining the aims of the research to all participants. The purpose of the Statement is to promote ethically good research that accords participants with the respect and protection that is due to them, and is of benefit to the wider community. The Statement clarifies the responsibilities of researchers in the ethical design, conduct and dissemination of results of human research. In addition, a Consent Form that was provided to and signed by all interviewees acknowledging their participation in the research, the recording and transcribing of interviews as well as the use of the information provided.

The case study draws upon the perspectives of those who chose to be interviewed about the processes of the Latrobe Valley Transition Committee to which they had either direct involvement or in cases where there was no direct involvement their responses reflect their thoughts on what they had heard or read in regards to the process. Whilst their opinions have been recorded but they do not necessarily reflect the opinions of the committee, groups or organisations in which they are associated.

3.2 The regional context and the governance framework

This section gives evidence for the economic, environmental and social context of the case study, the planning of the economic and social transformation of the Latrobe Valley region, in more general terms as well as the formal governance structure of the Latrobe Valley Transition Committee. This information is important to better understand the conditions which informed the work of the LVTC and how these might have framed the decision making process. It also provides some insights into transformative processes that are already under way even though not necessarily fully reflected or acknowledged in the debates of the LVTC.

Gippsland has well established regional networks that have been operating over a long period of time. We have discussed the Gippsland Regional Plan Leadership Group whose membership is linked to other key groups. The intention of the research was not to undertake an extensive network mapping exercise but to discuss in broad terms the way in which networks are established, how membership of the networks are reliant upon organisational leadership roles and discuss the presence or absence of voices from the broader community in the Advice to Governments and the Roadmap process.

The literature review highlights the way in which innovation and the dynamics that drive it are central to questions of political power and influence. Considine et al. (2009) have identified two components in relation to power – institutional power and the power of political actors to influence the path of innovation (agency power). There is a great deal of debate in the literature (Luhmann 1993; Renn 2008; Habermas 1984; Considine et al 2009; Hajer 2009) in regards to how to recognise those people who have power, how it is wielded how it filters out alternative views, agenda setting etc. what is of importance when considering the role of networks in Gippsland is to consider whether or not the same people

are present in the range of organisations that contribute to strategic planning. In addition to this type of institutional power the question is whether or not there is an opportunity for a broader range of policy ideas to be considered and not filtered out and is there an opportunity for the broader community to openly raise issues rather than generating enormous conflict? The power of networks at the local level could be investigated through an analysis of the patterns of interactions to highlight the relationship between power and innovation inside government but that is not within the scope of this study. We are seeking to raise the question for each of the regional institutions to consider the way in which these well-established networks currently operate in Gippsland and their capacity to produce innovative responses to policy questions that rely upon new approaches to managing long-term intractable policy problems.

3.2.1 Economic drivers in the region

Extensive research has been undertaken in Gippsland to identify the key economic drivers. Many of those interviewed suggested that the knowledge base was already significant "planned to death" is how one interviewee described it. It was now time for decision-making. The most significant strategic planning process underway in Gippsland is the Gippsland Regional Plan (GRP) as it sets the strategic direction for the future of the region. First published in 2010 the plan is currently being updated. The GRP is driven by the Gippsland Regional Plan Project Control Group whose members are drawn from a range of organisations that include: The Gippsland Local Government Network; Gippsland Regional Managers Forum; and Regional Development Australia (Gippsland) with support from private consultants. Consultation with the community was undertaken through a series of themed workshops in 2009 where some 150 people attended.

The Gippsland Regional Plan addresses three major themes: **a resource based economy**; a **growing community**; the **region's diverse landscapes**. In relation to the first theme—a resource based economy—it is clear from a range of publications that the resource based economy shapes decision making in the region (GRPPCG 2010; State Government of Victoria 2012a). The top five employment sectors of manufacturing, construction, mining, agriculture, forestry and fishing and electricity, gas and water supply generated some $9.46 billion of total regional exports in 2010 (GRPPCG 2010). As a consequence of the reliance upon these five sectors, a significant concern for regional planners was the impact on the region of the Federal Government policy of placing a price on carbon as it was seen to have the potential to have a detrimental effect on the regional economy.

This concern for the economy can be contrasted to the current and potential impacts of climate change on the resource base, particularly through extreme events such as fire, floods and drought, evident over the last five years – a fire in the Hazelwood coal mine started by a nearby grass fire on 9 February 2014 and continued burning for 29 days and had a significant impact on the health and wellbeing of the community; extensive flooding

occurred in East Gippsland in June 2012; flooding of the Yallourn coal mines occurred in 2012 making the mine inoperable, to name a few examples. The capacity to manage these extreme events is essential to the continued economic success of the region.

3.2.2 Social drivers in the region

Whilst the Gippsland landscape is diverse it is a relatively socially cohesive place in which to live given that the vast majority of its residents (an average of 83%) were born in Australia and the second largest group were born in England (an average of 3.8%) (ABS 2011). Bass Coast (20.8% born overseas with 5.4% from England) and Latrobe (19.4% born overseas with 3.1% from England) have been the most successful in attracting overseas-born residents and it is projected that this will only increase (GRPPCG 2010).

This social cohesion has both strengths and weaknesses as evidenced by the recent community based response to coal seam gas exploration in the region. A groundswell of capabilities emerged to oppose the exploration of coal seam gas on farms within the region. A successful campaign led to the State Government supporting a moratorium on mining coal seam gas in the region. This strong and cohesive community response provides an example of its potential to organise and effectively deal with an issue. Whilst some politicians and administrative operatives struggle to communicate in a way that reaches the broader community, this 'site of resistance' has emerged and has been highly successful in communicating with the broader Gippsland community.

Hajer (2009) describes this as "citizens appearing as a rapid-deployment force that can mobilise and make itself felt when need be". This goes counter to the idea of the citizen as a passive member of the community. Instead, these are actively engaged citizens who found their way into policy making processes in Gippsland. This highly engaged public is the product of practices and storylines that constantly change meaning in response to new and emerging issues. An emerging new community - some 3,000 people from the African continent (Centrelink feedback) have emerged within the region (GRPPGC 2010). Improvements are required in the capacity of current governance arrangements to take into account emerging voices in public debates and incorporate them into decision-making practices.

Population projections outlined in the Gippsland Regional Plan (GRPPCG 2010) for both the LGA of Wellington and East Gippsland were an increase of 16.7%. The population data provided by ABS (ABS 2011) and outlined in **Table 1** are significantly below expectations having achieved actual population increases of 3.1% and 5.4% respectively whilst population projections for Latrobe (29% projected) were also not achieved (14.3% actual). By way of contrast the LGAs of Baw Baw (15.7 % actual) and Bass Coast (11.3% actual) were more accurate in projecting their population growth. It is important for strategic planning purposes to understand why these projections are significantly lower than expectations.

Table 1: ABS Data on population and country of birth for five Local Government Areas in Gippsland

	LATROBE	BAW BAW	EAST GIPPSLAND	WELLINGTON SHIRE	BASS COAST
Population					
2011	72,396	42,985	42,196	41,335	29,614
2006	63,329	37,179	40,037	40,080	26,548
% Increase	14.3%	15.6%	5.4%	3.1%	11.5%
Median Age	39	40	47	41	46
Country of Birth					
Australia	80.6%	85.3%	84.1%	84.2%	79.2%
Next Significant	England 3.1%	England 3.5%	England 4%	England 3.0%	England 5.4%

Source: Australian Bureau of Statistics 2006 and 2011 Census of Population and Housing

Victoria in Future (GRPPCG 2010) projected that regional increases would not be spread evenly throughout the region as the western end of Bass Coast and Baw Baw would experience higher growth due to its proximity to Melbourne and the quality of their natural environments, particularly along the coast, which is attractive to retirees. Innovative strategies are required to take into account regional differences in populations and to consider growth management strategies that fit with the specific requirements of a place. Collaborative decision-making is not an easy process since the social realm is characterised by stakeholders with contradicting interests and a public that is diverse and fragmented but as many authors suggest it is important to attempt an open process of engagement (Fischer 2003; Forester 1999; Hajer 2009; Healey 2006; Innes & Booher 2003).

Key points highlighted in the Gippsland Regional Plan that require innovation strategies that respond to regional variations are:

- The overall population is anticipated to grow by around 50,000 by 2026 but will have regional variation across Gippsland.
- The population is ageing as it is projected that around 30% of the population will be over 60 by 2026 but this is not a geographically even process.
- Population pressures will be most significant along the coast.
- 90% of housing is constructed as separate houses and given that lone households are increasing and the population is ageing alternative housing options are required although this proposition is not fully supported in current research (GRPPCG 2010) as most people feel bound to their current houses. Further

analysis is required to consider the consequences of building more of the same or not responding to the needs of potential/future migrants.

- Young people have consistent patterns of migration to Melbourne for education and employment.

Employment

Future trends identified in the Gippsland Regional Plan (GRPPCG 2010) include a decline in the significance of the regional economy to Victoria, a projected lowering of participation rates in employment and a decline in income levels. The reasons cited for this pessimistic outlook are related to its population structure (older than average) and exposure to the impacts of climate change and mitigation policies, particularly the carbon-trading scheme (GRPPCG 2010).

Table 2: ABS Data on Income and Employment for Five Local Government Areas in Gippsland for 2006 and 2011

	LATROBE	BAW BAW	EAST GIPPSLAND	WELLINGTON SHIRE	BASS COAST
Median Weekly Household Income 2006 and 2011					
2006	$784	$897	$653	$773	$636
2011	$942	$1,025	$798	$906	$855
% change	20%	14%	22%	17%	34%
Employment 2011					
Full-time	54.7%	56.6%	51.8%	56.7%	54.2%
Part-time	30.7%	32.0%	35.6%	31.1%	34.4%
Unemployed	7.9%	4.9%	5.5%	5.2%	4.7%
Occupation 2011					
Technicians	18.9%	16.6%	15.1%	16.7%	18%
Professionals	15%	16.4%	14.9%	15.3%	14.5%
Managers	9.4%	15.9%	15.7%	17.2%	14.6%
Industry of Employment 2011					
Industry of employment top response	School Education (4.9%)	School Education (6.5%)	School Education (6.4%)	Dairy Cattle Farming (6.1%)	School Education (5.1%)
Industry of employment 2nd response	Hospitals (4.5%)	Hospitals (3.9%)	Residential Car (4.5%)	School Education (5.9%)	Cafes & Restaurants (4.7%)

Source: Australian Bureau of Statistics 2006 and 2011 Census of Population and Housing

Table 2 provides more recent data (2011 ABS data) than presented in the Gippsland Regional Plan 2010 (2006 ABS data) to highlight regional variation and any changes that occurred. The median weekly household income for Baw Baw was the highest in 2011 at $1,025 compared to East Gippsland with the lowest median weekly household income in 2011 of $798 (ABS 2011). However, the LGA of Bass Coast had the highest increased in median weekly household income between 2006 and 2011 with a 34% increase whilst Baw Baw had the lowest with an increase of 14%. This variation in income reflects the need to address regional innovation that responds to the different social landscapes apparent across Gippsland and gives some indication of the challenges for planning.

Employment participation rates vary across the LGAs (highest employment participation rates are in Bass Coast and Baw Baw with 88.6%) and the most common type of occupation is technician. The top five sectors for employment identified in the Gippsland Regional Plan 2010 are: health and community services; manufacturing; education; retail trade; property and business services (GRPPCG 2010). The top response in relation to the industry of employment identified in the ABS data (ABS 2011) identifies school education as the sector providing the highest employment rates within the majority of LGAs (refer to Table 2 above). Once again, regional variation is apparent in employment participation rates and requires a carefully managed response with an overarching narrative of innovation as a business as usual approach is clearly not appropriate given declining income and employment levels.

Education

A number of studies have identified low participation rates in university education as well as completion rates for Year 12 (GRPPCG 2010:p118). Speculation as to the reasons include: financial costs associated with travel and accommodation; limited range of local course offerings; relocation issues associated with moving away from Gippsland; lack of adequate transport.

Table 3: ABS Data on Education Levels for 2011 for Five Local Government Areas in Gippsland

	LATROBE	BAW BAW	EAST GIPPSLAND	WELLINGTON SHIRE	BASS COAST
Education					
Secondary	23.5%	26%	24%	24.2%	21.1%
Trades	8.6%	8.4%	8.7%	7.1%	7.0%
Tertiary	8.3%	7.1%	4.6%	5.0%	4.5%

Source: Australian Bureau of Statistics 2011 Census of Population and Housing

These issues support the data for the low participation rates in tertiary education in East Gippsland (4.6%) due to its relative isolation but do not explain the low rates for Bass Coast (4.5%) that is closer to Melbourne.

The GRP highlights a lack of knowledge in relation to the type of skill shortages in Gippsland and the Gippsland Local Government Network is conscious of the need to increase participation rates for secondary and tertiary students as well as trade qualifications for Gippsland students. This is an area of high complexity that is so fundamentally important for the region's future.

3.2.3 Policy making and its influence on regional planning

The Gippsland Regional Plan (GRPPCG 2010) argues that the sectors with the greatest potential to develop into the future are: coal derivatives; agribusiness exports; health; education; defence; and in the longer term the services sector. The first two are reliant upon the natural resources that the region provides whilst the latter relies upon educational qualifications and innovation. Whilst it is anticipated that the natural resource based industries will be impacted by climate change, the other sectors are currently hampered in their development through a lack of skills and education and training (GRPPCG 2010). The GRP argues that without addressing the challenges and opportunities in its transition to a low carbon economy, Gippsland will experience an economic downturn (GRPPCG 2010:p81).

Two aspects of the literature are important when considering the capacity to develop new industries within the region. The first is the work of Laws and Rein (2003) who see the concept of framing as providing a particular way of representing knowledge that bounds and orders it from a chaotic situation whilst providing a means of interpretation. This is particularly relevant to intractable policy issues such as climate change adaptation or social issues such as low participation rates at universities. They describe moments when systems are open to new insights, ideas and behaviours. It is particularly relevant to our understanding of the decision-making processes undertaken by the LVTC. In two examples an opportunity to reframe the policy making process occurred, the first when the Federal Government withdrew from negotiations with the owners of the Hazelwood Coal Fired Power Station to provide compensation for the closure of the power plant and the second is the current policy to rescind the legislation that placed a price on carbon.

These two policy changes provide moments in time to consider how the region responds to changes in policy direction and to ask whether this created new ways of framing the issues and new visions for the future of the economy. The second is a discussion on how knowledge is generated. There is a strong case for the co-production of knowledge that includes both science and the social sciences along with participative approaches to decision making (Renn 2008; Ison 2010; Healey 2010). In the areas of education retention rates and transforming the Gippsland economy, the role of systems thinking advocated by Ison (2010) is valuable in assisting in the design of deliberative processes that combine with social

learning processes to think differently when dealing with these complex problems. The case study provides an opportunity to engage with multiple stakeholders in a multi-level decision making process. The case study will assist in our understanding of whether or not it succeeded in reframing the issues or engaging in the co-production of knowledge to generate new responses to these intractable issues.

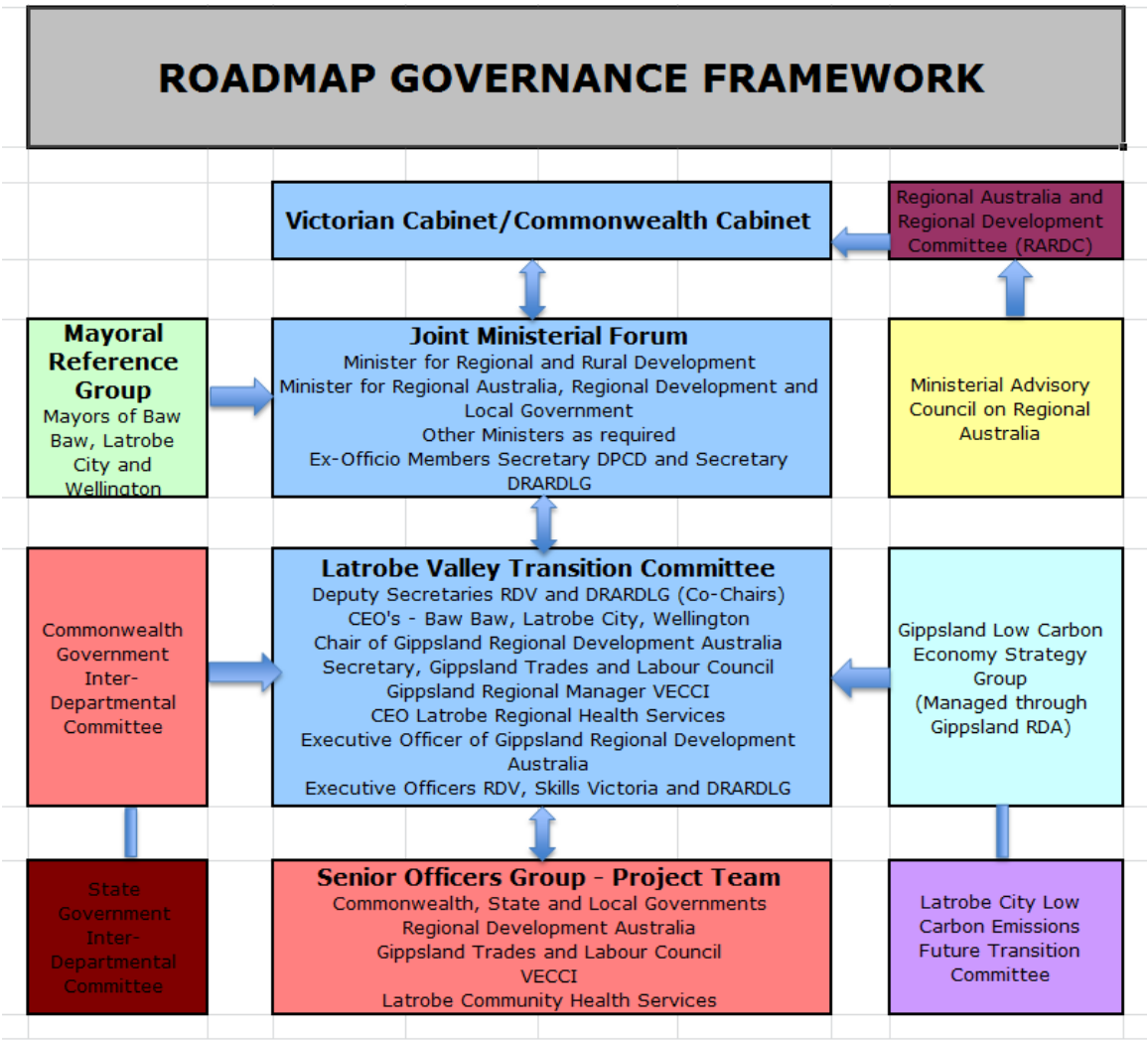
3.2.4 The governance framework – The Latrobe Valley Transition Committee

The Latrobe Valley Transition Committee goes back to the collaboration between two politicians, the Hon Simon Crean from the Labor Party and the Hon Peter Ryan from the National Party who had not only a political interest but also a personal bond to the region. The Latrobe Valley Transition Committee (LVTC) was established in October 2011 as part of the Commonwealth and Victorian Government's Agreement for Cooperative Arrangements for the Gippsland Region aimed at supporting the transition of the Latrobe Valley economy. This agreement outlined the following governance arrangements: the establishment of a Joint Ministerial Forum led by Hon Peter Ryan, the Victorian Minister for Regional and Rural Development and the Hon Simon Crean MP, Federal Minister for Regional Australia, Regional Development and Local Government; a Mayoral Reference Group aimed at identifying local issues and concerns; and the LVTC. The LVTC was tasked with providing a report to the Joint Ministerial Forum by June 2012 providing advice that would:

1. identify challenges and opportunities facing the region's economy;
2. set a clear, long term direction for industry development and employment growth; and
3. outline processes to support coordinated planning and investment between levels of government, regional institutions and businesses.

The LVTC included representatives from the Victorian and Commonwealth governments, the region's three local councils (Baw Baw, Latrobe City and Wellington), the Regional Development Australia Gippsland committee, Victorian Employers' Chamber of Commerce and Industry, Gippsland Trades and Labour Council, Monash University and Latrobe Community Health Services. A **Latrobe Valley Transition Committee Discussion Paper** was prepared in 2012 and provides a summary of the LVTC's preliminary analysis of the Latrobe Valley economy (State Government of Victoria 2012b). The LVTC also contributed to the **Latrobe Valley Industry and Employment Roadmap** published in 2012 (State Government of Victoria 2012a). The Roadmap was the State Government's response to the introduction of a carbon pricing system and the Commonwealth's contract for closure process aimed at identifying coordinating actions and leveraging Commonwealth Government assistance and funding opportunities to support the transition of the Gippsland economy.

Diagram 1: The Latrobe Valley Transition Committee within its governance framework



Source: Regional Development Victoria, 2012, Latrobe Valley Transition Committee: Report to Government, Department of Planning and Community Development, Melbourne.

3.3 Empirical findings – the interviews

Summary: Key findings from the interviews

The regional identity is driven by the major industries that include mining, energy, agriculture and forestry. However, the economic data shows that other important industries are developing such as health, education, defence as well as the services sector where there is potential for developing small business innovation.

How the regional history has shaped the processes around the LVTC:

- It established an expectation for significant funding support due to the historical impacts of the privatisation of the State Electricity Commission and its role as an energy provider for the state.
- It informed the selection of committee members as they were linked to the traditional major industries in the region.
- It prevented the development of visions or a visioning process for the region beyond these traditional industries and the type of infrastructure that supports these industries.

The formal set up of the committee shaped the policy process in a number of ways:

- It reduced the opportunities of the region to take ownership of the process
- It did not support a long term economic transformation for a climate change world.
- It was driven by the agendas of Federal and State ministers.
- Additional stakeholders were invited (health, unions, education) but found it difficult to put forward their perspectives.
- State and Federal members successfully defined the purpose of the committee which remained somewhat blurry for a number of stakeholders/members.
- State/Federal Governments determined the agenda and the studies that were commissioned (e.g. social impact study favoured by the region was rejected).
- Direct negotiations regarding funding ran parallel to the committee.
- Project funding was driven by a rational that prioritised relatively short-term, shovel ready projects with directly measurable outcomes.
- There was limited community input into the process which restricted the ability to gain broad community support for the process and ensure an enduring legacy
- Inter-agency governance processes are effective in building cooperation and trust between established regional institutions.

Other external issues identified:

- The regional university has not yet played a significant role as a regional innovator but the new arrangements that have recently emerged as Monash University becomes the Federation University is seeking to offer greater educational opportunities to regional Victorians.
- The involvement of small business remains a key issue as there is little organisational representation of this sector.

3.3.1 How history shapes the present

The region was subject to the **privatisation of the energy sector in the 1990s** and the social impact is still being felt. Unemployment and poor financial circumstances over generations are only one of the outcomes for a disadvantaged community. Many of the interviewees from the region emphasised how present the experience of the privatisation still is for the regional identity and that the aftermaths can still be felt.

> We're still dealing with the second generation and third generation of disadvantage tracked back to that privatization [of the SEC]."

These experiences were described by regional leaders quite dramatically illustrating the fear and anxiety that still exists through the hardship experienced in the past:

> People were trapped property prices dropped through the floor. You couldn't sell your property and then move somewhere else and buy a house, you just couldn't afford to do that. There were three bedroom brick veneer houses with new kitchens, new bathrooms et cetera, out at Churchill, for under $30,000.
>
> There was an initial boost, because there were a lot of redundancies, and people took early retirement, bought new cars and white goods and TVs and all that sort of stuff. After that, it sort of fell apart. So we still have generational unemployment – we've got families that have never had a worker, a person in the family employed, still. And, you know, that's changing.
>
> But that level of fear is still out there. It shouldn't be a surprise, because the industry itself, the power industry, has an aging workforce. A number of those people were survivors in the system after the privatisation. … The people in the industry have a genuine fear about, loss of lifestyle, loss of job, having to move from the region to some other region in Australia, et cetera. And you know, genuine memories of hardship.

We found not only the still pervasive experience of the privatisation of the energy sector but the notion of a 'social licence' for burning coal. Interviewees expressed a strong identity related to the exploitation of the natural resources of the region in particular coal. For this reason there was some doubt about the capacity within the region to generate other successful economic activities not associated with brown coal:

> It's a region that's recognised that it had a social license that went beyond a social license in other regions. They were used to 50 years of burning brown coal. They were quite prepared to get their hands dirty, and they weren't particularly; I won't say they weren't environmentally focused, but they recognised the importance of the timber industry down there, in the brown coal sector.
>
> There was a little scepticism about climate change.

There was agreement among many members of the committee that there is a future with brown coal and there was frustration among the local leaders that shared that view that there had been a lack of investment into brown coal related technology:

> Well there's the view that the only reason these brown coal generators should be shut is because they were old, not because they were omitting, you know. They'd lived with it for a long time. There was a view that there was life in brown coal, and I shared their view; there is recognition that there hadn't been enough investment in brown coal generation sector over a course of 50 years to get those generators up to some sort of scratch. But that argument was lost a long time ago, when the Government decided to sell them off and there was no investment really thereafter in the plant and equipment because they were sold at such high prices.

Most committee members agreed that there is a strong attitude in the region that significant funding is required to manage the necessary economic transformation.

> I suppose one of the levels of cynicism that came through in the community is that it's been spoken about so often, about the big projects that were going to happen in the region and were going to transform brown coal, whether it be sequestration, whether it be drying out the brown coal and exporting it, whether it be the fertiliser productions. Huge capital investment promised over, I reckon, 10 years that hadn't materialised. So there was a recognition that they might have been running out of time.
>
> But generally there's a view, the region is a productive region. Their social license to do things with brown coal and forestry, and a little bit of frustration that not enough attention is given to the region to ensure that capital formation, to make things happen.

The composition of the committee represented a relatively narrow focus on coal and energy production since many members had links to the industry. As a result members of the committee recognised that there may be a bias in the debates towards coal and energy production that may limit the consideration of alternatives for the future economic development of the Latrobe Valley.

> The background to Latrobe had been very mechanical. I mean, XY member of the committee, for example he's very used to the power industry. He's very used to working with workers in that industry so he understands that. So that's how he views the world and that's how he talks about the world. He's open to thinking about other things, to give him credit, but it's not been his overwhelming experience, so it's not his natural position and, similarly, XZ member of the committee comes out of the power industry. So most people would sit round a table and have either come out of or are in the power industry or have been related to the power industry so that's

> their dominant sort of paradigm. … Here that's the dominant thinking and so you've got to work against that all the time and it's erroneous too, because when you look at it on the hierarchy of industries now in Latrobe, it's dropped right down the rankings.
>
> I think this region sort of knows how to play it as a card too. I mean, it lived off the back of the public you know, electricity industry but we're used to a very good life in Latrobe and then of course it got privatised and then it all went downhill but then they got used to assistance and had a sense of entitlement. They know how to use the power industry as a bit of a lever. But I don't know whether we do it particularly well.

This perspective from within the committee is complemented by members of the community who see a future for the Latrobe Valley beyond coal. They are rather critical ofthe narrow focus on coal and electricity that restricts the innovative potential of the region.

> My involvement with some of the transition stuff has been that there are a lot of people who are very happy to engage in changing the way we burn stuff, but not really in changing the way we do things, so that we stop burning stuff. I think there's an awful lot of people who don't see the big picture and they just see the little narrow universe that they live in and they just want to tweak it a bit and keep on doing more of the same old stuff, without really making enough major changes to make a difference, and that's the frustration.

The way in which the privatisation of the energy sector was managed in the 1990s was a key driver for stakeholders from all levels to look at a better approach for regional resilience and development. It was one reason for the councils to be proactive in preventing something similar from happening again.

> "So when the government came in and said we're going to privatise the electricity industry, there was no thought to what might be, the social and economical impacts at a local level, it was all about reducing state debt, increasing, you know, … et cetera, et cetera. That resulted in significant pain for this community over a long period of time. That was one of the drivers for firstly the Council here developing a proactive policy for the transition and focusing on both the economic and social transition of the community and learning from, you know, 20 per cent unemployment rates, property prices through the floor, suicides up through the roof, family breakdown through the roof, et cetera, et cetera, after the privatisation. So, it was about making sure that we didn't get into that, ah, sort of situation again."

It also drove political commitments on the state level. The former and the incoming governments in Victoria promised funding for the long term economic transition of the region that is still impacted by the privatisation.

There is also interest from the Federal government to ensure that the carbon tax and closure of the highest coal burning power plants would not adversely affect the regional economies. Whilst the political aim was to close Hazelwood, it was accompanied by the concern in regards to the political costs as the economic impact of these closures would be significant. This may have influenced the slow progress of negotiations that needed to find a balance between achieving the twin policy goals of lowering emissions and achieving economic prosperity. State, federal and regional interests complemented each other in the management of the closures (Federal responsibility) and regional economic transformation (State responsibility) and bringing money to the region through the transition fund (regional government).

3.3.2 Governance structures

A focus on governance arrangements identifies how the structures of "state and societal organisations are vertically and horizontally disaggregated but linked together by co-operative exchange" (Low 2005:p48). Consideration of the role played by individuals and organisations as part of these structures, the way in which knowledge sources are developed and incorporated into decision making and the processes used to make decision all have an impact on the outcomes.

Formally set up through a Memorandum of Understanding between the State and the Commonwealth the LVTC was chaired by the deputy secretaries from the Departments of the respective Ministers and resourced by their departments. Governance structures influence how the work of the LVTC unfolded, how the region was identified and positioned and influenced the attitudes and behaviour of committee members. The members agreed that the committee "was very much driven by the state and the federal governments" (LVTC member 2013, 14).

> The Committee was headed up by the two senior bureaucrats rather than the ministers themselves. They had to get the ministers and then the mayoral reference committee and then the people doing the work on the Committee itself.

These structures are highly complex with multiple political dimensions as highlighted by one member of the LVTC.

> There'll be parts of cabinet and a premier who would want to make comments that would not be well received in Canberra and vice versa. So you've got these two ministers who are trying to conduct this relationship and their respective bureaucracies trying to conduct a relationship and the region itself has multiple political threads. You've got local government and the regional political aspirations

> of individuals. That can all make it rather difficult. And you have to remember that it's not that either Minister was free to take their money and just combine it as they saw fit – they have their own cabinets to go through. So their cabinets will be debating – do we want to be cooperative and let them off the hook or do we want to make political capital out of this?

To achieve better outcomes, it was suggested by one member of the LVTC, requires a compelling argument as well as process that is broadly socialised so that there is accountability in the decision making process.

> If the prospect of collaborative outcomes is well known then it is difficulty to defend being obstructionist. It was a well-advertised and socialised process in the valley. A lot of people were watching and involved and therefore behaving like that would have its political costs. There's also the very issue of the Latrobe Valley traditionally been seen as underperforming in terms of social, academic and economic indicators long before we were talking about climate change, through the corporatisation of the SEC right through to the privatisation the valley had undergone fundamentally dramatic changes. So for various reasons governments have wanted to do something about it. So separate to the climate change policy and the consequences and whether or not you mitigate against it, there was a compelling argument for just getting money and investment and co-ordination there anyway. So all these things is why you do it and why ultimately ministers and governments go down that road.

In our Literature Review (Zinn & Fitzsimons 2014) we investigate governance cultures aimed at delivering improvements to the quality of local places and able to respond to local issues. Healey (2010) argues that the solution lies in the quality of the local policy cultures and key elements include integration across scales and jurisdictions, being well connected – ensuring that a range of voices contribute to policy development and being well informed so that people involved in decision making have the capability to gather and interpret a wide range of knowledge. Importantly for local decision making, that there is the ability to act – to mobilise and capture opportunities and enhance local conditions.

Whilst the departmental secretariat was identified as providing high quality resources and direction it was also acknowledged that it restricted the influence of the region on the process. We will see in the later sections of the analysis that the tension between acknowledging the benefits of the resources and efforts of the Departments to develop a strategic transition plan, their influence on the process was not always seen as the most democratic way of achieving outcomes.

3.3.3 The Latrobe Valley Transition Committee

Practices of the committee

The composition of the Latrobe Valley Transition Committee is made up of a number of multi-level actors with a wide range of conflicting and co-operative powers due to their different areas of responsibility. Like any structure where there are multiple actors from multiple agencies there are different values, interests and resources of power and authority. Membership of the LVTC was determined through different processes. Whilst the majority were identified through the inter-agency co-operative arrangements that included representatives from Federal, State and Local Government and regional governance partners such as Regional Development Australia (Gippsland committee), other organisations represented business interests and skills development. Members were also acquired through the deliberative process as inclusion was sought from key sectors of the regional economy such as education, health and mining and energy.

From a state and federal perspective the involvement of members builds on successful transition experience in other regions such as Newcastle in New South Wales with the closing of the steel industry in the area. The advice they received encouraged a focus on the large industries but recommended the inclusion of the unions and other sectors of the economy:

> We visited Newcastle and spoke to them about the transition of their region after BHP withdrew. So there's no sort of surprises in that there was a disadvantaged fund and a range of other things. And what they spoke to us about was the importance of having various industries but predominantly the coal industry, the unions etcetera, all around the table. So we made sure that we got those bases covered and we also included other significant industries here. So the timber industry which is impacting on the carbon tax as well. A number of committee members were able to bring sort of different perspectives to the table as well given the sort of involvement and a range of different committees and activities around the place.
>
> I think one of the benefits of having the trade unions involved on the Committee is being able to bring that raw emotion from the employees in this industry, about what their fears are. So I think the profile of the Committee was such that we were able to bring an understanding of what those real fears have been.

There was the view that "no one was deliberately excluded". At the same time, the literature points towards a broader inclusion of representatives as innovative social change requires the inclusion of new and emerging leaders from diverse sectors of the economy or from non-economic sectors to contribute new perspectives to the debate:

> Putting those people together in a regional setting is often not difficult because there aren't many of them……and in fact often I think the great risk is that you use them so often that they tire……they've got multiple demands.

The composition of the Latrobe Valley Transition Committee changed during the process of decision making for a variety of reasons. Either gaps were identified as in the case of the health and education sectors or a representative was unable to cover all aspects of the sector. This occurred in the case of the CFMEU which argued that the Trades and Labour Council did not specifically represent workers in the mining sector. Indications of why different people became involved (and dropped out) are important as key issues of who is potentially included and excluded. As highlighted in the Literature Review (Zinn & Fitzsimons, 2013), ensuring a range of voices participate in planning processes is needed to enhance the potential for a multiplicity of values and rules to be incorporated into the decision making as it assists in providing "practical solutions to social problems"(p.46) (.Renn 2006; Considine et al 2009)

The committee determined that a representative from the **health sector** be invited to join the committee in response to the effects of past policy decisions, particularly privatisation of the power industry (this indicates that the changes have been more than the divesting of the lead authority) and to consider the implications of any further policy developments on the health and well-being of the community, whilst also recognising the sector's role as a large employer within the region.

> One of the drivers for bringing the community health perspective was … we've got to go back and think about what our suicide rates looked like, what our family breakdown rates looked like, and all of those sorts of things. At that time youth unemployment was 28-30%.
>
> The community health services was brought in later with the recognition that we didn't necessarily have that community health representative on the Committee and given what happened after the privatisation in terms of community health and those sorts of things that was seen to be important. So we brought them in pretty early but they weren't in the original appointments.

An invitation was given to the **Latrobe Community Health Centre** to join the committee. The motivation to attend the committee was twofold and went clearly beyond the original idea of the committee members to have a health representative to cover the impact of transformative processes on the community. Instead, the health representative saw the opportunity to show that the health sector is an economically innovative and transformative force within the region:

> Here at LCHS we provide a lot of social support services as well as health services, we're still dealing with the second generation and third generation disadvantage

> that's tracked back to that privatisation. So we were concerned from that point of view. The other reason that we were interested was that we saw that health, potentially was a very big part of the economy in Gippsland and Latrobe Valley and was going to be an increasing part of the economy and so would provide lots of opportunities for the economy to transition into those sorts of areas.

The role of the **higher education sector** was considered highly valuable given their potential role in training the next generation of workers. However, the level of input from the University was criticised as it was felt that the university did not actively engage with its community. This might have been expressed as a consequence of the changing personal that represented the University in the committee but members were concerned that this important area was neglected.

> I think [the university] could have lifted a bit, honestly, because they are a big employer down here. They were possibly going through their own thinking around what they'd do with their campuses down there so it might have been all a bit too close.

VECCI was identified as the body to represent the private sector, both large and small businesses. The committee agreed that timber production and the energy sector were well represented but representation for small business was difficult and there were doubts as to the ability of VECCI to represent the diverse range of small businesses in the region.

> Obviously timber and paper production and the energy sector were well represented and participated very well in the process but my question would be whether or not VECCI is able to represent a broad range of businesses as I don't know their membership base in Gippsland but in the absence of any other sort of representative employer body that would have to suffice.

The LVTC report recommended more collaborative approaches in regards to regional economic development would be beneficial.

> One of the criticisms from the development of the first Gippsland regional plan was a lack of engagement consultation with the private sector. So that's sort of been taken on board now and a group called the Committee for Gippsland was formed only about 18 months ago, because there was a view at probably state and federal level and with major industry stakeholders, particularly private sector stakeholders across the region, that there wasn't this voice on behalf of the private sector.

One Gippsland developed after the LVTC completed its deliberations and came out of the Gippsland Regional Plan as it identified a lack of engagement with the private sector. This lead to a group called Committee for Gippsland that was formed about 2 years ago and its focus is on large public sector investments. An offshoot of this committee is an advocacy

group called One Gippsland that includes the Chair of the RDA Gippsland and the chair of the Committee for Gippsland advocating and prosecuting the case for major investments.

There was not a strong feeling within the LVTC that other representatives from the region would be necessary. However, when asked, some interviewees found that there might have been a weakness in the representation of the broader community. And here again we found a clear indication of the dominant rationale influencing the work of the committee, rather than taking on board alternative perspectives.

> In hindsight, if they thought about a gap, then a general community representative on the Committee may have been beneficial but I think the next thing would be well who do you select? If you take the three mayors as being representatives of their community, then essentially you've got that covered and the mayors would argue that they were elected as the representatives on the broader committee where they can provide an input. But actually sitting on the Committee itself, it was more a sort of administrator type role than political roles that were involved, you know.

Purpose of the committee

A number of views about the **purpose of the committee** have been expressed in the interviews that clearly show the different rationales members brought to the committee.

The process was driven by state and federal ministers who saw that the purpose of the committee as the development of a strategic plan for the region:

> The report process itself was eight months. The view was we needed to get this – we had enough knowledge; we had enough understanding of the region. Give the community an opportunity for input, stop the talking, the gab fest, get down and produce the report; do it in real time. And then it was really a six-month piece of work, I think, about that report process. And give some life to it; but let's get something down that's coaching and it's constructive; get it down quickly. And the sense of time, moving things along, was really important for the process; really important. Not to drag the chain. Not to drag it out for too long, 'cause I think we would have lost them.

From a regional perspective it may have negative effects resulting from the top-down approach of managing the region:

> This was always a political construction to manage the community down here, by both the state and the federal government more so the federal government.

There was a clear tension between the expectations of regional leaders to gain access to large resources for the economic transformation of the region, envisioned as large investments in new technologies that would maintain the use of coal for energy production, and the state and federal's perspective that focused on the development of a strategic plan:

> I think, perhaps, we're talking about a region that's had a lot of plans in the past, and there's probably a bit of plan fatigue, and wanting to make sure that there was some funding that was going to come their way as a result. And the challenge was to keep them recognising that there wasn't going to be a bucket of gold, and it was about getting a very clear set of priorities.

Altogether, the predominant focus of the federal government was on national policies and that government experienced some difficulties in engaging with the regional-specific issues. They pushed for a more strategic economic perspective. Following the constitutionally defined tasks, they did not see their task in managing structural adjustment but dealing with the more immediate impacts of climate policies. The state perspective was also more strategic in pushing for thinking in broader regional terms rather than at the municipal local government level. The unions were perceived as closely looking after the interests of their workers. They were also accused of focusing on the unpaid debt to the region rather than proactively developing plans for an economic transformation. Regional leaders were encouraged to think beyond their municipality focus and their desire to get funding for their own projects towards a more strategic discussion about the transformation of the region as a whole.

These different perspectives are clearly expressed in the interviews by representatives of the region and the state and the commonwealth, illustrating that these perspectives had to be negotiated in the everyday business of the committee. However, the governance structure of the committee shaped the ability of different parties to have views expressed in the development of the RM, the project that received state funding and the Advice to Governments.

> There was a confusion about it. Is this a Latrobe Valley economic recovery taskforce or a price on carbon structural adjustment taskforce? The two can look similar but they are quite different. So, it's not the commonwealth's role to go in and fix the social ills of the valley. That's a state matter. We had to constantly bring them back front dealing with the systemic social disadvantage issues facing the region and they had been in existence for many decades … What we have in common here is an economic and social regeneration to replace the disappearance of the phased disappearance of another driver. At the end of the process, people got that, I think. We started off with a huge list of all these things we needed to fix and we ended up with a narrow set of priorities. People accepted that discipline by and large, you know.

Asked to discuss whether or not there was a change in people's perspective throughout the process the following was highlighted

> It's about getting people on the same page. The unions had a different view. They wanted to protect just the energy workers. It wasn't about undoing government

> decisions around the Emissions Trading Scheme. It was recognising that it was possibly going to be viewed as yet another plan. But putting all that aside, it worked quite smoothly. Some of them had been through it before. Some of them recognised that they couldn't take a municipal local government boundary view and that we had to look at the broader region, and that was a challenge for some, but others came to the party pretty quickly. I think there's always a push to have specific initiatives recognised and funded by municipalities, and that's always a danger, and you've got to continue to bring the discussion up a bit; up a notch, to be a bit more of a strategic regional view.

There was also a need for federal government representatives to overcome their macro-perspective so they could engage in the regional issues.

> But what worked well was the fact that it was a rare time when you actually had the Federal Government, State Government, and Local Governments working cooperatively on a problem. There's a bit of frustration from the Federal Government in, 'cause it's not seen as the business of Federal Governments to get into the whole game of structural adjustment or looking too closely at a particular region. And the good thing with the Department of Region Australia, Local Government, Arts and Sport was that it was willing to look very closely at regional impacts. So that was always a challenge to keep the Federal wheels moving as much as anything else, and I'm sure the same was found at the Victorian Government level, but not as acutely. They would have had a bit more shared understanding of the need to look at the region specifically. Foreign concept for the Federal Government; it's a foreign concept.

Altogether the LVTC challenged all engaged parties to be open to the perspectives of each other. When considering the whole process most parties got something out of the process. However, the overall practices formally and informally structured unfolded in a way that it might have partly prevented an engagement with the diversity of the community to engage in a more innovative and deep transformation of the region. This remains an ongoing process that requires further initiatives and resources.

The working arrangements of the committee

Decision making practice and planning is structured by a number of factors. These can include: the formal set up of the governance structure, the groups represented with their different interests and values, and the everyday practices that influence the development of trust and the space for open debate to allow for innovative solutions. Also issues such as the time available for deliberations and the definition of the purpose of the committee influence the process and the outcomes. It is important to note that many of these factors are ambivalent. Time pressure can help committee members to focus and to support an efficient solution oriented process. A broad process with a large number of groups with

contradicting and conflicting interests usually requires more time for a constructive process to unfold. Narrow composition of governance frameworks can support smooth decision making but the exclusion of significant groups may reduce the broad support and legitimacy of the solutions (compare e.g. Renn 2008).

There have been a number of conditions that supported the constructive engagement of all stakeholders involved in the LVTC. High media interest but also the desire to prevent traumatic impacts on the region such as that which occurred after the privatisation of the energy sector. Most members also indicated broad agreement with in the committee that the reach natural resources, in particular coal, has still to play a key role in the region's future.

> I think again that genuine fear of we don't want the same thing happening to us again [traumatic social impact of the 1990s privatisation], meant that when people came to the table there was again a genuine view that it's really important that we work together.
>
> In this case, it merely was about the future of the resource and the future of the sector, and really kept at a really high strategic level around those discussions, and saying we really need the commitment from both the state and federal government to supporting things like, the centre for sustainable industries, so that we could get research and development that said, we now have to change the way that we currently use the resource, but the resource isn't necessarily bad. If we use it in a different way and for different purposes, and we don't have the emissions attached to it, then there is a future for it, as a very valuable resource from the state and national perspective. We can't keep using it the way that we've used it, we have the responsibility to change. I think that sort of genuine agreement that nobody came in here and said, "Get lost, leave us alone, we're going to keep doing what we've been doing for the last 100 years." Nobody took that approach.

While most of the members felt that the committee established a professional working environment one member of the committee did not provide the kind of input considered appropriate and one reaction was:

> He was outside lobbing hand grenades, then he came in briefly, then he sort of withdrew and just went quiet, at least for the time I was there…….we never really got him engaged. I would've loved to but…..there were only a small number of us from the commonwealth side working on this. So it was challenging.

While some committee members emphasised the good working environment in the transition committee and the history of collaborative decision making in the region, there is also an indication of a level of competition within the region.

> Within the committee itself everybody was very well-behaved … I think there's always just in the background tensions between people when there's any sort of money on the table people tend to jockey, and try to position themselves in any sort of an environment like that, you might have people around the table that are there collectively in the interests of Latrobe Valley but then, you know, they also have their own interests as well for their own agencies or services or whatever they're doing.
>
> I think there was a sense that whilst the meetings were occurring, that Latrobe City was off in the background negotiating its own deals. I don't know whether you've heard that before but, and I don't know even how true that was but, you know if I was to say you said who was the major beneficiary of this, oh, well - Latrobe should've got the most money. They got their project up, that's right.

The LVTC was the outcome of a Memorandum of Understanding between the State and the Federal ministers that defined the purpose and the formal structure of the committee. The MoU determined that the committee was to be led by the secretaries of the Ministers. While this arrangement secured the appropriate resources at the same time the everyday practice was to a large extent structured by representatives of the State and Commonwealth Governments. How this influenced the process from the regional government perspective is expressed in a number of quotes from our interviewees. As a selection from many others this includes:

> I mean that was very much driven from the state and federal government – I mean, it's not necessarily a criticism but – because it was done very well and it was resourced at a very high level so there was a lot of skills that were brought in; very good people you know were rolled in to support this committee to do its work and write this report so that was very good, that we, probably of our own devices, could never have done you know?

This came at a price that was nicely expressed by another committee member:

> It was very much driven by State and Commonwealth Government in the, sort of, very formal MOU – and it was driven by Government. And I think that's where it lost a little bit of its way from a regional setting, is because the region didn't have any direct involvement. Even though they had a seat at the table they weren't leading and driving a framework. So it was quite interesting, you know, sitting back, coming in, observing, it was quite an interesting start.
>
> Right or wrong, I felt that the regional leaders were quite comfortable to be directed – take direction from the Commonwealth and the State.

Some members of the committee felt they had limited influence on the process. This was most clearly felt when they were not able to bring issues onto the agenda they felt were most important for the region.

> What are we doing here? We're not owning this. We're allowing government to dictate what our future will look like. So what we tried to do was facilitate a regional discussion and it got pushed back by some of the senior regional leaders on the committee. They did not want to go down that pathway. They felt as though what we were trying to do was undermine the Government's framework.

The division of labour and its impact has been clearly articulated by a number of interviewees. For example:

> I mean the beauty of this model [governance structure of the LVTC] was we had a seat at the table with various senior bureaucrats of the Commonwealth Department of Regional Australia and RDV and that's one of the things that the CEOs of local government don't want to lose. We've got to maintain that because in between – the next point of access is the ministers; the two ministers. So back then Crean and Ryan. So we would have regular meetings, and I'm just trying to remember the frequency of meetings where the State was developing the agenda, setting the agenda driving the discussion, driving the workshops, driving the research; it was like pulling, bloody teeth out of chooks. It was just bloody hard work. I sympathise with the State policy group. They did an awesome job, because it was difficult. The State really drove the agenda. But what they did very well was each step of the way it was validated with the committee. "Here's where we're at. Here's what we're thinking. What do you think?" Workshopped it, you know community would have involvement. And it evolved like that. So there was continuous review and feedback opportunities for all members of the committee.
>
> The process was really clever, because whilst the State policy group was driving the report to government and the Commonwealth came in later – on the scene and wanted to be part of the process. So they started generating their own evidence base. The State was doing their evidence base. What it did was inform the report that the committee put together. At the same time the State was driving their response to that report.

The state government drove the process, provided the information and used the information given by regional leaders to rework and revise the draft. There was little opportunity to directly structure the content and decide on the authoritative knowledge that was informing the process.

> The state government with the funds that they had to develop this road map, so that was very much the focus. The road map was the task that's right but as we went through the process, we'd be presented with information where we considered that, we would discuss it from a local perspective and then it would be taken away and worked on more and then there'd be further information that would come to subsequent meetings, and we would consider that and then, definitely towards the

> end of the process, there were multiple drafts and iterations of the report where, you know the goals would be, you know, refined with the committee.
>
> It was merely receiving a lot of information and then those particular offices would then go back and do some more work towards developing this road map. It felt more as if I was part of a reference group for the development of this road map that was being jointly facilitated by the federal and state government.
>
> Well, the decisions for the actual final priorities certainly did come to the committee and we considered those absolutely yeah, we absolutely considered those and had some influence over those.

There was a feeling that representatives of the unions and the health sector should be involved in the transition committee to contribute additional input. But when they did get involved they themselves felt unclear about their role or the decision-making processes. Some other committee members did not feel part of the 'club' as they felt they lacked knowledge on the decision-making process, their role on the committee and had little influence on setting the agenda.

> I don't think it was truly defined up front as to what my role was, and I think that's probably pretty typical of all the regional leaders that were sitting around the table. … probably about getting regional intel, feeding that back into the policy setting group who were really driving the strategy at that stage. And having input into the, the strategy setting for the transition and the State Government's response to that. so I was probably playing a fairly passive role like that.

The effect the composition of the committee had on debates can be better understood when considering the experience of one member who advocated bringing in a health perspective:

> I find that most of the discussion is usually around the economy, you know, the economy, the economy and the economy … I was quite surprised at how difficult it was to inject [a health perspective] into the discussion … I would talk about potentially the social impacts of transition and the importance of initiatives designed to perhaps mitigate that and people would just listen to me politely, look at me and then move back to talking about the economy again because of course the economy is the answer to everything.

At the same time local governments were also bound by their desire to gain access to the Ministers which they did not want to lose. They were anxious not to press too hard on their own interests so as to annoy the Ministers.

> Some within local government were very – don't want to lose that access, you know.

What was acknowledged from the state and federal perspective as a smooth process and a constructive working culture in the committee was considered more critically by other committee members as a possible weakness as well:

> You're talking to people that were fairly well informed, but those that brought a narrow interest needed to – … they had to lift it a bit.
>
> There wasn't a lot of conflict, you know, Gippsland broadly has a reputation for collaboration and working together, particularly across the six municipalities. So the Gippsland local government network has been operating for over 10 years and is recognised at state and federal level as a model of regional collaboration. So in terms of sort of conflict as to what should go into the advice to governments, et cetera, et cetera, - there really was none.
>
> I think there was a genuine commitment from all stakeholders to work together on the transition. I think that's what gave it the strength. I still cannot underestimate the lessons that we learned from the Hunter and Newcastle, and the importance of – of an understanding that you couldn't just expect business as usual. If you were going to successfully transition, you had to have a commitment from all the stakeholders that even from the union's perspective they had to be competitive.
>
> That's relied, obviously, on those relationships that we spoke about before, a level of trust being developed. I think also a genuine understanding that if we didn't work together then it would be easy for particularly state and federal governments to kick us off, if you like. So if we can't get our act together, so we won't respond appropriately and that. But we didn't do that.

Others emphasised more critical aspects that might have impacted on the efficiency of the decision making process.

> I felt that people were guarded and either didn't understand their role, weren't too sure of their contribution, didn't want to put anything out there in case it upset the government in terms of their policy framework. It was a really interesting setting. I just challenged whether it was effective in the early days.
>
> I suppose – me being new too, I sort of didn't feel I had the confidence to come in and start turning the agenda upside down I'd certainly try to adjourn – address issues like, you know, a social – a social impact study in the context of other – other items, but certainly didn't feel as if I could come in and change the agenda.
>
> But we didn't find ourselves in too much of a situation where there was absolute conflict and disagreement and argy bargy which we probably should have.

This lack of controversy or debate through the process may have resulted from the more passive roles of regional representatives, influenced by: the desire to secure significant

funding for the region; working under time pressures; structurally only holding positions as advisers and not being responsible for determining the outcome of the decision making process. Participants had little opportunity to take on ownership of the process.

> I just blame the regional leaders for not taking ownership of it [the RM process].

3.3.4 Managing knowledge

The generation and management of knowledge are central for planning and decision making processes. Who can control knowledge has the central resource at hand to control governance outcomes. For the roadmap process external knowledge was prepared by a series of consultants predominantly selected by State Government officers tasked with the responsibility of supporting the committee. The commissioned expertise was discussed in the meeting. Some recommendations of reports brought before the committee such as a report on a low carbon growth plan was considered inappropriate. The desire of regional leaders to have a commissioned report on the social impacts of the past experience of privatisation along with the potential impacts was rejected with the argument that there was already enough knowledge available about the impact of the possible closure of Hazelwood. It was also seen by some committee members as politically undesirable. There was a priority for a process that looked for solutions/answers rather than looking backwards for an analysis of what went wrong. Some committee members made clear that the expertise provided was not always good. Some involved stakeholders felt that they knew better than what was provided in the reports. Even though committee members had a high level of expertise what was beneficial to the process, at the same time it might have prevented new and unconventional knowledge entering the process when deviating from the mainstream.

> A lot of the evidence gathered was independently brought in. The State really, sort of, said, "Well, based on this proposition, here's the various information gaps." So, and we needed to go and understand things like, what's the comparative advantage of the region and how do we leverage that and stimulate diversity in our economic base, for instance. So, they went out to industry, and went to expressions of interest and got people to respond. That was a process driven by the State and owned by the State. The State didn't go to the regional leaders saying, "We've gone out to market. We've got three bidders here's what they're offering." We didn't get to that stage. The State made a decision, pulled that person in, and got the report. And it was at that point, once the report had been produced, that it then went out to the committee for, you know "Here's what we're asking for. Here's what we got. What do you reckon?"

There was the opportunity for controversial discussions regarding different reports. However, the regional leaders had had the experience of the social impact study that they considered quite important blocked.

> We didn't, understand well enough the social impact – we knew what the economic impacts would be, but how did they flow on to social impacts? How did we not know that our suicide rates and our family breakdowns et cetera were going to go up the way they did? We didn't know because we didn't look at it, we didn't do a social impact analysis on what such a change might be. So the community has been very strong in arguing for that unsuccessfully to date, … My take on it is that I reckon a couple of cabinet ministers argued for it, for the feds to fund that up front early on. And this is my personal view – I think they – they lost that argument because the cabinet was fearful of what it might tell them. That's my personal opinion.
>
> Some members of the committee saw some value in undertaking a social impact study for this based on what had happened with the privatisation based on the hypothesis that there would be negative consequences of this, no matter how we restructure the economy, you know, people would fall through the gaps. So we felt that it would be good to do some work prior so that we could at least anticipate some of that but that was resisted strongly at many levels. It had been tried before … it wasn't seen as being something that the State or Commonwealth government wanted to invest in.
>
> I think the investment into that sort of a project was – was seen as too large. I think there wasn't a lot of faith that it would add any value to the process. I think there was an understanding – "well, we just have to position and restructure our economy in order to accommodate the transition", so -we know the answer so let's do that.
>
> I think there were political drivers as well. Politically it is quite difficult then to deal with the results of a study like that and at that stage, it was a very politically unstable environment because the carbon tax had – you know, there was a carbon – there wasn't going to be a carbon tax and there was a carbon tax. Of course, it's a very dynamic environment.

Other committee members expressed their lack of understanding as to why regional CEO's pressed so hard for a social impact assessment:

> There was a desire to – I'm not sure why that was being driven so hard, particularly to do a social impact assessment. And they were after hundreds of thousands of dollars in assistance to get them to do it, and I just couldn't see the value of it, quite frankly. We had enough source data and we knew the impacts of the '90s, the loss as a result of privatisations. I'm not sure if I missed the point of their desire for it, but it kept on coming up, even at the end. "What about our funding for 150,000 to do the social impact assessment?" Okay. So there was something there that I couldn't understand.

The committee itself engaged in a kind of co-production of knowledge process. Since all external advice went through the committee reports triggered fruitful debates and even some of the reports, not considered as insightful as others, led to a better understanding of the region:

> Some work was commissioned that was pretty ordinary, quite frankly. And, I think there was some really interesting discussion from the local leaders around some of the findings of that report, and a bit of disappointment, but that disappointment also brought out a good discussion about what really, the region was about, and what it could do and what it's capabilities were and what we were just lacking. So while the report itself wasn't perfect it certainly led to a discussion and generated a debate, and again, those with a better understanding of the history of the region and the capabilities of the region, and they were able to articulate it and understand what governments could or could not influence, that has currency. That gets us a long way. That's the sort of knowledge that you're looking for. Others that think it could all be solved with waving the wand, it doesn't occur like that. So the knowledge about that local history, local experience, but also understanding what could be achieved from a government perspective. And some come in better prepared in that than others. (30 July 2013, 71)
>
> **And how were they accepted, these different inputs?**
>
> Always given opportunity to air them, to have discussion around them, and they were seen as important inputs, the report, you know, there was always discussion and they were accepted at face value. Some caused more debate than others.

There was a strong economic focus when seeking to understand the transition of the regional economy although social aspects found their way into the advice document. There is some indication of the difficulties experienced by committee members who sought to prioritise potential new industries over the current dominant industries of coal and mining.

> So it was all of those activities that I think economists seeing as adding value or creating new economic activity rather than the service sector. … But health is going to expand as the needs of this population grow, as it ages and it's going to be a growth industry. I was always trying to say, "Well, what about health as an industry? Why aren't we identifying that as being something huge?
>
> It was difficult for me to translate that in a way that people understood … I felt although the numbers [KPMG report] actually said that health is a big part of our economy you know, health could – will be a big part of our future. What they picked up on the traditional types of industries.
>
> Well, look, all of the things that we are talking about actually impact on people's health," but then, you know, the response goes, "well, we're not so much concerned

> about people's health, you know? We're concerned about restructuring the economy" and then everything else will follow, which I understand is the way that economists view the world, which is fair enough.

3.3.5 Collaboration and networking

The governance structure of the LVTC fertilised collaboration across different tiers of government and social groups. Some committee members emphasised that collaboration and personal contacts were strengthened through the process.

> From a personal perspective, I didn't have any sort of direct relationship with a number of other people on the Committee. … I knew who they were … in terms of working with them, I've never done that before. Those relationships are much stronger now. Whilst we might not all always agree on philosophical approaches to particular issues, the fact that we can actually sit down and have a conversation about it, is a good thing.

That includes VECCI, relationships at bureaucratic level in Regional Development Australia or Regional – Regional Development Victoria and even at ministerial level.

> Members of the Committee including myself walked into a room and Minister Crean happened to be there, then there was an instant connection. He'd come over and say, "Hello, how's it going?" all that sort of stuff. All that wouldn't have occurred if the – if the Committee hadn't been in place.

They enjoyed a lot of direct involvement and contact with the federal level as well:

> We've been having regular traipses to Canberra and getting into ministers' offices and I think one of the sort of turning points was a meeting with Climate Change Minister Wong. Going into her office and her expecting us to be saying, get rid of this carbon tax those sorts of things, and – or any sort of carbon pollution reduction scheme. That's not what we did. We walked in and said, "We understand that we have to change. And like you said, we can't keep emissions the way they are and all those sorts of things, but we actually want to work with you to enable us to achieve that" Not long after that we had Ferguson and Crean and the Prime Minister. People were starting to come down to chat to us and that's how the sort of relationship, particularly with Ferguson and Crean started to develop fairly quickly.

3.3.6 Community involvement in decision making

Consultation with the community

The nature of the consultation with the community was confusing as it was described in a number of different ways by members of the committee.

> It wasn't a broad community consultation.

> It was pretty targeted.
>
> It was about drawing on the evidence base, from a range of documents that had been prepared predominantly by the state government.

Some felt that the community engagement might have been better if the regional leaders had driven it:

> The level of urgency [of engagement], was probably not there, in terms of really recognise that it's important and we've got to do it but we've got all these in terms of meeting timelines for the ministers and that's where I'm saying its quite subtle. If the regional leaders were driving it, then potentially that engagement would have been higher up the priority list. But when you've got bureaucrats running the process it's all about meeting commitments for the minister.

Some clarified that the LVTC did not organise a lot community engagement events but the Council and the Mayors, as the elected representatives of the community, did some engagement to clarify their policy position regarding a low carbon future.

> Direct initiative of the Council, in fact, driven by the Mayor at the time, to get out into the community and talk about the Council's policy position in terms of low carbon transition and where we were at, and what we were trying to do and achieve. So then we sent a series of invitations and public notices, and said, "Come on and have a chat." Which they did. So then converting that into discussions around what are the community concerns, and that's where this emphasis on, particularly our social impact study got supported, in my view, driven a lot by fear from the experience around the privatisation. So there are a lot of people that are still hurt from that around the place. The clear message coming from that grass roots community was: we don't want the same thing to happen to us that happened to us after privatisation. How do we make sure it doesn't happen? So you've got a range of different views – the sort of sustainable use of the resource, brown coal resource et cetera for both energy production and alternative uses, against, we should all get out of it altogether, the economic opportunities and that come from withdrawing from the sector and introducing renewables and those sorts of things is much better. So you really did have those very different views to the business as usual.

There was criticism from the community regarding the development of the first Gippsland Regional Plan that there was a lack of engagement with the private sector. In addition, there was recognition within the community that there needed to be broad community engagement.

> We recognised that we haven't actually communicated what we've been doing and what we've achieved.

> Just having been at a couple of sort of public forums and people saying, well, you know, how does the grass roots community get representatives on these things, so that concern from that sort of level – not huge, not, you know, major protests in the streets or anything, but just the issue raised a couple of times.

The exact nature of community engagement included: three public forums initiated by the Mayor of the Latrobe City Council with the aim of discussing their policy position in terms of a low carbon transition and what they hoped to achieve; submissions to a draft document from the LVTC (State Government of Victoria 2012b); and interviews with the power sector in relation to displaced workers by one consultant.

One member of the LVTC suggested that the community input and forums might not have produced huge input in the process but business forums had been useful:

> We had a community input; opportunity for community input and forums. They weren't particularly well attended but that's the nature of those things. We also had some good business forums that both ministers participated in, and they were useful to extract some ideas and some agreed approaches.

There was also a clear idea among some of the members that the function of the community involvement might be more to inform the community rather than taking community concerns seriously:

> There was a fair bit of local government's consultation with communities … public forums, you know, running concurrently with this. I was involved which was useful, but, you know, we were able to get our message in.

From the different perspectives, it became clear that there was concern within the committee that community consultation was a weakness of the process

> "Then it becomes more and more apparent that you aren't really engaging with the local community and talking to them".

Local and State Governments have developed innovative approaches to adaptation by developing strategic plans and building the capability of its workforce to manage change. This is also relevant and important for communities so that when the opportunity arises to engage with the community to build their knowledge and capacity in regards to adaptation it is important to consider how it is organised, who is involved and what issues are being discussed and by whom? One example from the Transition Committee of a community engagement process was an event where the guest speaker was Ross Garnaut.

> It was open to the community and it was quite well facilitated. So you basically only got about one question and maybe a slight follow up as well, as long as you were quick. And there were quite a lot of people who wanted to get up and make a statement, rather than to ask a question. So I didn't think it achieved a great deal.

> I'm not sure that there were any major, fabulous outcomes, and we were, sort of, left hoping that Garnaut could somehow take away anything useful.
>
> One of the people, sort of, looked around and said, "There are hardly any young people here.
>
> It was really just discussing prearranged solutions, rather than asking for new ideas or delving into climate change. It was really just – oh, we've got to do something about carbon, so we'll tweak it a bit, and these are our fabulous ideas that we're all working really hard on, sort of thing. Yeah. It would have been, I mean, I think they're all a bit scared of the angry debates. Um, I mean, I think it's a hard one to do well"

When the final advice was provided to government there was large agreement:

> I guess all we can judge is the reaction to the Committee's advice from the Transition Committee's perspective, the Committee's advice to government. There was no huge objection, if you like, or concern, that the advice had missed anything. So generally the sort of response from across the community was, it's good advice. And it addresses the sort of issues that have been raised more broadly around the place, because it didn't just focus on the coal energy sector and the economy, it focused on the social impacts and, um, things around the liveability and those sorts of things. So even, um – so I'm testing my memory now – but we did a draft advice, and then we got some feedback through a variety of channels, including the different local governments and those sorts of things that said, you've sort of missed the – the liveability factors around all of that, some of those – the sort of social infrastructure stuff. So the report was amended from the draft to include those sorts of things. So that was good feedback. Yeah eventually the report included those sorts of things.

Building trust with the community

Collaboration in complex governance structures and networks requires trust and time for such trust to develop. Committee members reported how trust developed among committee members while frustration was expressed about the lack of continuity among some of the representatives which compromises the development of trustful collaboration.

> I mean, oh, well you know, some of the other risks we had during the whole process was the change of personnel. Extraordinary. Particularly, in the Commonwealth space. Just a consistent revolving door. So we lost – you know, we had one person down here from the Commonwealth for eight weeks, I think she was down here, and then a month later she was gone. So she had all this knowledge. And we were really at that point where, okay, there's all this information out there how do we bring it to reality. We need some guidance, something like that, and she would have been perfect, and she's gone; and then someone else. So that was something that we

> didn't plan for was the Commonwealth churn of personnel. Ah, when you look at the State and the local leadership that stayed pretty consistent. It's really been the Commonwealth.

Compared with other regions in Australia, Gippsland, has a well-established governance framework which could be described as a highly successful network of actors and significant stakeholders who know each other well and have a high level of collaboration. When an academic from RMIT developed a proposal recommending the need for more collaborative approaches around the economic development of the region and suggesting the establishment of an economic development forum, there was disagreement across the Local Government sector as they had already developed their own Regional Development Strategy. The argument was that "putting another structure in place to focus on economic development is unnecessary and could well confuse existing processes and collaborations" and suggests that "some of the stakeholder groups across the region don't necessarily understand the level of collaboration that exists".

Community trust in decision making and planning process is also important to secure support for long term regional transformation. The successful organisation of community consultation might be an indicator for the existence or development of a trustful relationship between regional decision makers and the community. For example, the timing of the Council's community consultation was linked to the public consultation process undertaken by the LVTC that sought submissions following the publication of a discussion paper titled Directions for Latrobe Valley Transition (State Government of Victoria, 2012a). The period of consultation from 3 April to 9 Mary 2012 sought submission on any relevant issues facing the Latrobe Valley's industry and workforce. 25 submissions were received and the following excerpt from a report by the State Government highlights the way in which the advice received was interpreted.

> Over 25 written submissions were received from a range of organisations, businesses and individuals offering guidance on the sorts of employment creation and growth required in the Latrobe Valley region to assist the region's transition through economic diversification. Evaluation of community consultation by Regional Development Victoria revealed that overwhelmingly there was support for the establishment of a locally based Committee structure and the generation of research material to support the strategic directions and advice of the Committee. (State Government of Victoria, 2012b).

One member of the LVTC provided the following insight into a question on the consultation process.

> I guess all we can judge is the reaction to the Committee's advice to government. Most people, there was no huge objection or concern that the advice had missed anything. So generally the advice from across the community was that it was good

> advice. We got some feedback….that said you've sort of missed the liveability factors …. the sort of social infrastructure, so the report was amended to include these sorts of things, so good feedback.

Two reports out of a total of 25 provide dissenting voices to the positive message presented above:

> From the beginning of carbon reduction discussions, XXY maintained that the only solution is to attract significant new industry/employment opportunities to the Latrobe Valley. Such a process would obviously require considerable funding for industry attraction incentives and appropriate staffing dedicated to this project. It would appear that the Transition Committee has rejected this approach. Unfortunately, our assessment of the Discussion Paper is that it offers nothing new or innovative. Much of the content has already been proposed on numerous occasions by Latrobe Valley economic development committees and organisations that have worked in this field since privatisation. Their lack of success over the last twenty to thirty years is evident.
>
> While we are pleased that the LVTC has been established, it is disappointing that the Committee is without direct community representation and is, instead, heavily populated with senior bureaucrats. In its current format, disappointingly the LVTC reassembles people and interests whose voices already dominate channels of advice to government about our region. It is also regrettable that an important function of the LVTC process, to take advice from the regional community, has been further stymied by the extremely short public consultation and submission period allowed in response to its Discussion Paper.

The objections presented above are not the only ones presented in submissions but highlights the way in which reporting to the committee can dilute the input of the community and therefore the notion of building trust with the community can be hindered. In the interviews there was a slight recognition that there was concern

> not huge, you know, major protests in the street or anything…..just the issue raised a couple of times.

3.3.7 Project development and funding

When it was up to make decisions about the projects that should be put forward for funding there was a focus on 'ready to go' and low risk projects. Projects that would require long term investment such as the proposed Sustainable Industry Centre at Monash University were not supported. The projects that have been funded were roads, upgrading an urban centre, high profile technology, and the regional airport. Technological innovation but not at all climate change related.

> You know, they've been through from initial concept phase to some sort of business planning process there's still not quite an understanding of how that project will actually contribute outcomes to the region [Sustainable Industry Centre]. And for that reason it probably hasn't been funded. But it's one of those sort of chicken and egg things. I think from the federal government's perspective it seems to be that all **projects need to be shovel ready**. And for the states as well, probably.
>
> One of the major program announcements was the funding for GippsAero or for the Latrobe airport, through the federal government. I think it's fair to say that the community had no influence over that decision. That funding was approved through the commonwealth in the second round of funding so they were actually knocked back the first time because the business case wasn't well established.

There was some indication in a number of interviews that the process for determining how projects were funded was not clear to all members. Altogether there were only a comparatively small number of project proposals. Some members of the committee indicated that the process of project development and the decision making process were outside the responsibilities of the committee. Therefore project preparation took place outside the committee structures and the projects were then presented to the LVTC. This process seems to have taken place with more direct negotiations between different stakeholders but not necessarily through the committee.

> I hadn't realised that at this particular meeting that projects would be considered for that $15 million and I think, within any community, there are people that understand what's going on more than others there's different levels of understanding of the opportunities. Certainly there are others within the group that probably had a more advanced understanding than I did that this was going to occur and this was the real opportunity to get whatever project that you might have funded from the $15 million.
>
> There weren't many projects. I think, that was potentially one of the frustrations of the federal government, I think they had come a number of times and said, "Well, look, you know, you need to be identifying the projects that you think are going to transform your economy." They're probably fairly informal – the first bite of that $15 million that I heard of was when Simon Crean the minister at the time for DRALGAS actually visited Warrigal and made an announcement of $3 million for their rail centre redevelopment rail centre precinct redevelopment which was being co-funded by the Victorian government from other funds and whatever, so I then heard that they'd just had an announcement from the state government for funding for this and then there was another one and I said, "Well, where did this come from?" "Where did that money come from?" And so I was told, "oh, well, this is out of the $15 million," So that didn't even go to the committee, as far as I can see ... But none

> of this really, I can remember, unless I've missed it, had come through the committee as a way of prioritising these projects. This was something that was sort of happening outside of the committee.

The informal preparation of projects for the meetings is underpinned by another member's observation:

> I think – there were probably those - local government intended to have more information than anybody else at the table you know, about things and what was available and probably had more experience in how these processes ran, because often it's a mixture of policy and – and bureaucratic processes and political processes all running side by side [laughs], isn't it you know?

However, one committee member reported that a project proposal, provided at the last minute, was successfully supported, although it was not part of an externally negotiated process.

> Until I rocked along that day and whacked it down on the table, there was no competition to their project and, I must admit it, I don't know whether it was just me projecting but I certainly felt a sense of hostility that I had turned up with my project and just potentially taken four million dollars away from XY's project.

It is unclear whether the informality of the process prevented more projects being considered for funding. Another member observed that there were surprisingly few projects for review and even representatives from the federal government were surprised about the lack of ready to go projects.

> We didn't really advertise or seek projects and I remember at the meeting, [a government representative] was turning to [a regional representative] and saying, "well, why aren't there any other projects here" and he couldn't really answer the question.

3.3.8 The legacy of the Latrobe Valley Transition Committee

The perceived success of the process

The Transition Committee and the Roadmap process were considered by many as a success in many respects. It was a good and efficient working climate and a regional plan was developed in a relatively short period of time. One member emphasised how important it is to find the right people. These are usually people personally committed to the region:

> So you had three good local government leaders that were cooperative. They had their elected representatives, the Mayors, well organised. They were well informed. They kept up to speed with it, and we had a strong chair of the Regional Development Australia Committee, who was well connected to the business community, and knew the issues back to front and had seen it all before. It was

> those elements and some new players that bought some enthusiasm that helped keep it moving on. Yeah. So there was the background, but having said that, you'd be amazed how if you pick the right people in any region you can get a lot of enthusiasm, because a lot of the staff, you'd think, is like having fruit, in terms of getting a good strategic issue for a particular region. Not often done. It's just not.

Strategic Planning is often about building an overarching narrative whereby other institutions buy into the ideas presented through the strong storylines. It is important to consider how narratives are built over time and their impact on decision making. Has the LVTC and related processes contributed to develop a new narrative for the region?

> There was a Garnaut conversation a few years ago and Garnaut and the suits on the stage, said all these clever things about how clean coal was going to be fantastic and another one's going to do this fantastic thing, where they were going to, with the hot water from the power stations, they were going to use the CO2 to grow algae. And I said, "What are you going to do with the algae?" And they said, "Oh, it makes oil that you can burn." I thought, yeah, great. We'll just hold onto it for a slightly longer – and then burn it still. Um, and then – and I said, "So has anyone got a plan for anything that this valley can do with brown coal that does not involve burning it?" And YYX was the only one who had an answer. So he had lots of other suggestions of things you could do with coal that didn't involve exporting it or burning it.

Community responses to the failure of contract for closure negotiations:

> It wasn't really until the announcement around the contract for closure being unsuccessful that people sort of took a sigh of relief, and said – because they really thought that particularly at Hazelwood, which was the sort of trophy that the federal government would love to have been able to get when that was sort of off the table, people sort of went, "All right, okay, we're safe for now for a few years." And those other few years are now looming very large. So 2017, well, probably even less than that now given the changes from the carbon tax.

The State and in particular regional stakeholder frustration was evident in relation to the level of federal government commitment to the region following the failure of contract for closure negotiations.

> I think – the most frustrating sort of issue, if you like, and uncertainty, was around trying to get a formal response from the federal government after the advice had been submitted. There was a real reluctance to come out with a response, like the state governments writing that response. … There was a real, then, frustration, waiting for the feds. And the expectation was that the feds would provide a similar response [than the state]. "Here's our document that defines our level of

> commitment and the sorts of things that we'll consider to support." And that never arrived. We've never had that. The different sort of upheaval sort of at the federal level, and Crean going, and Minister King coming in and those sorts of things, that's sort of where the real uncertainty and frustration has been and I think continues to be. Because there were some changes at the bureaucratic level as well, which created again some uncertainty and frustration, and trying to re-educate new members. But I reckon, the good thing was that the Committee was resolute in its view that our advice is the right advice, and we want the federal government to respond to that advice. And now obviously I'm not, um, they spent the $15 millions, nothing left, and – so what's next? So I think, you know, part of the role, from a political perspective for, probably not the Committee, given that it's appointed by the two ministers, but certainly from a local government perspective and a One Gippsland perspective, if you like, um, the challenge now is to say, okay, what's – what's the response from the current government and the opposition to support for transitioning communities into the future?
>
> Perhaps, we're talking about a region that's had a lot of plans in the past, and there's probably a bit of plan fatigue, and wanting to make sure that there was some funding that was going to come their way as a result. And the challenge was to keep them recognising that there wasn't going to be a bucket of gold, and it was about getting a very clear set of priorities.

There was a view that the Federal Government lacked commitment to the process once the contract for closure process ceased:

> I think the frustration – this lack of formal response from the feds. And I reckon that's caught up in a couple of things. I genuinely believe that Ministers arguing strongly for support for the region, and I suspect a similar package to the state response, um, because Crean and Ryan had a very strong relationship. I think they got rolled, in the cabinet, because, (a) money got a bit tight, um, (b) um, their contract for closure stuff didn't occur, and – this, again, this is a personal view, I just think some cabinet ministers thought, well, now, why would we do anything down there if we can't get the trophy that we wanted. And I think, this is probably a bit cynical, and again a personal view – but we're also the wrong colour at the federal level.
>
> I genuinely think [Ministers argued for at least something to be provided prior to the election time]. Because of the work that had gone in to the Committee, and there needed to be at least some recognition of that work and acceptance of some of the recommendations. Yeah. Does it go far enough? No. Not at all. And you know, I think to cut a $200 million fund to $15 mil … it is a bit sad, given some of the things that

> you could do in supporting new research and development, you know, growth of employment, across the region and broader, but particularly here.

A number of members have recognised the importance of the University as a provider of innovation and a driver for regional transformation. The influence of Monash University on the process was limited and it is not possible to give any explanations as to why the collaboration with the university did not work or why the university did not play an active role in creating forums for discussion as compared to the role played by the University of Newcastle that the committee had observed on an investigative visit. Some expressed a feeling that the regional University could have done more. But it could also well be the case that the regional culture was not open for highly innovative change:

> I think Monash could have lifted a bit, honestly, because they're a big employer down there. We've got some work done through one of the Monash groups, but again, they were possibly going through their own thinking around what they'd do with their campuses down there.

Monash regional university was going through a transformation during the LVTC process with an amalgamation that was not foreseen at the time.

Dealing with political uncertainty

We did not find any indication that the decision making process within the committee was driven or was affected by the uncertainties or complexities of climate change knowledge. Several members indicated that the uncertainty of the political context for planning was crucial:

> So, we've got a range of potential projects that I believe would have progressed if there was greater certainty at federal level about what the policy framework might be moving forward (6 August, 85).

> The carbon capture and storage project was one of those, where the feds have now sort of withdrawn significant funding from. So you start to see those relationship and commitments fall apart. Again that just creates uncertainty to the point where people won't invest until they know what the framework might be. And we know of two or three that would essentially flip the switch tomorrow if they had some certainty about what their cost structures might be.

The lack of a clear political agenda and the controversial debates on the federal level were quite vividly described by other committee members as well. Even though federal and state members of the committee emphasised that the plan rather than the money was the major purpose of the committee, the uncertainty about the policy framework and the actual availability of federal support impacted on the thinking among the committee members.

Rumours about the political contexts and conflicts about power contributed to the uncertainty surrounding the planning process and also contributed to a significant change of personnel:

> Of course, this is in an environment where you're hearing it change through the media, you're hearing whispers that, "oh, no", "the federal government are backing away from contracts for closures. Have you heard that?"
>
> There was Simon Crean, who was the minister and then there was the failed coup or whatever it was, for Julia Gillard, the first one but then, after that, because Simon was supporting the coup he fell on his sword so then we got a new regional Australia minister, Catherine King who was very new to the area but then, after that, once Catherine had been down and had looked at it and whatever, it was going through the processes and, before we knew it, we had a new Prime Minister you know, so it was a very politically turbulent time just towards the end.
>
> This was the carbon tax which, – Kevin Rudd's saying, "oh, no, we didn't actually have a mandate for that". He was sort of very chaotic and it was very political. It was very much driven by the political agenda, and that political agenda, I don't think, was necessarily that pure, you know? There was a whole lot of other power politics that were going on [laughs] as well, you know, so a very complicated environment.

That the uncertainty of the political context might have been larger than usual is also expressed by another LVTC member:

> I'd have to say that was always a surprise. And disheartening because you think you're working towards something and then it changes just like that. So – for me, the political environment was probably the most uncertain that I'd ever worked within and made the process very difficult.

We asked how a planning process would looks like in an ideal world. Most respondents whished for a more straight forward process with more certain and stable political conditions. While most acknowledged that uncertainty is part of their work they still reflected on how the high levels of uncertainty negatively affected the outcomes.

> This process, in an ideal world Mmm, in an ideal world, I suppose there would've been much more political certainty -you know, that it wouldn't have changed every couple of months. That we would've, in an organised way, gone into a carbon emissions trading scheme, that it would've been supported by the Australian community and we would've in a planned way you know, dealt with the needs of special communities such as Latrobe and continued to work our way systematically through that but it just was very chaotic because of that and I'm unsure about what the future of any of this work will be, whether this report will just disappear to a shelf somewhere and that will be the end of it.

There is indeed a contradiction between the requirements of long term planning and the volatility of the political environment. However, planning processes can better deal with these uncertainties when planning is regionally rooted and supported by a grand narrative that helps conflicting parties work together in a more general framework (Healey 2010)

Inter-agency collaboration

The literature review showed that there is overwhelming support for the assumption that planning processes and risk governance work best when integrating a broad variety of different local and regional stakeholders in the planning process. The Adaptation Plan's recommendation for a whole of government approach seems to reflect this insight. The governance structure of the LVTC provided this opportunity but the degree to which it achieved this aim is open to debate. We found hints that suggest that vertical integration was limited and that there is space for improvement.

A number of interviewees suggested that the region was not leading the process. Instead they felt that they became part of something else:

> I think to turn it around into "well, we're not just the tool of something else" you know, we are a committee that wants to transition and transform the Latrobe Valley. I think that sort of needs to happen.

The process became more ambivalent over time. The initial leadership of the federal and state governments was valued and had advantages but as policies changed there were some undesirable side-effects which did not help the process engage in a more fundamental transformation or development of an alternative narrative to provide guidance for an innovative transformation of the region.

> The fact that it was led by a federal government and state government was one of its greatest strengths but also could've been one of its greatest weaknesses as well, so I think that was a tension with the process. It was very good though to have the attention of state and federal government at that level in our community. The development of the road map for whatever it is, I think it does provide a road map, so there is now a real opportunity for us to use that road map to assist the Latrobe Valley to prepare itself for the inevitably changed economic future. [The roadmap] still valid, it's still relevant and it should still continue to enjoy the support of both state and federal government.

There is also a good understanding that a coherent approach is needed that brings together the large number of different plans to "mobilise all of our strengths together". The idea of a "high profile chair" for the committee was discussed to push this aim. This is part of a process during which the regional leaders have started to take on ownership of the process as suggested by a member of the LVTC:

> It's only now that we're starting to see the regional leaders really take ownership of a vision for the region.

There had been visions established by some regional groups but not yet a generally shared narrative.

> We've got a vision. No-one takes it on board. No-one knows about it.

The difficulty of these visions is that they were developed by particular people or groups. But such visions have often been developed more or less "in isolation". As a result no broad support for such visions developed. They were not the result of a broader local bottom up development. These visions had not been well communicated.

> One of the things we recognised is we haven't actually communicated what we've been doing and what we've achieved. And you know. So community is definitely one. Business is probably another._You know, we've done a bit of consult – we had a consultant come in and interview the power sector, for instance, at one stage. … We probably could have had some sub groups in place, where we say okay, let's have a coms strategy every six months we're out to inform these key stakeholders that we know are really strong community leaders, so I'll spread the message to those groups. These business leaders, you know. So no, we didn't do that.

There is further indication from the community that there was a lack of integrating at least some significant local perspectives. Traditionally dominant perspectives remain:

> There are a lot of people who are very happy to engage in changing the way we burn stuff, but not really in changing the way we do things, so that we stop burning stuff.

> I'm a big picture thinker and I, sort of, look at the whole context and think - and I think there's an awful lot of people who don't see the big picture and they just see the little narrow universe that they live in and they just want to tweak it a bit and keep on doing more of the same old stuff, without really making enough major changes to make a difference.

Finally, some worries remained that the initiatives that have been set up will not always deliver. There was some concern that there is little control about the actual achievements of the initiatives that got funded.

> The risk for me is, okay, government is throwing money at a number of initiatives that potentially will drive jobs and economic growth and but will they? How do we make sure that we're? So we run a real risk of this project delivering really nothing. You know, very soft, sort of, outcomes that really haven't transformed the small business sector and built capacity in the small business sector which is such a critical sector for us here in the region.

The crucial question remains: how can long term transformations be achieved? Examples from other regions such as Newcastle show how important the involvement of the regional university is in the regional transformation process. However, in the case of Gippsland the Federation University has not yet taken on the role as a driver for innovative change but the potential remains given its re-emergence as a regional university

The legacy of the process on regional governance structures

The governance framework is seen by most participants as a success even though the hoped for funding support did not reach the region. Providing funding for the region is acknowledge as being one of the important drivers for these processes:

> It was a good process. In a way it's, as I say, it's been replicated in Far Northern Queensland and the outskirts of Gulf. Different issues, but the same sort of approach, whereby there was an MOU between two ministers to look at specific issues within a regional context, and put a governance framework that involved the State Governments, the Local Governments and the Federal Government. And it was about getting people on the same page on specific problems, really. And so it had worked quite well elsewhere, and they're still underway. The promise of funding always helps.

Cooperation between different tiers of government was highly valued and sometimes even seen as a prototype for dealing with complex problems. However, it may be difficult to apply it to other issues or government processes but it was considered successful in the context of the Transition Committee:

> I think it was a unique process [the roadmap process]. I haven't seen any place, … certainly that joint ministerial approach from, different flavours of government, at the state and federal level. I think that's been unique, and I think hugely beneficial to promoting the need for the transition, to be supported in its transition. I think the genuine commitment of all of the stakeholders, all of the major stakeholders to working together to plan for and manage the transition has been hugely beneficial, and will have, I think, long-lasting benefits for the region.
>
> The government's framework itself was cooperative in nature, and it set out the rules of engagement, and that was a very useful tool to keep coming back to. So that's unique because that doesn't happen. It's very rare to see that happen between tiers of government. So my issue was trying to actually convince other Federal Government departments of the value of it.

The transition committee may have a broader impact on governance structures that support collaboration between the different tiers of government. Members also provided different perspectives in regards to the challenges of multi-agency collaboration.

> [Federal Government] don't like to drill down region by region. It's a top down approach, and there's an overriding view that the market will determine the outcomes as things settle in different regions, so don't interfere too much. And this was probably trying to prove that you didn't have to interfere a lot, you just needed to coordinate better. And even that, there's a view, well the State Governments are just rent seekers, and Local Governments are corrupt. So that cynicism is a difficult thing to break down federally ... I think it's a barrier that's there today. That's why it's important to get some political buy. Political buy and political leadership is fundamentally important. The political leadership has to not just be by an individual minister. He has to bring his cabinet colleagues along with them, and has to run the case for some assistance or focus on a region-by-region basis. I'm a big believer that … you can actually focus on a region to understand it a lot better. It helps for better when you're mounting big projects, whether it be coming out of Infrastructure Australia or others.
>
> As the bureaucracy centralised itself in Canberra, it has a very centralised perspective and a view that it doesn't need to get down into local issues, and that other tiers of government are responsible for that.

The question of the legacy of the transition committee and the roadmap process is divided. While there is support for the view that the roadmap itself has value for the State Government there is also the belief that without any further funding support the transformation of the region is unlikely to take place quickly.

There is recognition of the value of the learning process among members of the committee. But it is not clear what will eventuate from the individual and collective learning process:

> I think for the members it was a good learning process. The question is how much capacity is behind them, and how much assistance is behind people. So I would expect it could go either way and people just fragment off and learnings get lost, or people take an element of it and really keep developing it.

Some members who were not from the region said that the region had obviously achieved a level of collaboration that is important for regional planning and development. Rather than seeing this as an outcome from the process itself, one member of the committee acknowledged that this has been achieved through former processes (regional management forums) that established forums for discussion for regional leaders:

> A genuine desire to actually unlock some solutions. That helped too. It was achieving empathy for the region. What helped it was one of the few times everyone got around the table together. So there's been other processes, there'd been other studies, and this is a region that used to fight amongst themselves, but that wasn't the case. I don't know why it wasn't the case on this occasion. They'd developed a

good collective view, and had good working arrangements. They were pretty sound there. But that, to me, had come a long way. And so that doesn't happen just through the course of this. So it happened before this. There was some good regional development structures that were put in place by the former State Labour Government over 10 years that worked well down there, into its regional planning. Not that they had produced much, but they, at least, had spoken a lot, from a regional perspective. And what do they call it, the Regional Management Forums?

The Regional Management Forum, that was a construct of the Bracks' first term of government, where Department or Secretary was assigned to a particular region, and they would bring all the particular government leaders in. And that created a new level of dialogue amongst otherwise competitive shires, but also gave them a bit more of an understanding and access to regionally placed bureaucrats, whether they be in education, or whether they be transport. And again, I don't think they ever produced anything that seems right, except they have created a dialogue, and a cooperation that helped play out in this, I think. So while people might scratch their head, "Why do we have these things?" Well you have them because you've got to know each other on a first name basis and understand the particular problem that each region is facing. You do need a forum for discussion.

3.3.9 Discussion and concluding comments

Considering the different interests and rationales of the key players driving the LVTC process it is not surprising that climate change and climate variability were not central to the process. The Federal Government's position was driven by the prevention of potential negative impacts in regards to implementation of their climate mitigation policies as they had achieved their aims of a nation-wide climate change policy. Considering the different responsibilities of federal and state governments there was considered no further need for state or regional authorities to contribute more directly to climate change mitigation. State representatives were driven by the opportunity to find additional funding to implement a regional economic transformation they had promised in their election campaign. Finally, local/regional representatives were driven by a desire to achieve funding support for the region as well as for their own projects. They were not willing to endanger access to federal and state ministers to discuss options for funding support to the region as the overarching narrative was that significant funding support was required to enable the region to successfully transform its economy away from one reliant upon the mining sector to a broader more sustainable and diversified economy.

Consideration of the long term climate change impacts was secondary to the central question of how to ensure a strong and enduring regional economy. As the paradigm was clearly on the continuing role of coal, transformational technologies such as the idea of clean coal or carbon sequestration were associated with reducing the carbon emission of

coal. An attempt to undertake a social impact study was not supported by State and Federal representatives as it was feared that it may focus on old legacies, such as the privatisation of the State Electricity Commission, that have a negative political impact on government decision making. We found support for the concept of multi-agency collaboration that built on a long history of collaboration within the region but required not only trust but the acceptance that members would not be exposed during the process. A number of members of the committee emphasised that the two ministers, although from different parties, had a respectful and trusting relationship and that the working climate in the group was very constructive and professional.

The decision making process of the LVTC remained focussed on clearly defined tasks (developing a regional plan) and driven by the desire to direct funding to the region. It also contributed to streamlining the public involvement and reduced the space available that would allow for innovation or a broader range of voices to be heard. There was a lot of support for the idea that not a lot of innovative thinking took place rather it was about ensuring that people were 'on the same page' and forming a consensus view.

There was some acknowledgement in the region that they did not really "own the process" that it was a Federal and State Government process. The LVTC was less about interference in the market and more about co-ordination across agencies. Whilst federal support had a price it was mainly seen as a great opportunity to gain political access, potential funds for the region and collaboration with all the major stakeholders. There were two positions. One emphasised the achievement of having a roadmap as a kind of strategic framework that could be used in the future. The other was mainly disappointed at the lack of funding that eventuated and left the region with a great plan but a lack of resources for implementation.

The follow on attempts to find broader funding support for some key projects from the roadmap/Advice to Governments seems difficult in the current economic context. It seems that the conditions under which the plan was produced, a collaborative multi-agency process, did not develop an innovative transformative vision of the future that may be needed in a climate change world. It may become more difficult to go beyond this plan and to implement new and innovative ideas. One potential driver of innovation could be the university that was highlighted in the example of Newcastle where a close relationship developed between the university and regional authorities. There are also strong existing local networks and leadership capacity that is capable of building further capacity and an interest in more transformative outcomes.

Crucial events such as the Morwell coal mine fires and the coal seam gas protests help to develop local leaders and networks that could contribute to the questioning of old worldviews and belief-systems and therefore help to trigger change and innovation. But this is only an opportunity that may or may not be taken. A lack of institutional stability supports the influence of informal networks that are able to obstruct processes of change as

observed through the committee when representation changed and there was uncertainty over roles. This weakens the ability to present alternative views and for them to gain authority.

These issues outlined above are not about a lack of knowledge. Climate change/climate variability knowledge if it can be introduced as facts rather than political ideology could help to bring different interest groups and ideologies together. The important question for climate change adaption is whether that can be done without addressing issues of power, interests, values and all the social dimensions. The perception of risk is to a high degree structured by social dimensions as are the decision-making processes that have been explored throughout this report.

4. Summary and policy advice

Decision making and planning in climate change adaptation is challenged by complex, uncertain and contested knowledge. In expert debates the problem being addressed is often narrowed down to a problem of knowledge (often identified as a lack of knowledge) and/or the problem of understanding the degree of uncertainty involved in models and scenarios. Strategies employed to manage these issues move from embracing complexity, for example by systems thinking approaches, to dealing with the unknown by focussing on strengthening the resilience of communities. There might still be a tendency to focus on complexity rather than to develop new strategies to deal with the unknown as well as the surprises. There is good evidence identified in the available research literature on the importance of including and acknowledging local knowledge in this process.

However, this is only half of the story. The focus on knowledge tends to underestimate the social dimensions of the decision making process and conceptualises them as being separate from the production of 'objective' knowledge. Because knowledge is inseparable from values, power and vested interests, they can only be dealt with together. Thus, in order to deal successfully with 'wicked problems', the decision making process cannot be purely about knowledge. There is increasing evidence that new decision making structures are required (that combine assemblages of different tiers of government, NGO's, the community and the economy) to deal successfully with complex problems (e.g. Considine 2005; Hajer & Wagenaar 2003; Healey 2010; Innes & Booher 2003; Renn 2008).

How to set up such structures so that they can foster successful decision making and strategic planning outcomes depends on a number of factors. On the basis of our extensive literature review and some recent work with a group dealing with considerable complexity and change, some key aspects have been identified to better enable decision making within a context of uncertainty.

This advice is based on an extensive literature review, context analyses and interviews with decision-makers, policy experts and members of the community.

Key components of the literature review in relation to climate change adaptation

- Although science has the capacity to provide authoritative knowledge, in Australia climate change knowledge is often presented as too uncertain and too complex. This leaves the governance of decision making more open to the political process rather than providing a clear direction for policy makers.
- Climate change debates take place in a context characterised by the different rationales and values of people, organisations and stakeholders involved in the process. As a result, real consensus in concrete responses is unlikely to be achieved.
- Since all planning and decision making has a social context that informs and shapes the process and the outcomes. There is no one fits all approach.

Key components for effective decision making

Research indicates that there are four key components that need to be considered in achieving a successful process, involve:

- gaining inclusive governance approaches and effective stakeholder participation;
- develop and managing knowledge to support potential actions and implementation;
- managing power and political uncertainty to achieve effective change, and
- fostering innovative approaches to inject new ideas and solutions to deal with the matters at hand.
- The following gives some guidance for people involved in policy development and policy and program delivery. In each case, key issues of concern have been highlighted as well as specific strategies or a checklist to improve approaches to effective decision making under uncertainty.

4.1 Inclusive governance and stakeholder engagement

Governance structures that combine a broad range of stakeholders and tiers of government are often required to deal with 'wicked' policy problems – problems that span generations or that are not capable of being dealt with by one agency or government body alone. The literature highlights the importance of integrating local knowledge as it fosters legitimacy of and trust in planning processes and in democratic societies gives voice to vulnerable social groups (e.g. March & Low 2005; Fincher & Iveson 2012). Also important is the need for planners to mediate between complex and contradicting interests. The case study identified an area that was neglected by the LVTC – social infrastructure and was able to incorporate some suggestions into the final recommendations to show how it was able to incorporate suggestions from outside the committee: "We got some feedback….that said you've missed the liveability factors….the sort of social infrastructure, so the report was amended to include these sorts of things, so good feedback".

Public participation is not a good strategy for all decision making situations but it is important when decisions are likely to be controversial (Hajer 1995: Hajer & Wagenaar 2003). Openness in regards to planning processes and their normative basis is essential to build trust and legitimacy for long term planning as well as building the capacity for social learning (Innes & Booher 2003). Difficulties emerge in addressing the various agendas of different levels of government, diverging perceptions of authority and differences in understanding of the decision making processes (Healey 2010). Ensuring appropriate and adjustable representation from all major stakeholders will provide for greater degree of surety when dealing with complex issues that can transcend generations and an economic perspective. Sharing responsibility, re-framing the problem, stretching decisions over time and sharing the gains amongst others are all strategies that can be successfully employed (Yannow 2003). Whilst the literature review highlights the importance of incorporating a broad range of perspectives it was clear that the lack of broader community representation

in the LVTC was identified although not acted upon "if they thought about a gap, then a general community representative on the Committee may have been beneficial".

Key issues

- Coping with changes in the authorising environment
- Representative governance
- Incorporating a breadth of perspectives
- Constructive engagement
- Open communication

Strategies for improved governance and stakeholder engagement

- Integrate a broad range of key stakeholders who are affected by the policy position, including groups that have a history of obstruction or working 'on the outside'. Keep in mind the need to regularly review your 'ideal' stakeholder/ participant grouping.
- Engaging with heterogeneous group that lack authoritative representation.
- Develop a clearly defined purpose/ 'agenda' that is agreed to and owned by all stakeholders.
- Ensure a collaborative process in which all members are actively engaged in the decision-making process. Ensure that they are not just being informed or there only to discuss issues.
- Put in place a constructive design process to discuss alternatives options and have clear and inclusive criteria for decision-making that give clear weight to local or regional issues as well as wider policy objectives. (e.g. economic development and/ or environmental outcomes).
- Set flexible, but agreed timelines in order to better respond to changing circumstances.
- Build trust through effective and lasting working relationships. This requires reliable and predictable behaviour as well as open and respectful communication.

4.2 Managing knowledge

Knowledge is a central resource for planning and decision making. A lot of time and resources are spent on gathering knowledge or 'evidence' to support decisions. The type of knowledge needed, and advice about its potential or best source, is often limited, uncertain, complex and contested. This is a common issue in politics, planning and governing risk. To highlight the way in which knowledge is produced one interviewee described a process involving one report developed for the LVTC. "So while the report itself wasn't perfect it certainly led to a discussion and generated a debate, and again, those with a better understanding of the history of the region and the capabilities of the region, and they were able to articulate it and understand what governments could or could not influence, that has currency. That gets us a long way. That's the sort of knowledge that you're looking for."

The lack of appropriate knowledge is often considered a barrier for adaptation, but can be addressed through a variety of strategies that involves the co-production and exchange of

knowledge (such as the inclusion of local knowledge, vulnerable groups and tacit knowledge). Also taking an active role in organising public debates and decision making processes that includes developing and nourishing policy networks and establishing authoritative hybrid organisations that respond to changing circumstances. One example from the interviews highlights how we can improve our approach to organising and supporting public debates particularly in climate change adaptation. "It was really just discussing prearranged solutions, rather than asking for new ideas or delving into climate change. It was really just – oh, we've got to do something about carbon, so we'll tweak it a bit, and these are our fabulous ideas that we're all working really hard on, sort of thing. Yeah, I think they're all a bit scared of the angry debates. Um, I mean, I think it's a hard one to do well"

Key issues

- Acquiring knowledge is resource intensive
- Knowledge is often lacking or too complex
- Selecting, generating and negotiating knowledge is a contested social process, influenced by values, culture and experience.
- Knowledge is power
- Scientific evidence is no longer seen as independent. Authority of knowledge results from a public negotiation process.

Strategies for managing knowledge

- Involve all relevant stakeholders in identifying what type of knowledge is needed.
- Ensure a diversity of knowledge and evidence is used so that the decision is not dominated by a specific or too narrow perspective, for example having sufficient information to consider economic, social or environmental concerns.
- Social and well-being concerns are often critical in determining community attitudes to the development of options. These need to be properly addressed in knowledge generation for decision making.

4.3 Managing power and political uncertainty

While evidence-based planning and decision making is generally put forward as a key principle for good governance in decision-making, power and politics usually underpins the process and final decision making. Political and policy uncertainty can stifle longer-term thinking required for issues such as adaptation to climate change. One quote from the interviews highlights the high degree of uncertainty that the LVTC faced "for me, the political environment was probably the most uncertain that I'd ever worked within and made the process very difficult" whilst another identifies the importance of building working relationships: "all of the major stakeholders working together to plan for and manage the transition has been hugely beneficial, and will have, I think, long-lasting benefits for the region".

Where certainty is not achievable and a lack of knowledge is more common an ongoing process of evaluation and re-evaluation is a more reasonable strategy than neglecting or ignoring uncertainties. Long-term commitment to solutions, ideally involving all interested parties and potential stakeholders, is required to enable longer term transitions in better functioning societies (Luhman 1971). A defensive (financial) risk management strategy is not good enough. Instead establishing positive aims and values is required to guide decision making and planning in the first instance while risk assessment is complimentary (Hood & Rothstein 2000).

Key issues

- Legislative responsibility and framing
- Resource allocation
- Dealing with bias or set views
- Internal leadership and vision

Strategies for managing power and political uncertainty

- Develop a collaborative culture that deals positively with conflicts and builds wider support as issues unfold.
- Focus on long term strategic objectives rather than on the uncertainty of the political context or achieving short-term financial gains.
- Build lasting working relationships with key stakeholders to assist in building long term social, economic and physical infrastructure.
- Allow for a multiplicity of values and rules into the decision making process.
- Encourage active debate to achieve common understanding and agreed goals.

4.4 Fostering innovation

Climate change adaptation requires new attitudes, perspectives and ways of thinking about the future. Climate change and its impacts, particularly at the regional or local level, remain uncertain. Therefore strategies are required to look at problems in new ways and deal with unexpected events as they emerge.

Typically, strategic decisions are often driven by routine approaches that fall back on past ideas and pet-projects. Innovative approaches and ideas are generally considered financially and politically too risky. It is important in embracing new ways of dealing with complex problems that the wider expertise within the community, industry, local government and higher education are used effectively in the development of creative and effective options. To illustrate the point of how difficult it is to look beyond current frameworks one interviewee described the current process: “There are a lot of people who are very happy to engage in changing the way we burn stuff, but not really in changing the way we do things”

Adaptation involves engaging with the knowledge of science and social science and collaborative learning processes that foster exchanges between those with local knowledge

and those with relevant expertise. There are a range of strategies that could assist in developing innovative plans and build capacity to respond to complex issues.

Key issues

- Path dependencies in doing and thinking
- Innovative change is challenged by cultural beliefs and institutional routines.
- Critical events may bring new opportunities
- Broad engagement can offer new thinking
- The research sector can offer broader experience

Strategies for fostering innovation

- Move from isolated planning activities to integrated strategic planning.
- Challenge 'business as usual models' by incorporating new actors, ideas and processes. Bringing in those who are often excluded from more mainstream engagement processes can generate new perspectives on old problems. Conflicting perspectives or views can enhance diversity of thinking.
- Use new forms of engagement, such as social media, to present knowledge and engage the public in decision making.
- Build long term relationship with research providers to support local innovation capacity, through their links to national and international centres of excellence.
- Shift planning practice away from risk management to the development of positive strategic visioning that informs, reframes and directs planning and public debates whilst fostering risk taking behaviour that achieves innovative change.
- (Re)-embedding planning for climate change adaptation into a specific local history, social conditions and requirements and the unique identity of a region.

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