3.   Methods

In this chapter, I set out the theoretical underpinnings of the methods employed for this research project. I then detail how the particular subjects were chosen for application of these methods, how the methods were applied, discuss my particular positionality in relation to the research and the subjects, and reflect upon shortcomings in my research methods and how these could be addressed in future research in this area.

3.1   Introduction to Research Project Methods

In the literature review (Chapter 2), I identified a need for a theoretical framework that recognised the complexities particular to climate governance. I have employed the super wicked problem framing for understanding climate policy complexities and assessing possible solutions: practice theory to better understand climate governance and household practices, and transition management to inform a structured process to drive change towards more sustainable outcomes at the community level (Levin et al. 2012; Shove and Walker 2010; Frantzeskaki, Loorbach, and Meadowcroft 2012).

In this chapter, I set out how these considerations have influenced the research methods chosen to answer the primary research question:

> *Can practice theory effectively re-craft Australian local government*
> *community engagement approaches in response to climate change?*

In applying a practice lens to the climate governance of Australian local governments, I have adopted Shove's (2017) approach that the research question should generate the methods. Answering the question requires research methods able to examine both specific practices (e.g. how is community engagement constituted and performed?) and their relationships with other practices and broader systems (e.g. how is community engagement influenced by and how does it influence other practices?).

I came to this research project as a consequence of previous work as a consultant, conducting a survey of environmental community engagement programs funded by the Victorian state government and delivered by local governments (UrbanTrans 2008). A key finding of this piece of work was that local governments tended to follow relatively simplistic behaviour change models which had been shown to be of limited efficacy in achieving changes in household practices and reduced emissions (Moloney and Strengers 2014; UrbanTrans 2008; Shove 2010). As with other government reviews of similar sustainability community engagement programs (Scally et al. 2011; Southerton et al. 2011; Brög et al. 2009), my consultancy work focused primarily on what was

achieved (e.g. number of people adopting new behaviours), rather than why and how governments employed these forms of engagement in the first place. The 'why and how' of community engagement is the focus of this research.

As a consequence, I have adopted an interpretivist approach to better understand the subjective reality of the subject (in this case, local governments and the people that comprise them) as well as the meanings I attach to climate governance, both as a researcher and as a participant (Saunders et al. 2003). During this research, I have worked as an executive officer of a network of local governments working together on climate change issues. The Northern Alliance for Greenhouse Action (NAGA) is comprised of nine local governments in northern metropolitan Melbourne and is one of a number of similar climate alliances in the state of Victoria (Moloney and Horne 2015). In addition, in the last year of this research I have also taken on a role as coordinator of a national network of the 95 local governments that have declared, recognised or acknowledged a climate emergency, Climate Emergency Australia (Northern Alliance for Greenhouse Action 2020). In doing so, I engage with officers from local governments both as a researcher and as a colleague.

As a result, it is impossible for me to adopt the positivist stance of researcher as independent from the subject and not bring my values and meanings into my research process (Bryman 2016). For example, at the beginning of this research project, I assumed that efficacy issues with community engagement resulted from a lack of understanding about behaviour change by local government practitioners. In addition, my role as a local government network coordinator positioned me as an insider from the perspective of the interviewees, with both advantages and disadvantages.

Consequently, the interpretivist approach with its blurring of boundaries between researcher and researched is better suited (Alharahsheh and Pius 2020). Ontologically, interpretivism's emphasis on the importance of meanings and how humans construct their social reality aligns well with practice theory's framing of individuals as performers, creating constantly evolving practices and systems of practice (Watson 2012; Shove et al. 2012; Weber 2004)

From an epistemological viewpoint, adopting an interpretivist approach leans towards methods that recognise the co-creation of knowledge between the researcher and subject, and place value upon the meanings that underpin human action (Potrac et al. 2014). In particular, qualitative approaches common to practice theory, including interviews (Nicholls and Strengers 2015), focus groups (Browne 2016) digital engagement (Ellsworth-Krebs and Marshall 2017) and discourse analysis of historical documents (Trentmann and Taylor 2005), allow for close interaction with the subject. This creates ontological realities based on the view of the researcher, the view of those being researched and, ultimately, the audience engaging with the research (Creswell 2013; Potrac et al. 2014)

In this research project, I have drawn upon qualitative methods comprising semi-structured interviews with local government community engagement practitioners, analysis of local

government sustainability and climate change strategies and public statements by key actors to produce empirical evidence which is explored in each chapter as set out in Table 3.1.

Table 3.1: Thesis Chapters and Methods Employed

Chapter	Title	Data/Methods
4	*Analysing Local Government Community Engagement Approaches through a Practice Lens*	• interviews with 29 practitioners (rounds 1 and 2, April – August 2015) • document analysis of 37 strategies
5	*Shifting Practices: How the Rise of Roof-top Solar has Changed Local Government Community Engagement*	• interviews with 8 practitioners (round 2, July – August 2015) • document analysis of 37 strategies
6	*Climate Emergency Declarations and the Emerging Role of Local Governments in Mobilising Change*	• document analysis of 95 climate emergency motions and 25 strategies • public statements by activists and councillors
7	*Driving Transitions in Local Government Climate Governance Systems of Practice*	• interviews with 8 practitioners (round 3, September – October 2015) • document analysis of 95 climate emergency motions and 25 strategies

This research was conducted according to the National Statement on Ethical Conduct in Human Research and approved by the RMIT University College of Design and Social Context Human Ethics Advisory Network (19287-03/15, 19375-05/15 and 20470-10/16).

3.2   Selection of Sources

The initial stage of the research focused on Australian local government climate change and sustainability strategies and interviews with practitioners. Selection of local governments was guided by data outlining the degree of participation of local governments in the Cities for Climate Protection Program (ICLEI 2007, 2008) supported by a snowballing approach through known networks, including the Victorian greenhouse alliances, the regional operating councils in New South Wales and personal contacts of the author. In all this resulted in capturing 106 Australian local

government climate change, greenhouse and sustainability strategies. From this list, 37 strategies were selected for more detailed examination, based on their inclusion of community engagement as a key part of their climate governance practices.

Practitioners were selected for interviews from this initial batch of 37 local governments, based on the data about programs gleaned from the document analysis of the strategies as well as their participation in local government networks, such as the Victorian greenhouse alliances (Moloney and Horne 2018). Again, a snowball sampling approach based upon the recommendations of this first batch of local government officers was adopted to recruit additional interviewees. The selection of interviewees and strategies was not intended to be representative of all Australian local governments, and is biased towards better resourced local governments, often in metropolitan areas, as set out in Table 3.2:

Table 3.2: Local Government Strategies: Selected Australian Council Strategies for Analysis (Sorted by Location)

Inner City	Mid-Suburban	Outer Suburb	Regional City	Rural
Adelaide (SA)	Canada Bay (NSW)	Brimbank (VIC)	Gosford (NSW)	Moreton Bay (QLD)
Ashfield (NSW)	Darebin (VIC)	Frankston (VIC)	Greater Geelong (VIC)	Mount Barker (SA)
Boroondara (VIC)	Kogarah (NSW)	Hobsons Bay (VIC)	Greater Shepparton (VIC)	Tweed (NSW)
Brisbane (QLD)	Manningham (VIC)	Hume (VIC)	Newcastle (NSW)	Warrnambool (VIC)
Fremantle (WA)	Maribyrnong (VIC)	Ku-ring-gai (NSW)	Sunshine Coast (QLD)	Yarra Ranges (VIC)
Leichardt (NSW)	Monash (VIC)	Nillumbik (VIC)	Wollongong (NSW)	
Marrickville (NSW)	Moonee Valley (VIC)	Whittlesea (VIC)		
Melbourne (VIC)	Moreland (VIC)	Wyndham (VIC)		
North Sydney (NSW)	Parramatta (NSW)			
Port Phillip (VIC)	Whitehorse (VIC)			
Sydney (NSW)	Willoughby (NSW)			
Yarra (VIC)				

The selected local governments included 22 from Victoria (VIC), 14 from New South Wales (NSW), three from Queensland (QLD), two from South Australia (SA) and one from Western Australia (WA). As such, the selected local governments do not provide a complete picture of the state of climate change community engagement throughout Australia. However, they do help to identify issues common to less well-resourced local governments (Zeppel 2013; Fallon and Sullivan

2014) as well as more innovative community engagement approaches available to better-resourced local governments.

The local government climate emergency motions and strategies examined in Chapter 6 and 7 were drawn from a database of 95 local governments that have declared a climate emergency (at the time of conducting this research) maintained by a non-government organisation, Climate Emergency Declaration and Mobilisation in Action (CEDAMIA 2020). Climate emergency strategies were identified through desktop research and recommendations from local governments in my network. The 25 strategies selected addressed both community as well as corporate emissions, included elements of climate change community engagement and are generally biased towards better resourced local governments, often in metropolitan areas, as set out in Table 3.3:

Table 3.3: Local Government Climate Emergency Strategies: Selected Australian Council Strategies for Analysis (Sorted by Location)

Inner City	Mid-Suburban	Outer Suburb	Regional City	Rural
Adelaide (SA)	Banyule (VIC)	Brimbank (VIC)	Ballarat (VIC)	Augusta-Margaret River (WA)
Inner West (NSW)	Charles Sturt (SA)	Greater Dandenong (VIC)	Launceston (TAS)	Bass Coast (VIC)
Melbourne (VIC)	Darebin (VIC)		Newcastle (NSW)	Bellingen (NSW)
Port Phillip (VIC)	Holdfast Bay (SA)			Mornington Peninsula (VIC)
Sydney (NSW)	Maribyrnong (VIC)			
Yarra (VIC)	Moonee Valley (VIC)			
Darwin (NT)	Moreland (VIC)			
	Stonnington (VIC			
	Vincent (WA)			

The selected local governments included 13 from Victoria (VIC), four from New South Wales (NSW), two from Western Australia (WA), two from South Australia (SA), one from Tasmania (TAS) and one from the Northern Territory (NT). Analysis of these documents was supplemented by extracts from public statements made by climate emergency activists and councillors, conducted at the 2018 Sustainable Living Festival, in Melbourne. The Sustainable Living Festival is an annual environmental festival, held in Melbourne, that attracts a broad audience including state and local governments, businesses, community groups and individuals. Audio from the speeches cited here was collected by the Centre for Climate Safety (https://climatesafety.info/theclimateemergencyplan/).

3.3   Document Analysis: Local Government Sustainability and Climate Change Strategies

The review of Australian local government strategies was conducted through an extensive search of strategies available on local government websites. This review included both existing as well as precursor versions of strategies to assess how these changed over time in response to both internal and external factors. The analysis sought to understand the strategic motivations of local governments responding to climate change and the perceived role of households participating in that response through community engagement practices. It must be stated that despite these strategies often encompassing both climate mitigation and adaptation practices, I have decided to focus only on mitigation actions as this has been the primary focus of the bulk of community engagement programs delivered by Australian local governments. To this end, I analysed the original 37 strategies to identify data suitable for answering the supplementary research questions, as set out in Table 3.4:

Table 3.4: Analysis of Local Government Strategies: Supplementary Research Questions and Data

Supplementary Research Question	Identified Data
How is community engagement currently used by local governments?	• Specified community engagement programs. • Identified role of community responding to climate change.
How are community engagement practices constructed?	• Specified community engagement programs.
What influences the methods or approaches used in community engagement and have these changed over time?	• Community-based emissions reduction targets set by local governments. • Stated vision outlining climate change response.
Where does community engagement sit in relation to other local government practices?	• Stated forms of climate governance, (regulation, infrastructure, services, advocacy and community engagement)
How is community engagement positioned in relation to the households practices it seeks to influence?	• Specified community engagement programs. • Identified role of community responding to climate change.

The results of the analysis were coded employing an inductive approach sorting the data into thematic nodes using data analysis software (Nvivo). Nodes included:

- framing of the threat of climate change and its use as motivation for action;
- the positioning of council, including the nature of its response to climate change (e.g. mitigation versus adaptation, scope and scale of response);
- the positioning of other stakeholders responding to climate change, such as state and Federal governments;

- behaviour change theories, including the perceived roles and responsibilities of individuals responding to climate change;
- methodological approaches to community engagement (i.e. recruitment, engagement and evaluation); and
- the role and scope of other climate governance practices (i.e. regulation, infrastructure provision, service delivery and advocacy).

This inductive approach was continued through the practitioner interviews. In instances where new thematic nodes emerged during the interviews, they were re-applied to the original scan of climate change strategies.

3.4   Interviews with Practitioners

Semi-structured interviews were conducted with local government practitioners in order to gain the required information while also recognising the expertise of those being interviewed (Schmidt 2004). Semi-structured interviews have been commonly used by practice theorists exploring the construction and performance of everyday household practices, including energy consuming practices of heating and cooking (Powells et al. 2014) and water consuming practices, such as showering and laundering (Laitala et al. 2012; Pullinger et al. 2013). In this research project, there was not the need to compare responses directly between different interviewees as would have been the case with structured interviews (Alshenqeeti 2014). Rather, the advantage of semi-structured interviews ensured some commonality between the different interviews while allowing opportunities to explore issues raised in greater depth (Patton 1990).

Three rounds of interviews, each up to an hour long, were conducted with practitioners responsible for the delivery of climate change community engagement programs, from 29 local governments across Australia. The three rounds of interviews were designed to gain increasingly specific and richer contextual data from engaged local governments. Apart from the first round, each round of interviews built on the findings of the preceding round: the first round provided a high-level view of local government climate change community engagement practices, the second round delved into greater detail about how these practices were constructed and how they worked in performance, and the third round introduced the idea of new forms of community engagement and climate governance practices drawing on practice theory and transition management.

Round 1 – Development of Climate Strategies and Framing of Community Engagement (Interviews with local government practitioners from 29 local governments – April to May 2015)

The first round of interviews sought information about how existing climate change strategies had been developed at each local government and how those parts of the strategies directly seeking to engage with households were structured. In doing so, I sought to understand the relationship between the faming of community engagement within each strategy and how this translated into the practices of community engagement (namely, recruitment, engagement and evaluation). In addition, I also sought information about the professional capacity of the practitioners themselves as to whether previous training or experience influenced their approach to community engagement.

In this first round of interviews practitioners were asked about:

- how their existing local government climate change strategy was developed;
- resources available for the implementation of the strategy;
- their understanding of elements of the strategy that engage directly with households;
- if and how community engagement practices set out in the strategy relate to other local government climate governance practices;
- how community engagement practices have been implemented;
- how implemented community engagement practices have been evaluated, how success of these practices is defined and whether they have been judged to be successful;
- their personal professional background; and
- their knowledge and understanding of theories underpinning community engagement (e.g behaviour change theories).

Round 2 – Understanding Community Engagement Practices and their Relationships to Household and other Governance Practices (Interviews with local government practitioners from eight local governments – July to August 2015)

From the responses in the first round, I then developed a second round of questions for a selected cohort of eight of the first-round interviewees. These interviewees had provided more in-depth detail that those in the first interviews. The questions in this round were designed to gain more detailed information about specific community engagement programs implemented by local governments including:

- the number of participant households in community engagement programs;
- how households were recruited to programs;
- reported actions undertaken to alter the performance of household practices; and
- evaluation practices to assess both changes to household practices as well as the effectiveness of the community engagement practices.

Round 3 – Exploring the Value of Practice Theory and Transition Theory with regard to Local Government Climate Governance Practices (Interviews with local government practitioners from eight local governments – September to October 2015)

Finally, a third round of interviews was conducted with the same cohort of eight local government practitioners sought to understand whether local governments might consider alternative community engagement approaches based on practice theory and transition management. Interviewees were provided with a research background paper ahead of the interviews detailing the relevant theories underpinning the thesis research: super wicked problems, practice theory and transition management. The questions for this round of interviews centred around:

- the value of new practice theory and transition management approaches to community engagement in generating effective change in household practices;

- measuring success in these new approaches versus current conventional approaches;

- reflection on how adoption of these new approaches might change current governance practices; and

- a consideration of the likelihood of adoption of new approaches to inform local government climate governance practices.

Interviews were conducted either face-to-face in the offices of the interviewees or by phone. Interviews were recorded using digital voice capture software either on a smart phone or through desktop computer software, transcribed and coded thematically using the data analysis software (Nvivo). The identity of each of the interviewees was protected to ensure their privacy and ability to speak freely.

3.5 Document Analysis: Local Government Climate Emergency Motions and Strategies

The final phase of research focused on the emerging influence of the climate emergency movement through analysis of motions declaring, recognising or acknowledging a climate emergency passed by Australian local governments and the strategies and action plans that were developed subsequently. The climate emergency movement emerged during the second half of my research. Its impact on local government climate governance practices appeared significant though unclear as to its extent. This justified expanding my scope to include this new movement to assess the likely consequences for climate change community engagement.

From a list of climate emergency declared local governments, I searched the websites of declared councils for climate emergency or climate change strategies developed after the motion had passed. The text of these documents was analysed with a view to identifying specific climate governance

and internal process practices with a particular focus on their implications for community engagement. This included analysis of how motions and strategies framed the role of the community in responding to a climate emergency as well as specific measures outlining how climate change considerations should be embedded across council operations. The analysis also included a comparison between how the role of the community was positioned in previous climate change strategies in order to assess change as a result of the climate emergency framing.

The analysis of the motions and strategies was supplemented by drawing upon public statements made by key actors in the climate emergency movement, including councillors and activists speaking at the 2018 Sustainable Living Festival in Melbourne. This provides additional context for the development of the climate emergency movement that is not otherwise available. As per the previous document analysis, data from a textual analysis of the strategies was entered into qualitative data analysis software (Nvivo) and coded thematically.

3.6   Positionality of the Researcher and Evolution of Research Process

As noted, I commenced this research from a background working as a behaviour change professional, both within government and as a consultant (Harbutt and Meiklejohn 2003). Coming to this research from a behaviour change background, I initially assumed that the focus of the study would be on the types of community engagement programs developed and delivered by Australian local governments. However, early reading as part of the development of my literature review made it clear that it was necessary to examine what was happening in local government climate governance activities and processes, which influenced what was ultimately delivered in programs for households. This reading led me to practice theory as a way to understand and analyse both specific governance practices and their relationship to household practices.

In addition, my prior experience as a behaviour change consultant constrained my initial view of the role of community engagement and, therefore, how to assess its effectiveness. Consultancy projects tend to be limited to the scope defined by a client, though it is recognised that shared understandings generated by consultancies also influence policymaking (Keele 2019). From the point of view of the consultant, the limited scope constrains thinking about the broader impact of the specific project and whether other approaches might be more effective. While practice theory proved useful in lifting my gaze away from the specific project to adopting a more critical systems frame, this realisation also necessitated analysis of theoretical frameworks used for understanding climate change policy making. From my reading, the little-used concept of framing climate change as a super wicked problem emerged as a useful approach as it identified climate complexities and proposed a method to critically assess the credibility or rigor of climate governance solutions (Levin et al. 2012).

At the outset of this research, I assumed not that behaviour change didn't work, but rather that the approaches used or and the way behaviour change programs were was implemented was ineffective and could be improved. In reality, I found that many practitioners I interviewed had sufficient knowledge about behaviour change methodologies but shared my misgivings about whether these worked. This was useful from a research perspective as the practitioners were able to elucidate their own governance constraints, such as limited resourcing, and the impact this had on community engagement practices.

However, my assumption raised two particular issues I had to examine further, and which influenced my research methods. The first was to fully understand the argument that behaviour change models based on theories of rational choice were antithetical to understanding social practices and practice change as proposed by practice theorists (Shove 2010). This required me to deepen my analysis of practice theory to determine if this was the appropriate theoretical foundation for a critical analysis of community engagement practices in my research. While critical of the theoretical underpinnings of behaviour change-based community engagement programs, practice theorists have explored integration between the two approaches (Hargreaves 2011; Spotswood et al. 2015). For me, this indicated that practice theory was not a 'closed shop' and that it had potential beyond an analytical critique of existing theoretical frameworks. This included other 'oppositional' theoretical approaches, notably transition theories (Shove and Walker 2007; Geels 2011; Watson 2012)

Finally, my position as both insider and outsider in this research process, has provided distinct advantages for the research project in terms of gaining access to local government practitioners and a sense of trust in shared knowledge (Mercer 2007). The primary disadvantage lies in differing expectations between practitioners and me as an academic researcher about what would emerge from this research project. While I have sought research methods and results that can inform the activities of the local government networks within which I play a role, translating this research into practical community engagement methodologies or practices has proved problematic. While such research offers a greater understanding of the complexities inherent in climate governance, it does not offer straightforward solutions that can be immediately implemented, as desired by practitioners. For researchers, the phrase "requires further research" offers new opportunities for exploration; for practitioners, it can frustrate in its inability to deliver clear answers. My dual role as both insider and outsider requires me to walk the line between theory and practice, between academic and practitioner in a manner that is useful to both.

3.7   Reflections on Methods and Research

While the methods employed for this research project have delivered findings on the state and potential future of local government community engagement practices responding to climate change,

I have also identified three opportunities for future research. The first is the need to examine more deeply the dynamic relationship between governance approaches and interventions and the impact on changing or influencing household practices; second, the capacity and time to test the implementation of transition management methods by local governments and others; and third, a more detailed analysis of the influence of the climate emergency movement on emerging local government governance practices.

With regard to the relationship between local government climate governance and household practices, as I was primarily interested in capturing data about climate governance practices, the three rounds of interviews with local government practitioners were useful, particularly in providing both a high-level perspective on activity across Australia (recognising that this is not a representative sample of all Australian local governments) as well as within specific programs. In this approach, I have relied to an extent on previous analyses drawing on practice theory focusing on both local government climate governance practices (Moloney and Strengers 2014) and everyday household practices (Nicholls and Strengers 2015; Judson and Maller 2014), and the intersection between the two. An alternative approach may have been to adopt a case study approach and focus on a select number of programs, examining these in depth to capture both the community engagement practices as well as how households respond to those practices. Such an approach would possibly provide richer data not only about specific community engagement practices, but also about the relationship between governance and household practices.

With regard to the employment of transition management as a potential method to inform a future-focused policy and program governance framework, I recognise that, in this project, it has been limited to a proposed way forward rather than subject to a thorough exploration of how that might play out. When conducting the third round of interviews with practitioners, I introduced the concept of transition management and sought their views on its value in informing their work. However, this generated minimal useful data as practitioners struggled to see how the concept could be applied, especially with regard to sharing a transition arena space with other stakeholders. This suggests there is a need for more groundwork in terms of the research to better engage practitioners in the use of value of an approach like transition management. This would be required to more rigorously explore how existing strategy development and implementation approaches could employ transition management in practice. This could benefit from a more action-research oriented approach engaging over a longer term with practitioners.

Finally, the emergence of the climate emergency movement during this research project presented a challenge as this was not within the original research remit. As a result, there has not been the time to conduct interviews with practitioners as to their assessment of the influence of this framing, upon how the community is being engaged and what this means for future methods of community engagement. There is also a paucity of research on how local governments are responding to the

climate emergency framing (Chou 2020; Davidson et al. 2020). Drawing on my experience coordinating a network of climate emergency declared councils, I am aware of only one community engagement approach under development at the time of writing. This points to future opportunities for research examining the implications of emerging climate emergency governance practices.