4. Applying a Practice Lens to Local Government Climate Change Governance: Rethinking Community Engagement Practices

Abstract

Governments commit substantial time and resources, through community engagement programs, engaging individuals and households to reduce their greenhouse gas emissions. These approaches, based largely upon behaviour change theories, have been criticised for their limited reach and effectiveness by practice theorists who have offered an alternative approach, broadening the focus beyond individuals. While practice theory has provided valuable insights into the energy consuming activities of households it has gained only limited traction as a way to analyse and inform government practices and policy making.

I address this by applying a practice lens to climate change community engagement practices performed by Australian local governments. Drawing on 29 interviews with practitioners and analysis of 37 Australian local government climate strategies, I examine the bundle of practices that constitute climate change community engagement: recruitment, engagement and evaluation. I consider how these practices are situated vis-a-vis other climate governance practices (regulation, service delivery, infrastructure provision and advocacy) as well as internal local government processes. Using a practice lens reveals weaknesses in current engagement approaches which I contend are limiting the efficacy of local government climate governance. I draw upon Spurling et al.'s (2013) conceptualisation of re-crafting, re-integrating and substituting practices to consider how climate change community engagement practices might be reconfigured to improve their effectiveness.

4.1 Introduction

While practice theory has proved valuable in analysing and understanding everyday activities that contribute to the causes of climate change (Shove 2010), it has struggled to gain acceptance within governments as a working approach to develop policy and interventions to reduce greenhouse gas emissions (Watson et al. 2020). By contrast to the widespread adoption of behaviour change theories within government circles (John et al. 2009; Halpern 2015), the deliberate use of practice theory has been far more limited (Hoolohan et al. 2018; Spurling et al. 2013). Positing an alternative to behaviour change-based governance requires more than simply swapping out one theoretical approach for another. I contend that a necessary first step is to understand how current climate governance is structured, which has been historically under-examined by practice theory (Macrorie et al. 2015).

Applying practice theory offers a deeper understanding of how climate governance activities are constructed, what sustains them, how they interact with one another and how they relate to the household practices they seek to influence (Keller et al. 2016). By doing so, I not only gain a rounded picture of how policy and interventions work but also how practice theory might shape them to improve their efficacy in reducing household emissions (Strengers and Maller 2014). To test how this analysis might be developed and applied and what it might tell us about the value of applying a practice lens to government activities, I examine the practices of *climate change community engagement* as performed by Australian local governments.

Lacking the regulatory, service or financial powers available to many of their international counterparts, Australian local governments seeking to reduce community-based greenhouse gas emissions are more reliant on voluntary action being taken by others, such as households (Pillora 2011; Coenen and Menkveld 2013; van Staden and Musco 2010). This is achieved through community engagement programs that seek to convince individuals of the need to act on climate change and empower them with the resources and capacity to do so (Fritze et al. 2009; Moloney et al. 2010; Tilbury et al. 2005; UrbanTrans 2008). These programs are underpinned by an assumption that individuals can, through altering their behaviours and choices, reduce their personal emissions (Southerton et al. 2011; Ly and Soman 2013).

This reliance upon behaviour change theories has already been the subject of practice-based critiques (Moloney and Strengers 2014; Shove 2010). Primarily, practice theory is critical of a behaviour change focus on the role of the individual while neglecting broader systemic influences (Shove 2010); by contrast, practice theory with its positioning of the individual as a performer of practices broadens the view of policymakers and practitioners to the practice (e.g. washing, heating, driving etc.) and the relationships between individuals and systems that sustain it (Shove et al. 2012). Despite this, behaviour change-based approaches remain a key component of Australian local government climate change community engagement (Moloney and Horne 2015). My contention is that while practice theory has explained *what* needs to change in thinking about what households do (i.e. a broader focus on practices rather than individuals), it has less successfully explained *how* that is to be achieved and the implications for what governments do (Macrorie et al. 2015).

I begin by examining the elements that constitute practices (competencies, materials and meanings) drawing on the work of Shove and others (Shove et al. 2012; Reckwitz 2002; Strengers 2010). I consider an intervention methodology based upon re-crafting or substituting practices or through reconfiguring relationships between different practices (Spurling et al. 2013). I then define the governance framework within which community engagement practices sit, including other climate governance practices, such as the use of regulations, the provision of supportive infrastructure, the delivery of services and advocacy to other stakeholders on behalf of their communities, as well as the

influences of internal process practices, such as local government strategy management, governance and political cultures. I define and examine the three distinct practices performed by Australian local governments that form what we call community engagement: *recruitment* to a program, *engagement* to change a specific practice and *evaluation* of the impact of these programs. I consider the relationship between these three practices within a bundle of community engagement practices.

This analysis identifies weaknesses in current forms of local government climate change community engagement, including limited resourcing resulting in short-term interventions, a reliance on concern for climate change as a motivation for action and assumptions about the ability of individuals to change their behaviour. I explore opportunities to reconfigure or shift these practices drawing on the work of Spurling et al. (2013). They talk about reconfiguring practices in three different ways: *re-crafting* (changing the composition of an individual practice), *substituting* (replacing one practice with another) or *re-integrating* (changing the relationships between different practices) (Spurling et al. 2013). I identify examples where local governments have already undertaken forms of re-crafting, substituting or re-integrating, and consider how these approaches might be applied more broadly to improve the effectiveness of interventions.

4.2 Analysing Local Government Climate Governance and Community Engagement

Local government climate change community engagement practices are situated within a broader governance framework which influences how these practices are structured and performed. These include other climate governance practices that mitigate against the production of greenhouse gas emissions or adapt to the projected impacts of climate change, including regulation, infrastructure provision, service delivery and advocacy. In addition, what might be termed internal process practices central to the general operation of local governments, such as strategy development, management and political cultures, are also influential in both hindering and supporting the effectiveness of community engagement practices (Betsill and Bulkeley 2006; Fallon and Sullivan 2014; McGuirk et al. 2015; Storey 2012).

In this section, I draw upon the analysis of 37 local government climate change and community engagement strategies as well as interviews with 29 local government practitioners to explore these related practices to understand the implications of their structures, performances and relationships for climate change community engagement. I then apply a practice lens to each of the community engagement practices (recruitment, engagement and evaluation).

4.2.1 Local Government Climate Governance and Internal Process Practices

In addition to community engagement, climate governance practices performed by local governments include regulation, infrastructure provision, service delivery and advocacy. Regulatory practices

include land use planning provisions and guidance, local traffic laws and ecologically sustainable design requirements for new building approvals (Maddocks 2010). Infrastructure provision may include local sustainability centres that provide direct demonstration of low or zero carbon forms of household practices, as well as supportive built forms, such as walking and cycling paths (Inglis et al. 2014). Service delivery includes domestic waste collection and recycling that directly addresses the production of household greenhouse gas emissions arising from consumption practices (Xu et al. 1999). Advocacy practices, such as engaging in formal consultations with state and Federal governments, seek supportive policy frameworks and resourcing (City of Boroondara 2009; Gold Coast City Council 2009; Hobsons Bay City Council 2015; City of Moreland 2014).

Internal process practices within local governments include strategic management in which climate change governance practices are planned and resourced through multi-year strategies to meet climate change mitigation and adaptation objectives (City of Darebin 2009; City of Fremantle 2014; City of Newcastle 2011; City of Sydney 2013; City of Yarra 2013). The form of these strategies is broadly consistent throughout the sector, including measurement of baseline emissions, establishing emissions reduction targets, developing and implementing a plan of action and evaluating its effectiveness, both in terms of the efficacy of governance processes as well as outcomes in the form of reduced emissions for the municipality (Lindseth 2004). This consistency reflects the influence of the Cities for Climate Protection program, which created a structured process for local governments to tackle climate change in the early 2000s (ICLEI 2007, 2008). Initially focused on local government corporate emissions, this process subsequently expanded in scope to account for community emissions, including those from households (Brisbane City Council 2007; City of Moonee Valley 2010; Gold Coast City Council 2009). Strategies have more recently included adaptation measures that seek to protect council assets and services and improve community resilience to projected climatic impacts (City of Melbourne 2009; Hume City Council 2013).

Finally, climate change governance practices, including community engagement, are influenced by management and political cultures practices that may actively weaken support for or undermine the effectiveness of climate governance (Zeppel 2011). These include narrow perspectives of professionals that resist change (Binder and Boldero 2012; Rickards et al. 2014):

> "I feel like there's a high proportion of people in councils who are … rusted on. They're kind of hanging out for retirement. They don't want anything to get more difficult or more complex."
>
> (Interviewee E)

While local governments possess creative individuals responding to climate change (Pillora 2011), these individuals may be constrained by internal structures and cultures within local government that emphasise risk and the limited role of councils (Considine and Lewis 2007). Practitioners note that

this often results in a contest between a conservative risk management culture, expressed by senior managers and directors, and progressive councillors wishing to act on climate change:

> "Our executive is very fiscally conservative. They've almost kind of been recruited to play that role because we were in this very financially constrained situation, so it's their role to tighten the screws. The irony is that, at the moment, we have this super progressive council, so it will be very interesting to see how that plays out, whether that has an influence on what gets done, whether things continue to be constrained through that bottleneck of executive."
>
> (Interviewee E)

4.2.2 Climate Change Community Engagement Practices

Local government climate change community engagement seeks to influence the performance of everyday practices carried out within households, such as heating and cooling, lighting, cooking, washing and entertaining, that contribute to the production of greenhouse gas emissions (Shove and Spurling 2013). My analysis of local government strategies and interviews with officers have identified three primary community engagement practices: recruitment, engagement and evaluation, that create a step-process bundle called community engagement. The first step, recruitment, refers to the communications strategies and techniques employed to identify and target individuals and households, promote initiatives and encourage households to participate in programs. The second step, engagement, refers to the actual process the individual or household is encouraged to undertake in order to enact a shift in the performance of their everyday practices. Finally, the third step, evaluation, records whether climate change community engagement interventions are effective in meeting their objectives. In this section, I apply Shove et al.'s (2012) formulation of practices (materials, meanings and competencies) to examine community engagement practices, reveal weaknesses in current performance and identify opportunities to improve their effectiveness.

4.2.3 Recruitment Practices

How Australian local governments recruit households to climate change community engagement programs is heavily influenced by available communications channels (materials) and the limited financial capacity of local governments (competencies). This results in the use of more affordable avenues such as local newspapers and council publications (Jenner and Roberts 2014; Metropolis Research 2015; Hoff 2010), supplemented by public outreach opportunities, such as festivals:

> "That is actually a very good platform to reach out to the people that aren't currently already interested or that minded, just because, you know "oh a festival, you can come along, you can look at markets, there's music, there's also free workshops and activities" that sounds fun and interesting, we think."
>
> (Interviewee I)

Practitioners will also seek to recruit from within audiences that have already been engaged, using cross-promotional opportunities to highlight other topics that may be of interest:

> "We cross-promote all our different activities at each workshop, people are like "oh, I might go to this sustainable gardening one on the weekend or I'd love to go to that cooking workshop to learn how to use food scraps", so, yeah, we do get a fair bit of crossover in that respect."
>
> (Interviewee C)

The primary meaning informing recruitment practices is that individuals are part of a collective response to climate change with council filling in gaps in information or improving the skills of individuals to help them change their behaviours. These meanings are set out in local government strategies: "the pursuit towards a sustainable future also requires a shift in values and behaviour by the community" (City of Yarra 2013, p. 7), "success depends on the support and involvement of community stakeholders" (Sunshine Coast Council 2010, p. 17) and "positive environmental change in the future can only be achieved through influencing and altering our current lifestyle and behaviours which are unsustainable" (City of Canada Bay 2012, p. 8).

The use of climate change as the primary motivation to engage individuals raises two potential issues that limit the effectiveness of this type of recruitment practice. Firstly, it confronts well understood psychological barriers specifically associated with climate change (Lorenzoni et al. 2007; Gifford 2011). Secondly, it places 'doing something about climate change' in competition with other meanings associated with everyday household practices (Shove and Spurling 2013).

Psychological barriers include fatalistic beliefs about the efficacy of acting, contested political influences, negative social norms that reinforce existing forms of practice and financial barriers to changing household practices (Lorenzoni et al. 2007; Pike et al. 2015; Oliver 2017; Axsen and Kurani 2012; Gifford 2011). From a practice perspective, the use of climate change as a motivation for action clashes with other meanings associated with the performance of everyday household practices, few of which have to do with the consideration of the environmental impacts of these practices (Shove et al. 2012). By contrast, the need to act on climate change can appear less immediate and attractive only to a limited audience, a weakness recognised by local government practitioners:

> "How do you get the people who should be doing all of this instead of the group that's already invested?"
>
> (Interviewee I)

The conflict with psychological barriers associated with acting on climate change often leads to limited success in recruitment where a like-minded group are engaged, leaving a wider population much more challenging for local governments to reach. The conflict with meanings associated with everyday practices not only blunts the potential to recruit households but also results in missed opportunities that would arise from a better understanding of such practices.

4.2.4 Engagement Practices

The meanings associated with recruitment practices (namely, that there is a need to respond to climate change and that this is achieved through building the capacities of individuals) also flow through engagement practices. Additionally, the constrained financial resources that affect recruitment practices also influence forms of engagement. The most common engagement practices are face-to-face workshops (materials and competencies), often hosted at local government facilities, such as libraries and community centres, to pass on information or improve the skills of individuals (Department of Transport 2012; Fritze et al. 2009; Ingle et al. 2014; Tilbury et al. 2005). Interested individuals are brought together to learn about specific subjects, such as energy efficiency, solar power, rainwater harvesting, chicken rearing, composting, worm farming, recycling, reusing goods, healthy and frugal cooking as well as discussions about climate change (Fritze et al. 2009). Practitioners note that the popularity of workshops varies by topic:

> "I think the solar panel ones, because the room was absolutely packed, it had a real energy of "wow, lots of people are doing this" so it was kind of exciting."
>
> (Interviewee M)

Recognising that face-to-face workshops are limited in their ability to reach larger audiences, local government seek to build the capacity of leaders within the community to not only act themselves but to also educate and inspire others. Participants in such leadership programs may already have an interest in climate change and sustainability issues or the local government may identify them as leaders within existing social networks, such as culturally and linguistically diverse communities (City of Darebin 2009; Sustainability Fund 2012). This 'train the trainer' approach requires deeper engagement:

> "Training touches on some key sustainability issues but it's also leadership training and project planning training. Then the idea is that

> some people bring project ideas, and those project ideas are formed up into projects and other champions might join in with one of those project ideas or create a new group and deliver the project."
>
> (Interviewee F)

Funding limitations and uncertainty also hamper the ability of local governments to develop longer-term forms of engagement that would build relationships with households over time:

> "We might have strategic plans going ten years into the future but that doesn't mean that we can allocate money that far. So, if you want to do something, even if you know that it's a longer-term thing, the way that you pitch it to us is as a pilot, as a one-off project which ideally will lead to other things, but it still leaves us open to saying yes or no in the future."
>
> (Interviewee B)

This results in a need to deliver projects within a limited time period that favours short-term interventions. This, in turn, influences the third community engagement practice within the bundle: evaluation.

4.2.5 Evaluation Practices

Evaluation practices vary in their performance depending upon whether their focus is process measurement, such as the number of individuals engaged in a program, or outcomes, such as tonnes of emissions saved (UrbanTrans 2008). For practitioners, focusing on process measures is influenced by a need to better understand what works in their recruitment and engagement practices:

> "It's questions around 'are the topics suitable? Is the time suitable? How can we get more people there? What do the people want out of it?' So, it's more evaluation of our own stuff rather than what outcomes have the people got from it."
>
> (Interviewee R)

The most common material used in this form of evaluation are post-event surveys, whether conducted immediately following a workshop or later, especially if practitioners want to record any changes in household practices following the engagement. Once again, constrained financial and time resources limit the ability of practitioners (competencies) to evaluate their interventions effectively:

> "Our intention is to send out emails three months later or something like that or a survey and see if people are doing it but to be honest, at this stage I've only managed to get one out."
>
> (Interviewee D)

This recognised difficulty in evaluating programs combined with an emphasis on emissions reductions, as stressed in local government strategies, can favour some forms of intervention over others. In particular, technological improvements to a household, such as the installation of rooftop solar, can be measured in a straightforward manner (has the technology been adopted or not?). Reasonable assumptions can be made about emissions reductions, based on the known performance of the technology although these need to be treated with some degree of caution (Aydin et al. 2015). What is less clear, and is recognised as such by practitioners, is how much credit a program can claim and how much is a decision that may have been taken by the household regardless:

> "Someone might have come up to a street stall and we've had a five-minute chat about solar and they've gone off and done some Googling and ended up getting solar. So, we're definitely part of that process but it's really difficult to measure."
>
> (Interviewee S)

From a practice perspective, the difficulty in evaluation relying upon outcomes based solely on emissions reductions is that it tells practitioners very little about how particular interventions engaged with and changed (or failed to change) everyday practices within the household. Lacking a deep understanding of why practices change due to climate change community engagement presents future challenges for local government practitioners seeking to deliver effective solutions: why is one form of engagement sticky with an audience and another not? What makes a particular technology capable of embedding itself within the lives of a target audience while another fails to do so? Are some forms of practice suitable for spreading rapidly amongst new audiences, and if so, why? None of these issues are addressed in the narrow approach to evaluation commonly used by local governments.

To conclude this analysis of local government climate change community engagement practices, three primary limitations have been identified.

The first, which is common to all three community engagement practices, is limited resourcing. This is the result of a range of factors beyond the control of practitioners, including conservative management cultures within local government. This results in low impact forms of recruitment, such as local media, engagement practices based upon face-to-face interventions and evaluation that can favour easier-to-measure approaches, such as encouraging the adoption of emissions reduction technology. Additionally, such numbers-based outcome measurement misses the complexities of what is occurring

within households.

The second is a focus on the individual as a rational actor capable of changing behaviour and contributing to a collective community response to climate change. This alignment with behaviour change theories results in engagement practices that stress the development of skills and provision of information to address perceived shortfalls in the capacities or understandings of participants. In doing so, it fails to understand the complexity of the household practices it seeks to influence. As a result, the integration of community engagement with other climate governance practices is neglected.

Finally, the third is the use of climate change as a motivation for individuals to act. Spelled out in the strategies that frame community engagement and other climate governance practices is the assumption that the threat of climate change will encourage individuals to act. As has been noted, this not only faces known psychological barriers but also conflicts with meanings associated with the performance of everyday practices within the household.

Identifying these weaknesses offers opportunity. I regard them as pressure points within existing practices and relationships that can be that can be used to reconfigure these practices to improve their effectiveness. The motivation to change how climate change community engagement practices are performed and interact is not about 'doing community engagement better' but rather should seek to improve the opportunity for local governments to attain broader strategic objectives. In the next section, I draw upon an existing practice-based intervention methodology to test what is possible (Spurling et al. 2013).

4.3 Re-Crafting, Substituting and Re-Integrating Local Government Practices

Having identified shortcomings in the existing performance of community engagement and climate governance practices, I now consider how these practices might be altered to improve their effectiveness. To achieve this, I turn to Spurling et al.'s (2013) approach to consider how existing community engagement practices might be *re-crafted, re-integrated or substituted* to address these weaknesses. In exploring the possible avenues for shaping local government practices through this approach, I identify a need for practitioners and policymakers to establish clear objectives to be sought through climate governance, to understand the relationship between community engagement and other climate governance practices and to understand the dynamic relationship between community engagement and household practices and the systems of practice within which the latter are situated.

I develop a framework that addresses each of the identified weaknesses in current forms of community engagement (lack of resources, using climate change as a motivation for action and a reliance on behaviour change theories that focus on the role of changing individual behaviours). As set out in Table 4.1, addressing each of these weaknesses with Spurling et al.'s (2013) suggested

approach reveals new opportunities as I consider each form of practice change (moving left to right in terms of least to more radical change) in relation to the level of ambition associated with climate governance.

Table 4.2: Re-crafting, Re-integrating and Substituting to Address Weaknesses in Current Community Engagement Practices

Weaknesses/Responses	Re-crafting	Re-integrating	Substituting
Limited Resources	New forms of recruitment, engagement and evaluation.	Deliver community engagement along with other climate governance practices.	Replace community engagement with other forms of climate governance.
Climate Change as Motivation for Action	Community engagement on climate specific actions.	Integrate with other meanings associated with household practices.	Replace with more effective meanings.
Focus on Individuals	Focus on household practice.	Integrate with other household practices.	Address systemic issues that enable or disable household practices.

Selecting interventions from this set of possible practice changes is guided by objectives set out in climate change strategies. Deciding which approach to take will reflect those objectives and the political will of the local government. I now examine each of the potential approaches in detail, drawing on existing experience of local governments and considering how these might be used to improve community engagement.

4.3.1 Re-Crafting

Re-crafting existing community engagement practices (recruitment, engagement, evaluation) can range from minor tweaks to existing forms of community engagement to a fundamental re-consideration of the role of households in responding to climate change. In the case of the former, recruitment can be re-crafted to include new communications channels, such as social media that can reach a larger and more targeted audience in a manner that reflects the financial constraints of local government (Ross et al. 2012; Heldman et al. 2013). In the case of the latter, recruitment can take

better advantage of existing networks within the community based upon practices rather than identifiable demographic groups. Analysis of how everyday practices are performed can identify networks of practice based on commonalities in performance between households (Higginson et al. 2015). These networks may then suggest new interventions based around practice household types. For example, households with young children have broadly common forms of performance of cooking, washing and heating practices (Nicholls and Strengers 2015). Developing interventions that take account of these common performances are more likely to meet the super wicked solutions criteria of being embedded within the household. In this example, such embedding also has the opportunity to apply to the local government as interventions could be delivered by alternative parts of local government that have existing governance relationships with households (e.g. maternal and child health services in Victorian councils). This approach has already been tested at Hume City Council (in Melbourne's outer northern suburbs) where practitioners developed interventions to improve the energy efficiency of low-income, elderly households using Home and Community Care services already delivered by council, drawing on existing trusted relationships between council and the target audience (Northern Alliance for Greenhouse Action 2016).

Local governments wishing to maintain a framing based upon a collective response to climate change, in which the community is viewed as working together to reduce emissions or adapt to projected impacts, may consider other forms of engagement. Engagement practices based around climate adaptation responses, such as public tree planting and citizen science projects, meet this need by introducing new practices to be performed by households. Alternatively, climate change may be positioned as a secondary meaning associated with everyday practices; for example, community engagement to encourage the uptake of rooftop solar has, more recently, shifted its emphasis to stress the financial and health benefits of solar while climate change as a motivation sits in the background (Meiklejohn et al. 2018).

Should practitioners seek to dramatically expand the scale of their impact upon household emissions, engagement practices can be re-crafted through more ambitious interventions. For example, local governments could increase their support for community energy projects that accelerate the uptake of renewable energy in a collective manner (Mey et al. 2016). Such an approach consolidates a collective approach but also draws attention to the construct of the energy provision system and its contribution to climate change (Pears 2007).

Finally, evaluation practices may be re-crafted to reflect an understanding that different forms of evaluation are required to meet different needs. Instead of relying solely on quantitative approaches to measure outcomes (e.g. numbers of workshop participants or numbers of solar units installed as reported by interviewees), practitioners could employ more qualitative approaches, such as targeted surveys and interviews, to better understand what is going on within household practices as they interact with climate governance practices (Pullinger et al. 2013). In addition, instead of conducting

their own quantitative evaluation, local governments could rely more on evaluation practices performed by other agencies to capture broader, municipal-wide shifts in energy use and emissions production (Ironbark Sustainability 2020).

4.3.2 Re-Integrating

Re-integrating requires consideration of the relationship between community engagement and other climate governance practices, with the household practices they seek to influence as well as with actors and forces driving broader changes in the socio-technical system. It offers local governments an opportunity to overcome a constraint of limited resources by combining community engagement with other forms of climate governance, potentially increasing the effectiveness of policies and programs with little or no additional expenditure.

For example, the City of Darebin's *Solar Savers* program drew together community engagement and regulatory practices to increase the uptake of rooftop solar amongst a previously untapped audience, thereby addressing energy poverty issues and reducing greenhouse gas emissions (EAGA 2017). Pre-intervention research informing this project identified a target audience that was likely to benefit financially from the adoption of rooftop solar but was excluded from the market: low-income pensioners owning their properties (City of Darebin 2017b). This audience reported to council that they were unable to afford the upfront costs of solar and were less likely to use air conditioning during heat waves because they were concerned about the associated energy costs (Robertson 2016). Council employed a provision in the Victorian *Local Government Act* (State of Victoria 1989) to provide solar units to participating households and recoup the funds through a special rates charge at a rate which guaranteed savings from reduced energy bills (City of Darebin 2017b).

This intervention demonstrates an ability to re-integrate the relationship between targeted community engagement practices and regulatory practices, by drawing on available legislative powers (Mey et al. 2016). In addition, community engagement practice meanings associated with the promotion of rooftop solar were re-crafted, shifting away from a focus on needing to act on climate change to health messaging associated with staying safe during heatwaves (Robertson 2016; City of Darebin 2017b). The first round of the council's *Solar Savers* program installed solar on the roofs of 294 low-income pensioner households in 2014, and has been repeated and expanded in subsequent years (Irwin 2014; City of Darebin 2017a).

The City of Moonee Valley (in Melbourne's north east suburbs) re-integrated community engagement with infrastructure provision to encourage higher rates of walking and cycling for children travelling to school (Bagnati and Meiklejohn 2013). While Australian local governments perform a range of engagement, regulatory and infrastructure practices to encourage and support children to walk or cycle to school, including parking and speed restrictions for vehicles, footpaths and cycling lanes and

interventions such as walking school buses (Brisbane City Council 2007; City of Boroondara 2009; City of Manningham 2009; City of Port Phillip 2011), the integration of these with community engagement has been haphazard (Morris et al. 2001; Peddie and Somerville 2006). The City of Moonee Valley's re-integration rewarded those schools active in supporting walking and cycling through community engagement by prioritising infrastructure installation where it was most needed. This approach not only incentivised school communities to act but also provided council traffic engineers with stronger justification for the selection of projects (Bagnati and Meiklejohn 2013).

While both examples highlight the opportunity of re-integration, they also meet super wicked solutions criteria. Rooftop solar is popular amongst Australian households and can be quickly embedded into the network of practices performed within the home (Meiklejohn et al. 2018). The re-integration of community engagement with the provision of infrastructure in Moonee Valley schools not only embeds a new approach to sustainable transport governance within a council but also has the capacity to spread quickly by providing schools with an incentive to act.

4.3.3 Substituting

Local governments may also consider whether to replace community engagement practices altogether in favour of other climate governance practices that may drive a greater decrease in community-based emissions (Beyond Zero Emissions et al. 2018). In terms of meeting the requirements of addressing climate change as a super-wicked problem - developing solutions that are immediately popular, can embed themselves in people's lives and have the capacity to spread rapidly - community engagement may be less effective than other practices. Regulatory practices, such as building requirements to encourage sustainable building design and land use planning to increase urban density and tree cover have the capacity to drive material improvements that are embedded for the long term (Allender et al. 2009; Ballingall et al. 2013; City of Yarra 2020; City of Melbourne 2017; City of Sydney 2013). Local governments may also consider delivering services that will achieve the same objective. For example, councils may take on new roles, such as energy retailers, that ensure the delivery of renewable energy to their communities (Dunn 2018) or they may focus more on supportive infrastructure, such as walking and cycling routes (Pucher et al. 2011). Alternatively, they may decide to devote their resources to advocating to higher tiers of government with greater capacity to act (Council Action in the Climate Emergency 2018). In practice, it is rare for local governments to abandon community engagement in favour of other climate governance practices. Engaging communities is still a key role for local governments as it provides social license for regulatory practices and advocacy (Wiseman et al. 2010).

4.4 Discussion

In this chapter, I set out to correct an historical under-examination of governance practices within the practice theory literature (Macrorie et al. 2015). By gaining a better appreciation of how governance practices work, I have advanced practice theory as a useful lens for policymakers and practitioners, replacing current methodologies based upon behaviour-change theories. I focused on climate change community engagement practices which I have characterised as a bundle of three practices - recruitment, engagement and evaluation - as performed by Australian local governments. Drawing on a sample of 37 local government strategies and 29 interviews with local government practitioners from across Australia, I examined the relationship between each of these practices as well as between these and other climate governance practices (regulation, infrastructure provision, service delivery and advocacy). I also reflected on local government strategic management and working cultures and how this can influence local government approaches to engaging with the everyday household practices they seek to influence. I identified three primary constraints influencing the performance of community engagement practices.

The first is that Australian local governments operate within constrained financial circumstances, resulting in low-cost forms of recruitment, engagement and evaluation. This includes recruitment practices that use local and free media, such as newspapers and council publications, engagement practices such as face-to-face workshops held in council premises and relatively simplistic evaluation of process measures (e.g. numbers of program participants) or outcome measures (e.g. numbers of solar installations in municipality). In each instance, there is little opportunity to explore or understand the nuance and complexity that informs how household practices are performed.

The second is an adherence to behaviour change methodologies in which individuals are encouraged to adopt more sustainable forms of household practices, through the provision of information and resources. This is allied with the third shortcoming of climate change community engagement: a reliance upon climate change as a motivation for individuals to change how they perform practices such as heating and cooling, washing, cooking and travelling to work or school. I note that this approach not only faces obstacles within the behavioural framing common to community engagement but also conflicts with meanings associated with everyday household practices (e.g. notions of comfort associated with air conditioning versus reducing energy usage to cut emissions).

I then drew upon Spurling et al. (2013) to examine how current local government climate engagement practices might be re-crafted, re-integrated or substituted to address the three identified weaknesses in current forms of practices and improve their efficacy. This includes examples of local government initiatives that have already sought to shift how community engagement practices are performed, such as re-integrating community engagement with regulation and infrastructure. While applying a practice lens to community engagement practices has proved valuable in showing how practices can be altered (and, in turn, can change household practices), developing a practice-based approach to local

government climate governance requires further investigation at both the practice-specific and the systemic level.

For practices, there is still more work to be done on understanding the dynamic relationship between climate governance practices and the household practices they seek to shape. For the emissions over which local governments have control or strong influence, climate governance practices are framed as tools to be used to influence household practices (City of Darebin 2017a; City of Sydney 2013; Adelaide City Council 2015; Gold Coast City Council 2009; City of Melbourne 2019), but the relationship between governance and household practices runs both ways. For example, the rapid and widespread adoption of rooftop solar has disrupted meanings associated with community engagement, most notably through a shift away from using a collective social response to climate change as a motivation to personal financial gains (Meiklejohn et al. 2018). The implications of this dynamic relationship need to be considered when crafting more effective forms of community engagement.

While some changes in household practices, such as the adoption of rooftop solar, can be anticipated, others are less predictable though just as consequential for community engagement practices. For example, the shift to working from home during the Covid-19 pandemic for a significant proportion of the population has driven significant changes in residential energy consumption patterns (IEA 2020). Such a rapid change in household energy consumption practices may create new opportunities for community engagement but only if policymakers and practitioners have a clear understanding of what is going on within the home, how everyday practices have shifted and what this means for energy use. This new understanding might inform effective governance practices to enable a reduction in energy use and greenhouse gas emissions.

In addition, practitioners need to understand how their governance practices might be influenced by new political movements and resulting cultural changes within councils. Just as existing community engagement practices have been shaped by the past participation of local governments in programs such as ICLEI's Cities for Climate Protection program, the recent emergence of the climate emergency movement is likely to change cultures and practices within the local government sector (Chou 2020). In particular, the climate emergency movement's emphasis on the need to advocate to other tiers of government rather than focus on encouraging households to change their practices envisages new forms of community engagement with a stronger emphasis on advocacy and working across sectors (Sutton 2017). These wider social change movements are likely to influence meanings and competencies within local government climate governance practices, which increases pressure on councils to address the complexities associated with responding to climate change.

Finally, while Spurling et al.'s (2013) approach proves valuable in thinking about how climate governance practices can be re-shaped or reconfigured, more research is required to develop and apply a practice-based framework to be employed by policymakers and practitioners. In this chapter, I have commenced that process with a rethink of assumptions underpinning many climate change

strategies in local government, such as an over-reliance on climate change as a motivating factor to change household practices. A climate change strategy based on a practice-based understanding of how both household and local government practices are constituted and performed (as well as the influence of other actors and movements) may look significantly different. If the impetus driving local government goals and objectives is the need to do all it can to reduce emissions, then there is need to re-think what is possible to inform where limited resources are best directed. While identifying opportunities extending from existing climate governance practices is useful, local governments must also be aware of the broader systems of practice they are seeking to influence through their interventions. Addressing the super wicked problem of climate change requires that local governments recognise the complexity not only in the household practices that they are seeking to shape, but also in their own governance practices. Practice theory can offer a useful framework to address both.