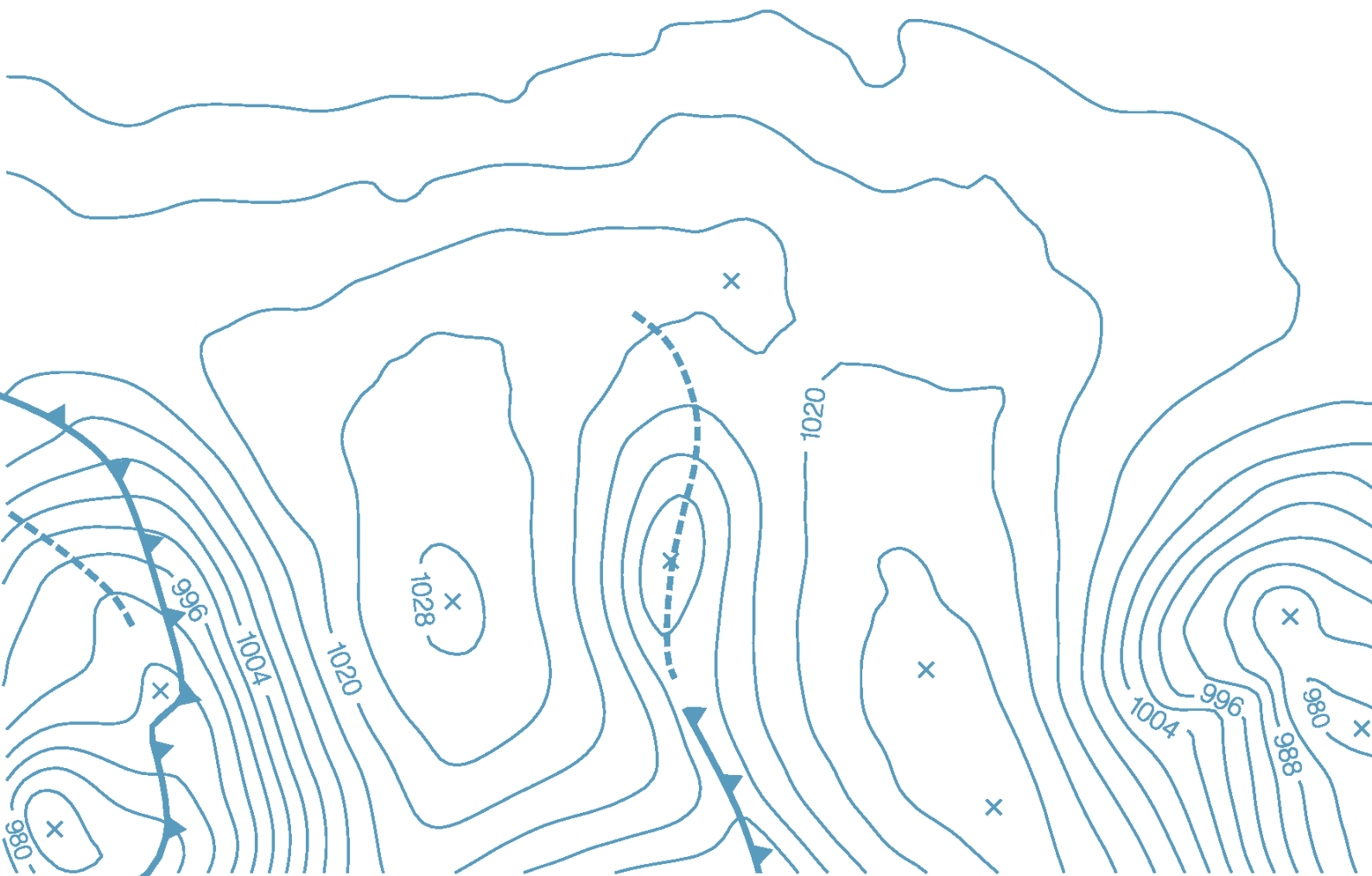


# Victorian Climate Resilient Councils Needs Analysis

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## Executive Summary

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The needs analysis is designed to scope the key needs and opportunities of Victorian local government organisations to embed and build capacity for climate change adaptation. This analysis will be used to inform the development of a proposal for a dedicated program to support Victorian councils in climate change adaptation and resilience.

### Key Findings

**Adaptive capacity is currently low across the sector.** Overall, there is a substantial gap between council's experience of climate change impacts and their readiness to respond.<sup>1</sup> This includes the skills, knowledge, access to information, cross-organisational capacity, and governance support.<sup>2</sup> Many councils are still only starting to consider climate change risks, let alone understanding how to address adaptation.<sup>3</sup> Multiple interconnected systemic barriers exist to embedding climate change adaptation and developing adaptive capacity. Although many councils now develop climate change adaptation plans, implementation remains a challenge. Recent research into climate change responses by local government found that adaptation is a key area where councils are seeking assistance.<sup>4</sup> For many councils in regional and rural areas, barriers are even further entrenched compared to metropolitan Melbourne.<sup>5</sup>

**The local government sector is currently not responding to climate change in a way that is commensurate with the level of impact and urgency of climate risks.** For some councils the increase in frequency and intensity of climate change is already creating significant financial and human burdens, and these will continue to increase in the future. For example, the cost to coastal local governments to combat infrastructure and property damage from rising sea levels and beach erosion is approximately \$1 million a year and could reach up to \$54 million a year.<sup>6</sup> The direct and indirect impacts of climate change threaten to erode community resilience and capacity to adapt. This applies to both extreme events (e.g., bushfire, flooding, storms) and slow-emerging changes (e.g., drought and sea-level rise). Further, funding is overwhelmingly in emergency response rather than in anticipatory adaptation even though the costs of early action and preparation far outweigh the cost of recovery.<sup>7</sup>

**At the local government level in Victoria funding and guidance for climate adaptation is fragmented.** Despite the widely acknowledged importance of local government in adapting to climate change<sup>8</sup> there is no overarching framework and funding to support strategic and targeted action and capacity building. Funding for adaptation projects through grants make responses reactive, opportunistic, and ad hoc.<sup>9</sup> These governance arrangements are ineffective in addressing systemic, whole-of-sector approaches required.

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1 Australian Local Government Climate Review (2021) p.61

2 Adaptive Capacity Checklist Survey (2021)

3 HWAWA project report, 2020; Parliament of Victoria 2020.

4 Australian Local Government Climate Review (2021) Ironbark Sustainability and ICLEI – Local Governments for Sustainability (ICLEI Oceania) p.61

5 Hughes et al (2021)

6 Hughes et al (2021)

7 Hughes et al (2021)

8 Hughes et al (2021)

9 Hughes et al (2021)

## Key Needs

**Lack of support and funding for more sustained, strategic climate change adaptation.** Despite the widely acknowledged importance of local government in adapting to climate change<sup>10</sup> there is no overarching framework and funding to support strategic and targeted action and capacity building. Funding arrangements for local government adaptation projects are often through grants which lead to short term, ad hoc adaptation projects that do not produce long-term, sustained adaptation responses and are not driven by local priorities and needs.

**Climate change is not prioritised or embedded across councils.** Climate change adaptation requires a whole-of-organisation approach supported by buy-in and support from all levels of council to effectively identify and address risks. Yet climate change is currently not well embedded across councils; it is typically considered primarily an environmental issue rather than a cross-organisational issue and is often deprioritised relative to other issues resulting in inadequate allocation of resources and consequently, poor implementation.<sup>11</sup>

**Lack of clear guidance to help in managing complexity.** Local government climate adaptation must contend with multiple complexities and uncertainties. Yet councils report that there is currently no clear, consistent guidance to support them in interpreting their complex physical, community, economic and political situation into actionable climate change adaptation programs.

**Inequity in resourcing and capacities.** The challenges that many councils are faced in understanding and addressing adaptation are exacerbated in councils with the lowest resources. These councils are often in rural and regional areas that are also facing increased social, environmental, and economic costs of extreme climate events<sup>12</sup>.

## Key Opportunities

**Community support is driving greater awareness and action.** The Black Summer bushfires and an upsurge in community concern about climate change is leading to an increase level of scope and ambition for climate action and a better understanding of the challenges and opportunities faced by the sector<sup>13</sup>.

**Strengthened legislative and policy context.** Local governments are identified as a key actor that will be impacted by and must act on climate change in many influential and strengthened International, National and State legislative, policy and knowledge frameworks<sup>14</sup>.

**Support existing action and collaboration.** There is a substantial opportunity to link and leverage off isolated efforts and support existing knowledge, tools, and frameworks. Creating economies of scale can help attract greater investment, produce synergies, and overcome barriers.

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10 Australian Government Department of Agriculture, Water and the Environment (2015); Parliament of Victoria 2020.

11 Measham et al 2011; McClure and Baker 2018

12 Interview with rural council

13 Hughes et al (2021); Lowy Institute 2021; Interview with rural council

14 Local Government Climate Change Adaptation Roles and Responsibilities under Victorian Legislation 2020

## Introduction

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The needs analysis was initiated due to the observation over many years by WAGA and other Victorian Greenhouse Alliances through the How Well Are We Adapting (HWAWA) project that the local government sector has not made ongoing and significant progress in embedding climate change adaptation into their organisational structures, governance, or services. Over time, the lack of progress of the sector in developing adaptive capacity has not been proportional to the emerging risks. Multiple barriers and the complexity of the challenges have meant that progress has been slow and substantial investments from different levels of government in successive adaptation projects and tools<sup>15</sup> have not been sustained or overcome systemic barriers.

Local government organisations have a key role and responsibility in supporting communities to adapt. “The projected impacts of climate change cut across almost all areas of local government responsibility, including the critical assets, infrastructure, and essential services that Councils provide for their local communities<sup>16</sup>”. Local, place-based climate change adaptation is needed to address the unique sets of circumstances and change that occur in specific places. The critical role of local governments in adaptation is widely recognised in international and national strategies and frameworks including the IPCC, National Adaptation and Resilience Strategy.

The difficulties in tackling adaptation at a local level are not unique to Victoria. The literature shows that adaptation and resilience are extremely challenging endeavours for governments and societies across the world. However, despite the exceptional challenges, not adapting is no longer a viable option. Like facing the complex challenges of COVID-19, confronting the complexities of more extreme bushfires, storms, rising sea levels, drought, heatwaves, and floods is inevitable. Without the right approaches adaptation is likely to be highly inequitable; and those people, places, and ecosystems that are already experiencing disadvantage and vulnerability will be disproportionately impacted.

Following a request from the HWAWA councils, we developed an Adaptive Capacity Checklist process and engaged councils in a trial of the tool. From feedback on this process, it's understood many councils remain at a low level of adaptive capacity. Indeed, some councils that five years ago were demonstrating greater adaptation response planning (through detailed organisation specific adaptation plans) have shown reduced adaptive capacity recently, with those plans having not been fully implemented, and adaptation being seen as a lesser priority.

The needs analysis was designed to better understand key needs and opportunities in the local government sector. Drawing on work that has been undertaken over many years, the needs analysis seeks to inform the development of the next steps, to explore how best the sector can be supported and cultivated and where best to invest in the most critical leverage points. However, an iterative process is needed, and this needs analysis is one element that is going to inform a broader program, that will aim to keep improving and embedding over time in an adaptive way to the needs of the sector as they change over time.

The goals of this needs assessment are to:

1. Identify key needs and opportunities for Victorian local government organisations in climate change adaptation planning.
2. Consolidate key messages and priorities to support the business plan for the VCRC.

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<sup>15</sup> For example, the VCCAR, HWAWA

<sup>16</sup> Hughes et al 2021 p..7

## Methodology

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### The purpose of a needs analysis

A needs analysis is defined as the process of systematically collecting information to better understand a discrepancy or gap in knowledge about what is happening and what is needed.

### The objectives of this needs assessment

1. Identify key needs and opportunities of the Victorian local government sector in climate change adaptation and resilience. Consider how this relates to different council contexts (e.g., rural, urban).
2. Assess and develop a list of priority needs, barriers, and opportunities and develop consolidated key messages to inform the development of a dedicated program to support Victorian councils over the next 5 years.

### The approach

1. Literature scan: this needs analysis will collect evidence from the grey and academic literature including past HWAWA project reports, council statements, Adaptive Capacity Checklist evaluation, Greenhouse Alliances adaptation cost-benefits framework.
2. Group discussion with project group and four individual interviews with council representatives and peak body. Councils represent urban, rural, suburban local government contexts.
3. Project team SWOT/ PEST analysis

## Key Findings: Needs

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Many significant and interconnected systemic barriers exist to embedding climate change adaptation and developing adaptive capacity in local government organisations.<sup>17</sup> This leads to council staff reporting they encounter difficulties in creating and sustaining cross-organisational support and developing traction over time for sustained adaptation action.<sup>18</sup>

### Lack of funding and support for more sustained, strategic climate change adaptation

Despite the widely acknowledged importance of local government in adapting to climate change<sup>19</sup> there is no overarching framework and funding to support strategic and targeted action and capacity building. Funding arrangements for local government adaptation projects are often through grants which lead to short term adaptation projects that do not produce long-term, sustained adaptation responses capable of delivering systemic changes required to reduce vulnerability.<sup>20</sup> Councils report that ad-hoc grant-based funding is not driven by local priorities nor does it support collaborative, cross-council projects.<sup>21</sup> Further, often the applications for grants for climate change far outweighs availability.<sup>22</sup>

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<sup>17</sup> McClure and Baker 2018

<sup>18</sup> Larsen and McGuinness 2016; McClure and Baker 2018.

<sup>19</sup> Australian Government Department of Agriculture, Water and the Environment (2015); Parliament of Victoria 2020.

<sup>20</sup> NCCARF 2013

<sup>21</sup> CVGA 2019 in Parliament of Victoria 2020.

<sup>22</sup> Parliament of Victoria 2020.

*“Ad-hoc grant programs lend themselves to a boom-bust cycle where investment is generally only available after a disaster has caused harm, rather than building resilience in assets and communities before the event occurs. This is at odds with the substantial evidence that spending in advance of a disaster is a better return on investment than recovery spending”.*<sup>23</sup>

A planned, long-term approach to funding that is better aligned with local and regional priorities is needed.<sup>24</sup> Regional and rural councils report that the delivery of project funds through competitive grants is challenging and that they are disadvantaged by this funding strategy. Issues raised by rural councils in relation to grant-based funding include: the short time frame in which to achieve outcomes; the frequent bar on the use of grant funds to hire staff; community expectations of ongoing program delivery; the need to start projects rapidly after the announcement of a successful grant; and challenges in budgeting co-contributions when announcements are delayed.<sup>25</sup>

## Climate change is not prioritised or embedded across councils

The impacts of climate change are already widely felt by local communities and councils across Australia.<sup>26</sup> These impacts are widespread and potentially cut across all local council areas and responsibilities. Climate change adaptation requires a whole-of-organisation approach supported by buy-in and support from all levels of council to effectively identify and address risks. Yet climate change is currently not well embedded across councils; it is typically a responsibility that is situated with environment and sustainability officers and is considered primarily an environmental issue rather than a cross-organisational issue. Even where climate change is considered at a strategic level of organisational decision making, it is often deprioritised relative to other issues resulting in inadequate allocation of resources and consequently, poor implementation.<sup>27</sup>

Many councils are facing the increasing costs of more intense and extreme weather events while simultaneously facing *“an ever-growing list of responsibilities and limited revenue opportunities”*.<sup>28</sup> There are now clearer legislative requirements for consideration of climate change in council planning through the *Local Government Act (2020)* and the *Climate Change Act (2017)*. However, council staff that participated in this needs analysis report that there is still a low level of understanding about these obligations. Further, there is often little capacity or allocation of funding to support implementation or enforcement. Research shows that in councils the attitudes, awareness, and level of buy-in of senior staff, elected councillors, mayor and CEO or general manager strongly influences whether climate change will be prioritised.<sup>29</sup> Political will and available resources differ across councils resulting in highly uneven progress, with the less well-resourced councils, often in rural and regional areas, disadvantaged.

## Lack of clear guidance to help manage complexity

Local government climate adaptation must contend with multiple complexities and uncertainties. The impacts of climate change can be highly varied and present new challenges. Yet councils report that there is currently no clear, consistent guidance to support them in interpreting their complex physical, community, economic and political situation into actionable climate change adaptation

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<sup>23</sup> Hughes et al 2021 p..48

<sup>24</sup> Hughes et al 2021 p.50; Parliament of Victoria 2020.

<sup>25</sup> Interview with rural council; Productivity Commission 2012; Parliament of Victoria 2020.

<sup>26</sup> Australian Local Government Climate Review 2021

<sup>27</sup> Measham et al 2011; McClure and Baker 2018

<sup>28</sup> Hughes, et al 2021

<sup>29</sup> Measham et al 2011

programs. For example, the Inquiry into tackling climate change in Victorian communities noted that:

*“... At the larger scale of riverine flooding, drier soils, lower flows, increased capacity in reservoirs, sea level rise and increased rainfall intensity create a highly complex and uncertain environment for modelling future changes to flooding. (Inquiry into tackling climate change in Victorian communities: 165-166).*

*“The governance of local government climate risk is a key emerging issue...that from a financial perspective the exposure of local governments to climate impacts on its infrastructure is largely unknown” (Inquiry into tackling climate change in Victorian communities p.168).*

*“Councils do not have the data or asset management systems in place to enable a deep enough understanding of the risk that climate change poses to council business and communities” (Inquiry into tackling climate change in Victorian communities p.168).*

Not only is adaptation complex, but the local government sector is also complex. It comprises practitioners across many disciplines that have their own work practices and cultures. E.g., asset managers, social planners, conservation, waste management, risk management, governance, land use planning, health and leisure services, local business support, customer service, emergency management. Councils are grappling with understanding their risks and vulnerability to climate change and how to best manage it over the long term.

Complexities that councils are either grappling with, or failing to address include, for example: integration of climate change scenarios or risks into development or zoning plans; dealing with the mismatch between planning timelines and climate change scenarios; and the disconnect between traditional predict and plan approaches with ‘wicked’ problems.<sup>30</sup>

The Parliament in Victoria Inquiry into tackling climate change in Victorian communities found that:

*“The integration of state, national and international goals is challenging for local governments when they lack clear guidance and direction. Many stakeholders called for further clarification of the roles, responsibilities and expectations of local government related to climate change to assist them in defining the strategic direction and scope of their climate change plans and strategies.”<sup>31</sup> Inquiry into tackling climate change in Victorian communities p.152).*

The Local Government Roles and Responsibilities for Adaptation under Victorian Legislation Guidance Brief<sup>32</sup> has since been published. However, there is perhaps a gap in how these guidelines are disseminated to local government decision makers with the authority to resource a response to the identified roles and responsibilities. Developing direct, consistent communication channels with senior local government leadership to raise awareness of adaptation issues, and their roles and responsibilities could enable the sector to raise the level of priority given to adaptation and allocate increased resourcing.

Many council staff are not comfortable basing their financial and asset design plans on ‘uncertain’ scenarios. They traditionally use historical climate data for asset design, and financial models are limited to close timeframes. So, asking them to imagine distant timeframes and possible uncertain futures to base decisions on makes most uncomfortable. You are challenging a ‘reliable’

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<sup>30</sup> Measham et al 2011; McClure and Baker 2018; Fuenfgeld, et al. 2013

<sup>31</sup> Parliament of Victoria 2020 p.152

<sup>32</sup> Local Government Climate Change Adaptation Roles and Responsibilities under Victorian Legislation 2020

traditional decision-making framework with a more uncertain new framework. A lot of work must go towards re-framing traditional decision-making practices, and requires confident, skilled communication and expertise which most councils cannot access reliably.

There is a need for more clear and consistent guidance and facilitation to support councils and communities in not just identifying their risks but in understanding, applying, and creating new types of data, knowledge, and methodologies. Lack of clear guidance also increases the potential for maladaptation – where risks are transferred other social groups, environment or into the future.

## Inequity in resourcing and capacities

The challenges that many councils are faced in understanding and addressing adaptation are exacerbated in councils with the lowest resources – which are often in rural and regional areas.<sup>33</sup> These councils are also often highly exposed to natural hazards such as bushfire, drought, heatwaves, and coastal erosion. For example, both CVGA's 'Cool it' project in central Victorian towns and a study by Lander et al (2019) on heat impacts on public housing tenants in Mildura found high levels of heat vulnerability and a lack of services, capacity, and budgets to adapt.<sup>34</sup> There is a need for any program to consider equitable access for rural and regional councils and their specific needs. As noted above, the timeframes and conditions of competitive grants programs create obstacles for rural and regional councils and are compounded by high staff turnover resulting in a continuing cycle of capacity loss. All councils need to be supported based on the equity principles and in relation to where they are on their adaptation planning journey.

## Key Findings: Opportunities

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### Community support is driving greater awareness and action.

Recent experience of the climate crisis, particularly the Black Summer 2019-2020 bushfires have dramatically illustrated the far-reaching economic, social, and environmental costs of climate change spurring an upsurge in community support for climate action. The Climate Review 2021 survey by ICLEI and Ironbark sustainability of councils and communities across Australia has found that almost every community respondent (96%) felt climate change had impacted their local community. In councils, there has been an increase level of scope and ambition for climate action and a better understanding of the challenges and opportunities faced by the sector. This is reflected in declaration of a climate emergency by 100 Australian councils since Darebin City Council's first declaration in 2016. Similarly, The Climate of the Nation 2020 Benchmark Report by the Australia Institute found that following the Black Summer bushfires of more Australians are concerned about climate change, with 82% concerned that climate change will result in more bushfires, up from 76% in 2019. Further, a growing majority of Australians want the country to be a global leader in climate change solutions.<sup>35</sup> The Lowy Institute has found that when considering the potential costs and benefits of climate change policies, three quarters (74%) of Australians see the benefits as outweighing the costs.<sup>36</sup> This rising community understanding and support for climate change action presents an important window of opportunity to build support for adaptation action at the local level that are proportional to the scale of the crisis that communities now face.

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<sup>33</sup> CVGA 2018; Lander et al 2019

<sup>34</sup> CVGA 2018

<sup>35</sup> Quicke and Bennett (2020); Australian Local Government Review 2021

<sup>36</sup> Lowy Institute 2021



## Strengthened legislative, policy, social context

Recent strengthening of the regulatory and policy environment for climate change have directly and explicitly recognised and established obligations for local government. Local governments are identified as a key actor that will be impacted by and must act on climate change in many International, National and State legislative, policy and knowledge frameworks including:

- The Paris Agreement (United Nations Framework Convention on Climate Change)
- UN Sustainable development goals
- Reports of the Intergovernmental Panel on Climate Change (IPCC)
- The Australian Government's National Climate Resilience and Adaptation Strategy
- The Victorian *Climate Change Act (2017)*
- The Victorian *Local Government Act (2020)*
- Victorian Climate Change Strategy, Regional Adaptation Strategies and Adaptation Action Plans.

Includes overarching governance principles that create obligations for Councils in the context of climate change. Processes like strategic organisational planning and governance must incorporate consideration of climate change and relevant state and national plans. *“There is now a clear expectation that decision-making is supported by robust and transparent practices, and that the long-term adverse consequences of climate change for future generations are incorporated into council planning, decisions and actions.”* As noted above however, councils are still coming to grips with these responsibilities and there are significant understanding, knowledge, and capacity gaps. Councils are increasingly aware that they must act but require more dedicated support in how to act.

## Support existing action and collaboration

There is a substantial opportunity to build off existing knowledge and experience in and of the local government sector that has been growing over many years based on investments of time and resources by the Victorian State government and many other organisations and agencies working individually and collaboratively. Some of the many examples that have been active in research, projects and the development of tools specifically for local government include:

- Victorian Centre for Climate Change Adaptation Research (2009-2014)
- The Victorian Greenhouse Alliances (Embedding Action on Climate Change in Your Council Plan, [Financial Risk Adaptation Planning](#), [Asset Vulnerability Assessment](#), [Costs and Benefits of Adaptation Investment in Greater Melbourne](#), [Resilient Emergency Relief Centres](#), [Exploring Vulnerabilities](#), [Building Vulnerability Assessment](#), Healthy Homes, [Cool It](#), regional strategies, plans and roadmaps), VASP projects, etc.
- How Well Are We Adapting (HWAWA, Adaptive Capacity Checklist)
- CASBE; Association of Bayside Municipalities
- Greening the West, Greening the Pipeline, [Resilient Melbourne](#), Inner Melbourne Climate Adaptation Network (City of Melbourne)
- [Local Government Climate Change Roles and Responsibilities under Victorian legislation](#) (DELWP)
- Climate Change Exchange (RMIT University)
- [Victorian Climate Projections Data](#) (DELWP)
- [Municipal public health and wellbeing planning and climate change](#) (Department of Health)
- [Working with Local Government](#) (DELWP)

- [Councillor and executive climate change training](#) and associated resource packs (DELWP) Training

The local government sector is experienced at responding to issues connected to their communities and developing innovative responses. They are also effective at sharing lessons and case studies with other councils through communities of practice. However, as noted above, these initiatives are often limited by short-term funding and lack of time and capacity in councils to engage in them. This prevents uptake and realisation of the many opportunities that could come from better coordination including economies of scale, consistency, ability to attract larger investors, create stronger partnerships and develop a stronger and larger stakeholder base.

- **Develop a stronger knowledge base:** Develop a framework for ongoing scanning of developments in climate change adaptation, case studies and updating resources. These can be developed through greater coordination between state government and university partnerships for the co-creation of knowledge to support longer-term resilience building of individual councils and the sector.
- **Better use and sharing of resources:** The HWAWA team already has several adaptation tools specific to the local government sectors that could be used as part of a broader program, and there is an opportunity to develop a stronger knowledge base through continued development of technical information, tools, and guidance for making decisions under uncertainty (e.g., improvements in downscaled climate scenarios, adaptation pathways planning). The work on developing cost benefit analysis for adaptation e.g., the greenhouse alliances current projects. Regional councils might need to consider shared resources (Bronwyn Chapman, former EO of GBGA, via VCRC working group).
- **Stronger networks and partnerships:** One significant opportunity is to build on the work of the greenhouse alliances, including their existing cross-alliance collaboration, and other council networks like CASBE.
- **Building a more cohesive framework around programs and projects:** to make a better use of those resources over time. How to apply lessons from regional adaptation strategies. Explore new framings and strategies to communicate adaptation internally and to stakeholders.
- **Explore new framings:** Explore new ways of socialising results to achieve better uptake, for example, framing as technical not political; sue economic rationale – economic costs and benefits; health lens etc

*“Despite the benefits of the Greenhouse Alliance model, limited funding and resources can be an impediment to participation for less well-resourced councils. Mr Gil Hopkins, Acting Executive Officer of the Wimmera Mallee Sustainability Alliance (WMSA), explained the challenge that the Alliance faces:*

*One of the main points I want to stress is that a low population, especially in some of the shires, makes it very difficult for the councils to participate in a lot of the activities that are there, including grant activities, and now with staff members in councils restricted— you have to restrict the number of staff you have; they tend to grow. But with grants available to councils, they usually put on more staff. So that is always a tendency. So, if you do not have the staff, you cannot get the job done basically.<sup>37</sup>*

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37 Mr Gil Hopkins, Acting Executive Officer, Wimmera Mallee Sustainability Alliance, public hearing, Bendigo, 19 September 2019, Transcript of evidence, p. 22. In Parliament of Victoria 2020 p.33

*While the alliances facilitate collaboration and the sharing of some resources, some local governments are less able to contribute in terms of membership fees and staff participation, which can represent a barrier to their full participation. This is particularly the case where many of an alliance's members may be less well-resourced councils. Targeted investment from the Victorian Government could help to redress this situation"<sup>38</sup> (Inquiry into tackling climate change in Victorian communities p.33).*

*"The Victorian Government should work to identify and support existing collaboration on climate change action and formalise and support networks where appropriate. - Wider collaborative action, networks and partnerships are needed to link and leverage across isolated efforts and foster knowledge sharing, learning and synergies. While there are some thriving networks, significant gaps remain, including between regions and sectors"*

## Conclusions

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Adapting to climate change is a complex endeavour. Multiple complexities overlap and addressing them requires approaches to that raise difficult questions about trade-offs and short- vs longer - term priorities. Councils are facing multiple and simultaneous climate change challenges including the growing costs of climate change impacts, greater responsibilities, and fewer resources.<sup>39</sup> Although councils are developing adaptation strategies, there are many interconnected challenges to successfully implementing them including lack of resources, capacity, and short-term funding.

Climate change is already impacting on Victorian communities, and it will continue to do so. Not adapting isn't an option. The choice is to either attempt to adapt strategically or adapt in a reactive ad hoc manner. Substantial opportunities exist to leverage off and expand on the knowledge, partnerships and collaborations that have been in place for many years. A dedicated program could support councils to work more collaboratively, both in terms of common projects and shared learnings (networking, buddy-system, etc.). This would be especially impactful for small and resource constrained councils that are currently disadvantaged and are not addressing adaptation in a way that is proportional to the risks they face now and into the future.

### Framework for VCRC

- Ongoing support
- Engagement and coordination to translate into implementation
- Equitable support
- Cross-organisational support
- Peer-learning based
- Context- and needs- based
- Tools based (Access to evidence-based tools that support adaptation planning and action HWAWA).
- Capacity-building

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<sup>38</sup>Parliament of Victoria 2020

<sup>39</sup> Hughes et al 2021

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## Appendix One: Interview questions:

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- 1) How would you describe your councils' approach to adaptation?
- 2) What do you see as the key gaps in council adaptation responses? And how has this changed over time?
- 3) What do you see as the gaps for the local government sector? How has this changed over time?
- 4) What do you see as key opportunities for councils to develop capacity and improve their adaptive responses (external and internal drivers)?
- 5) What do you see as the key opportunities for the local government sector in adaptation responses? How has this changed over time?
- 6) Given your context, as a (rural/ urban/ suburban) what do you see as the impact of this on your adaptation response (e.g., resources, access to information, politics, community support etc)?