

Supporting healthy and climate resilient communities



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Contributors

We would like to thank our development partners for contributing to this module.



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VicHealth health promotion modules for local government

The [VicHealth Local Government Partnership \(VLGP\)](#) aims to support local governments to improve the health and wellbeing of children, young people, and their families. To do this, VicHealth has partnered with sector experts to develop a suite of health promotion modules that provide how-to guides and recommended resources for health promotion action.

The Supporting Healthy and Climate Resilient Communities module supplement has been developed to better understand the complex ways our changing climate impacts health and wellbeing, and the unique role of local governments within this. It highlights considerations and opportunities for local government to promote and integrate climate change action across policy, programs, and practice, with a particular focus on children, young people and their families.

This module supplement outlines:

- The context and importance of working at the intersection of health and climate change
- The unique levers and opportunities for local governments to address climate change and health equity
- Examples of innovative practice led by local governments
- Considerations for aligned action with existing VLGP health promotion modules:
 - *Building active communities*
 - *Building better food systems for healthier communities*
 - *Connected and supportive communities*
- A range of resources for local government.



Disclaimer

The information included in this resource was accurate as of January 2024, and should be considered alongside formal guidance and requirements for local governments in relation to climate change and public health policy and legislation. While this resource refers to legislative frameworks, it does not constitute legal advice.



Section 1:

Introduction and context – our climate, our health

The intersection of climate change and health promotion

Climate change is an urgent health priority in Victoria,¹ Australia,² and globally.³ It is an issue of intergenerational justice: children and young people will experience a different and hotter world to previous generations.⁴ Climate change will also exacerbate existing child health inequities. It will have the most significant impacts for children and young people already experiencing disadvantage, intersecting social, economic, and cultural inequities.^{5, 6}

Our climate is both a determinant of health and impacts on the wider determinants of health.⁷ As the climate continues to change, we will continue to see increases in extreme weather events and slow onset disasters, with direct and indirect impacts on health. There will be impacts on underlying determinants of health and wellbeing such as air and water quality, housing, income, food, education,⁸ the availability of local social services and infrastructure, and more broadly on mental wellbeing and existing community cohesion.⁹

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1. Department of Health, 2018. (Reviewed 2023). 'Climate change and public health in Victoria,' Your health: Report of the Chief Health Officer, 2018, Accessed 28/11/2023, Available at: <https://www.health.vic.gov.au/your-health-report-of-the-chief-health-officer-victoria-2018/environmental-health/climate-change>.
 2. Beggs, P.J, Zhang, Y, McGushin, A, Trueck, S, Linnenluecke, M.K, Bambrick, H, Capon, A.G, Vardoulakis, S, Green, D, Malik, A. and Jay, O, 2022. 'The 2022 report of the MJA-Lancet Countdown on health and climate change: Australia unprepared and paying the price.' Medical Journal of Australia, 217(9), pp.439-458.
 3. Cissé, G, McLeman, R, Adams, H, Aldunce, P, Bowen, K, Campbell-Lendrum, D, Clayton, S, Ebi, K.L, Hess, J, Huang, C, Liu, Q, McGregor, G, Semenza, J, and Tirado, M.C, 2022. 'Health, wellbeing, and the changing structure of communities.' In: Pörtner, H.O, Roberts, D.C, Tignor, M, Poloczanska, E.S, Mintenbeck, K, Alegria, A, Craig, M, Langsdorf, S, Löschke, S, Möller, V, Okem, A., and Rama, B (eds.), Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge, UK and New York, NY, USA: Cambridge University Press, pp. 1041-1170, doi:10.1017/9781009325844.009
 4. IPCC, 2023. 'Summary for Policymakers.' In: H. Lee and J. Romero (eds.) Climate Change 2023: Synthesis report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, pp. 1-34, IPCC, Geneva, Switzerland: doi: 10.59327/IPCC/AR6-9789291691647.001.
 5. United Nations Children's Fund (UNICEF), 2021. The climate crisis is a child rights crisis: Introducing the children's climate risk index. New York. ISBN: 978-92-806-5276-5.
 6. Bennett, C. and Friel, S, 2014. 'Impacts of climate change on inequities in child health', children 2014, 1(3), 461-473; DOI: <https://doi.org/10.3390/children1030461>.
 7. World Health Organisation (WHO), 2023. 'Climate change.' Fact sheets. Accessed 27/11/2023. Available at: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>.
 8. World Health Organisation (WHO), 2023. 'Climate change.' Fact sheets. Accessed 27/11/2023. Available at: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>.
 9. Bowen, K, and Friel, S, 2015. 'Health and social impacts of climate change.' In R. Walker, W. Mason & Ebooks Corporation (eds.), Climate change adaptation for health and social services, pp. 3-13. Clayton South, Vic: CSIRO Publishing.

The complex intersection of climate change and health highlights the need to take a systems-driven, equity-centered approach in our responses to climate change. Urgent health-centered climate action across multiple sectors and levels is required to support our social, ecological, and economic resilience, including supporting equitable food systems, universal access to essential services, health coverage and social protection, responsive urban planning, and sustainable transport.¹⁰ These types of actions have the potential for substantial shared benefits across health and wellbeing, climate resilience, and emissions reduction.

Recommended resource

Sustainability Victoria published a social research paper in 2020 titled '[Linking Climate Change and Health Impacts](#)' which explored the awareness among Victorians and our healthcare professionals of the health effects of climate change.

Planetary health

Planetary health has emerged as a way of understanding an integrated approach to supporting both the health of our human and natural systems, aligned with the United Nations Sustainable Development Goals. It was defined in 2014 by The Rockefeller Foundation–Lancet Commission as:

- the health of human civilisation and the state of the natural systems on which it depends.¹¹

The Planetary Health Alliance redefined planetary health in 2021 as:

- a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth.¹²

The potential for integrated approaches to support healthier natural systems alongside human health are significant. Locally-led, eco-social approaches to public health, including action from local government, are effective and necessary.¹³ Planetary health provides a useful frame to holistically understand and act upon complex interactions and relationships between human health, climate change and natural systems.

Recommended resource

Blue Mountains City Council have established the [Blue Mountains Planetary Health Initiative](#) which aims to establish an 'exemplary model' for local governments to promote community health, wellbeing, resilience and hope in the face of climate change, while also restoring the health of natural systems.

10. Schipper, ELF, Revi, A, Preston, BL, Carr, ER, Eriksen, SH, Fernandez-Carril, LR, Glavovic, B.C, Hilmi, N.J.M, Ley, D, Mukerji, R, Muylaert de Araujo, M.S, Perez, R, Rose, S.K, and Singh, P.K, 2022. 'Climate Resilient Development Pathways.' In: Pörtner, H.O, Roberts, D.C, Tignor, M, Poloczanska, E.S, Mintenbeck, K, Alegria, A, Craig, M, Langsdorf, S, Lösckhe, S, Möller, V, Okem, A, and Rama, B, (eds.), Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, pp. 2655-2807, Cambridge, UK and New York, NY, USA: Cambridge University Press, doi:10.1017/9781009325844.027.

11. Horton, R, Beaglehole, R, Bonita, R, Raeburn, J, McKee, M, and Wall, S, 2014. 'From public to planetary health: a manifesto', The Lancet, 383.

12. Planetary Health Alliance, 2021. 'Planetary health', Accessed 15/12/23, Available at: <https://www.planetaryhealthalliance.org/planetary-health>.

13. Hancock, T, Capon, A, Dooris, M, and Patrick, R, 2007. 'One planet regions: planetary health at the local level', The Lancet Planetary Health, Volume 1, pp.92-93: doi: [https://doi.org/10.1016/S2542-5196\(17\)30044-X](https://doi.org/10.1016/S2542-5196(17)30044-X).

Climate change and Aboriginal and Torres Strait Islander health

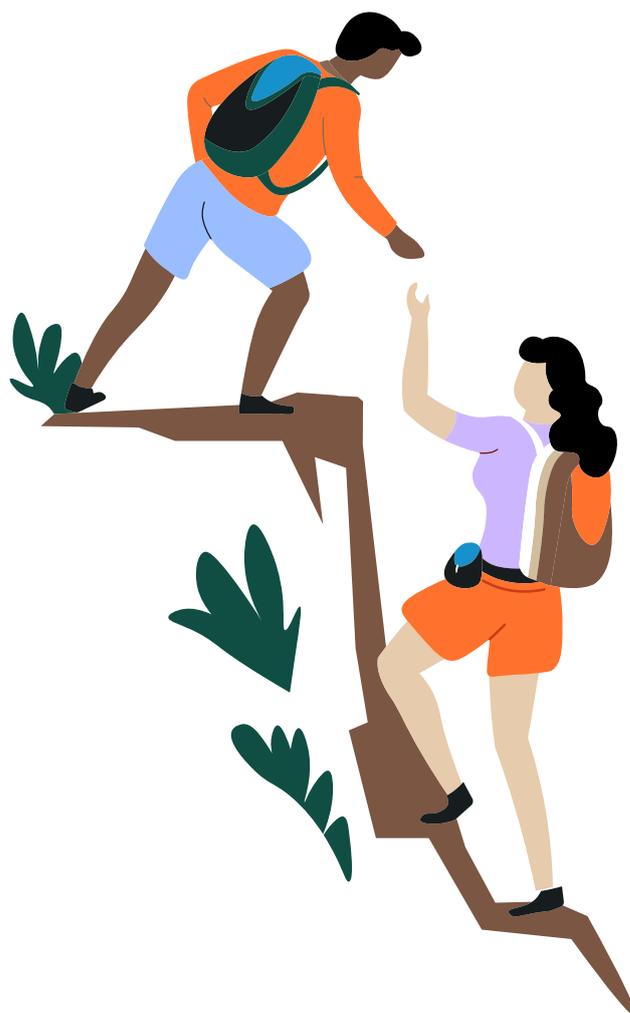
For Aboriginal and Torres Strait Islander people, climate change impacts on health will further compound and exacerbate historical and existing injustice and pose risks to cultural and spiritual connections to Country.¹⁴ Both climate change responses¹⁵ and health interventions¹⁶ can reinforce colonial control. Often excluded from climate change and health decision-making, it is essential that there are opportunities for “Aboriginal and Torres Strait Islander communities [including children and young people] to lead climate action planning based on their intimate traditional and historical knowledges of Country, alongside continual and present knowledges.”¹⁷

Local governments can play a key role in supporting and enabling Aboriginal and Torres Strait Islander engagement, leadership, and reconciliation by developing meaningful relationships and partnerships with Community Controlled Health Organisations, Traditional Owners, Registered Aboriginal Parties, other First Peoples’ organisations, and community.

Recommended resources

The Lowitja Institute’s [Climate Change and Aboriginal and Torres Strait Islander Health: Position Paper](#) describes climate change in Australia and its impact on the health and wellbeing of Aboriginal and Torres Strait Islander people. It highlights Aboriginal and Torres Strait Islander-led initiatives in climate change adaptation and mitigation that strengthens wellbeing and benefits the global community.

The Maggolee [website](#) was developed by Reconciliation Victoria as a resource to support local councils to support engagement and equitable partnerships between local government and Aboriginal communities and includes a section on health and wellbeing. To support the Victorian Aboriginal and Local Government Strategy, the Department of Jobs, Skills, Industry and Regions (formerly the Department of Jobs, Precincts and Regions) has also developed [Ministerial Good Practice Guideline and General Guidance for Councils Engaging with Aboriginal Victorians](#).



14. HEAL Network and CRE-STRIDE, 2021. 'Climate change and Aboriginal and Torres Strait Islander health, Discussion Paper', Lowitja Institute, Melbourne, doi: 10.48455/bthg-aj15.

15. Jones, R., 2019. 'Climate change and Indigenous health promotion.' Glob. Health Promot. 26, pp.73–81.

16. Porter, L, Rickards, L, Verlie, B, Bosomworth, K, Moloney, S, Lay, B, Latham, B, Anguelovski, I, and Pellow, D, 2020. 'Climate justice in a climate changed world.' Plan. Theory Pract. 21, pp. 293–321.

17. HEAL Network and CRE-STRIDE, 2021. 'Climate change and Aboriginal and Torres Strait Islander health, Discussion Paper', Lowitja Institute, Melbourne, doi: 10.48455/bthg-aj15.

Children and young people

Climate change will increasingly and detrimentally impact the health and wellbeing of children and young people through multiple pathways.¹⁸ According to Save the Children (2020), under current emissions trajectories, 'a child born in 2020 in Australia will experience four times as many heatwaves, three times as many droughts and one-and-a-half times as many bushfires as those born in 1960.¹⁹ Children and young people have increased vulnerability to the physical and psychological impacts of climate change, with further impacts on disruptions to education, risks to social protection, and healthy physical, mental and social development.²⁰

Many young people also recognise links between climate change and their health and wellbeing. Over half of Victorian young people (aged 15–24 years) report that their health is currently affected by climate change.²¹ Children and young people in Australia are increasingly on the frontline in advocating for climate change action.²² This can be personally empowering,²³ and may also inspire action in others.²⁴

Despite these impacts, and existing knowledge and action, children and young people – particularly those experiencing disadvantage and marginalisation – are often excluded from decision-making processes.²⁵

Children and young people must be meaningfully involved in making decisions to shape healthy and climate resilient communities.

18. Helldén, D., et al., 2021. 'Climate change and child health: a scoping review and an expanded conceptual framework', *The Lancet Planetary Health*, 5(3) Accessed 3/1/23, Available at: [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(20\)30274-6/fulltext#secectitle240](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30274-6/fulltext#secectitle240).
19. Save the Children, 2022. Born into the climate crisis, accessed 4/01/24, Available at: <https://resourcecentre.savethechildren.net/pdf/born-into-the-climate-crisis.pdf/>.
20. Save the Children, 2022. Born into the climate crisis, accessed 4/01/24, Available at: <https://resourcecentre.savethechildren.net/pdf/born-into-the-climate-crisis.pdf/>.
21. Sustainability Victoria, 2020. Climate change and health, accessed 4/1/24, Available at: <https://assets.sustainability.vic.gov.au/susvic/Report-Linking-climate-change-and-health-impacts-Research-Snapshot-2020.pdf>.
22. Hilder, C. and Collin, P., 2022. 'The role of youth-led activist organisations for contemporary climate activism: the case of the Australian Youth Climate Coalition,' *Journal of Youth Studies*, 25:6, pp. 793–811, doi: 10.1080/13676261.2022.2054691.
23. Stanley, S.K, Hogg, T.L, Leviston, Z. and Walker, I., 2021, 'From anger to action: Differential impacts of eco-anxiety, eco-depression, and eco-anger on climate action and wellbeing,' *The Journal of Climate Change and Health*, 1. <https://doi.org/10.1016/j.joclim.2021.100003>.
24. Fornwagner, H, Hauser, O.P., 2022. 'Climate action for (my) children.' *Environ Resource Econ* 81, pp. 95–130. <https://doi.org/10.1007/s10640-021-00620-7>
25. Kapeke, K, Muse, K, Rowan, J, Saw, P, White, T, Ojinnaka-Psillakis, A, Peries, T.D, Miranda, N.P, Shireen, A, Dau, A, Taafua, L, Nalupta, C, Harvey M. and Zorbas, C., 2023. 'Who holds power in decision making for young people's future?' *Med J Aust*, 219 (10) doi:10.5694/mja2.52147.
26. Arora, R., et al., 2022. 'Platforming youth voices in planetary health leadership and advocacy: an untapped reservoir for changemaking', *The Lancet Planetary Health*, 6(2), pp. 78–80. Accessed 2/1/23, Available at: [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(21\)00356-9/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(21)00356-9/fulltext)
27. Sustainability Victoria, 2020. 'Linking climate change and health impacts'. Accessed 2/1/23, Available at: <https://assets.sustainability.vic.gov.au/susvic/Report-Linking-climate-change-and-health-impacts-Research-Snapshot-2020.pdf>.
28. Arnot, G, Thomas, S, Pitt, H, and Warner, E., 2024. 'Australian young people's perspectives about the political determinants of the climate crisis'. *Health Promot J Austr*. 35(1), doi: 10.1002/hpja.734.

Meaningful participation of young people in climate and health action

Despite being significantly impacted, it is important that young people aren't framed as passive victims in the climate and health crisis. The value and imperative to meaningfully engage young people in decision-making to shape climate and health policy and action is increasingly being recognised.²⁶

Young people in Victoria have a significantly higher awareness of climate change related health impacts compared to other age groups in the state.²⁷ Additionally, young Australians have the capabilities and desire to engage in discussions around the political determinants of climate change and avenues for action.²⁸ There is a significant opportunity for various levels of government and youth advocacy organisations to enable and support meaningful youth participation and recognise young people as valuable and essential contributors to decision-making and action on climate change and health.

Recommended resources

The United Nations Development Program has developed [a list of recommendations \(p.10\) for meaningful youth participation in climate action](#), as part of their broader report 'Aiming Higher: Elevating Meaningful Youth Engagement for Climate Action'.

Members of the C40 Global Youth and Mayors Forum created a resource titled [Youth Engagement Playbook for Cities: How to tackle the climate crisis through collaboration with youth](#), which includes information and case studies on strengthening meaningful youth engagement in climate action.

The role and responsibilities of local governments

As the closest tier of government to community, local governments have a unique role in addressing health and climate through creating and advocating for the conditions which support a healthy environment, community connection, inclusion, and more equitable health and wellbeing outcomes for children and young people.

Local governments are in a good position to meaningfully contribute to place-based action on the wider determinants of health through collaboration and partnership, services, infrastructure, policies, and processes. They can also act on the environmental determinants of health, such as water and air quality, while also reducing emissions to support a healthier climate for the health of current and future generations.

The diverse range of levers within local government can effectively support integrated, inclusive, and ambitious climate change and planetary health action that centres social and intergenerational justice.



Recommended resources

The [Local Government Climate Change Adaptation Roles and Responsibilities under Victorian Legislation: Guidance for Local Government Decision-Makers](#) resource from the Victorian Department of Energy, Environment and Climate Action points to the key legislation supporting climate change adaptation decision making by local government in Victoria and provides practical advice to help meet the on-the-ground needs of local government staff.

Victorian legislation

There are specific obligations for Victorian local governments under legislation to act on and protect the health of communities in the context of climate change.²⁹

- Local governments in Victoria must plan for climate change mitigation and risks, as well as the long-term sustainability and best interests of current and future generations, as part of their overarching governance principles, as outlined in the Local Government Act 2020 (Vic).
- Local governments must also prepare Municipal Public Health and Wellbeing Plans which respond to climate change, with the Public Health and Wellbeing Act 2008 (Vic) listed as a scheduled act to the Climate Change Act 2017 (Vic), which creates an obligation for decisions taken under the Public Health and Wellbeing Act 2008 (Vic) to respond to the Climate Change Act 2017 (Vic).
- Municipal Public Health and Wellbeing Plans in Victoria must also respond to the [Victorian Public Health and Wellbeing Plan](#) which outlines 'tackling climate change and its impact on health' as a priority, with an emphasis on health equity and achieving shared benefits with other health and wellbeing priorities.
- The Local Government Act 2020 (Vic) requires local governments to support deliberative engagement (including for young people). Both the Climate Change Act 2017 (Vic) and the Public Health and Wellbeing Act 2008 (Vic) are principles-based acts, and outline principles to guide decision-makers.
- The Climate Change Act 2017 (Vic) outlines a principle of community engagement, and the Public Health and Wellbeing Act 2008 (Vic) outlines the principle of collaboration, including with individuals and communities.

29. The State of Victoria Department of Environment, Land, Water and Planning, 2020. 'Local government climate change adaptation roles and responsibilities under Victorian legislation: Guidance for local government decision-makers'. East Melbourne.

Municipal public health and wellbeing planning is a key lever through which local governments can accelerate and amplify action on climate change and health.

[The Tackling climate change and its impacts on health through municipal public health and wellbeing planning – Guidance for local government](#) resource has been developed to assist councils to meet their legislative obligations. This guidance has been prepared by the Victorian Department of Health with input from the Victorian Department of Environment, Energy and Climate Action, Sustainability Victoria, the Municipal Association of Victoria and several Victorian councils. It highlights opportunities for councils to protect and improve the health and wellbeing of their communities through climate change action and builds on the significant work that councils are already delivering across Victoria.

The Guidance outlines:

- The broad context, and specific Victorian considerations – the impacts of climate change in Victoria, how climate change will impact on disease burdens, and some ways climate change interacts with the social determinants of health.
- The legislative and policy context – including further detail on the requirements set out in the legislation (as noted in this section and Appendix 2 of this module supplement).
- Guidance on the ways climate change can be incorporated in the municipal public health and wellbeing planning cycle – from identifying priority populations and suggested indicators, through to evaluating interventions.
- Case studies throughout, demonstrating action taken by local governments.

Opportunities for local government to act

To achieve the most significant changes for the health and wellbeing of children, young people, and their families in the context of climate change, significant systemic change is needed.³⁰ There is an important role for whole-of-local government approaches to support integrated responses to climate change and health equity.

Many local governments are leading on climate change action, and are leveraging their local knowledge, assets, policies, and partnerships to both reduce emissions and adapt to climate change. Many also have their own emissions reduction targets, are investing in renewable energy and innovative technologies and practices to reduce emissions, have developed resource and recovery strategies, as well as adaptation and resilience strategies, and are advocating for change collectively.³¹



30. IPCC, 2022. 'Summary for Policymakers', In: Pörtner, H.O., Roberts, D.C., Poloczanska, E.S., Mintenbeck, K., Tignor, M., Alegría, A., Craig, M., Langsdorf, S., Lössche, S., Möller, V., and Okem, A., (eds.), *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (eds.), Cambridge, UK and New York, NY, USA: Cambridge University Press, pp. 3–33, doi:10.1017/9781009325844.001.

31. See for example: Climate Emergency Australia (N.D.), Home, Accessed 2/02/2024, Available at: <https://www.climateemergencyaustralia.org.au/>.

While there has been significant progress by these local governments, urgent and ambitious action is still required. Specifically, there are opportunities for more integrated approaches to promote climate resilient development and health equity by acting on a range of local government levers.

Local governments can deliver local, place-based climate change and health solutions because of their cross-cutting role and unique levers, such as:

- health protection and promotion
- planning and building, local laws and regulation
- assets and infrastructure

- community service provision
- business and industry
- their relationships with other levels of government and the private and not-for-profit sector
- often being first responders to localised impacts of climate change with strong local knowledge and connections to community.

Table 1 below outlines example strategies for local governments and highlights resources or actions useful in developing health promotion actions responsive to climate change.

Table 1: Example strategies for action on climate change and health equity for Victorian local governments

Example roles	Ensure strategies and plans are taking an integrated approach to action on climate change and health equity
Example strategies	
<ul style="list-style-type: none"> • Develop comprehensive plans and strategies to support action on climate change and health. • Consider climate change and health equity across all council plans, policies, and strategies and ensure that there is alignment and complementarity in these plans. 	
Resources or actions underway	
<ul style="list-style-type: none"> • Northern Alliance for Greenhouse Action (NAGA) worked with councils across Greater Melbourne to produce a guide for Embedding Action on Climate Change in Your Council Plan to inspire action and outline responsibilities. The guide is aimed at councillors, senior management, and council plan writers. • The Department of Energy, Environment and Climate Action (DEECA) has developed a number of resources for local government to support climate change including a Checklist for Embedding Climate Change across council. 	
Example roles	Utilise strategic urban planning processes to act on the wider determinants of health and climate resilience
Example strategies	
<ul style="list-style-type: none"> • Ensure that strategic planning processes are responding to climate change and health equity priorities. • Partner with organisations and networks working on healthy and sustainable built and natural environments. 	
Resources or actions underway	
<ul style="list-style-type: none"> • Maroondah City Council's application of the Greening the Greyfields initiative provides an innovative approach to urban renewal in greyfield precincts with a focus on liveability and sustainability. This initiative is supported by the Swinburne University of Technology who have also published a Local Government Playbook for municipalities wanting to implement precinct regeneration as part of their local planning scheme. • The Sustainable Subdivisions Framework seeks to provide planners with a basis for measuring and achieving stronger sustainable outcomes for subdivisions. • The Heart Foundation website includes a list of resources and tools to consider liveability and healthy urban design, including the Healthy Active by Design resource which showcases effective council case studies. 	

Example roles Support planning, strategies, and programs that promote circular and wellbeing economies

Example strategies

- Identify and support strategies, policies and community-led action to increase the circularity of local food systems.
- Explore collaborations, partnerships and funding with organisations supporting local circular and wellbeing economies, including [Regen Melbourne](#), [Sustainability Victoria](#) and [Circular Economy Victoria](#).

Resources or actions underway

- VicHealth has created a [webpage and toolkit](#) and an 'Influencing commercial determinants of health' module supplement to support understanding and action on wellbeing economy approaches.
- Ballarat City Council has launched [Circular Ballarat](#), supporting a number of circular economy initiatives including the [Waste to Wellbeing program](#) to improve social and economic wellbeing through keeping and creating value from waste.

Example roles Utilise procurement processes to support social and sustainable goals

Example strategies

- Review and update procurement policies to support and facilitate social and sustainable procurement processes to achieve climate change, social justice, and health outcomes.

Resources or actions underway

- The [Business Renewables Buying Group](#) is a council-led procurement process for medium to large electricity consumers to enter into renewable energy Power Purchase Agreements (PPA). This project is being led by the City of Yarra and being rolled out across Victoria. The approach will build on the first successful phase of the program delivered in 2022/23 and leverage the experience of councils gained through the successful [Melbourne Renewable Energy Project \(MREP\)](#), MREP 2, and [Victorian Electricity Collaboration projects](#).
- The Victorian Department of Health has developed the '[Good Food Policy](#)' which includes a 'healthy and more sustainable food procurement policy template' and a 'Guide to healthy and more sustainable food procurement'.
- Darebin City Council's [Social and Sustainable Procurement Policy](#) supports their commitment to a fair, inclusive community that is both environmentally and socially sustainable.

Example roles Prioritise and invest in social infrastructure

Example strategies

- Prioritise and invest in sustainable social infrastructure and third spaces such as parks and community hubs (recognising the important role they play in supporting social connection, community cohesion, and resilience).³²

Resources or actions underway

- [Cooling the Commons](#) is an action research program that co-designs practices and infrastructures for accessible cool living in an age of urban heating.

32. McShane, I, and Coffey, B, 2022. 'Rethinking community hubs: community facilities as critical infrastructure', Current Opinion in Environmental Sustainability, Volume 54, 101149, <https://doi.org/10.1016/j.cosust.2022.101149>.

Example roles Leverage the role of local government as a long-term local institution to strengthen and build new partnerships and collaborations

Example strategies

- Foster and develop partnerships and collaborations on climate change and health equity with community groups and leaders, but also with a range of other stakeholders, all of which supports the health of local communities, including schools, early childhood services, community health, local public health units, community service organisations, statutory authorities, other levels of government, and more (see Appendix 3).

Resources or actions underway

- The [‘What works for place-based approaches in Victoria?’](#) project was funded by the Victorian Department of Jobs, Precincts and Regions to understand what features enable the success of place-based approaches and how to best support them.
- [Place-based adaptation guidance notes](#) have been created to provide a flexible, guiding framework for the emergence of diverse approaches to climate change adaptation, through working with local and regional stakeholders and communities.

Example roles Engage children and young people in climate change and health equity planning and responses

Example strategies

- Meaningfully involve children and young people in shaping climate change and health action, including projects, programs and policies which impact the conditions in which they live, learn, work and play.

Resources or actions underway

- VicHealth’s foundation module [Leading the way – Engaging Young Voices for Change](#) provides the basic building blocks to help develop staff capabilities and skills in children and young people led engagement and planning.
- VicHealth’s [Youth Engagement Evaluation Framework](#), developed in partnership with the University of Melbourne, assists organisations in the designing, planning and evaluation of youth engagement activities.
- The [Young People’s Climate Superpowers](#) project, led by the University of Melbourne, highlights the strengths and assets that young people have and how these can be drawn upon and developed to help young people navigate the climate crisis.
- [Aiming higher: Elevating Meaningful Youth Engagement for Climate Action](#) examines youth engagement in both a conceptual and practical sense for climate action. It identifies dimensions and pathways to support meaningful youth action for nationally determined contributions and climate action more broadly.

Example roles Ensure services are climate resilient

Example strategies

- Ensure health services (such as maternal and child health) and other services which support health and community connection (such as programs delivered through neighbourhood houses) plan for current and future impacts of climate change.
- Strengthen the capacity of community and local organisations (including young people and organisations who support young people) to respond to climate and health challenges through grants, educational opportunities and events.
- Strengthen the capacity of community and local organisations to develop their own organisational resilience.

Resources or actions underway

- Western Alliance for Greenhouse Action is leading the development of the [Victorian Climate Resilient Councils program](#), a climate change adaptation program for Victorian local governments. As part of the program, it seeks to strengthen knowledge, skills and capacity to plan for and respond to climate change impacts across local government services.
- A resource that can be shared with local community sector organisations is the Australian Council of Social Service [Six Steps to Resilience](#).

Example roles Design, support and implement projects and programs to support priority populations

Example strategies

- Support individuals, families, communities, and local businesses to act on climate change and health through funding and incentives which are targeted to respond to those most at-risk of climate change impacts.
- Identify and promote existing programs designed to support those most at-risk of climate change health impacts.

Resources or actions underway

- The [Victorian Healthy Homes Program](#), led by Sustainability Victoria, was a randomised controlled trial designed to measure the impact of an energy efficiency and thermal comfort home upgrade on temperature, energy use, health and quality of life.

Example roles Monitor, evaluate and learn about how integrated approaches to climate change and health equity are working in practice

Example strategies

- Develop or utilise existing frameworks and indicators to learn about how integrated approaches to climate change and health equity are working in practice.
- Partner with organisations who may be undertaking work already (e.g. Department of Health, local public health units, community health organisations and women's health services).
- Consider the ways existing monitoring and evaluation processes may provide insights across health interventions.

Resources or actions underway

- [How Well Are We Adapting](#) is a web-based climate change adaptation monitoring, evaluation and reporting tool for Victorian local governments. It contains indicators relevant to monitoring for climate change and health equity.

Further recommended resources

Climate change and other data:

- [Victorian climate change data and information for local government](#) is a factsheet for Victorian local governments which provides a snapshot of the climate information and data available, and a decision-tree, to help determine which resource might be best suited for a particular decision or action.
- The [Australian Urban Observatory](#) is a digital liveability planning platform that transforms complex urban data into easily understood liveability maps across Australia's 21 largest cities. The Observatory draws on over 10 years of policy-relevant research and is located within the Centre for Urban Research at RMIT University.
- [Dropping off the Edge 2021](#) identifies areas of disadvantage in every Australian state and territory. The report measures 37 indicators across seven domains of social wellbeing, health, community safety, economic, education, environmental and intergenerational outcomes for 2,292 communities in every Australian state and territory.
- .id has developed a [Climate Change Survey](#) for councils to understand local community views on climate change and its impacts. The data collected from the survey can be utilised by councils to build an understanding of how their community feels about climate change, climate change vulnerability and impacts, and actions to respond.





Section 2:

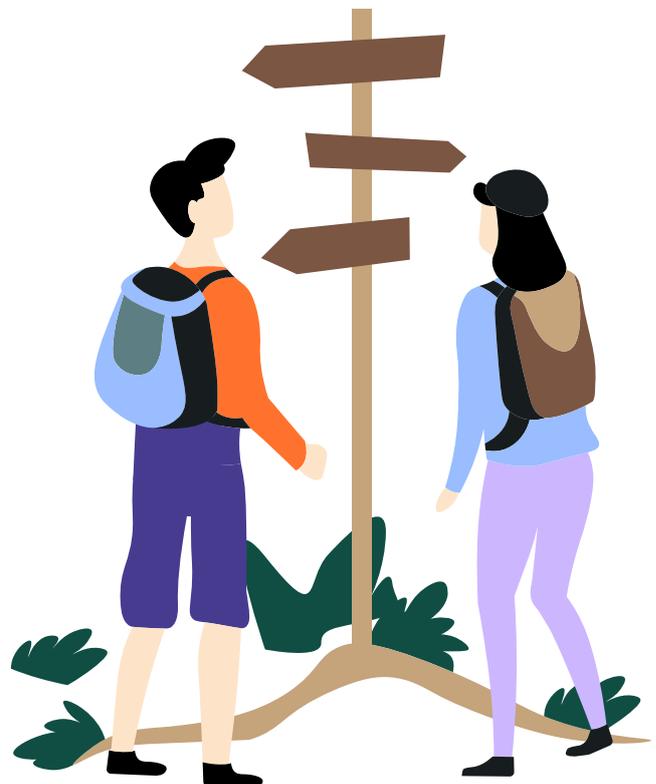
Climate change considerations for councils undertaking the VLGP core modules

This section has been created for VLGP councils undertaking actions from the core modules: Building Active Communities, Connected and Supportive Communities and Building Better Food Systems for Healthier Communities. For each module, this resource provides:

- a high-level overview of the interrelationships between climate change and physical activity, food systems and social connection and mental wellbeing (aligned to the core module impact streams)
- an overview of the opportunities to apply a climate change lens or ‘shared benefits’ approach to the impact streams within the core modules to promote effective environmental, health and social outcomes
- a diverse range of resources, tools, publications and case studies to inspire and support action on climate change and preventive health, including a focus on children, young people and families.

This section will support VLGP leads to:

- increase understanding of how climate change intersects with core module topics and support integrated planning and systems approaches
- initiate engagement and cross-council collaboration with other roles or business areas within council whose work may intersect with health and wellbeing and/or climate change
- understand alignment and initiate partnerships with external prevention partners and stakeholders such as community health, women’s health services and local public health units
- plan or identify potential implementation actions within current and future VLGP work plans where action on climate change can be introduced or strengthened
- plan or identify innovative climate and health actions as part of future VLGP funding rounds.



Building Active Communities

Climate change considerations for councils undertaking the 'Building Active Communities' core module

Key messages:

- The impacts of climate change such as air pollution, extreme weather, and climate events are having an increasingly negative effect on physical activity levels.³³
- Local governments have a range of levers that can improve rates of physical activity, while simultaneously supporting communities to reduce carbon emissions from the transport and sports sector (climate change mitigation) and adjust and respond to the local impacts of climate change that may affect participation in physical activity (climate change adaptation).
- Integrated approaches across council (e.g. health, community development, transport, planning, infrastructure, sustainability, open spaces and sport and recreation etc.) can positively influence built and natural environments, policies, projects, and programs that create shared benefits for the environment and physical activity.

Overview

The impacts of climate change and extreme weather events are increasingly undermining local government efforts to promote active communities. Within the [Building Active Communities](#) module, examples of this may include:

- air pollution preventing active travel to school
- extreme weather events (storms, floods, bushfires etc.) impacting recreational facilities or volunteer capacity at sporting clubs
- extreme heat reducing opportunities for safe, outdoor play.³⁴

Councils undertaking the Building Active Communities module are ideally placed to simultaneously act on physical activity and climate change through a range of mitigation and adaptation approaches.

A range of shared benefits for people, places and planet can be realised through integrated, equity-centred, and place-based action to support sustainable active travel, engagement with nature, climate resilient sport and recreational infrastructure, and healthy and sustainable built and natural environments.

Planning and implementing climate-centred actions that benefit the physical and social health and participation of children and young people may positively contribute to intergenerational wellbeing and climate justice.

While the significant role of the transport sector in reducing carbon emissions is well recognised,³⁵ the sports and recreation sector can also negatively contribute to climate change. Councils and

33. Mellick Lopes, A, Arora, V, Healy, S, Power, E, Armstrong, H, Crabtree, L, Gibson, K, and Tonkinwise, C., 2020. 'Cooling common spaces in densifying urban environments: A review of best practice and guide for Western Sydney renewal.' Sydney: Landcom.

34. Abu-Omar, K, Chevance, G, Tcymbal, A, Gelius, P, and Messing, S, 2023. 'Physical activity promotion, human and planetary health – a conceptual framework and suggested research priorities', *The Journal of Climate Change and Health*, Volume 13, 100262, doi: <https://doi.org/10.1016/j.jocl.2023.100262>.

35. Department of Climate Change, Energy, the Environment and Water, 2023. 'Reducing transport emissions', Accessed 02/02/24, Available at: <https://www.dcceew.gov.au/energy/transport#:~:text=In%202022%20our%20transport%20sector,source%20of%20emissions%20by%202030>.

their partners should take care in prioritising physical activity promotion that is considerate of environmental impacts and planetary health. Many activities that are good for individual health may produce negative outcomes for planetary health. To mitigate this, strategies such as ensuring public transport access to nature areas or sporting facilities and promoting activities and events that minimise or avoid environmental degradation are required.³⁶

Equity considerations

People and communities already experiencing structural, environmental, and systemic barriers to being physically active (e.g. limited access to green and recreational spaces, poor air quality, urban heat islands, poverty, low perceptions of safety etc.), may also be more vulnerable to the negative health impacts of climate change. The negative impacts of climate change on physical activity behaviours in people with pre-existing health conditions (e.g. chronic disease) may be more severe.³⁷ Many communities in locations of high socio-economic disadvantage also experience higher heat vulnerability, lower green canopy, and lower levels of biodiversity³⁸ which may contribute to reduced physical activity and widen existing health and social inequities.

Actions to promote physical activity and climate action that also address spatial, economic, or social vulnerabilities can therefore have the greatest impact. Examples of this may include:

- prioritising active travel projects with schools in locations that may have limited access to public transport, low walkability, low tree canopy, and high vulnerability to heat or other environmental risks.
- advocating and supporting equitable distribution and access to safe green spaces, such as parks, that can be used for active recreation and play.
- investing in climate change adaptation of community infrastructure (such as playgrounds or playing surfaces) in locations of high climate vulnerability and socio-economic disadvantage.
- supporting local sports clubs and recreational facilities to reduce operating costs through improving their energy efficiency, ensuring they can keep fees affordable and/or redirect savings towards initiatives that improve equitable and inclusive access and participation.

Recommended resources

Sport and recreation

The following resources may support actions within the 'Creating opportunities for all Victorians to be active' impact stream:

- The Sports Environment Alliance and the Victorian Government developed '[Future Proofing Community Sport & Recreation Facilities: A Roadmap for Climate Change Management for the Sport and Recreation Facilities Sector](#)' and an online guide and toolkit to support community sports organisations to increase their readiness to take action on climate change.
- Many councils are now undertaking measures and upgrades to [climate-proof their sports fields](#) ensuring better quality playing surfaces that are energy efficient and tolerant to hotter and drier conditions.

36. Abu-Omar, K., Chevance, G., Tcymbal, A., Gelius, P., and Messing, S., 2023. 'Physical activity promotion, human and planetary health – a conceptual framework and suggested research priorities', *The Journal of Climate Change and Health*, Volume 13, doi: <https://doi.org/10.1016/j.joclim.2023.100262>.

37. Bernard, P., Chevance, G., Kingsbury, C., et al., 2021. 'Climate change, physical activity and sport: A systematic review', *Sports Med*, 51, pp.1041–1059, doi: <https://doi.org/10.1007/s40279-021-01439-4>.

38. Tanton, R., Dare, L., Miranti, R., Vidyattama, Y., Yule, A., and McCabe, M., 2021. 'Dropping Off the Edge: Persistent and multilayered disadvantage in Australia', Jesuit Social Services: Melbourne, Accessed 02/02/24, Available at: https://static1.squarespace.com/static/6170c344c08c146555a5bcbce/t/61958bf805c25c1e068da90f/1637190707712/DOTE_Report+_Final.pdf.

Sustainable transport (including walking and bike riding)

The following resources may support actions within the 'Increasing active travel for children and young people' and 'Including walking and bike riding in council strategies' impact streams:

- The Climate Council developed a communications guide '[Send the right signal: How to effectively talk about sustainable transport](#)' which includes evidence-based messaging advice for public and active transport.
- The '[Clearing the air: transport decarbonisation and our health](#)' report by the Climate and Health Alliance includes a high-level evidence review of what is required for a healthy and just decarbonisation of Australia's transport system.
- The Council Alliance for a Sustainable Built Environment (CASBE) have developed a series of resources and tools to support local governments with utilising the Sustainable Design Assessment in the Planning Process Framework, which includes a fact sheet on '[Transport](#)' (including Green Travel Plans).
- The [Health Economic Assessment Tool \(HEAT\) for Walking and Cycling](#) can be used to create health, economic, and environmental assessments of walking and cycling projects, for professionals working at the interface between transport, health and the environment.
- The C40 Knowledge Hub has developed a [resource](#) which outlines examples of climate change adaptation measures integrated with walking and bike riding, including international case studies.
- The City of Greater Bendigo's '[Shadeways](#)' project and the City of Melbourne's '[Cool Routes](#)' initiative use technology platforms to show which streets and routes are likely to be shadier and cooler than others for pedestrians and cyclists.
- As part of the 'Moreland Integrated Transport Strategy' and 'Climate Emergency Action Plan', Merri-Bek City Council are delivering a range of [sustainable transport initiatives](#) for children and young people to achieve their goal of 80% of school trips to be by foot, bike, scooter or public transport by 2030.
- Victoria Walks published an online article on '[Walking in a warming world](#)', which includes key strategies to minimise the impacts of urban heat on rates of walking.

Children and young people

The following resources may support actions within the 'Creating opportunities for all Victorians to be active' impact stream:

- Initiatives and programs such as [Nature Play Australia](#), [Junior Landcare](#) and [Junior Rangers](#) combines physical activity and play with connections with nature, environmental stewardship, and climate action for children and young people. In 2023, VicHealth also commenced '[Active in Nature](#)' with Parks Victoria and Outdoors Victoria.
- Primary and secondary schools, workplaces and early years services can be supported to take climate action through physical activity within the '[Climate and Health Pathway](#)' of the Achievement Program.
- Cumberland City Council demonstrates the application of [effective design principles in outdoor playgrounds](#) to promote outdoor play in a changing climate while also addressing health and wellbeing challenges such as heat health, UV exposure and injury prevention.

Building Better Food Systems for Healthier Communities

Climate change considerations for councils undertaking the 'Building Better Food Systems for Healthier Communities' core module

Key messages

- Local food systems are highly vulnerable to various climate and environmental challenges and are also a key driver and contributor to greenhouse gas emissions.
- Building the resilience of local food systems to the shocks and stressors of climate change will be critical to ensuring adequate and equitable access to sustainable, healthy, affordable, safe, and culturally appropriate food.
- Opportunities exist to build and strengthen healthy local food systems and food environments that also consider and contribute to economic, social, and environmental sustainability outcomes.
- Local governments are well positioned to deliver a broad range of tailored, systems-driven, place-based actions that simultaneously address climate change, food system, and health equity challenges (e.g. policy, transport, land use planning, procurement, economic development and community services).

Overview

The compounding impacts of climate change on food systems are predicted to be extensive, complex, vary geographically, and heavily mediated by social and economic conditions.³⁹ Climate change impacts all the elements of food systems, from production through to waste management.

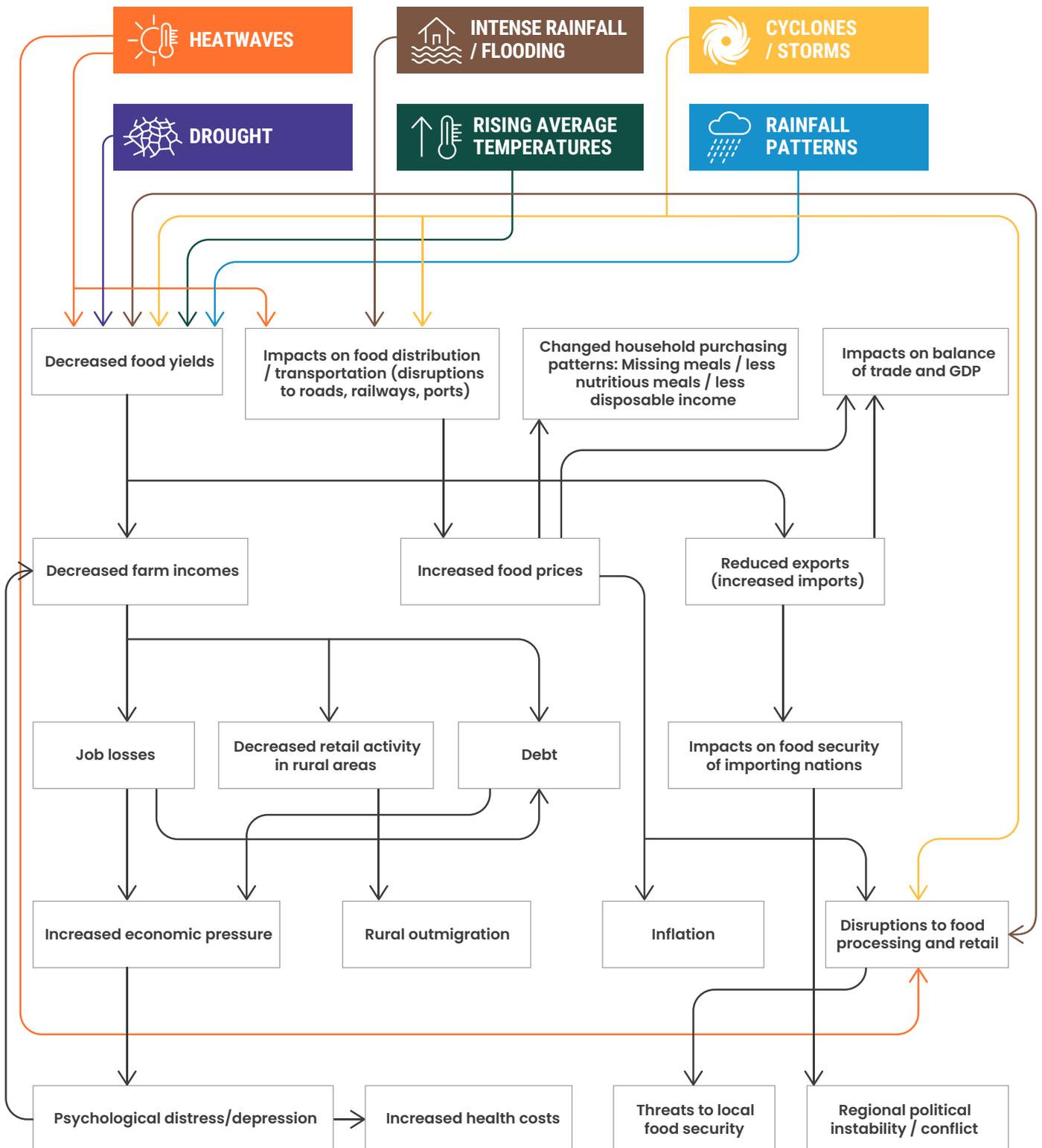
The work of local governments' undertaking the [Building Better Food Systems for Healthier Communities](#) module has the potential to positively shift food systems and environments to promote health, social and environmental outcomes. This includes the development of localised food system actions, governance and strategies that integrate principles of food sovereignty and circularity, increasing access to sustainable and healthy diets, and creating policies and partnerships that prioritise ethical and sustainable business practices.

The compounding impacts of climate change, poverty, and inequality are threatening already stressed food systems, food insecurity and children's nutritional wellbeing. Engaging children, young people and their families in local food systems transformation is essential in ensuring better health and climate outcomes for current and future generations.⁴⁰

39. Porter, J.R., Xie, L., Challinor, A.J., Cochrane, K., Howden, S.M., Iqbal, M.M., Lobell, D.B., and Travasso, M.I., 2014. 'Food security and food production systems'. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., Barros, V.R., Dokken, D.J., Mach, K.J., Mastrandrea, M.D., Billir, T.E., Chatterjee, M., Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R., and White, L.L., (eds.)]. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press, pp. 485-533, Accessed: 02/02/24, Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap7_FINAL.pdf.

40. UNICEF, 2021. 'Children and young people must be at the heart of food systems transformation', Accessed 02/02/24, Available at: <https://www.unicef.org/press-releases/children-and-young-people-must-be-heart-food-systems-transformation>.

IMPACTS OF CLIMATE CHANGE ON THE FOOD SYSTEM



Source: Climate Council

Equity considerations

Australia's current food systems fail to feed all Australians in a sustainable and equitable way.⁴¹ Shocks and stresses, such as climate change and extreme weather events, disproportionately impact people and places that are already vulnerable to food insecurity, including people on low incomes, single parent households, rural communities, and Aboriginal and Torres Strait Islanders.^{42, 43} Unless transformative food systems action is taken to mitigate the emissions and environmental degradation, build local food system resilience, and address the underlying drivers of food insecurity (such as poverty and unemployment) through rights-based approaches, the compounding impacts of climate change on the food system are likely to drive further nutrition, health and social inequities.

Self-determination, food sovereignty and knowledge of Aboriginal and Torres Strait Islander communities should be central to local action on food systems, in addition to acknowledgment of Aboriginal and Torres Strait Islanders as the Custodians of the land upon which our food systems exist.⁴⁴ Indigenous knowledge and practice, leadership and agency, combined with approaches that address underlying structural inequities can support food systems with ecological and socio-economic sustainability.

Examples of actions to support climate resilient, healthy, and just food systems include:

- Developing or reviewing local or regional food strategies and action plans to incorporate approaches and indicators that address and reflect issues of spatial justice and equity (e.g. City of Baltimore's [Food Systems & Urban Agriculture Sustainability Plan](#)).
- Reviewing or establishing local coalitions or platforms for food system planning and decision-making that centre meaningful inclusion and representation of communities most and/or disproportionately affected.
- Developing values-based food procurement policies to increase and leverage social and environmental justice and equity throughout supply chains.
- Promoting and supporting just and equitable transition to regenerative farming practices at a local level through strategies such as rebate schemes, incentives, training, and capacity building.



41. CSIRO Futures, 2023. 'Reshaping Australian Food Systems – A Roadmap towards a more sustainable, productive and resilient future for Australia's food, its environment and people'. CSIRO, Canberra.

42. Malik, A., Li, M., Lenzen, M. et al., 2022. 'Impacts of climate change and extreme weather on food supply chains cascade across sectors and regions in Australia'. *Nat Food* 3, pp. 631–643, doi: <https://doi.org/10.1038/s43016-022-00570-3>.

43. Murphy, M., Carey, R., and Alexandra, L., 2022. 'The resilience of Melbourne's food system to climate and pandemic shocks'. University of Melbourne, Australia, doi: <https://doi.org/10.46580/124370>.

44. Carey, R., Murphy, M., Alexandra, L., Sheridan, J., Larsen, K., and McGill, E., 2022. 'Building the resilience of Melbourne's food system – a roadmap'. University of Melbourne, Australia, doi: <https://doi.org/10.46580/124371>.

Recommended resources

Food Systems

The following resources may support actions within the 'Creating thriving local food systems' impact stream:

- Two key documents informing Australia and Victoria's food systems work are the CSIRO's [Reshaping Australia's Food Systems](#) roadmap and the University of Melbourne's [Building the Resilience of Melbourne's Food System](#) – both of which incorporate a strong focus on creating sustainable and resilient food systems. Internationally, the International Panel of Experts on Sustainable Food Systems has developed a report titled '[From Plate to Planet: How local governments are driving action on climate change through food](#)', calling for transformative and urgent change.
- Mornington Peninsula Shire's [Food Economy and Agroecology Strategy](#) is an example of how councils can align and promote growth of a local agriculture and food sector that is also environmentally, economically and socially sustainable (also linked to Council's Climate Emergency Response and Green Wedge Management Plan).
- Deakin University's [Local Food Systems Policy Index \(Local Food-EPI+\) Tool](#) is available for local governments to benchmark and prioritise food policy actions, including those related to nutrition and environmental sustainability.
- City of Greater Bendigo's [Food System Strategy 2020-2030](#) provides a holistic approach to food systems and climate change, integrating a One Planet Living framework, and will be further supported and informed by a [regional food systems framework](#) led by Healthy Loddon Campaspe.
- Darebin City Council has responded to an increased community interest in 'creating local food systems which respect the limits of natural resources and improve the health and wellbeing of communities' with a series of [food systems events and festivals](#) with a focus on promoting sustainable food and community leadership.
- [My Smart Garden](#) is an award-winning, free, sustainable gardening community education program run collaboratively by 11 partner councils in metropolitan Melbourne.
- [Circular Casey](#) is a City of Casey initiative that includes funding and support via the Circular Economy Living Lab Grant, and includes the trial, evaluation and scale-up of place-based projects to reduce food waste and increase food security.

Healthy and sustainable food retail environments

The following resources may support actions within the 'Embedding healthy food and drink options in council owned and operated places' impact stream:

- The Victorian Department of Health has developed the [Good Food Policy](#) which includes a 'healthy and more sustainable food procurement policy template' and a 'Guide to healthy and more sustainable food procurement'.
- The [Catering for Good](#) initiative has been developed by the Healthy Eating Advisory Service to support workplaces to access healthy and sustainable catering through promoting businesses and social enterprises that engage in sustainable business practices.
- City of Melbourne's [Sustainable Event Guide](#) includes considerations for lessening the environmental impacts of food and drinks at events, including a planning template with example actions and key performance indicators.

Healthy partnerships

The following resources may support actions within the 'Enabling healthy partnerships' impact stream:

- Councils undertaking reviews or updates of their current advertising, sponsorship and/or event policies to remove relationships with harmful industries (e.g. unhealthy food or drinks, gambling, tobacco etc.) can also consider banning advertising and sponsorship from fossil fuel corporations. [Fossil Ad Ban](#) have created a Councillor Toolkit and list examples of existing council motions and policies.

Children, young people, and families

The following resources may support actions within the 'Creating thriving local food systems' impact stream:

- Primary and secondary schools, workplaces and early years services can be supported to take climate action through healthy eating within the '[Climate and Health Pathway](#)' of the Achievement Program.
- Schools-based initiatives and programs such as the [Stephanie Alexander Kitchen Garden program](#), [Cultivating Community](#), and Nourish Network's [Farm to School Project](#) combines healthy eating with opportunities to learn about local food production, food security, sustainability and climate action for children and young people.
- Councils such as [Mornington Peninsula Shire](#) and [Cardinia Shire Council](#) are implementing initiatives designed to increase youth pathways and employment into small-scale farming and regenerative agriculture.
- The Just Food Collective and Sustain co-designed and delivered the [Youth World Food Garden](#) initiative for young people aged 14 to 25 years (who have experienced challenges in obtaining employment and/or accessing educational opportunities) to learn about food systems, food justice, identity, growing and cooking healthy food.



Connected and Supportive Communities

Climate change considerations for councils undertaking the 'Connected and Supportive Communities' core module

Key messages

- Climate change directly and indirectly impacts the mental health and wellbeing of communities, but also interacts with a range of other social, economic, and environmental determinants of mental health.^{45, 46}
- Nature-based solutions can provide benefits to mental health and psychosocial wellbeing, while also promoting planetary health and reducing the negative impacts of climate change.
- Social connection and social capital can be protective factors for mental health and wellbeing and can also strengthen climate resilience and reduce community and individual vulnerability to climate change and disasters.
- Local governments are well positioned to support people and places to build resilience to the mental health and wellbeing impacts of climate change at the collective community level.

Overview

The negative impacts of climate change (both acute hazards and slow onset impacts) on mental health and psychosocial wellbeing are being increasingly recognised. To date, discussions around mental health and climate change have predominantly been focused on emergency and disaster management and/or 'climate anxiety'. However, significant opportunities exist to integrate mental health promotion and prevention into community-based adaptation and mitigation efforts (e.g. active transport, access to green spaces, climate-resilient social infrastructure etc.).

Councils undertaking the [Connected and Supportive Communities](#) module are well placed to deliver local actions that support positive mental wellbeing and climate outcomes. Initiatives that address the social determinants of mental health can build social capital and promote wellbeing. For example, communities with access to healthy housing, employment and social connection will require less mental healthcare and be more resilient to the effects of climate change.⁴⁷ Nature-based solutions for mental health promotion are also growing in popularity, often providing shared benefits for physical and social health, and environmental sustainability.

Meaningfully engaging children and young people in designing and participating in local efforts and initiatives to address climate change may also have positive impacts on mental wellbeing.⁴⁸

45. World Health Organisation, 2022. 'Mental health and climate change policy brief', Accessed 02/02/24, Available at: <https://iris.who.int/bitstream/handle/10665/354104/9789240045125-eng.pdf?sequence=1>.

46. Sifuentes, J.E., York, E., and Fultineer, C., 2021. 'Social resilience and climate change: findings from community listening sessions', *The Lancet Planetary Health*, Volume 5, S3, doi: 10.1016/S2542-5196(21)00087-5.

47. Monsell, A., Krzanowski, J., Page, L., Cuthbert, S., and Harvey, G., 2021. 'What mental health professionals and organisations should do to address climate change', *BJPsych Bull*, 45(4), pp. 215-221, doi: 10.1192/bjb.2021.

48. Gunasiri, H., Wang, Y., Watkins, E.M., Capetola, T., Henderson-Wilson, C., and Patrick, R., 2022. 'Coping and eco-anxiety: Young people's mental health in a climate-impacted Australia', *Int J Environ Res Public Health*, 19(9), doi: 10.3390/ijerph19095528.

Equity considerations:

People with pre-existing mental health conditions, living with disabilities, experiencing poverty, living in rural locations, experiencing social marginalisation, and/or experiencing the ongoing impacts of colonisation are disproportionately at risk to the mental health impacts of climate change.^{49, 50}

Children and young people in Australia will be disproportionately burdened by climate change across the course of their lives. Young people increasingly understand the links between climate change and health,⁵¹ however have limited power to reduce and prevent its harm, contributing to feelings of hopelessness, anger, and despair. Efforts should be made by councils to empower children and young people to have a voice in decisions and actions that influence the impacts of climate change and their mental health and wellbeing.

Examples of actions to support equity in action on climate change, social inclusion, and mental health promotion include:

- Promoting and increasing community-led and community-based programs and projects to build community resilience to the mental health and wellbeing impacts of climate change in regional and rural communities.
- Identifying and establishing structures and processes to include the voices and rights of people of colour, First Nations people, non-binary folks, women, and other marginalised groups in local decision-making, plans, and policies relating to climate change (e.g. City of Darebin's [lived experience engagement](#)).
- Enabling and supporting youth-led action on climate change and mental health through community events, action groups and programs, with a specific focus on the participation and representation of young people that are often underrepresented in community engagement.
- Identifying and integrating climate change hazards, risks, and vulnerability in relation to social inclusion and mental health across different council strategies, plans, and policies.



49. Longman, J., Braddon, M., Verlie, B., Schlosberg, D., Hampshire, L., Hawke, C., Noonan, A., and Saurman, E., 2023. 'Building resilience to the mental health impacts of climate change in rural Australia', *The Journal of Climate Change and Health*, Volume 12, doi: <https://doi.org/10.1016/j.jocl.2023.100240>.

50. Monsell, A., Krzanowski, J., Page, L., Cuthbert, S., and Harvey, G., 2021. 'What mental health professionals and organisations should do to address climate change', *BJPsych Bull.* 45(4), pp. 215-221. doi: 10.1192/bjb.2021.17.

51. Sustainability Victoria, 2020. 'Climate change and health', Accessed 4/1/24, Available at: <https://assets.sustainability.vic.gov.au/susvic/Report-Linking-climate-change-and-health-impacts-Research-Snapshot-2020.pdf>.

Recommended resources

Social determinants of mental health and wellbeing

The following resources may support actions within the 'Addressing social determinants of mental wellbeing' impact stream:

- [Healthy Homes](#) was an initiative which delivered thermal comfort and energy efficiency upgrades to 1000 homes of low-income Victorians with a health or social care need. In addition to improving thermal comfort, and reducing energy consumption, it resulted in improved mental health, reduced healthcare utilisation and costs, and increased quality of life. Local governments (such as [Merri-Bek City Council](#)) can play a role in promoting and supporting various subsidies, rebates and concessions to support healthy and energy-efficient homes for low-income households.
- Initiatives such as [Our Bright Future](#) scheme (partnership between youth and environmental sectors) in the United Kingdom have demonstrated that involvement in nature projects can benefit young people's skills, experience, employability and mental wellbeing.
- The [Mobilising Climate Just and Resilient Communities in the West](#) project led by Jesuit Social Services' Centre for Just Places involved 44 health and community service organisations (including five councils) to create a collaborative action plan to build community resilience to the social and health impacts of climate change.

Inclusive communities

The following resources may support actions within the 'Building proud and inclusive communities' impact stream:

- Greater Dandenong City Council has been engaging and working with diverse community groups to take inclusive action on climate change, including hosting a [Disability and Climate Change Workshop](#) and development of a [Disability Inclusive Emergency Management Plan](#).
- Future Earth Australia's '[A National Strategy for Just Adaptation](#)' provides a blueprint for decision makers and all levels of government to embed a climate justice framework in climate adaptation and resilience, providing a strong focus on identifying and addressing the underlying drivers that continue to marginalise groups such as Indigenous Peoples, non-white and non-English speaking communities, young people, people with disabilities, women etc. in equitable climate action.

Social connection and community wellbeing

The following resources may support actions within the 'Co-designing with young people for better community wellbeing' impact stream:

- [Future Ready Youth](#) was a project co-designed by young people involved in the ADAPT Youth Climate Network (supported by Adapt Loddon Mallee) to develop a youth-focused adaptation event with a key focus on connection and wellbeing.
- [Healthy Parks, Healthy People](#) was developed by Parks Victoria to promote the health and wellbeing benefits of connecting with nature, with a strong focus on parks as a setting for mental health.
- The [Climate Adaptation Requires Youth Action](#) (CARYA) is a program delivered by Banksia Gardens Community Services in partnership with Hume City Council, designed to promote social connection and set up participants with essential sustainability knowledge, networks and communication skills to take action on climate change.

Children, young people and families

The following resources may support actions within the 'Addressing social determinants of mental wellbeing' impact stream:

- Deakin University's Institute of Health Transformation published a report titled '[Keeping the Future in Mind: A systems understanding of climate-related mental wellbeing among young people in Australia](#)' which explores the drivers of climate-related mental wellbeing, as well as actions and priorities to improve mental wellbeing of young people aged 18-24 years in Australia.
- Indigo Shire Council partnered with local primary schools, early childhood services, the Country Fire Authority and Beechworth Health Service to deliver the [Healthy and Resilient Together](#) project which aimed to build resilience and support disaster preparedness among local children.





Section 3:

Local Government Case Studies

This section has been created for councils looking for practical examples of local government-led action on climate change and health. The case studies were developed through in-depth interviews with council officers, conducted by staff from Jesuit Social Services' Centre for Just Places. The case studies were selected to:

- highlight a diverse range (e.g. size, scope, budget, process) of approaches to integrated planning and projects for climate and health outcomes
- showcase examples from a mix of metropolitan and regional councils
- promote initiatives that utilise climate and health levers unique to local government (e.g. municipal planning, grants, community engagement, assets and infrastructure etc.)
- promote initiatives that involved partnerships and collaboration within, and/or external to, council
- support strategic planning and alignment with local, state and federal policy, plans, and strategies
- where possible, promote initiatives that have direct or indirect benefits for children, young people, and their families.

The case studies provide a high-level summary of the respective local government climate change and health initiatives, including information about their approaches, strategic alignment, outcomes, and additional resources.

The information included in these case studies may support council officers to:

- identify and learn from other councils currently undertaking action on climate change and health
- increase knowledge and awareness of practical strategies and approaches to addressing climate change and health in a local government context
- demonstrate the success and impact of a diverse range of approaches to taking action on climate change and health, and/or to advocate for cross-council collaboration with other roles or business areas within council whose work may intersect with health and wellbeing and/or climate change.



Case Study 1:

Integrating climate change into municipal public health and wellbeing planning in the Greater Dandenong City Council and Mornington Peninsula Shire Council



Summary

- A partnership approach by the Greater Dandenong City Council and Mornington Peninsula Shire to inform and strengthen the integration of climate change into their Municipal Public Health and Wellbeing planning processes.
- The activities undertaken helped to understand and assess the climate change risks to the health and wellbeing of residents (including children and young people), and how this data and recommendations informed future work.
- The process highlights an evidence-based approach for local governments to support equitable, place-based planning responses to promoting health and wellbeing in a changing climate.

- **Develop a tailored indicator framework and evidence profile** of climate change impacts on health and wellbeing for communities across each municipality, including demographic data, liveability indicators, health statistics, climate projections, urban green space data and housing data
- Conduct preliminary **stakeholder workshops and interviews** with internal council staff and external health and human service providers to understand the opportunities, capacities and existing work across each council
- Undertake a high-level **scan of the adaptive capacity** of local health and community service delivery
- Develop a **set of recommendations** to respond to local risks and impacts, with consideration of differential needs, impacts, and opportunities.



Strategic alignment

These activities supported development of a report for each council which informed municipal scans and targeted community engagement. The additional evidence helped to prioritise actions and inform their 2021-25 Municipal Public Health and Wellbeing Plans, aligned with State Government priorities.

Additionally, cross-council workshops were delivered to determine focus areas, governance, and ways of working, to operationalise strategic actions. In Greater Dandenong City Council, this led to the development of a draft policy framework to assess interventions for health and climate planning.

An integrated cross-council approach enabled the success of this initiative. Relationships across councils were strengthened, supported by the establishment of internal working groups in each municipality.

This included representation from health, community development and climate change and environment teams, and collaboration with other council units as required (e.g. community partnerships, statutory and strategic planning, coastal planning, emergency management, and others).



Introduction

In 2021, Greater Dandenong City Council and Mornington Peninsula Shire Council partnered to commission a project to strengthen understanding of localised climate change risks to health and wellbeing in each municipality. Both councils identified similar challenges in considering climate change within their public health and wellbeing planning requirements, including access to comprehensive localised data sets, limited knowledge of the adaptive capacity of health and community services, and the absence of prescribed indicator frameworks for climate risks to public health.

An existing relationship between the health and sustainability teams at each council led to discussions which highlighted shared priorities and needs, and the development of a collaborative initiative to bridge this gap.



Approach and engagement

To support this work, the councils engaged Jesuit Social Services' Centre for Just Places and the Australian Urban Observatory, RMIT University, to:

Outcomes

Outcomes of the project included:

- Development of a **comprehensive evidence** base to inform council planning, including effective integration of climate change and health into relevant council plans and strategies
- An **increased awareness and capacity** across council departments to normalise climate and health considerations (including at-risk populations and the localised drivers of health inequity)
- **Strengthened relationships** across council teams, including ongoing partnerships and collaboration between the climate change, environment, community advocacy, and health planning teams
- The development of **targeted community engagement approaches** on climate change and health and initiatives.

Next steps

The outcomes of this initiative have continued to inform strategic planning and programs, as each council looks to further strengthen consideration for climate change in their next integrated Council and Municipal Public Health and Wellbeing Plans, and to embed health and wellbeing in future Climate Emergency Plans.

To learn more about the project and Greater Dandenong City Council and Mornington Peninsula Shire Council's approach to understanding and assessing localised climate risks, visit:

- Jesuit Social Services' Centre for Just Places project overview [webpage](#)
- Mornington Peninsula Shire's 'Impact of Climate and Health on our Community' [webpage](#) and their [Council and Wellbeing Plan 2021-2025](#)
- Greater Dandenong City Council's 'Climate and Energy' [webpage](#) and their [Council Plan 2021-25 \(incorporating the Municipal Public Health and Wellbeing Plan\)](#)



Case Study 2:

'UV-smart Cool Playgrounds' in Cumberland City Council: Piloting climate resilient playspaces to support health and wellbeing during hot weather



Summary

- Cumberland City Council, together with government, industry and research partners implemented a pilot project to demonstrate how heat-smart design choices and cooling strategies can be applied to existing public playgrounds.
- Increasingly hot climates combined with designs that aren't responsive to the health and wellbeing impacts of heat and ultra-violet (UV) exposure, negatively impact on the use of playgrounds.
- The pilot successfully increased thermal comfort and reduced the UV radiation of the playground, providing valuable learnings for councils looking to increase climate resilience of local assets.



Approach

The UV-smart Cool Playgrounds project was conducted at Merrylands Memorial Park Playground (see Figure 1), where prior testing had recorded feels-like air temperatures (which includes consideration for radiant heat off surfaces, humidity and wind) of up to 62°C and surface temperatures of up to 92°C.

The retrofit included four key design features:

- Cool materials, including floor surfaces and shade sails with lower heat conductivity and greater heat reflectivity
- Drinking water fountains
- Increased tree canopy, including a shade analysis and strategic planting of native trees to provide natural shade and improve microclimate while supporting biodiversity
- Education, including signage with information about how to stay UV-smart and safe during outdoor play in hot weather.

The shade sails and structure were designed to be modular and allow dismantling and reconstruction at another playground once the trees reached full maturity and cast sufficient natural shade in 10-15 years.



Strategic alignment

Planning and implementation of this initiative was informed by the Western Sydney Regional Organisation of Councils (WSROC) [Turn Down the Heat Strategy and Action Plan](#) (2018), which provides guidance for councils across Western Sydney to reduce urban heat. This Plan, along with an earlier heat mapping study,⁵³ provided the enabling environment to seek funding to pilot the innovative approach. The initiative also contributed to planning priorities in the [Cumberland 2030: Our Local Strategic Planning Statement](#), to objectives within the council's [Environmental Management Framework and Open Space and Recreation Strategy 2019-2029](#), which explicitly target the mitigation of urban heat stress, and to goals in the Cumberland Council Community Strategic Plan 2017-2027.



Introduction

In 2020 Cumberland City Council (Western Sydney, NSW) collaborated with Western Sydney University, NSW Health (Western Sydney Local Health District), Cancer Council NSW, Kidsafe NSW, and industry partners to pilot the retrofit of an existing playground to make playgrounds safer for families and children during hot weather.

A 2018-19 study of air temperatures across Cumberland recorded 10 or more days over 40°C at several playgrounds across the municipality.⁵² Temperatures, which varied across Cumberland by more than 10°C during heatwaves, can be significantly higher in playgrounds than the ambient air temperature, depending on natural or artificial shade, materials used for floor surfaces and equipment, and surrounding conditions.

52. Pfautsch, S, and Rouillard, S, 2019. 'Benchmarking heat in Parramatta, Sydney's Central River City'. Western Sydney University, pp. 56.

53. Pfautsch, S, and Rouillard, S, 2019. 'Benchmarking heat in Parramatta, Sydney's Central River City'. Western Sydney University, pp. 56.

Outcomes

The initiative saw feels-like air temperature reduced by up to 11°C, surface temperatures reduced by up to 34°C (e.g. by changing from unshaded bark mulch to shaded blue-white thermoplastic polyolefin flooring), and UV exposure reduced by 95–98%.

The UV-smart Cool Playgrounds project was designed to build an evidence base of the determinants of localised temperature readings in playgrounds and to test a design process and different shade structures and surface treatments. While this brought challenges, including in working within the constraints of existing equipment and surrounding infrastructure, it provided recommendations for future work captured in the '[Guide to Climate-Smart Playgrounds](#)' (2021) research report.

Funding

Funding for this pilot was provided by Local Government NSW and the NSW Government, through an Increasing Resilience to Climate Change Grant, and Cumberland City Council, with significant in-kind and material contributions from industry partners. The initiative was led by the Environment and Resource Recovery team in council who consulted with, among others, the Public Spaces Planning and Design team and the Open Spaces team responsible for maintenance of parks and reserves.

Next steps

Cumberland City Council have since received positive feedback from the Merrylands community and integrated recommendations from the pilot into how they approach planning and design of new (or upgrades to) playspaces and other public spaces.

They are currently drafting a Playspaces Action Plan in which urban heat mitigation will be a key consideration. The partnership with Western Sydney University has also continued, with a recent [pilot project](#) testing treatments to mitigate the impacts of urban heat from carparks in the Cumberland City Council.

To learn more about Cumberland City Council's work retrofitting playgrounds and addressing urban heat stress, visit:

- Cumberland City Council UV-smart Cool Playground Project [webpage](#)
- [Guide to Climate-Smart Playgrounds: Research Findings and Application](#) (2021), from Western Sydney University and Cumberland City Council
- The Western Sydney Regional Organisation of Councils Turn Down the Heat [webpage](#) includes links to the Strategy and Action Plan, Urban Heat Planning Toolkit, Cool Suburbs Tool and other resources that provide guidance for councils to reduce urban heat



Figure 1. The retrofitted Memorial Park Playground at Merrylands
Source: Western Sydney University

Case Study 3:

Building capacity and collaborative action for climate resilience in the City of Darebin



Summary

- The City of Darebin engaged 17 community service and health organisations to undertake workshops focused on building organisational and community resilience to the impacts of climate change (including health and wellbeing).
- This process supported the development of a shared, localised understanding of climate resilience, and created the necessary conditions and relationships to enable collaborative, place-based action.
- The outcomes of this initiative highlight the benefits of cross-sectoral engagement and capacity building, and the potential for councils in leading and convening approaches to municipal resilience.

- Building a shared understanding of the role of departments across council and community service and health organisations in building climate resilience.
- Strengthening local cross-sector relationships and networks to enable collaborative action to adapt and respond to climate change.

The workshops also incorporated a heatwave scenario exercise to consider the localised impacts of climate change for organisations (including staff and volunteers, infrastructure, and service provision) and the communities they support and explored a range of organisational and sector specific responses.



Strategic alignment

The workshops were developed with a view to align outcomes with climate equity priorities embedded in the City of Darebin's Council Plan (incorporating the Municipal Public Health and Wellbeing Plan) and to address growing concerns around the impacts of fuel poverty. The discussions were also used to inform the development of Darebin's Climate Emergency Plan 2024–27 and in municipal emergency management planning, particularly the Extreme Heat Sub Plan.



Introduction

In 2021, the Climate Emergency and Sustainable Transport team at the City of Darebin engaged local stakeholders, including council, community services, health organisations, and emergency services, to build a shared understanding of the ways climate change is impacting the health and wellbeing of different communities across Darebin and enable collaborative action to adapt to climate change.



Outcomes

The workshops enabled several short and medium-term outcomes:

- building local capacity
- stronger and more collaborative networks
- a shared understanding and common language around climate resilience.

The City of Darebin used the workshops to build local knowledge to inform place-based adaptation planning and programs and strengthen collaborative and coordinated action across the council and local organisations.

For some staff within council, it was the first time they had engaged in conversations about the health and wellbeing impacts of climate change within their professional roles. An example of this was the development of heat health fact sheets designed for specific cohorts (such as families with young children, older people and people with chronic illnesses). These involved collaboration



Approach and engagement

The City of Darebin engaged Jesuit Social Services' Centre for Just Places to facilitate two half-day climate resilience workshops that brought together staff from 17 different community service and health organisations, and council staff from a range of departments, including Families Youth and Children, Community Development, Equity and Inclusion, Darebin Libraries, Leisure Services, Municipal Emergency Management, and Climate Emergency and Environmental Programs (see Figure 2).

The workshops were designed to strengthen climate literacy and resilience, and improve the health and wellbeing of residents in the City of Darebin by:

- Building a shared understanding, across sectors and council departments, of climate vulnerability in the City of Darebin, including who is most at risk and why.

across Council teams, as well as input from Your Community Health; a key partner in distributing the fact sheets to clients. Meetings, between council staff, community and health services and State Government, were also convened to discuss coordination of heat health information and protection measures in the lead up to summer.

Participating organisations have taken action themselves following the workshops. The Darebin Neighbourhood House Network, for example, has since developed a [Climate Action and Resilience Plan](#), which identified strategic actions to strengthen organisational and wider community resilience, and hired a Climate Justice Coordinator to support implementation of the plan. Other organisations have utilised new relationships to jointly apply for funding to continue collaborative work and partnerships.

Funding

This initiative was funded by the City of Darebin.

Next steps

The City of Darebin has continued to leverage the collaborative relationships and shared commitment to climate justice developed through the workshops. This project informed:

- A community engagement project, focused on understanding the lived experiences of climate change for residents at greater risk
- Engagement via participating community service and health organisations supported greater access to the voices of community members who are commonly underrepresented
- The development of Darebin's Climate Emergency Plan 2024-2030, and municipal emergency management planning
- Valuable evidence that continues to support internal advocacy and conversations with leadership and Councillors around climate resilience.

To learn more about the City of Darebin's work strengthening local climate resilience and enabling collaborative action, visit:

- [Link](#) to the Climate Change in Darebin – Climate Justice Engagement Project report.
- First Nations Climate Conversations Wurundjeri Country (Yarning Climate, Country and People in Darebin) [report](#)
- An example of the [heat health fact sheets](#) designed for specific cohorts (including for families with young children).



Figure 2. Workshop participants

Source: Jesuit Social Services' Centre for Just Places

Case Study 4:

Enhancing liveability and active transport to school through a street tree planting program in Maroondah



Summary

- Planning and operations teams at Maroondah City Council collaborated to prioritise street tree planting along Walk to School routes with lower levels of tree canopy cover and higher levels of socio-economic disadvantage.
- This initiative demonstrates how a collaborative project can be delivered within existing operational budgets, supporting the health of children and young people by encouraging active travel, reducing risk of heat related illness and climate change mitigation.
- The initiative has inspired a strategic approach to Maroondah City Council's street tree planting operations, incorporating considerations for liveability and health equity in prioritisation and planning.



Introduction

The Schools First Street Tree Planting program is an innovative climate and health initiative led by Maroondah City Council to adapt existing tree planting operations to equitably support active travel to school, and strategically improve tree canopy across the municipality. The program involved collaboration across council teams to identify Walk to School routes in Maroondah that have lower levels of tree canopy and foliage cover (shade), high heat vulnerability, combined with higher levels of socio-economic disadvantage.



Approach and engagement

In the development of priority actions in the [Maroondah COVID-19 Recovery Plan 2021](#), council officers from the Strategic Planning and Sustainability team identified an opportunity to enhance green open space, through identifying the top 10 Walk to School routes in most need of additional vegetation (incorporating factors such as existing trees providing shade and an interesting natural environment) and aligning priority routes with the street tree planting program.

To identify the locations for potential tree planting, council officers developed an approach using

desktop analysis to overlay spatial data, including existing Safe Routes to School maps developed in 2017 as part of VicHealth's [Walk to School](#) funding. Under this initiative, Maroondah's Transport and Sustainability Planner collaborated with 17 schools across Maroondah to identify and map the safer and more accessible active travel routes to each school.

Eleven schools were prioritised through normalised scoring by applying a combination of the following data to the walking catchments and walking routes for each school:

- Tree canopy and foliage cover (utilising [Tree Ledger™](#) that uses machine learning to detect foliage cover from aerial imagery) (see Figure 3)
- Number of primary-age children within each school's walking catchment (using ABS data)
- Relative socio-economic advantage and disadvantage [using SEIFA (Socio-Economic Indexes for Areas) derived from ABS data].

These priority locations were presented to the Operations team who have oversight of council's street tree planting program. With assistance from Maroondah City Council's School Focused Youth Service Program Lead, the Tree Management Officer – Tree Renewal (in the Operations team) initially engaged with the principal or assistant principal at each school, and then grounds staff, to consult on location and timing of plantings and species choice for each school. Approximately 600 opportunities for tree planting across three locations were identified in 2022.



Strategic alignment

This project represents practical delivery of directions set in a number of key strategies and plans within council, including:

- [Maroondah 2040: Our future together](#) (Community Vision statement references a "... healthy and active community living in green leafy neighbourhoods...")
- [Maroondah Vegetation Strategy 2020-2030](#) (action 'Identify key locations for providing additional liveability benefits from vegetation')
- [Maroondah Liveability Wellbeing and Resilience Strategy 2021-2031](#) (priority direction 'Work in partnership to facilitate local neighbourhood networks that are walkable and bike-friendly, and promote active travel of all ages, abilities and backgrounds')

- [Maroondah Sustainability Strategy 2022-2031](#) (key direction 'Improve data collection, spatial planning and GIS capacity to assist in identifying priority areas where green infrastructure can deliver the most environmental, social and economic benefits in areas of greatest need')
- [Maroondah Council Plan 2021-2025](#) (priority action 'Implement a streetscape enhancement program, including a significant increase in tree planting')

Outcomes

Short-term outcomes from the program include:

- Positive feedback from the schools and community
- Demonstrating how projects involving council's strategic and operational teams are highly effective
- Tree planting schedules now incorporate equity considerations, including liveability and priority sectors of the community.

Longer-term health and environmental benefits are anticipated as the trees mature and provide shade, access to nature, and a more enjoyable experience for children and young people walking or riding to school.

Several factors facilitated the project's success, including:

- Use of existing **budget** (one quarter of annual operational budget used to plant the first three school catchments)
- Collaborative **relationships** between Strategic Environmental Planning, Sustainable Transport Planning, and the Operations team
- **Capacity** within the Operations team (including a Tree Renewal Officer) to support strategic planning in their approach
- **Alignment** with the council's Community Vision and existing strategies and plans (including the Maroondah Vegetation Strategy 2020-2030 and the Maroondah COVID-19 Recovery Plan 2021)
- Place-based **evidence**, including existing spatial data and Safe Routes to Schools mapping data.

Funding

The project used both existing staff time and operational planting budget. No additional funding was required. Annual street tree planting had previously been planned based on monthly vacancy data informed by electric line clearance.

Next steps

The Schools First Street Tree Planting program has reshaped the prioritisation of street tree planting and canopy renewal planning across the municipality. Next steps for the project include:

- By 2026, the 11 identified school routes will undergo planting
- In the coming decade, the safe routes to school of all 33 schools across the municipality will be identified and prioritised for planting
- Local kindergartens, health precincts, community hubs and signed walking trails are also being prioritised for planting as part of a liveability-driven prioritisation of planting opportunities.

To learn more about Maroondah City Council's 'Schools First Tree Planting' program, visit:

- Maroondah City Council's e-News [webpage](#) 'Maroondah branches out with over 2500 new trees' article
- Maroondah City Council's [Maroondah Vegetation Strategy 2020-2030](#)
- Short [video](#) on the Schools First Tree Planting program.



Figure 3. Tree Ledger™ data to calculate the proportion of foliage cover for each route.

Source: Tree Ledger™ foliage cover detection over 16th March 2020 aerial imagery.

Case Study 5:

Warrnambool City Council's Climate Action Grants: Supporting school-based action on climate change and health



Summary

- Warrnambool City Council piloted Climate Action Grants for primary and secondary schools, providing opportunities to fund local projects that support health, wellbeing, and climate action.
- The grants program strengthened engagement and created partnerships between council teams, schools, and local community stakeholders supporting climate and health, and subsequent initiatives such as the Warrnambool Health in a Changing Climate Forum.
- This case study highlights an effective community development approach to mobilising local, settings-based action on climate change and health.

Warrnambool College, for example, developed an educational model for year 10 students who designed and established an Indigenous garden project titled 'The Living Classroom' (see Figure 4). This project increased students' understanding of climate-resilient, sustainable landscaping practices, and Indigenous culture and connection to Country. Other projects supported at local schools included a fruit orchard, a kitchen garden featuring vegetables, herbs and bush tucker plants, revegetation, and recycling initiatives.

Each school developed a project to display at the Warrnambool Health in a Changing Climate Forum, a local event to inspire place-based solutions and action. The forum brought together a broad range of cross-sector stakeholders.



Strategic alignment

The grants program and the forum were coordinated to align with the [Warrnambool City Council Plan 2021-25](#), [Healthy Warrnambool Plan 2021-2025](#), [Warrnambool 2040 Community Plan](#), and [Green Warrnambool 2018](#). The grants program was also aligned with the [Achievement Program](#), a Victorian Government-led framework which supports a whole-school approach to health and wellbeing.



Introduction

In 2023, the Warrnambool City Councils' Strategic Community Planning and Policy team coordinated a [Climate Action Grants program](#) for schools, to encourage action that would improve the health and wellbeing of staff and students, school preparedness to the impacts of climate change, and reduce greenhouse gas emissions and waste.



Approach and engagement

Grants of up to \$5,000 were available to primary and secondary schools. Schools were required to submit applications aligned with relevant council plans and strategies, and at least two climate action areas from the following priorities:

- Active travel initiatives
- Improving energy and water use efficiency
- Sustainable food systems
- Connecting with nature
- Reducing waste
- Getting climate-ready

The grants were assessed by a panel of council officers and external stakeholders. Six diverse project applications were successful.



Outcomes

The projects schools delivered:

- fostered connections with nature
- enabled hands-on learning
- promoted physical activity
- encouraged healthy eating and provided the students with an understanding of their food system and tools to grow their own food
- linked environmental action to positive mental health outcomes for students, recognising the impacts of eco-anxiety on young people.

Other benefits include:

- forum planning strengthened collaborative relationships across council teams
- strengthened partnerships between the participating schools and local community health organisations

- ongoing relationships between the schools, council staff and Councillors
- increased community interest in the health impacts of climate change.

The outcomes of the forum provided priority actions to guide and fund future work under the Healthy Warrnambool Plan 2021–2025.

Funding

The funding granted to the schools was part of the Department of Energy, Environment and Climate Action's (DEECA) 'Supporting Our Regions to Adapt' program. In the absence of a dedicated grants team or officer, the Community Planning and Policy team were able to adapt existing community grant guidelines for schools, and also received in-kind support from external stakeholders of the Climate Change and Health Working Group to assist with the assessment of grant applications.

Next steps

Next steps for this project include:

- Warrnambool City Council has established a Community of Practice group to oversee the planning and implementation of future projects focused on improving community resilience and safety from the impacts of climate change,

including inviting further engagement from local children and young people.

- Council will be sharing the outcomes and learnings from the forum and grants program to neighbouring councils through the regional [Barwon South West Climate Alliance](#).
- The schools who received funding will be encouraged to develop case studies on their projects and will be supported to register for the Victorian Achievement Program if they are interested.

To learn more about Warrnambool City Council's Climate Action Grants and the Health in a Changing Climate Forum, visit:

- [Video](#) on the Warrnambool College 'Living Classroom' project
- Achievement Program Climate and Health pathway [webpage](#)
- [Online presentations](#) at the Health in a Changing Climate Forum, May 25, 2023



Figure 4. Anthea Rafferty and students at Warrnambool College cut the ribbon at the official opening of the 'Living Classroom' project
Source: Anthea Rafferty (Warrnambool College)

Appendix

1. Glossary

Adaptation in this context refers to the ongoing process to adjust to climate change and its impacts (and expected impacts) on our social and ecological systems.

Adaptation can be further understood as:

“Incremental adaptation. Adaptation that maintains the essence and integrity of a system or process at a given scale. In some cases, incremental adaptation can accrue to result in transformational adaptation.

Transformational adaptation. Adaptation that changes the fundamental attributes of a socio-ecological system in anticipation of climate change and its impacts.”⁵⁴

Climate change refers to “changes in the state of the climate, including an increase in extreme weather events, long-term changes in weather patterns and sea level rise, attributed directly or indirectly to human activity.”⁵⁵

Climate resilient development refers to a process “that successfully combines strategies to deal with climate risks (adaptation) with actions to reduce greenhouse gas emissions (mitigation) which result in improvements for nature’s and people’s wellbeing – for example by reducing poverty and hunger, improving health and livelihoods, providing more people with clean energy and water and safeguarding ecosystems.”⁵⁶

Health inequity refers to “those differences in health outcomes that are a consequence of unjust social arrangements and, as such, are avoidable and may be remedied”.⁵⁷

Resilience refers to “the capacity of individuals, institutions, businesses and systems within a city to adapt, survive and thrive no matter what kind of chronic stresses and acute shocks they experience”.⁵⁸

Risk can be understood as “[t]he potential for consequences where something of value is at stake and where the outcome is uncertain, recognizing the diversity of values. Risk is often represented as probability of occurrence of hazardous events or trends multiplied by the impacts if these events or trends occur... In this ...[module] the term risk is used primarily to refer to the risks of climate-change impacts.”⁵⁹

Social determinants of health describes the ways in which our lived environments – where we were born, live, learn, work, age, and play – can strengthen or undermine long term health outcomes. Social determinants of health describe the social conditions and structures that can be changed to create healthier environments and are important in explaining unfair and avoidable differences in health outcomes.

Wider determinants of health are the conditions in which people are born, grow, work, live and age, alongside the wider set of forces and systems that shape the conditions of daily life.⁶⁰

54. IPCC, 2018. ‘Annex I: Glossary’ [Matthews, J.B.R. (ed.)]. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., Zhai, P., Pörtner, H.-O., Roberts, D., Skea, J., Shukla, P.R., Pirani, A., Moufouma-Okia, W., Péan, C., Pidcock, R., Connors, S., Matthews, J.B.R., Chen, Y., Zhou, X., Gomis, M.I., Lonnoy, E., Maycock, T., Tignor, M., and Waterfield, T., (eds.)], Cambridge, UK and New York, NY, USA: Cambridge University Press, pp.541-562, doi:10.1017/9781009157940.008.

55. Department of Environment, Land, Water, and Planning, 2016. ‘Victoria’s Climate Change Adaptation Plan’, Victorian Government.

56. IPCC, 2023. ‘Sixth Assessment Report: Working Group II – Impacts, Adaptation and Vulnerability: What is climate resilient development and how do we pursue it?’ Accessed 02/02/2024, Available at: <https://www.ipcc.ch/report/ar6/wg2/about/frequently-asked-questions/keyfaq6/>.

57. Friel, S., 2019. ‘Climate Change and the People’s Health’, Oxford University Press.

58. Resilient Melbourne, 2016. ‘Resilient Melbourne’, City of Melbourne.

59. United Nations Office for Disaster Risk Reduction, 2016. ‘Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction’.

60. World Health Organization, 2022. ‘Social determinants of health’. Accessed 02/02/2024, Available at: <https://www.who.int/health-topics/social-determinants-of-health>.

2. Legislation and policy

Australian Government: legislation and policy

The Australian Government has legislated emissions targets under the Climate Change Act 2022 (Cth), attended by an [Annual Climate Change Statement](#). The Australian Government has several initiatives, schemes and funds targeted to reduce emissions. There is a [National Climate Resilience and Adaptation Strategy targeting adaptation efforts, and the first National Climate and Health Strategy was released in 2023](#).

Victorian Government: legislation and policy

Victoria's *Climate Change Act 2017 (Vic)* creates requirements for both mitigation and adaptation action. [Victoria's Climate Change Strategy](#) outlines the Victorian Government's plan to achieve net-zero emissions by 2050 and build resilience. [Building Victoria's Climate Change Resilience](#) further outlines the Victorian Government's plan for climate change adaptation. Across Victoria, [regional climate change adaptation strategies](#) have also been prepared, with a focus on regional risks, priorities, and opportunities for action.

At the intersection of climate change and health, the [Victorian Public Health and Wellbeing Plan 2023–2027](#) outlines 'tackling climate change and its impact on health' as a priority. The [Health and human services climate change adaptation action plan, 2022–2026](#) is one of seven adaptation action plans prepared as outlined in the Climate Change Act 2017 (Vic), with plans also for the Built Environment, Education and Training, Natural Environment, Primary Production, Transport and Water Cycle.

As outlined in reference to its priority to 'tackle climate change and its impact on health,' the Victorian Public Health and Wellbeing Plan 2023–2027 targets many of the policies and strategies outlined above, as well as:

- [Protecting Victoria's Environment – Biodiversity 2037](#)
- [Victoria's Air Quality Strategy](#)

Climate change and the rights of children

Australia has ratified the [United Nations Convention on the Rights of the Child](#) meaning that Australia has a duty to ensure all children in Australia enjoy the rights set out in the treaty.⁶¹ A statement released by the United Nations in 2023, General Comment No. 26 (2023) on children's rights and the environment with a special focus on climate change confirms that children have a right to "a clean, healthy, and sustainable environment."⁶² It also outlines the ways in which children's rights are threatened by climate change, and outlines obligations for governments to protect children's rights in this context, while recognising the agency of children in responding to this.⁶³ The General Comment requires States to meaningfully engage with Indigenous children and their families, including accounting for and integrating Indigenous culture and knowledges, in climate change responses.⁶⁴

Recommended resources

The [General Comment No. 26 \(2023\) on children's rights and the environment with a special focus on climate change](#) is available in child friendly versions. [An animation of the child-friendly version](#) is also available.

The [Child Friendly Cities Initiative](#) is a United Nations Children's Fund (UNICEF)-led initiative that supports municipal governments in realising the rights of children at the local level using the [United Nations \(UN\) Convention on the Rights of the Child](#) as its foundation.

61. Australian Human Rights Commission N.D., About Children's Rights, Accessed 15/12/24, Available at: <https://humanrights.gov.au/our-work/childrens-rights/about-childrens-rights>.

62. UNCRC, 2023. 'General comment No. 26 on children's rights and the environment, with a special focus on climate change', 93rd Session, 8–26 May 2023 GE.23-11144 (E).

63. UNCRC, 2023. 'General comment No. 26 on children's rights and the environment, with a special focus on climate change', 93rd Session, 8–26 May 2023 GE.23-11144 (E).

64. UNCRC, 2023. 'General comment No. 26 on children's rights and the environment, with a special focus on climate change', 93rd Session, 8–26 May 2023 GE.23-11144 (E).

3. Key Networks and Stakeholders

While locally-responsive, place-based efforts to address climate change and health are essential, collaboration and partnerships are required to harness collective knowledge, skills, and relationships at different levels. As such, this section outlines key stakeholders and networks relevant to local governments working at the intersection of climate change and health.

It should be noted that this list is not exhaustive (particularly when the cross-cutting nature of health, wellbeing, climate change, and social justice are considered) and focuses on climate change, and climate change and health networks. There is also an increasing number of regional and local climate change and health networks and action groups that encourage participation from local government.

Table 2: Key networks for consideration in climate change and health planning

International networks	
Global Climate and Health Alliance	The Global Climate and Health Alliance are health professionals, health advocates, researchers, public health and policy experts working together to protect human health through restoring the planet.
Youth Climate and Health Network	Supported by the Global Climate and Health Alliance, the Youth Climate and Health Network supports young people who care about the health of people and planet to connect with each other.
Planetary Health Alliance	The Planetary Health Alliance is a growing consortium of over 380 universities, non-governmental organisations, research institutes, and government entities committed to understanding and addressing the impacts of global environmental change on human health and wellbeing.
Extreme Heat Resilience Alliance	Founded and managed by Arsht-Rock, Extreme Heat Resilience Alliance works hand-in-hand with global leaders and practitioners at every level to increase heat resilience in urban areas, focusing on vulnerable populations.
Global Covenant of Mayors for Climate Change and Energy	The Global Covenant of Mayors for Climate Change and Energy is the largest global alliance for city climate leadership and is comprised of 12,500 cities ready to partner with national and international institutions to tackle both climate and economic crises through local initiatives, innovative financing models, and sustainable infrastructure.
National networks – youth led	
Seed Indigenous Youth Climate Network	Seed is Australia’s first Indigenous youth led climate network. Seed are building a movement of Aboriginal and Torres Strait Islander young people for climate justice. Our vision is for a just and sustainable future with strong cultures and communities, powered by renewable energy.
Australian Youth Climate Coalition	The Australian Youth Climate Coalition is Australia’s largest youth-run organisation, with a mission to build a movement of young people leading solutions to the climate crisis.
350 Pacific	350 Pacific is a youth-led grassroots network working with communities to fight climate change from the Pacific Islands and diaspora.
National networks	
Climate and Health Alliance	The Climate and Health Alliance (CAHA) is Australia’s peak body on climate and health. CAHA is a coalition of 100+ health and medical groups, academic and research institutions, health care service providers and unions. CAHA have a vision for the health sector to play a leading role in restoring a safe climate, and an ecologically sustainable, just and healthy world.

<u>National Rural Health Alliance</u>	The National Rural Health Alliance (the Alliance) comprises 50 national organisations committed to improving the health and wellbeing of the 7 million people in rural and remote Australia. The Alliance provides a united voice for people and health professionals living and working in rural communities and advocates for sustainable and affordable health services.
<u>Healthy Environments and Lives Network</u>	The Healthy Environments and Lives Network aims to catalyse research, knowledge exchange and translation into policy and practice that will bring measurable improvements to health, the Australian health system, and the environment.
<u>Climate Action Network Australia</u>	Climate Action Network Australia members are nonprofit organisations who collaborate to advocate for better climate solutions, to protect people from climate change, to safeguard our natural environment and to build a fairer and healthier Australia for everyone.

Regionally specific networks

<u>Greater Melbourne Heat Alliance</u>	Convened by Sweltering Cities, this is a cross-sectoral network of practitioners from community service, community health, local government and other agencies and organisations with a role and interest in heat management across Greater Melbourne.
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Local government networks and partnerships

<u>Victorian Greenhouse Alliances</u>	The Greenhouse Alliances are formal partnerships of local governments driving climate change action across Victoria's 79 municipalities. The Alliances work across their networks, communities and partners to deliver regional mitigation and adaptation programs. This includes the implementation of joint initiatives that provide economies of scale and enable projects typically beyond the reach of individual councils. The Greenhouse Alliances' project work is complemented by targeted advocacy, capacity building activities and regional partnerships.
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<u>Climate Emergency Australia</u>	Climate Emergency Australia is a network of Australian councils that have declared a climate emergency. Climate Emergency Australia advocates on behalf of our members and builds the capacity of the Australian local government sector to govern in a climate emergency.
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Local government networks and partnerships – specific interest

<u>Cities Power Partnership</u>	Cities Power Partnership is Australia's largest network of local councils leading the way to a thriving, zero emissions future. The Cities Power Partnership gives local government the tools, connections and momentum to capitalise on the global shift to a clean economy.
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<u>The Council Alliance for a Sustainable Built Environment</u>	CASBE is an independent alliance of councils in Victoria, operating under the auspices of the Municipal Association of Victoria. CASBE aim to make a difference to the sustainability of our built environment, through the Victorian planning process.
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<u>Planning Resilient Food Systems Community of Practice</u>	Foodprint Melbourne's research team, based in the Faculty of Science at the University of Melbourne, facilitate an online Community of Practice that supports Victorian stakeholders (including councils) in taking action to strengthen the resilience of food systems to shocks and stresses.
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Table 3: Key stakeholders for consideration in climate change and health planning

<p>Australian Government Departments leading work at the intersection of climate change and health</p>	<p>Australian Government Department of Health and Aged Care, Australian Government Department of Climate Change, Energy, the Environment and Water, National Emergency Management Agency</p>
<p>Victorian Government Departments leading work at the intersection of climate change and health</p>	<p>Victorian Department of Health; Victorian Department of Families, Fairness and Housing; Victorian Department of Energy, Environment and Climate Action; Victorian Department of Transport and Planning</p>
<p>Statutory bodies</p>	<p>Municipal Association of Victoria; Emergency Management Victoria; VicHealth; Catchment Management Authorities; Water Authorities; Environment Protection Authority Victoria; Sustainability Victoria; Parks Victoria</p>
<p>Health bodies, agencies, and services</p>	<p>Local Public Health Units; Aboriginal Health; Mental Health and Wellbeing Hubs; Community health organisations; Women’s health organisations; Primary Health Networks; Health services; Peak bodies</p>
<p>Key sectors and organisations</p>	<p>Community service organisations; Community groups; Not-for-profit organisations; Research and academic organisations; Essential service providers; Private sector</p>



Further Information

Stay up to date with the VicHealth Local Government Partnership.

Visit: www.vichealth.vic.gov.au/programs-and-projects/local-government-partnership

For further information or enquiries, contact our Local Government team at lgp@vichealth.vic.gov.au or phone on 03 9667 1333.



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VicHealth acknowledges the Traditional Custodians of the land. We pay our respects to all Elders past, present and future.



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