

Centre for Urban Research, RMIT University publications relevant to adaptation of human settlements

Publication title	Year	Country /Region of focus	Paper Citation	Key results	Related topics
Climate change adaptation in public policy: frames, fire management, and frame reflection	2015	Australia	Bosomworth, K. (2015), Climate change adaptation in public policy: frames, fire management, and frame reflection. <i>Environment and Planning C: Politics and Space</i> . Vol 33, Issue 6, pp. 1450 - 1466. http://journals.sagepub.com/doi/abs/10.1177/0263774X15614138#articleCitationDownloadContainer	A frame reflexive practice (in planning, adaptation planning, etc) could enable policy sectors to appreciate how their current framing directs action towards particular policy options, potentially ignoring others, and how exploring the sector's issues through different frames could reveal a greater array of policy options than currently considered.	Adaptation of human settlements - other issues
What's the problem in adaptation pathways planning? The potential of a diagnostic problem-structuring approach	2017	Australia	Bosomworth, K., Leith, P., Harwood, A., & Wallis, P. J. (2017). What's the problem in adaptation pathways planning? The potential of a diagnostic problem-structuring approach. <i>Environmental Science & Policy</i> , 76, 23–28. http://doi.org/10.1016/j.envsci.2017.06.007	This research "develops an argument for a diagnostic, problem-structuring approach as one way of improving the utility of AP planning in contested, complex problems". It suggests that good adaptation planning requires a comprehensive understanding of the problem 'structure'.	Adaptation of human settlements - other issues
Designing a climate resilient future: A guide to integrating multiple perspectives in spatial planning	2014	Australia	Clune, S., Martin, J., & Horne, R. (2014). Designing a climate resilient future: A guide to integrating multiple perspectives in spatial planning. Technical Report. Retrieved from http://www.vcccar.org.au/publications	This project took a charrette-based approach to designing for long and short term change involving multiple stakeholders in facilitated and tactile design exercises. The research identified six key findings for policymakers at the local and regional scale.	Integrating both short-term and long-term climate considerations into planning

The politics of urban greening - an introduction	Forthcoming	Australia	Cooke, B. and Coffey, B. (forthcoming). The politics of urban greening - an introduction. <i>Australian Geographer</i> .		Integrating both short-term and long-term climate considerations into planning
Dwelling in the biosphere: exploring an embodied human–environment connection in resilience thinking	2016	Global	Cooke, B., West, S. & Boonstra, W.J. (2016). Dwelling in the biosphere: exploring an embodied human–environment connection in resilience thinking. <i>Sustainability Science</i> . 11(5), 831-843. https://link.springer.com/article/10.1007/s11625-016-0367-3	Argues for the complementarity of a dwelling perspective with resilience thinking to think through human-environment connection and stewardship.	Adaptation of human settlements - other issues
Local climate change adaptation planning: a guide for government policy and decision makers in Victoria	2012	Australia	Fünfgeld, H. (2012). Local climate change adaptation planning: a guide for government policy and decision makers in Victoria. Retrieved from http://www.vcccar.org.au/	A guide developed to provide municipal and state government officials with guidance on the process of effectively considering climate change impacts in policy development and delivery, with an emphasis on place-based adaptation.	Integrating both short-term and long-term climate considerations into planning
Facilitating local climate change adaptation through transnational municipal networks	2015	Global	Fünfgeld, H. (2015). Facilitating local climate change adaptation through transnational municipal networks. <i>Current Opinion in Environmental Sustainability</i> , 12, 67–73. http://doi.org/10.1016/j.cosust.2014.10.011	Climate change calls for innovative forms of multi-level governance where local governments are likely to be key players. Transnational municipal networks (TMNs) have played a critical catalytic role in climate change mitigation and have potential to also support local adaptation. TMNs can provide greater flexibility than government adaptation policy and encourage experimentation. Challenges remain regarding measuring the impact of TMNs on adaptation outcomes.	City to city partnerships on climate change

Facilitating adaptation: Lessons learnt from engaging and supporting the primary health and community services sector in climate change adaptation	2015	Australia	Fünfgeld, H., Millin, S., Rance, A., Wallis, P., Bosomworth, K., and Lonsdale, K. Facilitating adaptation: Lessons learnt from engaging and supporting the primary health and community services sector in climate change adaptation Melbourne. Retrieved from http://www.vcccar.org.au/publications	This report argues for the design and implementation of a program to engage government-funded agencies and service providers in planning for climate change through adaptation. This program includes seven principles for organisations to consider when designing engagement processes.	Adaptation of human settlements - other issues
The significance of adaptation framing in local and regional climate change adaptation initiatives in Australia	2012	Australia	Fünfgeld, H., Webb, B., & McEvoy, D. (2012). The significance of adaptation framing in local and regional climate change adaptation initiatives in Australia. In K. Otto-Zimmermann (Ed.), <i>Resilient Cities: Cities and Adaptation to Climate Change</i> (pp. 283–293). Dordrecht: Springer Science+Business Media. http://doi.org/10.1007/978-94-007-4223-9	Examines framing in local and regional adaptation initiatives in Australia.	Integrating both short-term and long-term climate considerations into planning
Mainstreaming climate change adaptation: An incremental approach to disaster risk management in Australia	2013	Australia	Heazle, M., Tangney, P., Burton, P., Howes, M., Grant-Smith, D., Reis, K., & Bosomworth, K. (2013). Mainstreaming climate change adaptation: An incremental approach to disaster risk management in Australia. <i>Environmental Science & Policy</i> , 33, 162–170. http://doi.org/10.1016/J.ENVSCI.2013.05.009		Integrating both short-term and long-term climate considerations into planning
Housing, households and climate change adaptation in the town camps of Alice Springs	2015	Australia	Horne, R., & Martel, A. (2015). Housing, households and climate change adaptation in the town camps of Alice Springs. In <i>Applied Studies in Climate Adaptation</i> (pp. 289–296). Wiley Blackwell.	Explored adaptive capacity of federally funded Indigenous housing in Alice Springs. Used social practices for comfort to understand how households adapt to changing climate. The research found that federal funded housebuilding in the town camps was often contrary to adaptation and to pre-existing adaptive practices amongst householders, i.e. maladaptive in that it locked in air conditioning, removed trees and edited out traditional social practices.	Integrating both short-term and long-term climate considerations into planning

On the Frontline: Climate Change & Rural Communities	2016	Australia	Hughes, L., Rickards, L., Steffen, W., Stock, P., & Rice, M. (2016). On the Frontline: Climate Change & Rural Communities (Climate Council of Australia). Retrieved from https://www.climatecouncil.org.au/ruralreport	Rural and regional communities are disproportionately affected by the impacts of climate change. Rural and regional communities are already adapting to the impacts of climate change but there are limits and costs.	Assessing sensitivity and vulnerability to climate change
Cities Are Hotspots for Threatened Species	2016	Australia	Ives, C. D., Lentini, P. E., Threlfall, C. G., Ikin, K., Shanahan, D. F., Garrard, G. E., ... Kendal, D. (2016). Cities are hotspots for threatened species. <i>Global Ecology and Biogeography</i> , 25(1), 117–126. http://doi.org/10.1111/geb.12404	Highlights Australian urban areas as supporting more threatened plant and animal species than non-urban areas.	Assessing sensitivity and vulnerability to climate change
Healthy Urban Environments: More-than-human Theories	2018	Global	Maller, C. (forthcoming - 2018). <i>Healthy Urban Environments: More-than-human Theories</i> . Routledge.		Assessing sensitivity and vulnerability to climate change
Housing, heat stress and health in a changing climate: promoting the adaptive capacity of vulnerable households, a suggested way forward	2011	Australia	Maller, C. J., & Strengers, Y. (2011). Housing, heat stress and health in a changing climate: promoting the adaptive capacity of vulnerable households, a suggested way forward. <i>Health Promotion International</i> , 26(4), 492–498. http://doi.org/10.1093/heapro/dar003	Argues for more research on the influence of social and contextual factors on vulnerable populations' capacity to adapt to heat in the context of climate change.	Assessing sensitivity and vulnerability to climate change
Healthy Parks, Healthy People: The Health Benefits of Contact with Nature in a Park	2009	Global	Maller, C., Townsend, M., Leger, L. S., Henderson-Wilson, C., Pryor, A., Prosser, L., & Moore, M. (2009). Healthy Parks, Healthy People: The Health Benefits of Contact with Nature in a Park Context, 26(2).	Reviews the potential and actual health benefits fo contact with nature.	Integrating both short-term and long-term climate considerations

Context					into planning
Emergent processes of adaptive capacity building: Local government climate change alliances and networks in Melbourne	2015	Australia	Moloney, S., & Fünfgeld, H. (2015). Emergent processes of adaptive capacity building: Local government climate change alliances and networks in Melbourne. <i>Urban Climate</i> , 14, 30–40. http://doi.org/10.1016/j.uclim.2015.06.009	For climate change responses to be effective, multi-level governance is critical. Local government alliances are emerging forms of multi-level adaptive governance in the state of Victoria, Australia. This research shows that “new forms of regional adaptive governance are contributing to building the capacities of local governments and communities to respond to climate change in the state of Victoria, Australia.” (p31).	City to city partnerships on climate change
Local Action on Climate Change: Opportunities and Constraints	2018 (forth coming)	Global	Moloney, S., Funfgeld, H., & Granberg, M. (Eds.). (2018a). <i>Local Action on Climate Change: Opportunities and Constraints</i> . Routledge, UK. Retrieved from https://www.routledge.com/Local-Action-on-Climate-Change-Opportunities-and-Constraints/Moloney-Fuenfgeld-Granberg/p/book/9781138681521%0A%0A	A forthcoming book reviewing local and regional level climate change adaptation initiatives around the world, with case studies in Vanuatu, South Africa, Japan, India, Sweden and the USA.	Integrating both short-term and long-term climate considerations into planning
Dwelling performance and adaptive summer comfort in low-income Australian households	2016	Australia	Moore, T., Ridley, I., Strengers, Y., Maller, C., & Horne, R. (2017). Dwelling performance and adaptive summer comfort in low-income Australian households. <i>Building Research & Information</i> , 45(4), 443–456. http://doi.org/10.1080/09613218.2016.1139906	Low-energy houses without air-conditioning were both measured and perceived as more comfortable than the ‘standard-performance’ houses with air-conditioning; a need to integrate lessons from adaptive thermal comfort theory and strategies into minimum building performance requirements and standards, as well as wider design strategies. The research finds it is evident that adaptive comfort has a role to play in a transition to a low-carbon housing future.	Integrating both short-term and long-term climate considerations into planning

Utilising Mixed Methods Research to Inform Low-carbon Social Housing Performance Policy	2016	Australia	Moore, T., Strengers, Y., & Maller, C. (2016). Utilising Mixed Methods Research to Inform Low-carbon Social Housing Performance Policy. http://dx.doi.org/10.1080/08111146.2015.1077805	Benefits of mixed-methods in assessing sustainable housing.	Assessing sensitivity and vulnerability to climate change
Resilient Melbourne: Implementing the 100 Resilient Cities Project in Melbourne	2016	Australia	Mulligan, M., McLennan, B., & Kruger, T. (2016). Resilient Melbourne: Implementing the 100 Resilient Cities Project in Melbourne. Retrieved from http://cur.org.au/publications	A study of the initial phase of implementation of the Rockefeller Foundation 100 Resilient Cities (100RC) project in Melbourne, Australia. The 100RC approach needed to be adapted to take the fragmented nature of urban governance in Melbourne into account. The project is an important vehicle to cross-fertilise existing policies and practices which may otherwise operate with little reference to each other.	City to city partnerships on climate change
Winter urban heat island magnitudes of major Australian cities	2016	Australia	Neave, M., Rayburg, S., & Al-Obaidi, I. H. (2016). Winter urban heat island magnitudes of major Australian cities. <i>International Journal of GEOMATE</i> , 11(24), 2322–2327.	Study determines the relative magnitude of the Urban Heat Island (UHI) effect in five major Australian cities during the winter season.	Assessing sensitivity and vulnerability to climate change
Assessment of social vulnerability to climate change at the local scale: development and application of a Social Vulnerability Index	2017	Vietnam	Nguyen, C. V., Horne, R., Fien, J., & Cheong, F. (2017). Assessment of social vulnerability to climate change at the local scale: development and application of a Social Vulnerability Index. <i>Climatic Change</i> , 143(3–4), 355–370. http://doi.org/10.1007/s10584-017-2012-2	Developed a neighbourhood social vulnerability index. Research on Vietnam. Argues that the assessment of social vulnerability should be undertaken at a sufficiently local and fine-grained scale to allow for differentiation of local factors in vulnerability. A new social vulnerability index is proposed based on components of exposure, sensitivity and adaptive capacity.	Assessing sensitivity and vulnerability to climate change
Heatwaves, Homes & Health: electricity policy	2017	Australia	Nicholls L, McCann H, Strengers Y & Bosomworth K (2017) Heatwaves, Homes & Health: electricity policy matters for	The combination of poor quality housing, high electricity prices and energy policy that considers vulnerability as a purely financial condition is putting health at risk. This report proposes cross-sectoral policy approaches to	Assessing sensitivity and vulnerability to

matters for household wellbeing			household wellbeing, RMIT University, Melbourne. Available at http://cur.org.au/project/heatwaves-homes-health/	reducing vulnerability to heatwaves.	climate change
Electricity pricing, heatwaves & household vulnerability in Australia	2017	Australia	Nicholls, L., McCann, H., Strengers, Y., & Bosomworth, K. (2017). Electricity pricing, heatwaves & household vulnerability in Australia. Retrieved from http://cur.org.au/cms/wp-content/uploads/2016/12/heatwaveshomesh_ealth-briefing-paper_rmit-2.pdf	There is a body of energy vulnerability research that indicates that an increasing number of households are at risk of lacking essential energy services in Australia, particularly at times of extreme heat. However, in the context of electricity provision and heatwave vulnerability in Australia, knowledge of who is vulnerable and what needs to be done is limited. National energy governance does not yet account for the impact of energy policy on household vulnerability. Heatwaves will increase demands for airconditioning and there is a lack of planning in how to secure electricity provision for those most at risk of adverse health impacts in extreme heat.	Assessing sensitivity and vulnerability to climate change
Rising Household Energy and Water Bills: Case Studies of Health, Wellbeing and Financial Impacts	2017	Australia	Nicholls, L., & Strengers, Y. (2017). Rising Household Energy and Water Bills: Case Studies of Health, Wellbeing and Financial Impacts. Melbourne. Retrieved from https://researchbank.rmit.edu.au/view/rmit:44458	In Australia, rising reliance on air conditioning has rapidly increased the cost of electricity as utilities try to adapt the electricity network to meet occasional spikes in demand (during heatwaves). Households are forgoing other health and wellbeing essentials to pay increasing electricity bills and avoid being disconnected for non-payment. This largely hidden form of 'energy poverty' is a risk to individual, social and economic health.	Assessing sensitivity and vulnerability to climate change
Human factors challenges in emergency management : enhancing individual and team performance in fire and emergency services	2016	Australia	Owen, C., Bosomworth, K., & Curnin, S. (2016). The Challenges of change in future emergency management: Conclusions and future development. In <i>Human factors challenges in emergency management : enhancing individual and team performance in fire and emergency services</i> (pp. 219–229). Ashgate Publishing. Retrieved from https://researchbank.rmit.edu.au/view/rmit:29027		Integrating both short-term and long-term climate considerations into planning

Toward reflexive climate adaptation research	2015	Global	Preston, B. L., Rickards, L., Fünfgeld, H., & Keenan, R. J. (2015). Toward reflexive climate adaptation research. <i>Current Opinion in Environmental Sustainability</i> , 14, 127–135. http://doi.org/10.1016/j.cosust.2015.05.002		Integrating both short-term and long-term climate considerations into planning
Climate Change, Equity, and Sustainable Development Goals: An Urban Perspective	2017	Global	Reckien, D., Creutzig, F., Fernandez, B., Lwasa, S., Tovar-Restrepo, M., Mcevoy, D., & Satterthwaite, D. (2017). Climate change, equity and the Sustainable Development Goals: an urban perspective. <i>Environment and Urbanization</i> , 29(1), 159–182. http://doi.org/10.1177/0956247816677778	This research assesses how climate change events may amplify urban inequity. It finds that heatwaves, but also flooding, landslides, and even mitigation and adaptation measures, affect specific population groups more than others. The "study suggests focusing on the impacts on and needs of the most vulnerable ... For adaptation this means foremost addressing infrastructure and service insufficiencies in low-income neighbourhoods, and to build up institutions and governance options." (p171)	Assessing sensitivity and vulnerability to climate change
Goodbye Gondwana? Questioning disaster triage and fire resilience in Australia	2016	Australia	Rickards, L. (2016). Goodbye Gondwana? Questioning disaster triage and fire resilience in Australia. http://dx.doi.org/10.1080/00049182.2016.1154496 .		Integrating both short-term and long-term climate considerations into planning
Opening and closing the future: climate change, adaptation, and scenario planning	2014	Global	Rickards, L., Ison, R., Fünfgeld, H., & Wiseman, J. (2014). Opening and Closing the Future: Climate Change, Adaptation, and Scenario Planning. <i>Environment and Planning C: Government and Policy</i> , 32(4), 587–602. http://doi.org/10.1068/c3204ed	This paper discusses the role of scenario planning by government for climate change adaptation and notes how governance, climate change adaptation, and scenario planning all fold together the motifs of openness and closedness. The research points to the power of framing to open and close the future, particularly when "climate change adaptation is often framed in ways that reflect pre-existing perspectives" (p592).	Integrating both short-term and long-term climate considerations into planning

Australia's national climate: learning to adapt?	Forthcoming	Australia	Rickards, L., Neale, T., & Kearnes, M. (n.d.). Australia's national climate: learning to adapt? <i>Geographical Research</i> . http://doi.org/10.1111/1745-5871.12240		
The Problem of Fit: Scenario Planning and Climate Change Adaptation in the Public Sector	2014	Global	Rickards, L., Wiseman, J., Edwards, T., & Biggs, C. (2014). The Problem of Fit: Scenario Planning and Climate Change Adaptation in the Public Sector. <i>Environment and Planning C: Government and Policy</i> , 32(4), 641–662. http://doi.org/10.1068/c12106	Integrating both short-term and long-term climate considerations into planning	
Barriers to effective climate change mitigation: the case of senior government and business decision makers	2014	Global	Rickards, L., Wiseman, J., & Kashima, Y. (2014). Barriers to effective climate change mitigation: the case of senior government and business decision makers. <i>Wiley Interdisciplinary Reviews: Climate Change</i> , 5(6), 753–773. http://doi.org/10.1002/wcc.305	Integrating both short-term and long-term climate considerations into planning	
Adapting to 'extreme' weather: mobile practice memories of keeping warm and cool as a climate change adaptation strategy	2017	Global	Strengers, Y., & Maller, C. (2017). Adapting to "extreme" weather: mobile practice memories of keeping warm and cool as a climate change adaptation strategy. <i>Environment and Planning A</i> , 49(6), 1432–1450. http://doi.org/10.1177/0308518X17694029	This research reconceptualises adaptation as a series of everyday and remembered experiences with weather, which are situated within and carried by bodily social practices that contribute to keeping warm and cool. The goal of adaptation is redefined "as achieving tolerable, interesting, manageable, exciting, challenging and curious conditions; rather than pursuing comfort, familiarity and safety". It concludes that increasing exposure to varied weather conditions may enhance adaptive responses.	Adaptation of human settlements - other issues

Honiara Urban Resilience and Climate Action Plan	2017	Solomon Islands	Trundle, A., & McEvoy, D. (2016). Honiara Urban Resilience and Climate Action Plan. Fukuoka, Japan. Retrieved from https://unhabitat.org/wp-content/uploads/2017/03/HURCAP-final-Endorsed.pdf	Sets out a portfolio of adaptation actions to contribute to resilience building in Honiara. Priority actions were identified through a participatory planning processes are categorised according to 10 thematic strands. Climate change is only one driver affecting the vulnerability of poor communities in Honiara. Existing exposure to climate variability (cyclones) and natural hazard extreme events (earthquakes and tsunamis) meant that disaster risk reduction principles also needed to be accounted, as do significant development needs.	Assessing sensitivity and vulnerability to climate change
Climate Change Vulnerability Assessment: Greater Port Vila	2015	Vanuatu	Trundle A. & D. McEvoy (2015) Climate Change Vulnerability Assessment: Greater Port Vila, UN-Habitat, Fukuoka, Japan. http://www.nab.vu/sites/default/files/nab/documents/29/01/2016%20-%2010%3A08/vut_unhabitat_2015_pvva_fullreport.pdf	Identifies sea level rise, ocean acidification and localised flooding as climate-related hazards for Port Vila, Vanuatu. The vulnerability assessment followed UN Habitat Cities and Climate Change Initiative's Planning for Climate Change: A Strategic, Values-based Approach for Urban Planners. The report outlines the assessment process.	Assessing sensitivity and vulnerability to climate change
A Review of the Monitoring and Evaluation literature for Climate Change Adaptation	2014	Australia	Turner, S., Moloney, S., Glover, A., & Funfgeld, H. (2014). A Review of the Monitoring and Evaluation literature for Climate Change Adaptation. Melbourne. Retrieved from http://adapt.waga.com.au/cb_pages/project_resources.php	Outlines a five-step process to guide monitoring and evaluation processes and makes several recommendations regarding the development of a M&E framework and M&E indicators.	Integrating both short-term and long-term climate considerations into planning Monitoring & Evaluation