

Community Housing Climate Action Network (CHCAN) Roadmap:

Climate Change Risk Summary Example

This is a supporting document that accompanies the CHCAN Roadmap developed for Community Housing Organisations to take the necessary actions to address climate risks and opportunities. It is an example of what a climate change risk summary could look like for CHOs in NSW, based on the Adapt NSW climate risk ready tools and resources.

Table 1 - Climate Change Risk Summary for CHOs in NSW

Risk ID	Risk Statement	Category e.g. financial, service delivery, work health and safety	2030			2070		
			Likelihood	Consequence	Inherent Risk Rating	Likelihood	Consequence	Inherent Risk Rating
1	Changes to mean temperature (across all of NSW) resulting in: a. increased energy and water demand by tenants b. increased maintenance cost due to wear and tear of air-conditioning units c. greater instances of superficial peeling, cracking, corrosion, etc. to facades including glazing and cladding, structures and surfaces d. greater instances of material degradation to facades, structures and surfaces. e. an increase in the urban heat island effect impacting health and well-being of vulnerable communities.	a. Tenant cost of living, health & wellbeing impacts b. CHP & tenant maintenance & cost c. CHP maintenance & cost d. CHP maintenance & cost e. Tenant cost of living, health & wellbeing	Likely	Moderate	High	Almost certain	Major	Extreme
2	Changes in the number of extreme heat days and heatwaves (across all of NSW and particularly in the northwest of the state) resulting in: a. increased instances of heat stress for tenants, particularly vulnerable groups b. Increased of tenants requesting and using air conditioning systems	a. Tenant health & wellbeing impacts b. Tenant cost of living, CHP capital exp	Likely	Moderate	High	Almost certain	Major	Extreme

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	c. Increased incidence of energy poverty due to increased need to use air conditioning but not being able to afford it. d. an exacerbation of urban heat island effects impacting comfort and amenity e. increased energy and water demand across a CHP portfolio f. increased incidence of complaints and/or antisocial behaviour including domestic violence (Mallon, 2013). g. increased incidence of blackouts and water restrictions impacting tenants and CHPs' care for tenants' welfare.	c. Tenant health & wellbeing cost of living d. Tenant health & wellbeing impacts e. Tenant cost of living, CHP cost of operations f. Tenant health & wellbeing, CHP maintenance & cost						
3	Increasing frequency and intensity of bushfires (particularly inland and the northwest of NSW) resulting in: a. reduced air quality within internal areas b. full or partial fire damage to buildings and public spaces c. loss of life/injury of tenants, staff and contractors d. increased demand on emergency services, creating increased demand on CHP services to support and action an emergency plan e. impacts to the transport network causing staff delays and reducing accessibility to buildings f. changes to planning zones expanding land considered as bushfire-prone land increasing compliance and insurance costs	a. Tenant health & wellbeing impacts b. CHP repair & insurance cost c. Tenant and CHP staff health & wellbeing	Possible	Major	High	Likely	Major	High
4	Changes to relative humidity (especially in coastal areas) resulting in: a. build-up of mould and condensation leading to increased operations and maintenance requirements and costs b. changes in relative humidity resulting in decreasing thermal comfort resulting in health impacts for tenants c. increased cracking and corrosion damage to concrete structures due to accelerated carbonation (particularly inland arid or temperate climates) (Stewart, 2010). d. increased energy demand by tenants	a. Tenant health & wellbeing impacts, CHP maintenance & cost b. Tenant health & wellbeing c. CHP maintenance & cost d. Tenant cost of living	Likely	Minor	Medium	Almost certain	Minor	Medium
5	Changes to mean rainfall (including drought) patterns (across NSW) resulting in:	a. CHP maintenance & cost	Likely	Moderate	High	Almost certain	Major	Extreme

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			Likelihood	Consequence	Inherent Risk Rating	Likelihood	Consequence	Inherent Risk Rating
	a. degraded building foundations and other below-ground infrastructure (e.g. wiring) as a result of decreased soil moisture b. degraded integrity of building materials (e.g. adhesives, wiring) as a result of warmer and drier conditions c. increased incidence of mental health presentations of tenants in drought or flood d. decrease in cultural practice in waterways e. damage to infrastructure and assets (e.g. buildings, telecommunications)	b. CHP maintenance & cost c. Tenant health & wellbeing d. Tenant health & wellbeing e. CHP maintenance & cost						
6	Changes in sea level and the frequency of coastal erosion and inundation (coastal and estuarine areas) events resulting in: a. increased levels of localised flooding due to storm surge limiting access and egress b. more frequent and higher storm surges leading to damage to coastal assets and higher maintenance costs c. drainage capacity issues for buildings and hard landscaping d. corrosion of exterior infrastructure from salt spray (e.g. concrete) e. saltwater intrusion, contaminating water sources, impacting groundwater resources and landscaping, and/or increasing degradation of building materials (e.g. foundations) f. limited access and egress as result of permanent inundation of certain areas g. increased planning controls to manage associated impacts (e.g. changes to development approvals/conditions, and therefore increase development costs etc.) h. damage to infrastructure and assets (e.g. buildings, telecommunications)	a. CHP maintenance & cost, Tenant health & wellbeing b. CHP maintenance & cost c. CHP maintenance & cost d. CHP maintenance & cost e. CHP maintenance & cost f. CHP capital cost, tenant health & wellbeing g. Regulatory h. CHP capital cost	Possible	Moderate	Medium	Likely	Major	High
7	Changes in the frequency and intensity of extreme storms (incl. wind and hail) (across NSW) resulting in: a. increased storm and hail damage to building structure, façade and/or landscaping and therefore increased maintenance costs b. increased levels of rain/moisture penetration c. increased safety issues for tenants and staff (including operations and maintenance staff) d. high wind loads on building structure, and increased rainfall and flooding e. greater strain or loss of building fixtures, fittings and fastenings	a. CHP maintenance & cost b. CHP maintenance & cost c. CHP staff OH&S, Tenant health & wellbeing d. CHP maintenance & cost	Possible	Moderate	Medium	Likely	Major	High

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	f. structural damage due to greater wind load being exerted on assets g. Increased risk of power outages and need for this to be managed	e. CHP maintenance & cost f. CHP maintenance & cost						
8	Changes to the National Construction Code and BASIX in response to climate change could result in: a. Increased construction costs for new and renovated community housing.	a. Regulation/government and CHP capital cost	Almost certain	Moderate	High	Almost certain	Moderate	High
9	Necessary changes to improve the energy efficiency and thermal performance of old buildings is likely to result in: a. Increased capital expenditure because older buildings are difficult to retrofit. b. risk of minimum energy efficiency standards being introduced for existing homes alongside disclosure requirements	a. CHP capital cost	Almost certain	Moderate	High	Almost certain	Moderate	High
10	While the Registrar of Community Housing has not indicated any immediate plans to do so, there is the potential for reporting and compliance obligations relating to climate change to be introduced into the National Regulatory System for Community Housing (NRSCH) in the future. These reporting obligations could result in: a. Additional administrative workload and resourcing costs	a. Regulation/government b. (Some) CHP resources and budget	Possible	Minor	Medium	Possible	Minor	Medium
11	Physical and transition climate change risks may result in a transference of unacceptable risks from government to CHPs which could result in: b. Increased insurance costs for CHPs c. Asset write downs for CHPs d. Increased compliance and reporting burden	a. CHP capital cost b. Access to finance	Possible	Moderate	Medium	Possible	Moderate	Medium
12	Climate change impacts could lead to land use planning changes by state and local governments resulting in: a. Some housing and land parcels becoming 'stranded assets' if they are no longer zoned for residential use such as in flood plains and low-lying coastal fringe. This can impact new developments and existing housing that would need to be abandoned as uninhabitable.	a. Regulation/government and CHP capital cost	Likely	Major	High	Almost certain	Major	Extreme
13	Climate change impacts could lead to some areas in NSW becoming uninsurable resulting in:	a. Regulation/government and CHP capital cost	Almost certain	Major	Extreme	Almost certain	Major	Extreme

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			Likelihood	Consequence	Inherent Risk Rating	Likelihood	Consequence	Inherent Risk Rating
	a. Some homes and land parcels becoming 'stranded assets' causing financial loss, a reduction in available dwellings and disruption to tenants' lives. b. Increase in insurance premiums to neighbouring areas that may be considered at risk.							
14	There is a risk that CHPs may seek to promote a clean green climate-friendly image without sufficient action which could result in: a. be called out as ' greenwashing ' and damage the organisation's reputation.	a. CHP reputational risk	Rare	Minor	Low	Rare	Minor	Low
15	Extreme weather could displace people from their communities resulting in: a. Increased demand on community housing services	a. CHP capital cost	Possible	Major	High	Possible	Major	High
16	Continued exposure to climate change impacts, scientific and media reports could lead to " climate anxiety " resulting in: a. Mental health impacts on tenants and CHP staff b. Knock on impacts such as increased demand for support services	a. Tenant health & wellbeing b. (Some) CHP resources and budget	Possible	Moderate	Medium	Likely	Major	High
17	There is an increasing focus in the investment sector on the ESG credentials and performance of assets and investment categories which is likely to see funders increasingly require CHPs to demonstrate their climate credentials to access funding which could result in: a. Increased reporting requirements and regulatory burden b. Increased cost of finance for poor climate performance	a. Regulatory b. Financial	Likely	Moderate	High	Almost certain	Moderate	High
18	Inefficient buildings with higher energy prices can turn housing classified as affordable to become unaffordable to tenants, which could result in: a. CHPs could face backlash by the community for not having taking sufficient action to address thermal performance issues.	a. Reputational	Likely	Moderate	High	Almost certain	Moderate	High