

Response for Lithgow 2040 Local Strategic Planning Statement

Planning Priority 12: Adapt to Natural Hazards and Climate Change (pp 52-53)

The Climate Resilience and Net Zero Emissions Branch (the Branch) recognises the inclusion of climate change in Lithgow City Council's LSPS under **Planning Priority 12: Adapt to Natural Hazards and Climate Change**.

The Branch recommends that Lithgow City Council consider minor amendments to **Planning Priority 12** to align with current NSW Government targets. Under its recently released [Net Zero Plan Stage 1: 2020-2030](#) the NSW Government has a goal of net zero emissions by 2050 and as such this is no longer an aspirational target and it is requested that "aspiration" is deleted from this reference on p 52.

The Branch acknowledges the inclusion of NARClIM [climate modelling provided by AdaptNSW](#).

However, the Climate modelling provided by AdaptNSW identifies changes to 2070 (not 2080). Please amend text and the climate projections table to align with AdaptNSW climate projections "By 2030" (not 2040) and "By 2070" (rather than 2080) and reference AdaptNSW.

The Branch recommends the following actions under **Planning Priority 12**:

- Consider the regional systems transition model as outlined in the Western Enabling Regional Adaptation *Central West and Orana region report (2017)* when developing operational policy, undertaking strategic planning, delivering council programs and assessing future infrastructure needs.
- Assess and manage the impacts of climate change (such as heat, floods, storms and drought) on Council's assets and services. Enable communities and individuals to be better prepared and more resilient.
- Assess LGA-wide carbon emissions and develop and implement a plan to reduce emissions in consultation with the community. Consider referencing Lithgow's community emissions profile available here: <https://snapshotclimate.com.au/locality/australia/new-south-wales/lithgow/>
- Continue to consider updated climate change information and monitor and report to the community on progress against climate resilience and net zero goals.

Planning Priority 6: Community has access to Attractive, Healthy and Green Public Spaces and Places (pp35-36)

Consider and implement a range of urban design and land use planning strategies to minimise heat in local government areas described in [Minimising the Impacts of Extreme Heat: A guide for Local Government](#).

Planning Priority 9 – Attracting Investment and growing local jobs – Agricultural; Commercial and Industrial (pp 40 – 46)

Consider including actions noted in the Central West and Orana Regional Plan under *Direction 9: Increase renewable energy generation*:

- 9.1 Identify locations with renewable energy generation potential and access to the electricity network.
- 9.2 Facilitate small-scale renewable energy projects using bioenergy, solar, wind, small-scale hydro, geothermal or other innovative storage technologies through local environment plans.
- 9.3 Promote best practice community engagement and maximise community benefits from all utility-scale renewable energy projects.

Planning Priority 11 – Protect Areas of High Environmental Value and Significance (pp 50 – 51)

Consider including the following actions:

- Protect, enhance and increase natural and green spaces by considering ecosystem change and species shift from climate change, and applying ecosystem adaptation into strategic planning and land protection.

Further resources

More detailed information of these actions and the support available to council is outlined in the attached document 'Climate Change – Central West Region'.

Further information is also available at <https://climatechange.environment.nsw.gov.au/Adapting-to-climate-change/Local-government/Adaptation-planning>

Kind regards

Kylie Walker

Malcolm Robertson

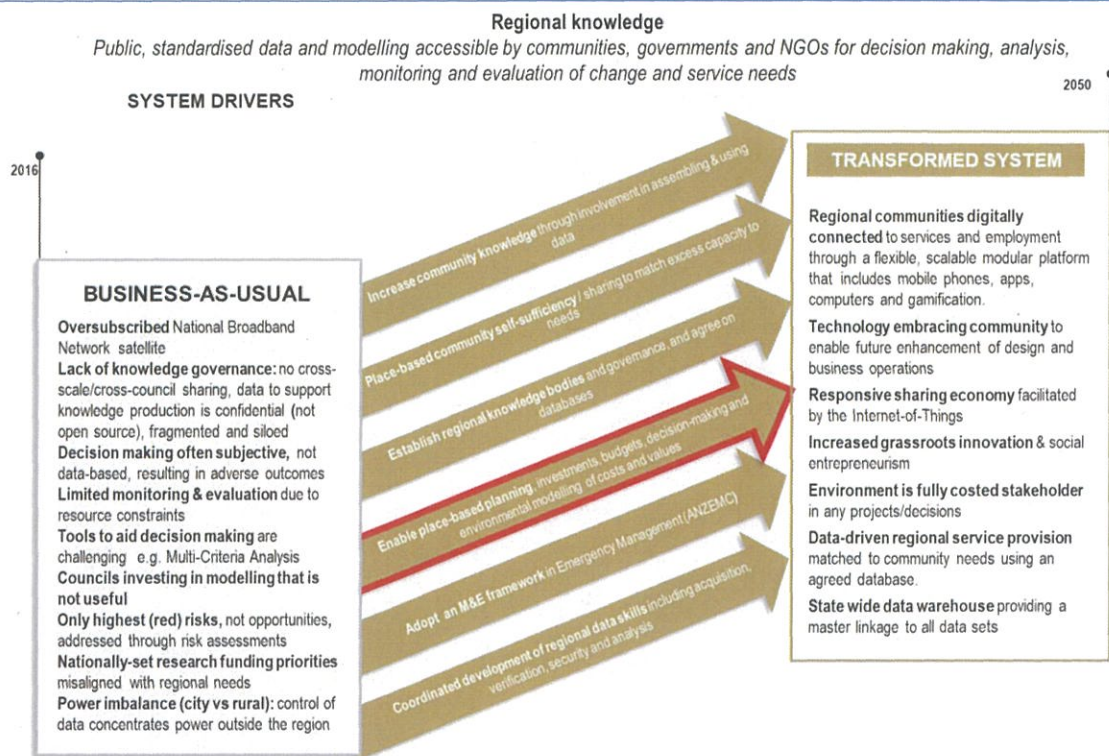
Climate resilience and net zero emissions branch.



DPIE LSPS Advice - CLIMATE CHANGE – Central West Orana region

Regional Plan context	<p>The Central West Orana Regional Plan recognises the importance of mitigating to climate change by increasing the region's specifically relating to the following Directions:</p> <p>Direction 9: Increase renewable energy generation</p> <ul style="list-style-type: none"> • 9.1 Identify locations with renewable energy generation potential and access to the electricity network. • 9.2 Facilitate small-scale renewable energy projects using bioenergy, solar, wind, small-scale hydro, geothermal or other innovative storage technologies through local environment plans. • 9.3 Promote best practice community engagement and maximise community benefits from all utility-scale renewable energy projects <p>The Western Enabling Regional Adaptation Central West and Orana region report (2017) aligns with a number of other regional plan directions which are relevant when looking to build regional resilience to climate change, these are:</p> <p>Direction 1: Protect the region's diverse and productive agricultural land Direction 2: Grow the agribusiness sector and supply chains Direction 3: Develop advanced manufacturing and food processing sectors Direction 4: Promote and diversify regional tourism markets Direction 7: Enhance the economic self-determination of Aboriginal communities Direction 9: Increase renewable energy generation Direction 10: Promote business and industrial activities in employment lands Direction 11: Sustainably manage water resources for economic opportunities Direction 12: Plan for greater land use compatibility</p>
NSW Government legislation and industry guidance	<p>In accordance with the NSW Government's NSW Climate Change Policy Framework (2016), NSW has a target of net zero emissions by 2050 and planning for greater resilience to a changing climate</p> <p>The Western Enabling Regional Adaptation Central West and Orana region report (2017) provides a strong evidence base for identifying adaptation pathways and opportunities to minimise climate change impacts on local communities.</p> <p>The Central West Orana (CWO) is made up of many component parts (or systems) that all contribute to how the region currently functions (business-as-usual) and its trajectory of future development. For persistent and disruptive drivers such as climate change, more fundamental and transformative change may be required to adapt regional systems.</p> <p>For the CWO, eight regional systems were identified as particularly vulnerable and in need of change to ensure effective ongoing government service planning and delivery:</p> <ul style="list-style-type: none"> • Small communities • Transport • Water • Regional knowledge • Mixed farming • Horticulture • Energy • Tourism.
LSPS commitments	Mitigate and adapt to climate change

<p>Data to consider</p>	<p><u>Climate Change projections - NSW and ACT Regional Climate Model (NARClIM)</u></p> <p>For your local government area, you can obtain climate change projection data available through the Climate Data Portal.</p> <p>The NSW Government has developed Climate Change Snapshots for all state planning regions. The snapshots provide details of the:</p> <ul style="list-style-type: none"> • likely changes in climate (temperature and rainfall) by 2030 and 2070 • likely changes to Severe Fire Weather by 2030 and 2070 • likely changes to Hot days (maximum temperatures >35°C) • likely changes to Cold nights (minimum temperatures <2°C). <p>Central West Orana Climate Change data can be downloaded in pdfs and zip files full of information on the climate change projections.</p> <p>Council Climate Change Risk Assessments, Adaptation Plans and Strategies</p> <p>The majority of councils across NSW have completed a climate change risk assessment (>90%) with many also having prepared an adaptation plan or strategy. These assessments, plans and strategies may identify priorities and actions that are suitable for inclusion in the LSPS.</p> <p>Increasing Resilience to Climate Change</p> <p>NSW Government Increasing Resilience to Climate Change grants program funds the implementation of Council led projects to address identified climate risks. The delivery of these projects may be relevant in the context of the LSPS and should be considered when identifying potential actions for inclusion in the LSPS.</p> <p><u>Western Enabling Regional Adaptation Central West and Orana region report (2017) - Transition Pathway consideration for LSPS strategic actions</u></p> <p>Change models for each of the eight regional systems identified for the Central West Orana have been developed to describe:</p> <ol style="list-style-type: none"> 1. the regional system (or set its boundaries) 2. the most important drivers acting on the system, which currently may not be climate related; however, the impacts of non-climate drivers will likely be amplified by climate change 3. business-as-usual (BAU) (or the way the system currently operates) 4. a series of transition pathways that emerge from business-as-usual in response to the need for change 5. a desirable future system, transformed by progress along the transition pathways. <p>Transition pathways identify new practices/changes/trends that may serve as an alternative to BAU that are emerging now or in the near future. These pathways could emerge from changes in the economy, society, the environment, technological development or politics. A transition pathway can be used as a data source to develop specific local strategic action embedded in a LSPS.</p> <p>Transition pathways can be found in the report along the arrow of a system model which connects from business as usual to the transformed system. The example below is from the Regional knowledge model which is defined as <i>Public, standardised data and modelling accessible by communities, governments and NGOs for decision making, analysis, monitoring and evaluation of change and service needs</i>.</p> <p>A specific example of a transition pathway from this model is:</p> <p><i>“Enable place-based planning, investments, budgets, decision-making and environmental modelling of costs and values”</i></p>
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Carbon emissions in the Local Government Area (LGA)

The NSW Government has a target of net zero emissions by 2050. Net zero emissions by 2050 is essential to meeting the objectives of the 2015 Paris Climate Agreement to limit the increase in global temperature to below 2°C by the end of the century.

Net zero by 2030 is the target required to limit global temperature increases to 1.5°C.

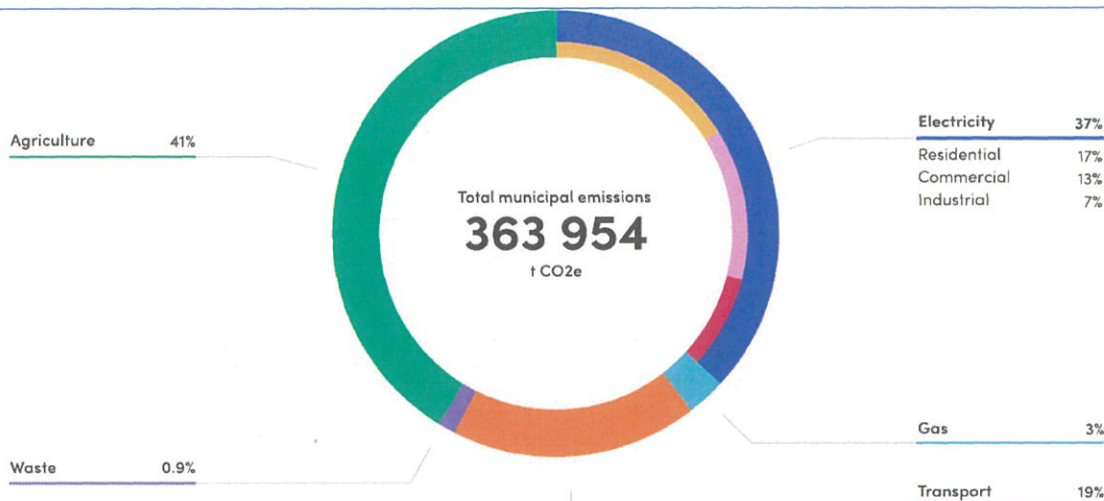
Local councils are establishing their own emissions reduction targets at both an operational and at an LGA wide level.

The NSW Climate Change Framework sets out the following policy directions:

- Create investment certainty to manage transition
- Boost energy productivity
- Take up opportunities for new industries
- Reduce risks to public and private assets
- Reduce impacts on health and wellbeing
- Manage impacts on natural resources, ecosystems and communities

In 2015/16 NSW emissions were 130 million tonnes CO₂e (carbon dioxide equivalent), with stationary energy (which generates heat and electricity) the largest contributing sector. NSW emissions represent 24% of Australia's total emissions.

The Department of Planning, Industry and Environment aims to ensure all regional NSW councils have access to an LGA wide emissions profile to provide councils with the information and tools to enable local emissions reduction pathways to be implemented. Workshops will be run in late October/November this year. Below is an example:



Emissions profiles provide an opportunity to identify local action toward emissions reduction and abatement. Emissions profiles allow council to set targets and establish relevant emissions reductions pathways.

From a planning perspective, local government can encourage new developments to identify emissions generated during project development and construction, as well as ongoing future emissions and abatement strategies.

Some councils in Greater Sydney have already taken the opportunity to embed net zero emissions strategy actions into council's planning instruments including Local Strategic Planning Statement (LSPS), LEP and DCP through improved building design and net zero commercial building targets. This includes actions for passive heating/cooling, ground source heat exchange, solar installation and water sensitive design.

Additional resources through Adapt NSW

[A Guide to Climate Change Risk Assessment](#)

[Integrated Regional Vulnerability Assessments](#)

[Regional Climate Data](#)

[Adaptation Planning for Local Government checklist](#)

[Minimising the impact of extreme heat: A guide for local government](#)

[Increasing Resilience to Climate Change Grants program](#)

[Building Resilience to Climate Change Grants program](#)

[Leading land-use case studies by local government](#)

Data, reports and resources for [Urban Heat](#) and [Green Cover](#) including the Baseline Assessment, available through NSW Government's [SEED portal](#)

[The NSW Adaptation Research Hub](#)

[NSW Local Government Climate Change Survey \(2018\)](#)

[NSW Local Government progress and needs in adapting to climate change Survey \(2015\)](#)

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Planning Priority: Mitigate and adapt to climate change

Rationale for adapting to climate change

The *Western Enabling Regional Adaptation Central West and Orana region report (2017)* prepared by the Department of Planning, Industry and Environment provides an evidence base for the likely vulnerability to the impacts of projected climate change for the Central West Orana region. The report identifies opportunities to respond to climate change and enhance government service delivery and planning. It can be used to identify actions that Council can undertake to build local resilience and long-term liveability to ensure future prosperity.

Climate related impacts are already being observed on the LGA's community, economy and environment. These include threats from natural hazards such as bushfire, heatwaves, drought, flooding and storms with high winds. Other seasonal changes will also be exacerbated by climate change. Council will manage the impact of climate change on its assets and services and enable communities and individuals to be better prepared and more resilient.

Recommended LSPS Actions	Support available
Consider the regional systems transition model as outlined in the <i>Western Enabling Regional Adaptation Central West and Orana region report (2017)</i> when developing operational policy, undertaking strategic planning, delivering council programs and assessing future infrastructure needs.	General planning/policy advice
Assess and manage the impacts of climate change (such as heat, floods, storms and drought) on Council's assets and services. Enable communities and individuals to be better prepared and more resilient.	General planning/policy advice
Protect, enhance and increase natural and green spaces by considering ecosystem change and species shift from climate change, and applying ecosystem adaptation into strategic planning and land protection.	General planning/policy advice
Assess LGA wide carbon emissions and develop and implement a plan to reduce emissions in consultation with the community.	General planning/policy advice
Continue to consider updated climate change information and monitor and report to the community on progress against climate resilience and net zero goals.	General planning/policy advice
Consider and implement a range of urban design and land use planning strategies to minimise heat in local government areas described in <i>Minimising the Impacts of Extreme Heat: A guide for Local Government</i> .	General planning/policy advice