



15 August 2017

Committee Secretary  
Senate Standing Committees on Environment and Communications  
PO Box 6100  
Parliament House  
Canberra ACT 2600  
Email [ec.sen@aph.gov.au](mailto:ec.sen@aph.gov.au)

Dear Committee Secretary,

**LGAQ Submission to the Senate Inquiry into the current and future impacts of climate change on housing, buildings and infrastructure**

Thank you for the opportunity to provide comment on the above inquiry. The LGAQ sought input from affected Queensland local governments in the preparation of the comments supplied in the following attachment.

Should you have any questions regarding the Association's submission, please don't hesitate to contact our Principal Advisor – Climate Change & the Great Barrier Reef, Ms. Dorean Erhart at

Yours sincerely

Sarah Buckler  
GENERAL MANAGER – ADVOCACY



**SENATE INQUIRY:  
Current and future impacts of climate change on housing,  
buildings and infrastructure.**

**LGAQ Submission**

**15 August 2017**

The Local Government Association of Queensland (LGAQ) is the peak body for local government in Queensland. It is a not-for-profit association setup solely to serve councils and their individual needs. The LGAQ has been advising, supporting and representing local councils since 1896, allowing them to improve their operations and strengthen relationships with their communities. The LGAQ does this by connecting councils to people and places that count; supporting their drive to innovate and improve service delivery through smart services and sustainable solutions; and delivering them the means to achieve community, professional and political excellence.

## Terms of Reference

On 9 May 2017, the Senate referred the following matters related to the Environment and Communications References Committee for inquiry and report by 23 November 2017:

The current and future impacts of climate change on housing, buildings and infrastructure, accounting for the full range of projected climate scenarios, having regard to matters, including:

- a) recent and projected changes in sea level rises, and storm surge intensity;
- b) recent and projected changes in temperature and precipitation;
- c) recent and projected changes in extreme weather, including heatwaves, bushfires, floods, and cyclones;
- d) recent and projected changes in natural coastal defence systems including coral reefs, kelp and mangrove forests;
- e) the impact of these changes on the vulnerability of infrastructure in coastal areas;
- f) the impact of these changes on water supply and sewage treatment systems;
- g) the impact of these changes on transportation, including railways, roads and airports;
- h) the impact of these changes on energy infrastructure, including generators and transmission and distribution lines;
- i) the impact of these changes on health, education and social services infrastructure, including hospitals, schools and aged care;
- j) the impact of these changes on private and public housing;
- k) the impact of these changes on public recreation and tourism facilities;
- l) the impact on financing and insurance arrangements for housing, buildings and infrastructure;
- m) the adequacy of current state and Commonwealth policies to assess, plan and implement adaptation plans and improved resilience of infrastructure; and
- n) any other related matters.

## Submission

### Role of local government in adaptation to climate change

Nationally local governments are at the forefront of identifying, planning for and undertaking actions to avoid and mitigate the impacts of climate change on their communities, in particular the appropriate provision, protection and maintenance of critical infrastructure such as roads and bridges, water and wastewater treatment and urban and open spaces. This infrastructure is essential for ongoing economic productivity, attraction of investment and the liveability of cities and towns. Local governments in Queensland are also responsible for the planning and location of all future development except for major State or Federal projects and Priority Development Areas.

At this time, no local government in Queensland could definitively respond to the Inquiry's Terms of Reference. This is of significant concern to the LGAQ and its member councils.

As a result, the LGAQ has considered the terms of reference and our submission principally relates to matter m) of the terms of reference. The LGAQ has prepared this submission to draw the Senate's attention to the important role local governments have in the provision, protection and management of housing, buildings and infrastructure and the significant issues they face in fulfilling this role in the face of climate change impacts.



## Queensland local government positions on climate change

For more than ten years, the LGAQ Policy Statements, the definitive statements of the collective voice of local government in Queensland, have held the following positions regarding climate change:

### 5.1.6 Climate Change

- 5.1.6.1 Local government is committed to providing a leadership role to assist local and regional communities, including industry, to understand and address the impacts of climate change.
- 5.1.6.2 Local government is committed to working in partnership with all spheres of government, industry and community to develop and implement effective climate change strategies focusing on mitigation and adaptation.
- 5.1.6.3 Local government is committed to utilising current and reputable scientific information, robust risk assessment methodologies and community engagement when developing mitigation and adaptation strategies, establishing priorities and the allocation of resources.
- 5.1.6.4 Local government requires appropriate policy and legislative frameworks from the Federal and State governments to allow necessary decision making and responses to climate change without prejudice or undue risk exposure.
- 5.1.6.5 Local government requires timely access to high quality, nationally consistent but locally appropriate data, methodologies, standards and codes from the Federal and State Governments to ensure responses to climate change are safe, timely, appropriate and equitable.
- 5.1.6.6 Local government requires appropriate levels of funding and resourcing assistance to meet urgent climate change mitigation and adaptation requirements for the short and long-term protection and benefit of communities.

The above Policy Statements are reviewed each year to ensure the collective voice of local government reflects the currency of its commitments and needs.

*Ten years on, Queensland local governments are still seeking:*

- A. Appropriate policy and legislative frameworks from the Federal and State governments;*
- B. Timely access to high quality, nationally consistent but locally appropriate data, methodologies, standards and codes; and*
- C. Appropriate levels of funding and resourcing assistance.*

The LGAQ supports the achievement of the above statements for Queensland local governments through advocacy and developing capability building resources, sourcing funding and delivering initiatives and programs such as the:

- Ongoing advocacy for indemnity from liability under the Queensland Local Government Act 2009;
- Advocacy for the ability to ‘build it back better’ under the NDDRA funding arrangements;
- Engagement and collaboration with scientific and research facilities;
- Establishment of the Coastal Councils Adaptation Taskforce;
- Queensland Climate Resilient Councils (Q CRC) program – <http://qcrc.lgaq.asn.au> (in partnership with the Queensland State Government); and
- QCoast2100 – [www.qcoast2100.com.au](http://www.qcoast2100.com.au) (in partnership with the Queensland State Government)

The latter program involves the identification of vulnerabilities and risks associated with future coastal hazards resulting from sea level rise and storm tide inundation. Grants totalling \$12 million over three years are available to the 41 coastal councils of Queensland to facilitate the identification of impacts to coastal communities (including housing, buildings and infrastructure) and the identification of response options for the short, medium and long term.

## A. Policy and legislative gaps for local government

The Australian Government has undertaken the development of a *National Climate Adaptation and Resilience Strategy* and a *Disaster Resilience Strategy* under which sits the *Enhancing Disaster Resilience in the Built Environment: Roadmap*. The Association is unable to find a digital copy of the latter document and is therefore unable to comment on its adequacy.



In the LGAQ's view, the implementation of the *National Climate Adaptation and Resilience Strategy* has not been adequately informed by the needs of the 'frontline' stakeholders, particularly local governments. One exception was the funding of the development of the CoastAdapt Tool – please see section B. below.

The Department of Environment and Energy engagement of critical stakeholders is largely limited to peak body representatives, such as the Australian Local Government Association (ALGA). It is well beyond the scope of ALGA representatives to be adequately informed about the needs of a widely diverse membership when advice is required about program design and resourcing. Strategy implementation, program design and identification of required outcomes requires meaningful engagement at least at the State and Territory Local Government Association level and preferably the establishment of a national community of practice, which includes council representatives.

*Recommendation:*

*That a panel or group be formed with representation from all levels of government, State and Territory Local Government Associations and key local government officers, major industry groups in the planning, building and construction industry and the valuation and insurance industry. This group would assist in the development of a strategic plan and action plan of items to address effective changes to policy, legislation and building codes to ensure that the impacts of climate change are embedded in current policy and process.*

*That a paper be developed providing further information on the current and future impacts of climate change on housing, buildings and infrastructure.*

There have been a number of initiatives and programs rolled out by the Australian Government including: Local Adaptation Pathways, Climate Adaptation Pathways, Roof Insulation Scheme, CSIRO Climate Adaptation Flagship and the National Climate Change Adaptation Facility. A small number of review and outcomes reports exist on the internet, however, there appears to be an absence of a centralised evaluation of the material affect these investments have been making to achieving adaptation planning and implementation on the ground. The climate change section of the 2016 State of the Environment report falls significantly below what is required to be able to effectively track the nation's readiness or otherwise to cope with future climate change impacts.

*Recommendation:*

*The Australian Government commit to a framework to measure the effectiveness of its climate change policies and programs.*

The Queensland Government has recently released a [Queensland Climate Adaptation Strategy](#), after an eight-year climate change policy hiatus.

The Strategy was developed using a partnership approach and incorporates a focus area on local and regional climate adaptation. The two State Government funded programs previously mentioned, QCoast<sub>2100</sub> and the Queensland Climate Resilient Councils programs, are both funded under this focus area. The strategy provides an overarching framework and general policy direction, while supporting sectors to develop their own Sector Adaptation Plans (SAPs). Two pilot SAPs were developed parallel to the development of the strategy – Agriculture and Built Environment and Infrastructure.

The Draft Built Environment and Infrastructure SAP (final not yet released) priority actions predominantly focus on incentives, tools and guidance/standards and are silent on policy and legislative gaps. The non-government elements of the sector are becoming aware of the Australian Prudential Regulatory Authority (APRA) [statement](#) on climate change noting the recommendations of the Financial Stability Board FSB Task Force on [Climate-related Financial Disclosures](#) and legal opinion on director's duties and understand that to reduce financial and reputational risks and remain in business, they must be held to account for climate change impacts. Under common law, local governments also carry exposure to increased risk of legal liability should they fail to take reasonable steps to consider and mitigate the effects of climate change on their communities.

Unfortunately, the State, Territory and Australian governments are not subject to the same legal and financial risks and at an agency and officer level appear to be lagging the private sectors and local governments in their understanding of the implications of climate change, the risks to their operations and cross-agency and cross-jurisdictional interdependencies.



Apart from political will the only drivers for the consideration of climate change by the State government is through policy and legislation – acknowledging that they are unlikely to regulate themselves for non-compliance.

The Association is aware of some work being undertaken at the Queensland and Australian Government levels to increase internal knowledge and capability. The Queensland government has made a commitment in their strategy to prepare a Government Adaptation Action Plan by 2018.

However, both the Queensland and Australian governments are nearly a decade behind local governments and other non-government practitioners in this area. There are opportunities for the local government to provide lessons and learnings regarding government specific issues encountered which are currently being missed.

The participation of the relevant Queensland government agencies in the development and implementation of the SAPs may provide opportunities to facilitate this to a limited extent.

*Recommendation:*

*Consider the establishment of cross-jurisdictional communities of practice over all three levels of governments at an agency level to facilitate knowledge and information sharing and capability building.*

Legislatively, local governments in Queensland are now required to respond to climate change in their planning instruments under the new Queensland Planning Act 2016 and the requirements of the Queensland State Planning Policy which commenced 3 July 2017. However, at this time there is minimal guidance to support the interpretation of the requirements into local planning instruments. At this time, the Association is not aware of an intention to establish a framework to evaluate effectiveness.

The State is required to consider and respond to climate change in the preparation of a Coastal Management Strategy under the Coastal Protection and Management Plan 1991.

While climate change is not explicitly mentioned in the Disaster Management Act 2003, the Disaster Management Strategic Policy Framework, is explicit about the requirements to consider the future impacts of climate change and take preventative and adaptive measures to mitigate these impacts.

With the exception of the Disaster Management Act 2003, the others are relatively new legislative obligations regarding climate change.

The LGAQ does not currently have a position on whether or not the Australian Government should prepare climate adaptation legislation. However, should such a proposal be considered, due to the likely significant impacts on local governments particularly, extensive consultation on the purposes of the regulation with local government associations should be undertaken prior to the decision to proceed with its preparation.

*Recommendation:*

*That extensive consultation with State and Territory local government associations is undertaken prior to an Australian Government decision to prepare Climate Adaptation legislation to ensure obligations on local governments are reasonable and implementable.*

## **B. Access to high quality and locally appropriate information and approaches**

The Association assumes that the Senate's Inquiry is seeking information regarding the matters listed in the ToR to facilitate some form of decision-making. This is a position that local governments are increasingly finding themselves in. They need information to facilitate decisions – usually decisions that will impact the homes and/or the livelihoods of members of their communities.

The avenues to that information are anything but streamlined. For example:

Detailed information and most recently available projections to answer items a) to c) can be found at:

- CSIRO, Climate Change in Australia – <https://www.climatechangeinaustralia.gov.au/en/>
- Geosciences Australia - <http://www.ga.gov.au>

However, access to information to respond to items d) to l) requires the review of numerous research papers, reports, assessments, strategies, plans and published scholarly articles.

The LGAQ wishes to emphasise the difficulty in gaining access to critical information in a format that supports efficient climate change adaptation planning and decision-making across all sectors, not just



housing, buildings and infrastructure. This difficulty increases the closer the work moves to a regional and local scale – the scales of operation for local governments.

While the Climate Council and a few other not for profit organisations undertake pieces of research and prepare publications about the implications of climate change on the matters of concern to this inquiry, there is currently only one organisation, the National Climate Change Adaptation Research Facility (NCCARF) that provides peer reviewed and credible synthesis of research outcomes specifically for practitioners.

This service is vitally important to facilitating the uptake of leading thinking by time poor practitioners who are not climate change specialists, but have content expertise e.g. coastal engineers, urban and regional planners and policy and regulation makers.

Below is a description of NCCARF's manifesto, taken from it's website:

*...NCCARF is a uniquely Australian response to these current and projected climate change impacts – established by the Australian government to ensure that the nation is properly prepared for the challenge of climate change. NCCARF's role has been three-fold: first, to identify the most important gaps in our knowledge and understanding about our vulnerabilities to climate change, and the possibilities for adaptation; second, to manage a portfolio of research projects that would address these gaps; and third, to communicate the results from this research to policy makers and other end-users to ensure their decisions about adaptation are based on the best possible information. To undertake these three roles successfully, NCCARF had a fourth role – to evaluate and where necessary develop capacity amongst researchers to carry out adaptation research, and capacity amongst policy makers to effectively utilise research outputs. (LGAQ emphasis added)*

<https://www.nccarf.edu.au/publications/nccarf-2008-2013-first-five-years>

The NCCARF CoastAdapt Tool (<https://coastadapt.com.au/>) is the only resource currently available to stakeholders which takes an holistic approach to an hazard that will be exacerbated by climate change (in this case, coastal hazards) by providing information about projections, impacts, implications and how to plan for and respond in one website. The NCCARF's approach was to extensively engage practitioners and policy makers from across the country. The tool was taxpayer funded, completed in 2016 and currently accessible by everyone.

The Australian Government invested \$9 million over three years in the development of the CoastAdapt Tool, but has not provided any further funding to maintain or update the tool, resulting in the development of a static product that will become obsolete within a couple of years. Limited funding has been provided to NCCARF to find a sustainable funding mechanism i.e. non-Australian Government funded. Without pre-empting the results of this work, to prevent the Tool from becoming an expensive white elephant, it is likely that a subscription approach may be employed, meaning that taxpayers have paid for a product that they will then continue to have to pay to access.

It is widely recognised that climate driven coastal hazards are likely to have the most significant impact on Australia's housing, buildings and infrastructure. The LGAQ questions the Australian Government's logic behind forcing a tool that can support individual awareness and resilience building into a limited access product.

*Recommendation:*

*The Australian Government commit to long-term funding for the ongoing maintenance and review of the CoastAdapt Tool and expanding the tool to include modules on bushfire, heatwave and flooding.*

The NCCARF also established four networks:

1. [Natural Ecosystems](#)
2. [Settlements and Infrastructure](#)
3. [Social, Economic and Institutional Dimensions](#)
4. [Vulnerable Communities](#)

Each network had a multi-stakeholder oversight committee and a national adaptation research plan that prioritises the areas of research to meet practitioner and other stakeholder needs.



One of the most impactful elements of the facility's work has been the establishment of communities of practice across the country and the facilitation of knowledge sharing between researchers and practitioners.

After this financial year NCCARF will no longer be funded by the Commonwealth Government and will cease operation. The networks have already been defunded.

The LGAQ considers the defunding of NCCARF at this time as a failure by the government to maximise the benefit of its investment in the facility over the past nine years and the last three years in particular (a total of \$39 million over 9 years).

The consideration of the impacts of climate change on various elements occurs in an environment of uncertainty and imprecision. This requires a different approach to risk assessment than is currently used. Most importantly, it requires repeated review and updating as more information becomes available.

These resources are fundamental to enabling effective and efficient adaptation and require long term commitment and consistent and timely re-investment. After nine years of supporting the establishment of the Facility, its research networks and nationwide working relationships with practitioners, the Australian Government is choosing not to make a long term and consistent investment to ensure up to date, locally relevant research and synthesis is available.

*Recommendation:*

*That the Australian Government make a long-term commitment to facilitating the development of researcher capacity to carry out adaptation research and policy maker and practitioner capacity to effectively utilise research outputs.*

### C. Funding and resourcing limitations for local government

Queensland local governments are principally enabled under the Queensland Local Government Act 2009 (LG Act) and directed under various other State and Federal regulations and policies. The LG Act determines the ways councils can source revenue, which is largely limited to what the local community can bear in terms of rates and fees for services. Approximately 45 of the 77 local governments in Queensland are Category 1 councils, typified by low populations and large geographic areas. Additionally, Queensland has 17 Indigenous local governments. At this time, they are unable to collect rates from residents due to the nature of tenure and property ownership in their local government areas. This means that 17 local governments in Queensland are wholly reliant on State and Federal funding to deliver services and maintain critical infrastructure including public housing and another 58% are significantly dependent on State and Australian government funding to deliver and maintain significant infrastructure.

A recent report by the Queensland Government Audit Office on local government financial sustainability states:

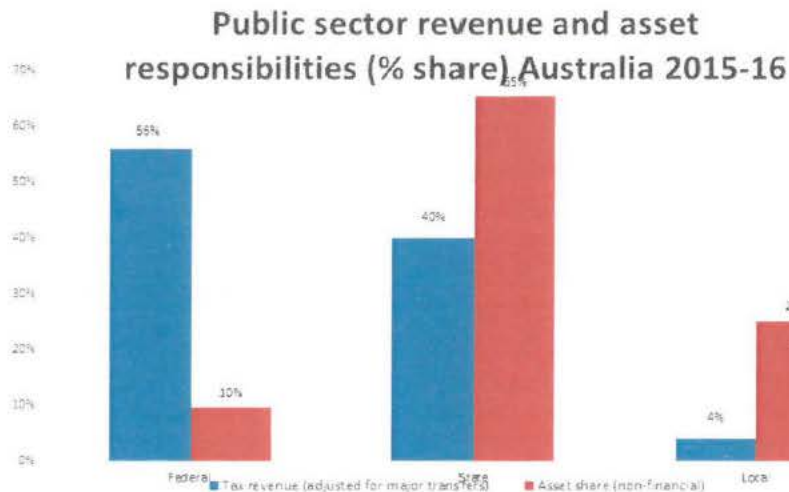
*"These services require councils to manage large numbers of complex, long-lived assets, almost all of which they own and control. Councils forecast they will be collectively responsible for \$124 billion of assets by 2025. For councils to retain existing service levels these assets need to be maintained and then replaced at the end of their lives, while new assets need to be acquired to match population growth and increasing demand for services."*

Source: [www.qao.qld.gov.au/reports-parliament/forecasting-long-term-sustainability-local-governments](http://www.qao.qld.gov.au/reports-parliament/forecasting-long-term-sustainability-local-governments)

The following graph illustrates the disparities between public sector revenue and non-financial asset responsibilities for each level of government under Australia's Federal system in 2015-16.

The greatest relative disparity is in the local government sector, which is responsible for many high value assets including aerodromes, bridges and roads, maritime facilities, stormwater and water infrastructure.

The revenue shares below have been adjusted for the major transfers from the Australian Government to the States & Territories (GST revenue and Specific Purpose Payments) and to local governments (Financial Assistance Grants).



Source: ABS 5512 *Government Finance Statistics, Australia 2015-16; Budget and programme papers, Commonwealth of Australia.*

*Recommendation:*

*That the Australian Government recognises and acknowledges that adaptation of public infrastructure and assets will be an ongoing process. That local governments have a critical role in achieving this adaptation and that to do so in a timely and effective manner, it requires an increase in the tax revenue share proportional to the value of assets it is responsible for.*

**Conclusion**

Queensland local governments are only in the early phases of undertaking holistic risk assessments across all future hazards as this work is typically expensive, resource intensive and takes time if appropriate community consultation and engagement is to occur.

As a result, there is only limited data available to quantify local level impacts to housing, buildings and infrastructure. However, this is the level of information all levels of government collectively need if we are to understand the level of actions required to maintain the quality of life Australians currently enjoy.

Without access to funding programs like QCoast2100 and the Q CRC, and without an increase in the tax revenue share, the progress of councils toward understanding and responding to future hazards will be too slow to ensure the minimisation of losses associated with impacts.

Should you require clarification or further information about any aspect of this submission, please contact Dorean Erhart, Principal Advisor – Climate Change and the Great Barrier Reef on [redacted]