

Planning to tackle

10 ACTIONS FOR A CLIMATE-CONSCIOUS PLANNING SYSTEM IN QUEENSLAND

PIA respects and honours Aboriginal and Torres Strait Islander Elders past, present and future. We acknowledge the stories, traditions and living cultures of Aboriginal and Torres Strait Islander peoples on this land and commit to building a brighter future together.



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A NATIONAL FOCUS ON CLIMATE CHANGE

As the professional association for planners, the Planning Institute of Australia (PIA) recognises that the work of planning must address the reality of a changing climate.

PIA accepts the scientific assessment of the Intergovernmental Panel on Climate Change (IPCC) that human activity is changing our global climate, and that irreversible change is already locked in. Good planning and coordinated leadership are essential if we are to mitigate and adapt to these impacts.

PIA has declared a climate emergency, joined zero-net carbon commitments, and supported calls for a Climate Change Bill. But there is more we can do.

Our planning systems have the potential to mitigate many of the drivers of carbon emissions such as urban sprawl, car-dependency and vegetation loss. At the same time, planning can provide people with communities that adapt to the impacts of climate change with healthier, cooler, more attractive, walkable, connected and resilient settlements.

Planning systems can also integrate local knowledge and understanding with policy to deliver regionally specific outcomes that deliver increased resilience and empowered communities.

Such an approach would be much less costly and more effective than retrofitting. The Productivity Commission Inquiry in 2014 observed that only three per cent of disaster management resources targeted resilience building rather than disaster response.

The decisions that planners make guiding urban and regional development will extend far beyond current influences and shape the future environments in which communities will live. We have a responsibility to ensure these decisions are climate conscious. It is time to act.

PIA has always advocated for best practice planning; it is more urgent than ever that planning balances environmental with social and economic drivers, to ensure healthy, prosperous, liveable and connected cities and regions - now and into the future.

Darren Crombie RPIA (Fellow) President Planning Institute of Australia



DELIVERING CLIMATE CONSCIOUS PLANNING IN QUEENSLAND

Here in Queensland, we know that climate change presents a clear and present danger. Our state is more vulnerable to the effects of climate change than any other state in Australia. We can expect more frequent and more severe storms and associated weather events, longer bushfire seasons, more exceptional floods, biodiversity loss, environmental degradation (including to our iconic Great Barrier Reef), and significant impacts on major industries like tourism and agriculture.

We also know that Queensland can realise new economic opportunities by transitioning to a clean economy. We are well-placed to harness renewables likes solar, we can lead in creating more sustainable cities and towns, and we can support household budgets with more energy efficiency and lower power bills.

To realise these opportunities, Queensland will need to use many different policy levers. Chief among these is effective and consistent planning where climate change and its impacts are considered at every step – a critical enabler for delivering more sustainable and resilient communities and facilitating new clean economy jobs.

Land use planning is one of the most important policy levers available to ensure a safe and prosperous future, creating settlement patterns that can enhance our valued lifestyle and adapt to change as needed.

Importantly, Queensland's planning system already has many nation-leading aspects when it comes to planning for climate change – particularly in relation to natural hazards. Nevertheless, there is more we can do.

This document is PIA's blueprint for a more climate conscious planning system in Queensland. The actions we propose are just the start of the collaborative change needed to address the climate emergency and are primarily focussed on the land use planning system that shapes development in our state.

PIA Queensland is committed to working with state and local governments – as well as the private sector – to further develop and deliver these proposals with the goal of creating a more climate conscious planning system for Queensland.

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Adopt a common climate change goal across all planning legislation

Adopt consistent climate change purpose statements across the *Economic Development Act 2012* and the *State Development and Public Works Organisation Act 1971* in line with the focus of the *Planning Act 2016* on the achievement of ecological sustainability.

THE CASE FOR ACTION

- Aligning the purpose of all of Queensland's key planning legislation around sustainable development will ensure the framework of our system shares a common direction. This can help unlock the economic and environmental opportunities presented by the transition to a zero-carbon economy.
- The *Planning Act 2016* is the primary planning legislation in Queensland, and the purpose of this Act is focussed on facilitating ecological sustainability. This includes accounting for the potential adverse impacts of development on climate change.
- However, planning and development activities are also facilitated through the *Economic Development Act 2012* (ED Act) and the *State Development and Public Works Organisation Act 1971* (SDPWO Act). The achievement of ecological sustainability or climate change mitigation and adaptation are not recognised as purposes of these Acts.
- This is important given Economic Development Queensland, established under the ED Act, is responsible for planning a range of major projects – including around 40 per cent of the total greenfield dwellings to be achieved under the SEQ Regional Plan.
- Similarly, the Coordinator-General, established under the SDPWO Act, has powers to plan, deliver, facilitate and coordinate large scale infrastructure projects and major private sector projects.

- The purpose of the *Economic Development Act 2012* and the *State Development and Public Works Organisation Act 1971* should be harmonised to reflect the ecological sustainability objectives already contained in the *Planning Act 2016*.
- Greater alignment and clarity can help unlock the economic and environmental opportunities presented by the transition to a zero-carbon economy.

Provide new strategic planning guidelines for mitigating and adapting to climate change

Strengthen the strategic planning framework to protect Queenslanders from the adverse impacts of climate change, including:

- Develop a Queensland Settlement Strategy.
- Prepare new guidance material for local government about the incorporation of climate change in strategic planning.
- Review the practical implementation of s30 of the *Planning Act 2016.*
- Expand the information in Planning and Development Certificates to include resilience and climate change.

THE CASE FOR ACTION

- The Queensland planning system should ensure that land use strategies consider mitigation and adaptation at all scales – state, regional, local and site specific.
- Planning strategies should communicate localised climate impacts, provide a regional level narrative on combined risk factors which inform settlement patterns, identify the approach to mitigation and adaptation, and fit within a statewide approach to achieving the Queensland Government's commitment to net zero by 2050.
- A clear line of sight is required from the purpose of planning legislation into all parts of the planning framework.

WHAT SHOULD BE DONE

A Queensland Settlement Strategy

- The Queensland Government should develop a Queensland Settlement Strategy to provide an overarching strategic planning framework for our state. This should include consideration of place-based risk and the identification of opportunities for economic and population growth to provide a joined-up and placebased approach to support growth and create resilient and climate-responsive communities.
- A settlement strategy can provide direction on the consideration of climate change in regional plans and local planning schemes and provide a strategic land-use framework to support private sector investment and jobs in a clean economy and well-managed landscapes.¹

New guidance materials for local government

- PIA welcomes the Queensland Government's recent release of the guidance for local governments, *Integrating state interests in a planning scheme.*
- Whilst this is a significant step forward, PIA supports the development of additional guidance materials to provide greater clarity and consistency around the inclusion of climate change considerations in planning schemes, including for other state interests beyond the Natural Hazards, Risk and Resilience State Interest.

Local government protections from compensation

- In 2016, local governments were given a statutory exemption from compensation for adverse planning scheme amendments made "to reduce a material risk of serious harm to persons or property on the premises from natural events or processes" (under s30 of the *Planning Act 2016*).
- The Queensland Government should review the implementation of these provisions to ensure they are operating as intended. This review should consider whether there is adequate certainty for local government to take necessary actions to address the risks associated with natural hazards and climate change, including in relation to guidance, funding, and state acceptance of relevant investigations.

Planning and Development Certificates

- Planning and Development Certificates provide comprehensive information about what planning regulations would apply to specific sites, including potential future obligations.
- The Queensland Government should consider changes to Schedule 23 of the *Planning Regulation 2017* so that Planning and Development Certificates include site-specific advice about natural hazard risks and whether climate change has been considered.

Assess new infrastructure for climate impacts

Include clear and measurable climate assessment requirements for new state and local government infrastructure in the proposed State Infrastructure Strategy and ensure these requirements are reflected in the Project Assessment Framework, infrastructure project procurement and infrastructure program funding processes.

THE CASE FOR ACTION

- Infrastructure Australia's (IA) 2019 Australian Infrastructure Audit highlighted the benefits of adopting more sustainable approaches to infrastructure assets and the associated risks of inaction, including in relation to climate change impacts. IA has also recently released Sustainability Principles to inform their infrastructure assessment and prioritisation functions.
- According to ClimateWorks Australia, around 70 per cent of Australia's emissions can be influenced by infrastructure projects.²
- The physical infrastructure we build today will still be operating in 2050, when Australia's obligations under the Paris Agreement to reach net zero will take effect.³

WHAT SHOULD BE DONE

- The proposed State Infrastructure Strategy (now under development) is a timely opportunity to provide greater clarity about the long-term approach to low-carbon infrastructure in Queensland.
- Whilst all Queensland Government projects greater than \$100 million in value now undertake a sustainability assessment, there is room for more to be done in the policy context on low-carbon performance requirements, as well as considerations for design, standards, specifications and measurement. Full life cycle costs associated with natural hazards should also be considered in future project assessments and included in guidance material for the preparation of Local Government Infrastructure Plans.
- PIA also supports the State Infrastructure Strategy recognising ecological (or natural) infrastructure as an asset class requiring investment, maintenance and monitoring.
- PIA will continue to engage with the Queensland government to identify further opportunities in relation to infrastructure planning.

Mon Repos Turtle Centre, Queensland (picture left) is a world-class community hub built using sustainable and locally sourced materials that will fullfill the 50 year design life.

Introduce stronger sustainability standards for new buildings

Review the Queensland Development Code to identify opportunities to lift sustainability and resilience standards for new buildings.

QUT Peter Coaldrake Education Precinct Bui

THE CASE FOR ACTION

- Buildings account for 50 per cent of Australia's electricity use, and nearly 25 per cent of all carbon emissions.⁴
- Whilst the planning and building frameworks operate separately in Queensland, there are opportunities to provide greater clarity on the responsibilities for resilience and climate change as the risks to the built environment continue to be exposed.
- The Queensland Development Code (QDC) provides the building standards framework for Queensland but includes limited consideration of building sustainability, resilience or carbon-impacts.
- Queensland has done an effective job in streamlining building regulation and allowing building and planning to get on with their respective roles. However, we now need stronger collaboration to ensure we have consistent approaches and support a sustainable future that protects people and property.⁵



WHAT SHOULD BE DONE

- The Queensland Government should review the Queensland Development Code to identify new opportunities to reduce the carbon impacts of new buildings and strengthen resilience to climate change and natural hazards.
- PIA also recommends that the Queensland Government advocates for stronger sustainability and resilience standards in the National Construction Code through the Building Ministers' Meeting.

The Peter Coaldrake Education Precinct Building (picture left and below) has been intentionally designed incorporating sustainable principles including use of natural filtered light, glare reduction, high performance glazing and incorporation of nature to create a memorable experience on campus.

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Plan for the impacts of heat on Queensland

Update the State Planning Policy to incorporate heat (including heat wave and heat island) as a state interest for natural hazards, including guidance mapping, policies and assessment benchmarks.

THE CASE FOR ACTION

- Extreme heat events are rising rapidly in Australia and overseas, with the latest science projecting that by 2100, annual deaths from extreme heat worldwide will outstrip all COVID-19 deaths recorded in 2020.⁶
- Heatwave kills more Australians that any other natural hazard and the impacts are likely to be more severe as our climate begins to change.⁷
- Despite this, heat is not identified as an area of state interest in the State Planning Policy (SPP), which is intended to express the state's interests in land use planning and development.

- The Queensland Government should update the State Planning Policy to recognise heat as a state interest, supported by the inclusion of mapping, state interest policies, technical guidance and assessment benchmarks.
- This will assist local governments to implement responses appropriate to their own climates and would ensure this important issue is considered more adequately in plan-making.



Invest more to address climate change risks and build resilience at the local level

Deliver "Planning for Climate Change Grants" to support training, capacity-building and local planning projects that address climate change risks and improve resilience to future extreme climatic events and hazards.

THE CASE FOR ACTION

- The Queensland Government has committed that by 2022 every local government in the state will have access to a regional resilience strategy that clearly identifies and prioritises actions to strengthen disaster resilience over time.
- These strategies complement the QCoast2100 program, as well as the State Planning Policy, which seeks to ensure that the risks associated with natural hazards, including the projected impacts of climate change, are avoided or mitigated.
- There is an opportunity to implement and build on this work with new investments in training, capacity-building and local planning projects that address climate change risks.

- The Queensland Government should deliver a targeted funding program to deliver training, capacity-building and/or local planning projects that address climate change risks, build resilience and plan for better local responses.
- This could include improved local mapping (such as urban heat island mapping); adaptation action plans; detailed risk assessments; capacity building training; the development of improved scheme provisions; or other local pilot projects.

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THE CASE FOR ACTION

- In the short term, decarbonisation of the energy grid will have the greatest impact in cutting emissions, and the Climate Council's Clean Jobs Plan has found 15,000 - 20,000 jobs could be created in Queensland across a range of opportunities, including renewable energy.8
- PIA acknowledges that while the Queensland Government has taken some steps to prioritise the assessment process for renewable energy projects (such as via the Coordinator General for some major projects, or via the State Assessment and Referral Agency for wind farms), there is more that can be done to expedite the consideration of these development proposals.
- The differing methods for the assessment of renewable energy projects in Queensland presents an opportunity to consider more integrated and consistent approaches

- The Queensland Government should examine new streamlined and integrated assessment pathways to support the continued growth of renewable energy in Queensland.
- PIA also believes there is an opportunity to consider streamlined assessment pathways for other low or zero-carbon development to incentivise high performance and fast-track the jobs associated with these projects.
- This would support the Queensland Government's commitment to establish three "Queensland renewable energy zones".

ACTION #8

Deliver a low or zero carbon precinct as a demonstration project to showcase best practice

Partner with the private sector to pilot a low carbon or zero carbon precinct to demonstrate the potential to achieve precinct-scale carbon reduction.

THE CASE FOR ACTION

- The Queensland Government has committed to achieving net zero carbon emissions by 2050, consistent with the Paris Agreement's objective of decarbonising the global economy.
- As part of achieving this goal, the built environment sector will need to move beyond a focus on individual buildings to look at carbon impacts at the neighbourhood or precinct scale. This will allow for the consideration of aspects like transport, infrastructure, land-use and waste management at scale.
- Taking a precinct level approach can enable more integrated approaches at scale for carbon reduction and offer the opportunity of proving up technology and strategies for deployment at larger scales.
- It is important to "prove up" the viability of low or zero carbon precincts, and deliver the tools, guidance and policy reform to support broader expansion of the concept.

WHAT SHOULD BE DONE

- The Queensland Government should work with the private sector to pilot a low or zero carbon precinct.
- For example, this could occur at the Cross River Rail precincts (which already benefit from high transport accessibility) or a future EDQ site. Opportunities also exist to explore the concept of Renewal Energy Industrial Precincts in Queensland.

Barangaroo in Sydney (picture left) is committed to being Australia's first large-scale carbon neutral precinct, including through the use of centralised infrastructure such as water cooling, embedded electricity networks, recycled water treatment plants and on-site renewable energy generation.

Introduce better planning for protecting and expanding green and open space

Deliver new planning initiatives that expand and protect green and open space, including:

- Progress and finalise the proposed Strategic Assessment for South East Queensland.
- Develop Green Grid strategies and tools to plan for inter-connected networks of green and open space.
- Encourage local governments to include mature street tree planting (or trees able to grow to provide canopy and shade) in the Desired Standards of Service under Local Government Infrastructure Plans and/or planning schemes.



- The hottest summer days in Brisbane are expected to regularly reach over 40°C by 2060–2080, and the urban heat island effect is likely to add several degrees on top of summer temperatures, especially in more vulnerable communities.⁹
- This trend will be similar in other parts of Queensland as well, so vegetation cover will be critical for addressing urban heat and promoting wellbeing.
- Street trees provide a range of benefits, including for the environment as well as improving physical, social and mental-health outcomes. As temperatures rise, street trees can also help cool urban environments.¹⁰
- Despite the importance of urban street trees, Monash University research shows that tree cover in Australia's capital cities declined in every capital city except Hobart between 2013 and 2020.¹¹
- The planning system can help protect and expand vegetation, particularly in urban areas.

50 per cent of the precinct is covered in vegetation to mitigate the impact of the urban heat island effect. Over 10,000 plants are growing, with native beehives in The Common (picture left and below) and European beehives on The Eaves' rooftop.



WHAT SHOULD BE DONE

Strategic Assessment for South East Queensland

• The Queensland Government and the Australian Government should progress and finalise the Strategic Assessment for South East Queensland to provide a strategic framework for the preservation of green space in the region, originally proposed in 2017 as an action under *ShapingSEQ*.

"Green Grid" strategies

- The Queensland Government should explore the development of "Green Grid" strategies in partnership with local governments, to plan and manage green and open space as interconnected, multifunctional networks.
- These strategies could be modelled on the Sydney Green Grid (2017), which plans for a network of high-quality open spaces to support recreation, biodiversity and waterway health. Green Grid strategies can also help in the prioritisation of future green and blue infrastructure investment and be reflected in the Local Government Infrastructure Plans.

Mature Tree Plantings

• The Queensland Government and local governments should explore planning changes that facilitate the planting of more street trees, including through updates to Local Government Infrastructure Plans and/or the inclusion of requirements (such as deepplanting standards) in planning schemes.



Establish a "Walkable Communities Fund" to invest in projects that retrofit climate responsive urban design via more walkable and accessible neighbourhoods, including footpaths and tree-planting.

THE CASE FOR ACTION

- The Queensland Government recently introduced new mandatory provisions for the design of new residential neighbourhoods. These mandatory provisions are intended to deliver more walkable neighbourhoods through best-practice urban design, including in relation to connectivity, block lengths, footpaths, access to parks or open space and street trees planting requirements.
- Whilst these changes for new subdivisions are welcome, it is also important that existing neighbourhoods are also made more walkable and accessible.
- The vast majority of people live in existing communities, so we need to retrofit existing neighbourhoods to the same standards of micro-climate, liveability, walkability and accessibility.

- The Queensland Government should establish a new Walkable Communities Fund to support local government investment in enhancing neighbourhood walkability and accessibility and retrofitting older and regenerating neighbourhoods.
- Investment priorities could include new or improved footpaths, parklets, tree-plantings, small-scale placemaking, awnings, shaded bus stops, and cycle lanes.
- Investment priorities could also be informed by the Queensland Government's Walkability Improvement Tool.

HANK

PIA wishes to thank the range of planners and technical professionals who contributed to the ideas in this report. The views expressed in this publication are those of the Planning Institute of Australia alone, and do not necessarily reflect the views of the individual contributors.

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²ClimateWorks. n.d. Reshaping infrastructure for a net zero emissions future. Available at: https://www.climateworksaustralia.org/project/infrastructure/ [Accessed April 2021].



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Special thanks to Articulous Communication for the graphic design of this report.