

APPENDIX

Queensland

Profile

Country	Australia
Population	4.9 million (2016)
Gross State Product	\$316,068 million (2015/16)
Greenhouse gas emissions	152.1 million tonnes of CO ₂ -e (2015)
Emissions per capita	32 tonnes CO ₂ -e (2015) (compared to Australia's average of almost 23 tonnes CO ₂ -e).

Overview

Queensland is Australia's highest emitting jurisdiction, responsible for 28 per cent of national emissions. Queensland's emissions-intensive economy and the projected global growth in carbon pollution expose our economy to global decarbonisation trends. Climate change is also expected to significantly impact our natural and human systems now and into the future. Even with strong global action, climate impacts from past and current emissions will continue to affect Queensland.

In response, Queensland has in place strategies for both economic transition and climate adaptation, and corresponding work programs for implementation across government. Our vision is an innovative and resilient Queensland that addresses the risks and seizes the opportunities of a changing climate.

The headline policy position for Queensland's Climate Transition Strategy, *Pathways to a clean growth economy*, is a target of zero net (greenhouse gas) emissions by 2050. Queensland has also adopted an interim target of reducing our emissions by at least 30 per cent below 2005 levels by 2030, conditional on and commensurate with continued national and global efforts to meet the goals of the Paris Agreement. This interim target will guide medium term planning by government and industry in Queensland and support monitoring of our progress.

Queensland recognises that while our carbon-intensive economy could be exposed to lower economic growth, our State can draw on its competitive advantages to successfully transition to a zero net emissions future. These include our abundant renewable energy resources (particularly solar), the land we have available for sequestration, our highly efficient land sector, our skilled workers, and those of our mineral resources needed to make low-carbon products.

Our broad approach to transition is to mitigate downside risks while positioning Queensland to take advantage of the upside opportunities as the Paris Agreement drives decarbonised global growth. In doing this, Queensland will continue to value its workers, supporting them through inevitable economic change. Queensland will continue to engage with industry and the innovation and investment sectors, while building capacity in communities to understand and seize opportunities in the new economy.

The Queensland Government will have a key role to play in leading by example and demonstrating and testing transition actions, especially in a context of national climate policy uncertainty and inaction. Queensland has actions already underway to reduce emissions ahead of national certainty, and a program of analysis and engagement on the risks and opportunities to Queensland of global climate trends.

Beyond this, Queensland has a commitment to introduce new actions from 2020 once the outcome of the 2017 review of national climate change policy is known, based on comprehensive sectoral, regional and economic assessment of the risks and opportunities to Queensland of transitioning to a zero net emissions economy.

Specific actions and commitments

Specific actions and commitments under our climate response framework are summarised below under broad thematic headings.

Leadership

To demonstrate government leadership, the Queensland Government will reduce emissions from its own operations. The first step is to reinstate by 2018 the requirement for all government departments to report on their emissions from energy, fuel use and air travel.

The Queensland Government will also play a leadership role in driving investment in sustainable infrastructure such as for energy and transport, as well as for buildings, and water and sewerage systems. As part of the State Infrastructure Plan, Queensland has committed to undertaking sustainability assessments (including climate change impacts) for all government capital works projects over \$100 million, while encouraging assessments for projects below this threshold.

Similarly, Queensland will use its land use planning system, and the new Queensland Building Plan framework to help deliver the zero net emissions goal. In terms of Government-owned buildings, the Queensland Government is committed to working towards achieving their Green Star ratings. As well as improving the emissions performance of buildings, the Government will ensure that changes to land use and built form—at the state, regional and local level—reduce energy emissions, promote energy efficiency, support renewable technologies and protect natural assets acting as carbon sinks. Importantly, Queensland also remains committed to reinstating strong tree-clearing protection laws in the future.

To support innovative climate change projects, Queensland is partnering with the Climate KIC network and engaging with the start-up community to promote zero emissions innovation in action. This aligns with the Queensland Government’s broader *Advance Queensland* initiative with its strong economic development agenda to create the knowledge-based jobs of the future. Further, to aid investment in climate-friendly and environmentally responsible projects, the Queensland Government now supports public investment through Green Bonds issued by the Queensland Treasury Corporation.

Queensland will continue to advocate for a coherent national framework that addresses greenhouse gas emissions from industry on a nationally-consistent basis. Should no coherent national framework be developed by 2020, Queensland will explore avenues under the State’s Environmental Protection Act framework to regulate greenhouse gas pollutants.

Finally, Queensland will play a leadership role in developing both regional and industry impact statements to assist the decision-making of all Queensland stakeholders. Alongside this, Queensland will build leadership capacity within communities to work towards their own climate transitions.

Low carbon electricity

Queensland aims to become Australia’s renewable energy powerhouse. To achieve this, the Queensland Government has committed to generating 50 per cent of our energy from renewable sources by 2030 while maintaining energy affordability and security. The Queensland Government’s *Powering Queensland Plan* (PQP) is an integrated energy strategy that supports this transition to a cleaner energy sector, and the creation of new investment and jobs, particularly in regional centres.

The *Powering North Queensland* plan sits under the PQP and guides the Queensland Government's investment in renewable energy in the region, and the region's communities. As part of the plan, Queensland will invest in strategic transmission infrastructure to support a North Queensland clean energy hub. This investment will support the region's energy security while reducing its energy costs, boosting local jobs and driving the region's economic transition.

Under the PQP, the Queensland Government will facilitate new uptake of up to 400 megawatts of diversified renewable energy, including 100 megawatts of energy storage, through a reverse auction. This initial reverse auction will support the bringing forward of renewable energy technology solutions that drive long term energy security. The PQP will also see Queensland considering the restructure of government owned generators and establishment of a new corporation, 'CleanCo', to run renewable and low emission power stations. Other relevant actions under the PQP include improving large-scale energy project facilitation, planning and network connections, and continuing to advocate for stable, integrated national climate and energy policies.

In alignment with the 50 per cent renewables target, Queensland has committed to achieving one million rooftops or 3000 megawatts of solar photovoltaics (PV) in the state by 2020 to help lower electricity costs for families and businesses, create jobs and protect the environment. Queensland will trial new business models for solar in government-owned social housing in select locations to decide if and under what conditions broader rollout might be appropriate. The decarbonisation of remote communities is another Queensland goal and will see infrastructure such as solar panels and batteries installed in remote areas of the State. Queensland's *Advancing Clean Energy Schools* program will support the rollout of rooftop solar systems and improved energy efficiency in Queensland public schools.

Energy efficiency

Alongside renewable energy, Queensland has significant opportunities to create new jobs and services through energy efficiency sector growth. Under the National Energy Productivity Plan (NEPP), as agreed through the Council of Australian Governments (COAG), Queensland is working with other Australian jurisdictions to progress higher energy efficiency standards for buildings and appliances. Queensland has committed to developing and implementing a Queensland Demand Management and Energy Efficiency Strategy, which complements the 50 per cent renewable energy target, and existing initiatives under the NEPP. The strategy will include a mix of mechanisms tailored to achieving a state-wide energy efficiency goal. To determine an appropriate mix of measures, the Government will explore energy efficiency opportunities in Queensland and the potential to establish an energy efficiency obligation scheme.

Measures under the Queensland Building Plan such as improving the sustainability performance of commercial, government and residential buildings, complement this work. Also supporting this work, Queensland has committed to developing a program to work with Queensland small-to-medium enterprises to take up energy efficiency measures and other sustainability initiatives that improve climate change mitigation and adaptation. Queensland is also exploring targeted energy efficiency training, developing an energy audit program and related workforce and skills development.

Decarbonisation of transport

Queensland has committed to delivering a Zero Net Emissions Transport Roadmap. This will consider better integration of transport policy with land use planning to reduce travel demand and optimise public and active transport infrastructure and services. It will also look at ways to reduce emissions from private, passenger and freight transport, such as through improved vehicle and fuel efficiency, technology and innovation, and fuel shift.

Queensland will also deliver a strategy focused on electric vehicles – The Future is Electric: Queensland's Electric Vehicle Strategy 2017. Where electrification is more difficult (such as in the

aviation, maritime, freight, mining and agricultural sectors), Queensland is supporting the substitution of liquid fuels with sustainable, low carbon biofuels. To boost the Queensland biofuels industry and related jobs, the Queensland Government has a biofuels mandate in place requiring fuel sellers to sell a minimum amount of biobased petrol and biobased diesel. Sustainability criteria apply to the mandated fuels to ensure they meet environmental performance standards and deliver sufficient greenhouse gas emissions savings when compared to regular fuels.

Natural resources and waste

Under the Advance Queensland Biofutures 10-year Roadmap and Action Plan, Queensland recognises that biofuels represent a significant opportunity to diversify and grow the Queensland economy while achieving environmental wins. To take advantage of this opportunity, Queensland is exploring the potential for wastes (e.g. crop residues and discarded plastics) and other materials (e.g. environmental weeds) as biofuel feedstocks.

In terms of land-sector carbon sequestration, Queensland recently established the CarbonPlus Fund to support landholders to undertake carbon farming with social, economic and environmental co-benefits, with a focus on Aboriginal Carbon Farming. Expanding on this carbon farming initiative, Queensland is now addressing regulatory and administrative gaps; supporting research; engaging with landholders on opportunities; and investigating opportunities for investment in the revegetation and remediation of land under state control such as abandoned mine sites, unallocated state land, protected areas and forest reserves.

Supporting community action

The Queensland Government is supporting Queenslanders to take action as part of the goal to reach zero net emissions by building leadership capacity within communities to develop place-based climate transition roadmaps. The Queensland Government will ensure communities have the tools, data and necessary financial support for success. A ‘pledge’ program will engage and encourage individuals, community organisations and businesses to make a public commitment to reduce carbon pollution and transition toward a low carbon future. Along with other support measures, local and regional skills and jobs plans for low and zero emissions jobs will assist those communities that will be most impacted by the transition to a zero carbon economy.

Adaptation

Queensland’s Climate Adaptation Strategy 2017-2030, *Pathways to a climate resilient Queensland*, provides the framework for mainstreaming climate adaptation into local, regional and state decision-making and planning processes. Under this framework, the foundational partnerships approach of the strategy will continue to support coordination and collaboration of actions and the ability to effectively deal with cross-sectoral issues. To guide this collaborative planning, Queensland is refining and updating its regional climate change projections data and impact summaries.

As part of the strategy, Queensland is developing a Government Adaptation Action Plan to provide government agencies with information and guidance to manage climate risks to the assets and services they manage in a consistent way. At the same time, Queensland is working with key stakeholders on sectoral adaptation planning, and with local governments to develop and deliver the Queensland Climate Resilient Councils program to guide local adaptation planning. To support Queensland local governments impacted by existing and future coastal hazards and advance their adaptation planning, the Queensland Government is investing in relevant adaptation measures under the *QCoast2100* program.