

ORDINARY MEETING 27 JULY 2016	7
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QUEENSLAND GOVERNMENT DISCUSSION PAPER – ADVANCING CLIMATE ACTION IN QUEENSLAND: MAKING THE TRANSITION TO A LOW CARBON FUTURE

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RECOMMENDATION:

That Council:

1. **Notes the Queensland Government’s *Advancing Climate Action in Queensland* discussion paper;**
2. **Notes the initiatives undertaken by Council in support of the principles outlined in the discussion paper; and**
3. **Notes that Councillors will be provided with an update following the release of the State Government Transition Strategy.**

EXECUTIVE SUMMARY:

This report provides an overview of the Queensland Government discussion paper, *Advancing Climate Action in Queensland: Making the transition to a low carbon future* (The Paper) and notes Council’s activities as they relate to the objectives of The Paper.

The Queensland Government is seeking to reduce carbon pollution in a range of sectors spanning energy and electricity; housing, building and town planning; transport, waste management and recycling; agriculture and land management; training, trade and investment; and mining and resources.

Council has made significant progress towards securing a low carbon future for the region. Some notable achievements include:

- reducing operational GHG emissions by 45 percent from 2007/2008 levels, in line with a 50 percent reduction target by 2020;
- investment in renewable energy at its premises with 76kW of solar capacity currently installed and an additional 165kW scheduled in 2016/17;
- participation in the Emissions Reduction Fund through the Portsmouth landfill Gas Flaring project;
- introduction of the Planning Scheme Policy on Tropical Urbanism in CairnsPlan 2016 and provisions to encourage connectivity and accessibility between residential areas and places of employment, schools, shopping, services and recreational facilities;
- extensive Active Travel program creating a network of connected bike paths for commuters;

- significant improvement in energy efficiency and fleet operations; and
- support for climate appropriate and resource efficient homes in the region, with the provisions of guides and ongoing participation in the Tropical Green Building Network.

BACKGROUND:

Understanding and adapting to climate change is a part of the Queensland Government Advance Queensland agenda. The Paper is seeking a well-managed and timely transition to a low-carbon, diversified and prosperous economy.

The Queensland Government recognises the need to adapt to the effects and opportunities of a changing climate, and to mitigate its effects through reducing greenhouse gas (GHG) emissions. It has committed to:

- developing a \$3 million Queensland Climate Adaptation Strategy (Q-CAS) expected for delivery in 2017;
- implementing a \$12 million Coastal Hazards Adaptation Program (CHAP) to help coastal communities plan and prepare for storm tide inundation, coastal erosion and rising sea levels;
- achieving 50 percent renewable energy by 2030- A Renewable Energy Expert Panel has been established to develop this pathway;
- one million rooftops (3000 megawatts) of solar photovoltaics (PV) installed in Queensland by 2020;
- The Solar 60 initiative, supporting up to 60 megawatts of large-scale solar generation in Queensland; and
- introducing a requirement for Ergon Energy to purchase 150 megawatts of renewable energy from suppliers in regional Queensland.

The Paper also proposes that the Queensland Government:

1. Joins the Subnational Global Climate Leadership Memorandum of Understanding (Under 2MOU), a commitment to reducing GHG emissions 80-95 per cent below 1990 levels by 2050; and
2. Positions the State to become a net exporter of renewable energy to other Australian states.

Council has made significant progress towards securing a low carbon future for the region. Some notable achievements include:

- reducing operational GHG emissions by 45 percent from 2007/2008 levels, in line with a 50 percent reduction target by 2020;
- investment in renewable energy at its premises with 76kW of solar capacity currently installed and an additional 165kW scheduled in 2016/17;
- participation in the Emissions Reduction Fund through the Portsmith landfill Gas Flaring project;
- introduction of the Planning Scheme Policy on Tropical Urbanism in Cairns Plan 2016 and provisions to encourage connectivity and accessibility between residential areas and places of employment, schools, shopping, services and recreational facilities;

- extensive Active Travel program creating a network of connected bike paths for commuters;
- significant improvement in energy efficiency and fleet operations; and
- support for climate appropriate and resource efficient homes in the region, with the provisions of guides and ongoing participation in the Tropical Green Building Network.

COMMENT:

The Queensland Government is seeking to build a cleaner, more sustainable and prosperous Queensland and seeking feedback on the discussion paper *Advancing Climate Action in Queensland: Making the transition to a low carbon future*. This includes how Queensland can best transition to a low carbon economy and mitigate the effects of climate change by supporting regional areas and local government to reduce carbon pollution across a range of sectors including energy and electricity; housing, building and town planning; transport, waste management and recycling; agriculture and land management; training, trade and investment; and mining and resources.

Council has undertaken and continues to undertake initiatives that support the direction of the Queensland Government in transitioning to a low carbon future. Future policy documents including the revision of the Corporate Plan and proposed Smart City Strategy can provide opportunities to set strategic goals towards a more sustainable and prosperous Queensland in collaboration with all levels of government.

OPTIONS:

The report is for noting.

CONSIDERATIONS:

Risk Management:

There are no risks associated with this report as it is for noting.

Council Finance and the Local Economy:

There are no budget considerations in relation to the discussion paper.

Community and Cultural Heritage

The discussion paper places value on the health and resilience of Queensland communities in a changing climate. It explores pathways for improved low carbon lifestyles and industry.

Natural Environment

The discussion paper recognises the threats of a changing climate on Queensland's biodiversity and iconic ecosystems, including the region's World Heritage rainforests and Great Barrier Reef. It highlights a variety of opportunities for lowering Queensland's GHG emissions to reduce this impact.

Corporate and Operational Plans:

- Strategic Goal 2.0 Economy:
A strong and sustainable regional economy that supports the growth of new and existing industry and business activities whilst enhancing local lifestyle and providing long term employment opportunities.
- Strategic Goal 3.0 Environment:
A sustainable, well managed and healthy environment that provides a balance between built infrastructure and the conservation of our world heritage features and natural and cultural resources.
- Strategic Goal 1.0 Community:
A vibrant, inclusive and healthy community with access to services and facilities which reflect its unique character, role and needs.

Statutory:

Nil.

CONSULTATION:

Consultation has occurred internally across Council departments.

ATTACHMENTS:

Attachment 1: *Advancing Climate Action in Queensland: Making the transition to a low carbon future.* Queensland Government. 2016. See: <http://www.ehp.qld.gov.au/assets/documents/climate/advancing-climate-action.pdf>



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Attachment 1: Sample from *Advancing Climate Action in Queensland: Making the transition to a low carbon future.*

<http://www.ehp.qld.gov.au/assets/documents/climate/advancing-climate-action.pdf>

Purpose

Queensland was once a national leader in promoting a low carbon future.

The former Office of Climate Change (OCC) established in 2008 had an extensive program and budget. In 2010-11, the OCC had a budget of more than \$50 million and about 60 staff. This included the Queensland Climate Change Fund of \$30 million annually, and the Queensland Climate Change Centre of Excellence which provided dedicated scientific advice to the government.

However since 2012, the state-level policies and programs that worked towards the goal of a low carbon future have been dismantled. Queensland's emissions are on a dangerous upwards trajectory and the state is unprepared for the transition to a clean energy economy that is gaining pace elsewhere around the world.

Queensland now lags behind other Australian states, such as Victoria and South Australia. It's time to re-start the conversation about how we build on our existing strengths, exploit our natural competitive advantages and transition to a cleaner energy, low carbon future that will benefit our families, our children and future generations.

Overall, economies that recognise that the global, low carbon transition is both inevitable and already underway, and plan accordingly, are better positioned to realise the opportunities presented and reap the benefits of early action. Conversely, those that ignore this issue and fail to plan for the transition will be forced to make abrupt and painful changes in the future. It makes sense to plan ahead now and to encourage new industries and jobs that will ensure the most successful transition possible.

We've already begun to rebuild, with a bold renewable energy program, new vegetation protection laws before Parliament, and initiatives like Advance Queensland and the Biofutures 10-Year Roadmap. But there's more we can do.

This paper includes a number of policy and direction-setting questions for the community to consider when responding to the issues raised. **Your feedback and ideas will help shape the transition strategy for Queensland in an increasingly low carbon global economy.**



What are the opportunities?

Just as Queensland is uniquely vulnerable to the impacts of climate change, our state is uniquely positioned to take advantage of the opportunities presented by the transition to a clean energy, low carbon economy.

The Paris Agreement has galvanised governments, industries, investors and innovators around the growing opportunities of a clean economy. Global investment in clean energy now outstrips fossil fuel investments with a record US\$329 billion (AU\$465.72 billion) in global clean energy investment last year alone (BNEF 2016).

Technological and commercial advances, both domestically and internationally, are producing clean energy goods and services at increasingly competitive prices. Governments that foster the development of these new products, markets and business models are already reaping the benefits in terms of growth, revenue and employment opportunities.

Queensland is benefiting from significant research and investment in the bio-energy sector and growing investment in carbon forestry projects. Opportunities also exist in the large scale mining and manufacturing sector where Queensland can combine its manufacturing expertise, large resource base and renewable energy potential to produce low emissions products and resources.

In particular, our plentiful supply of renewable energy resources and technology—especially solar—gives Queensland the potential to be a net exporter of renewable energy to other states.

Acting now will position Queensland to attract new investment and employment opportunities, building the industries of the future here in our state.

Along with creating new jobs, the transition to a clean energy, low carbon economy also has the advantage of allowing households to better manage their own power and bills through solar PV and batteries.

It's important that as a state, we act early to develop our own transition strategy. This allows us to design a strategy that suits our local priorities, rather than having one imposed on us by external forces. Early action also means costs can be reduced and the risks of transition better managed. Putting transition off to a later time will mean making deep, rapid economic

changes down the track—ultimately costing far more and unfairly disadvantaging vulnerable sectors of our community.

Economic analyses, including modelling by the Australian Government's Treasury Department (2008), consistently find that early mitigation action is cheaper than delaying action. That is, delayed action poses a greater risk to the national and Queensland economies. The modelling finds that countries that defer action lock in emissions-intensive infrastructure for longer and face higher long-term costs when forced to make greater adjustments later.





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What Queensland is already doing

The Queensland Government is already pursuing a range of strategies to tackle climate change and reduce the carbon pollution generated within our state, including:



CLIMATE ADAPTATION

- Developing a \$3 million Queensland Climate Adaptation Strategy (Q-CAS) in partnership with a wide range of sectors (public consultation is expected in mid-2016)
- Implementing a \$12 million coastal hazards adaptation program in partnership with the Local Government Association of Queensland.



RENEWABLE ENERGY

- Appointing a Renewable Energy Expert Panel to assess and establish a credible pathway to a 50 per cent renewable energy target by 2030
- Setting a target of one million solar rooftops or 3000 megawatts of solar PV in Queensland by 2020
- Instigating a public inquiry by Queensland Productivity Commission into fair price for solar energy
- The Solar 60 initiative supporting up to 60 megawatts of large scale solar generation
- Government-owned network operator Ergon Energy to buy 150 megawatts of renewable energy from suppliers in regional Queensland.



LAND SECTOR MANAGEMENT

- Reinstating responsible vegetation management framework to reduce carbon emissions from tree-clearing, with a bill currently before Parliament
- Promoting opportunities for Queensland landholders to participate in the national Emissions Reduction Fund.



TRANSPORT

- Developing a network of 'electric super highways' with fast-charging service stations for electric vehicles the length of Queensland
- Encouraging public transport as mode of choice in SEQ with new rail and ferry infrastructure, review of all bus and train service timetables in SEQ and SEQ Fare Review
- Supporting improved federal vehicle emissions standards
- Continuing work on Queensland Cycle Strategy to encourage greater use of cycle ways, leading to fewer cars on the road and reduced emissions
- Use of Managed Motorways technologies to reduce stop-start travel, leading to lower emissions.



BUILT ENVIRONMENT

- Reviewing State Planning Policy State Development Assessment Provisions and development assessment requirements to consider how climate change and renewable energy priorities can be advanced through the planning framework
- Identifying ways that renewable energy and energy efficiency can improve housing sustainability as part of the development of a new Queensland Housing Strategy
- Through the State Infrastructure Plan, working to ensure that Queensland's infrastructure is resilient and adaptive to climate change, contributes to reductions in greenhouse gas emissions and is considerate of the surrounding natural environment.
- New agency Building Queensland to provide independent, expert advice on major infrastructure projects, including examination of the social and environmental impacts
- All state government projects of greater than \$100 million in value to include a sustainability assessment (assessments will also be encouraged for projects worth less than \$100 million).



ENERGY EFFICIENCY

- Working to raise national emissions performance standards for appliances and buildings
- Investigating new policy options to improve energy efficiency in new and existing government buildings.



INNOVATION

- Driving innovation within traditional industries and creating the industries of the future with the Advance Queensland innovation and jobs plan
- Supporting research into the impact of climate change on the Great Barrier Reef to deliver tangible outcomes for change
- Helping industry connect with researchers to develop innovative ways to improve practices and reduce the environmental impacts of business.

What more should Queensland be doing?

The Queensland Government is determined to properly manage the transition to a low-carbon economy and secure our fair share of the jobs and industries of the future.

While a well-designed national approach is likely to be the most effective and efficient way to drive down carbon pollution, the state government will play a key role as both a leader and a model user. Specifically, state-based action is needed to address gaps in national policy, take action in areas of state responsibility and to help Queensland businesses and communities adjust to and take advantage of national and international carbon measures. The state government also has a significant role to play as a polluter in its own right, and a purchaser of goods and services. This includes managing the energy and emissions of state-run buildings like schools and hospitals.

There are four main ways to reduce carbon pollution over the long-term while maintaining strong economic growth. Each can simultaneously deliver other benefits to individuals, communities, existing industries and the economy overall:

- Energy efficiency
 - Being smarter about the use of energy and doing more with less
- Low carbon electricity
 - Reducing the emissions associated with energy production and, over time, replacing existing fossil fuel based generation with home-grown renewable energy
- Electrification and fuel switching
 - Switching the fuels used in cars, buildings and industries to cleaner options, including low carbon electricity and biofuels
- Non-energy emissions
 - Storing carbon in our trees and in our soils, which offsets emissions created by other sectors while providing our rural and regional communities with an additional income stream.

These four 'pillars of decarbonisation' (ClimateWorks Australia and ANU 2014) present opportunities in a range of sectors including:

- energy and electricity
- housing, buildings and town planning
- transport
- waste management and recycling
- agriculture and land management
- training, trade and investment
- mining and resources.

The next section of the discussion paper canvasses examples of actions that Queensland could take in key sectors. Your ideas on what actions and opportunities Queensland should pursue will help shape our strategy for transitioning to a low carbon economy.