

OCC Weather

Assistant Director-General's note

Welcome to the August / September 2009 edition of OCC Weather.

ClimateQ

The Queensland Government released its updated and revised climate change strategy on August 20. ClimateQ places the state on a sound platform to move ahead in meeting the challenge of climate change. The strategy provides a broad suite of programs, policies and initiatives designed to complement the Commonwealth Government's Carbon Pollution Reduction Scheme and the Renewable Energy Target.

The OCC will be working with state agencies and key stakeholder groups over the coming year to ensure that the ClimateQ program is effectively implemented. Can I take this opportunity to thank all our stakeholders and everyone who put the work into making a submission to the reviews.

ClimateQ is the next step, not the last step for Queensland in our approach to climate change. Ultimately our fundamental objective is to ensure that we make an effective transition to a lower carbon economy. Queensland must avoid and seek to minimise as much as possible the higher carbon prices and costs that will arise throughout the world in coming years and decades.

Department of Environment and Resource Management (DERM)

The Office of Climate Change is now well established within the consolidated and integrated Department of Environment and Resource Management. The new agency is providing broader and more effective linkages for our work and delivering a stronger support base for the climate change work program. In the next edition of OCC Weather I hope to provide a more detailed overview of the OCC work program in the coming year.

Feedback

This is the 14th edition of our newsletter and we are always seeking ideas and feedback. Please contact Kelly Bird (Kelly.bird@derm.qld.gov.au) with any input you would like to make. Can I also ask that you distribute OCC Weather widely among your staff, members and stakeholders.

Best wishes,

Greg Withers

Assistant Director-General, Office of Climate Change

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Policy update

Revised climate change strategy launched

Queensland's revised climate change strategy – *ClimateQ: toward a greener Queensland*, was released by Premier Anna Bligh and Climate Change and Sustainability Minister Kate Jones on August 20.

The strategy marks the completion of an extensive policy review and public consultation process over the past 12 months. It consolidates and updates the policy approach outlined in *ClimateSmart Adaptation Plan* and *ClimateSmart 2050*, taking into account the latest national and international science and policy.

Together with the government's *Toward Q2* plan, the new initiatives and policies are designed to reduce the state's carbon footprint and help prepare industry and households for higher energy costs following the introduction of the national Carbon Pollution Reduction Scheme.

It also strengthens the focus on adapting to the impacts of climate change by investing in long term adaptation measures to help deal with the risks and challenges associated with the dangerous effects of climate change.

Significant investment in a lower carbon future

ClimateQ represents a significant investment comprising the Bligh Government's 2009 election commitments including: policy initiatives such as *Supporting Our Heroes*; *Cleaner Greener Buildings* and *Queensland Solar Hot Water Program*.

ClimateQ presents eight sectoral initiatives formulated to expand the policy approach for managing future greenhouse gas impacts and reducing emissions.

The strategy contains \$87 million in new initiatives including: \$60 million for key sectors such as transport to reduce vehicle emissions; \$8 million to deliver improved mapping tools to guide climate change responses; \$6.5 million for improved fire management in national parks and \$9 million to expand climate change corridors for biodiversity.

Initiatives sweep across a range of crucial sectors that are either significant emitters or would be hardest hit by climate change impacts including transport, rural and remote Queensland, energy and coal, planning and building, business and disaster prone communities.

It includes recent State Budget 2009/10 climate change announcements such as: *ClimateSmart Business Service*; *Energy Conservation and Demand Management* programs and the extension of the *Rural Water Use Efficiency* initiative.

New initiatives include

- \$39.3 million for computer-based transport systems to reduce emissions and ease congestion in south east Queensland - new technologies to coordinate traffic signals and on-ramps, control lanes and monitor traffic;
- \$5.2 million to reduce car emissions by promoting walking, cycling, carpooling and public transport to get to work, major events and other key destinations;
- \$4.5 million for the Queensland Government to match dollar-for-dollar motorists who decide to offset their vehicles' greenhouse gas emissions - the total \$9 million will be used to create biodiversity corridors of bushland across Queensland;

- \$2.9 million to accelerate the planning and development of key walking and cycling infrastructure in south east Queensland;
- \$8 million to develop Digital Elevation Model mapping to better understand the impact of sea-level rise, storm surge and coastal erosion;
- \$6.5 million to enhance planned burn activities in national parks most vulnerable to fire;
- \$2 million to help remote indigenous communities prepare for the impacts of extreme weather through training, resources and exercises;
- \$1.4 million for a trial of low-emission diesel-electric buses in the public transport fleet;
- \$3.5 million for a new information system to help landholders establish reforestation projects for the domestic carbon market;
- \$3.2 million to help primary producers so they can better manage climate change risks and take advantage of emerging opportunities;
- \$600,000 to develop green skilling and workforce development needs of industries; and
- \$500,000 to work with about 50 firms in key sectors to better understand the costs and opportunities of a carbon price on business.

New measures for the coal industry

ClimateQ also includes a raft of new measures designed to ensure world's best practice in low emissions technology for coal fired electricity and to accelerate the development of Queensland's renewable energy sector.

Under the new conditions, no new coal-fired power station will be approved in Queensland unless:

- *it uses world's best practice low emission technology in order to achieve the lowest possible levels of emissions, and*
- *it is carbon capture and storage (CCS) ready and will retrofit that technology within five years of CCS being proven on a commercial scale.*

Much of the sector is already embracing cleaner, smarter technologies and preparing for their widespread use, but we are moving to ensure everyone jumps on board.

Australian firsts

The strategy presents Australia's first complete profile of 13 regional climate change projections, covering the entire state, to help Queensland local governments, developers and industries plan better for the impacts of climate change.

The Queensland Climate Change Centre of Excellence, with input from the Commonwealth Scientific and Research Organisation (CSIRO), prepared the latest regional projections for 2030, 2050, and 2070 under low, medium, and high greenhouse gas emissions scenarios.

In another Australian first, the state commissioned a CSIRO study, finding potential to store significant amounts of carbon by using its rural landscape in a process known as biosequestration.

Forming part of ClimateQ the study titled 'An analysis of Greenhouse Gas Mitigation and Biosequestration Opportunities from Rural Land Use', estimates the amount of greenhouse gases that can be stored or mitigated by changes in rural land use in Queensland and more broadly, Australia.

The CSIRO report provides a key input to the Commonwealth Government's negotiations on the treatment of land use in the new international climate change framework to be determined in Copenhagen later this year.

For more information on ClimateQ: toward a greener Queensland visit www.climatechange.qld.gov.au

Draft plan guides development on Queensland's coast

A new Draft Queensland Coastal Plan has been developed to help manage and protect Queensland's coastline by providing greater certainty about dealing with coastal hazards such as erosion and sea-level rise and managing the pressures of population and development.

The draft plan provides for a more effective coastal planning and management framework and responds to issues raised during the review of the State Coastal Management Plan—Queensland Coastal Policy 2001.

Compiled in two parts, the first part includes policies to address public access and natural resource management on the coast. The second part will be a State Planning Policy under the Integrated Planning Act 1997 to provide better integration with Queensland's planning laws and the government's planning reform agenda.

Public comment on the draft coastal plan commenced on 28 August and will close on 31 October. A new Queensland Coastal Plan with supporting legislative changes is expected to be implemented early next year.

For more information on the plan visit <http://www.derm.qld.gov.au/coastalplan/index.html>

Tapping into Queensland's geothermal energy reserves

The Queensland Government is supporting the utilisation of the state's vast geothermal energy resources by developing legislation for geothermal energy production.

The Geothermal Energy Bill 2009 aims to ensure that companies with exploration rights can proceed to production once a suitable geothermal resource is identified. The Bill will update and extend the Australian-first legislation on geothermal resources exploration which Queensland introduced in 2004.

A consultation paper and the draft legislation can be accessed at www.dme.qld.gov.au/Energy/geothermal_energy_bill_2009_consultation_paper.cfm and comments on the Bill close on Friday 4 September 2009.

The Queensland Government has encouraged industry to identify geothermal energy reserves through granting exploration permits to over 42 000 square kilometres of land. In early August a tender was opened for a fifth round of exploration permit tenders to an additional 16 000 square kilometres of land.

These recent developments build upon other Queensland Government geothermal initiatives including the allocation of \$15 million over five years for the Geothermal Energy Centre of Excellence to drive geothermal research and technology, and support for Australia's only geothermal power station in Birdsville.

Geothermal energy has the potential to reliably generate large scale emissions-free electricity for Queensland for hundreds of years. Further information about Queensland's geothermal energy initiatives can be found in the Queensland Renewable Energy Plan at www.cleanenergy.qld.gov.au/zone_files/Renewable_Energy/oce_rep_11_web_final.pdf

Comment sought on SEQ Climate Change Management Plan

The SEQ Regional Plan and SEQ Climate Change Management Plan – Draft for Public Consultation were launched by the Queensland Government on 28 July.

The SEQ Climate Change Management Plan – Draft for Public Consultation contains proposed actions to implement the climate change policies in the SEQ Regional Plan over the next five years.

The draft actions aim to help reduce greenhouse gas emissions and improve the region's resilience to the impacts of climate change through land use planning.

Comments are being sought from SEQ residents on any additional actions that should be considered for inclusion in the final SEQ Climate Change Management Plan.

The Department of Infrastructure and Planning held six public information forums on the plan between August 17 and 24. The final closing date for comments is Friday September 11.

For more information on the plan visit www.dip.qld.gov.au/climatechange

Green Cross announced as Q2's 'green' partner

The Queensland Government recently partnered with international environmental group Green Cross under Toward Q2, the strategic vision for Queensland to 2020.

Toward Q2 demonstrates the Queensland Government's commitment to public policy which addresses the key challenges facing Queensland now and into the future under five broad ambitions - strong, green, smart, healthy and fair.

The Q2 Partners program has been established to acknowledge the shared responsibility that business and community organisations are taking with Toward Q2. The program promotes projects that are working toward achieving the Q2 targets.

To support the green carbon footprint target, the state is partnering with the Brisbane-based Australian headquarters of Green Cross International and their "Build It Back Green" project.

The project will help reduce Queenslanders' carbon footprint by providing practical assistance and guidance on rebuilding in an environmentally sustainable manner after natural disasters such as bushfires and floods.

For more information on Toward Q2 and becoming a partner visit www.towardq2.qld.gov.au

Premier's Council on Climate Change update

The fourth Premier's Council on Climate Change meeting was convened on 30 June 2009.

The meeting heard a report from the Minister for Infrastructure and Planning, the Honourable Stirling Hinchliffe, on the Queensland Government's response to the council's second working paper, Building ClimateSmart in Queensland. The working paper provided recommendations about cost effective opportunities to reduce greenhouse gas emissions in Queensland's built environment. A number of regulatory and administrative reforms are being implemented by the Department of Infrastructure and Planning to give effect to recommendations from the paper. The working paper and the Queensland Government's response are available on the OCC website at www.climatechange.qld.gov.au/downloads.

Council member Jim McKnoulty presented the council's third working paper to the Government, *ClimateSmart Innovation in Urban Development*. The paper identified that more work is needed to incorporate climate change considerations in the development assessment process, to fast track assessment of innovative projects and to support innovation through skills development. A Queensland Government response to the council's third working paper will be developed in 2009/10.

An interim fourth working paper on biosequestration in the rural sector was presented for discussion by council member Peter Cosier. The interim working paper provided a summary of findings from CSIRO research commissioned to inform the council's deliberations. It found that there was potential for Queensland to store significant amounts of carbon in the rural landscape, with forestry as the leading option. The CSIRO report is now available and can be located by following the links on the OCC website. The council's fourth working paper will be finalised for consideration by the government by the end of 2009.

Two further working papers, on transport and energy issues, will be developed for consideration by the government in 2009/10.

National Climate Change Adaptation Research Facility update

Modelling climate change impacts

The latest climate change projections and modelling innovations were presented at a joint seminar at Griffith University, South Bank, on July 30.

Dr Rachael Warren, a lead researcher at the Tyndall Centre for Climate Change Research, UK, and Jeff Price, Managing Director of Climate Change Adaptation, World Wildlife Fund US, spoke on the latest information from around the world gathered and analysed to assist adaptation and mitigation planners.

Dr Warren spoke on the Community Integrated Assessment System (CIAS) and CLIMASCOPE: making decisions in an uncertain world - linking climate and impact models for decision-making and adaptation planning.

CIAS is a deterministic simulation that compares different future scenarios of climate change and impacts under a range of possible socioeconomic futures and levels of mitigation action.

She also presented information on a web portal application under development named CLIMASCOPE. The technology is designed to assist policy makers and other stakeholders to access information on projections of potential future local and regional climate changes and potential future climate impacts across a range of emission scenarios.

Dr Price presented *Networks for Adaptation: Designing a Protected Area System for the 21st century and the adaptation network to make it work*.

He explained how the Wallace Initiative and the Ecosystems and Livelihoods Adaptation Network will help to address the issue of climate change threatening the world's major centres of biodiversity.

For more information on NCCARF visit www.nccarf.edu.au/home?q=nccarf-seminars

Tracking to Kyoto and 2020 interim report released

The Federal Government has released a new report which shows Australia's carbon pollution will continue to rise if the Carbon Pollution Reduction Scheme does not become law.

The Tracking to Kyoto and 2020 report shows that without the scheme in place, emissions are projected to be 20 per cent above 2000 levels by 2020. The report shows that to achieve a five per cent reduction in carbon pollution by 2020, Australia needs to avoid the creation of 138 million tonnes of CO2 equivalent in 2020. This is equivalent to halving the carbon pollution that comes from electricity generation and transport between 2011 and 2020.

While emissions growth has slowed over the past 12 months due to the global recession, Australia's emissions continue to rise, with an average increase of 1.6 per cent each year from September 1998 to March 2009.

The report also shows that Australia remains on track to meet our Kyoto emissions target of 108 per cent of 1990 levels over the Kyoto period from 2008 to 2012. As a result of slowed emissions growth from the global recession and the first year of the Scheme, Australia will be on track for emissions to be 107 per cent of 1990 levels over the Kyoto period.

For more information on Land and Water News visit

<http://news.envirocentre.com.au/lawn/newsletterfull.php?issue=560&key=526>

South East Queensland Climate Adaptation Research Initiative

OCC recently organised a seminar for all interested government staff on the South East Queensland Climate Adaptation Research Initiative (SEQCARI).

SEQCARI is a three year research initiative examining South East Queensland's vulnerability to climate change and developing practical and cost-effective adaptation strategies to assist key decision-makers in government, industry and the community respond to climate change. It is the first comprehensive regional study of climate change adaptation in Australia, and one of just a few worldwide.

The initiative involves over 30 scientists from the CSIRO Climate Adaptation National Research Flagship, Griffith University, the University of the Sunshine Coast and the University of Queensland, and is supported by funding from all four organisation as well as the Queensland Government Smart State Fund and the Australian Department of Climate Change.

Dr Ryan McAllister from the CSIRO and Prof Jan McDonald from Griffith University, presented an overview of adaptation opportunities in human settlements under the SEQCARI, and in particular the use of case studies to determine how urban planning and emergency management and preparedness can facilitate adaptation to climate change.

OCC will organise further seminars over the coming months on each of the major components of the SEQCARI.

For more information on the initiative visit www.csiro.au/partnerships/seqcari.html

Science update

Queensland's record breaking August

The Bureau of Meteorology recently issued a special climate statement outlining reasons for the recent exceptional winter heat over large parts of Australia and particularly throughout Queensland.

Record high temperatures for August have been set in many areas and the month as a whole is set to be Queensland's and Australia's warmest August on record by a substantial margin.

Above-average daytime temperatures have persisted over the subtropics due to a lack of the cold air which normally moves northward from the Southern Ocean, a lack of moisture and persistent clear skies. As of 26 August there have been two major episodes (14th – 16th and 21st – 25th) of extreme heat which have seen significant numbers of records broken.

Record high maximum temperatures for August have been set over almost half of Queensland. Nationally, maximum temperatures have averaged 3.14 °C above the long-term average for the month so far, more than a degree above the previous record set in 2006. It is likely that August 2009 will also break the record set in April 2005 (+3.11 °C) for the largest monthly maximum temperature anomaly ever recorded.

The last two months have also been exceptionally dry in Queensland. While July-August is the peak of the dry season and low rainfall is normal, this year has been even drier. So far the average rainfall for Queensland for July-August 2009 is 1.65 mm, and at this rate, the 1946 record low of 2.81 mm will be broken.

The warm weather is forecast to stay, with the Bureau's seasonal outlook showing a high probability of above normal temperatures through the spring over almost all of Queensland. The Bureau reports that although the El Niño weather event has stalled, 2009 is likely to be recognised as an El Niño year. El Niño events usually (but not always) correspond to hot dry summers in Queensland, fewer tropical cyclones and a less active and less extensive monsoon system.

Other weather news in brief

- *A three-year collaboration between the Bureau of Meteorology and CSIRO has confirmed that the drought is not just a natural dry stretch but a shift related to climate change.*
- *Scientists working on the \$7 million South Eastern Australian Climate Initiative said the rain had dropped away because the subtropical ridge – a band of high pressure systems that sits over the country's south – had strengthened over the past 13 years.*
- *The scientific results have implications for many State Government water programs and drought funding, some of which factor in climate change and some of which do not.*

Workshops on sea-level extremes

A series of workshops on 'Estimating Sea-level Extremes in an Uncertain Future' Training Workshop 2009 are being held across Queensland. The Brisbane workshop was held in May 2009 and an information session was held in Townsville on the 24 June 2009. The next workshop will be held in Cairns on 8-9 September 2009.

For more information on the workshops visit <http://sealevelrise.info>

Antarctic Climate and Ecosystems Cooperative Research Centre

Sea-levels could rise by more than a meter by 2100, Australian ocean dynamics research scientists have found.

The internationally recognised Australian Antarctic Climate and Ecosystems Cooperative Research Centre released two position analyses on the impacts of polar ice sheets and Antarctic sea ice. It indicated the sea-level rise of over 0.8m by 2100, as predicted by the Intergovernmental Panel on Climate Change, could be exceeded by more than a metre.

The report helps to clarify the differences in sea ice and ice-sheets and states global warming has accelerated the melting and shrinking of ice sheets at both poles resulting in increasing sea-level rise.

This latest research highlights the importance of understanding these changes. Sea ice and ice sheets – the two main types of polar ice – are part of a dynamic system that has a profound effect on the world's climate. The information assists scientists, planners, and policy makers understand the latest developments of polar ice on our climate system, sea levels and ecosystems. Accurate data on the extent of sea level rise is particularly important in assessing the likely risk to existing infrastructure and ecosystems and to support future planning.

Changes in the mass of freshwater locked up in ice sheets in Antarctica and Greenland have the greatest potential to contribute to global sea level rise in a warming world.

This information provides clarity on these aspects of polar climate science, the potential impacts of changes in a warming world and the policy implications this brings for Australia.

For more information on the Antarctic Climate and Ecosystems CRC reports visit <http://nla.gov.au/anbd.bib-an42918737>

International Congress on Modelling and Simulation

The 18th World IMACS Congress and MODSIM09 International Congress on Modelling and Simulation was held in Cairns from 13–17 July 2009. The congress was organised by the Modelling and Simulation Society of Australia and New Zealand and the International Association for Mathematics and Computers in Simulation (IMACS). The Queensland Government was a major sponsor of the event which attracted over 700 hydrologists, physicists, climate scientists, economists and social scientists.

For a copy of the congress proceedings visit www.mssanz.org.au/modsim09/papersbysession.htm

CSIRO research to develop adaptation strategies

Examining Queensland's vulnerability to climate change and developing practical and cost-effective adaptation strategies is the focus of a research initiative being undertaken by the CSIRO and partners.

The CSIRO Climate Adaptation National Research Flagship is leading the three-year project which also aims to develop practical and cost-effective adaptation strategies to assist decision-makers in government, industry and the community.

This is a collaborative research effort with Griffith University, University of the Sunshine Coast and University of Queensland.

The activities include the development of tailor-made high resolution climate change projections and scenarios. Research will explore the adaptive capacity across SEQ and produce case studies of how

urban planning and emergency preparedness can facilitate adaptation. The impacts of climate change on the agricultural industry will be examined as well as impacts on important ecosystems and biodiversity and models of future energy demands.

For more information on CSIRO Climate Adaptation National Research Flagship visit www.csiro.au/org/climateadaptationflagship.html

Mapping tool helps identify coastal erosion prone areas

The Commonwealth Government has launched a National Coastal Landform and Stability Mapping Tool, which maps coastal landform type for the entire Australian coastline and identifies vulnerable areas to erosion under a changing climate. The tool was funded by the Department of Climate Change and developed by Geoscience Australia in collaboration with the University of Tasmania.

The tool contains detailed coastal landform information to better map the parts of the Australian coastline which are most vulnerable to erosion by the sea and help to improve coastal planning decisions. This work will provide essential baseline data to feed into the Commonwealth Government's National Coastal Risk and Vulnerability Assessment.

The tool is available at www.ozcoasts.org.au. For more information on the National Coastal Vulnerability Assessment visit www.climatechange.gov.au

Red Cross reports one of the deadliest years in history

The year 2008 was officially recorded as one of the deadliest in history with climate change set to claim more lives, a recent report states.

The International Federation of Red Cross and Red Crescent Societies released its World Disasters Report 2009 recently confirming 2008 as one of the deadliest years in recent history. The number of people reported killed by natural disasters last year, a total of 235,736, was surpassed only by 2004, the year of the Indian Ocean tsunami.

The report directly addresses climate change as the world's next impending disaster and stresses that more is known about this disaster than any previous disaster in history. Moreover, climate change will potentially threaten more lives and livelihoods than any other disaster the world has faced, and those who are threatened first and most significantly, mostly the poorest countries and communities around the world, will have little or no means to act.

The threat of extreme events or disasters resulting from climate change is reported as twofold for poorer and more vulnerable communities.

For more information on the World Disasters Report 2009 visit www.ifrc.org/publicat/wdr2009/summaries.asp

Water information to become more streamlined

A system to collate water information is set to make jobs of water planners and others easier.

Over the last couple of years there has been considerable investment in collating and disseminating water information to accurately monitor, assess and forecast water availability, condition and use.

Products are being designed to meet the needs of users engaged in emergency services, water policy development, planning, operations, public enquiry, education and research.

To deliver the high quality data required for each of these users, the Bureau of Meteorology is developing the Australian Water Resources Information System (AWRIS) to collate information about river flows, groundwater levels, reservoir storage volumes, water quality, water use, water entitlements and water trades from more than 200 water data sources across Australia.

The Bureau is also investing with CSIRO in a significant program of water information research and development through the Water Information Research and Development Alliance.

This alliance builds on the achievements of CSIRO's Water for a Healthy Country National Research Flagship, particularly work recently undertaken in the sustainable Yields Project in the Murray Darling Basin.

For more information on the Australian Water Resources Information System or the Water Information Research and Development Alliance visit www.bom.gov.au/water or www.csiro.au/partnerships/wirada

Valuing the effects of Great Barrier Reef bleaching

Bleaching of the Great Barrier Reef will cost Australia almost \$38 billion if climate change due to greenhouse gas emissions continues unchecked, an analysis has found.

A report commissioned by the Great Barrier Reef Foundation, a business-backed body investing in science, estimates half the tourists drawn to see reef coral will stay away if projections of permanent bleaching prove correct.

Foundation chairman John Schubert, the outgoing chairman of the Commonwealth Bank, said the report was a wake-up call about economic damage that would be triggered by the loss of one of Australia's great natural assets.

The analysis by Oxford Economics assessed not only the value of the reef in tourism and fishing, but the indirect value of having a natural barrier protecting the coastline. A measure of the value people place on the reef's survival was also included.

It found coral bleaching would result in the value of the reef tumbling by 73 per cent, from \$51.4 billion to \$13.7 billion. The loss in the Cairns region would be more acute: 90 per cent of an estimated value of \$17.9 billion.

"We are at a crossroads," Dr Schubert said.

"We owe it to the communities ... to all Australians and the global community to do all we can to secure the reef's future."

For more information on the Great Barrier Reef Foundation visit <http://www.barrierreef.org/>

Commonwealth Government update

Senate delays emissions trading legislation

The Commonwealth Government has pledged to re-introduce its Carbon Pollution Reduction Scheme (CPRS) bills to Parliament before the end of the year after they were blocked in the Senate on August 13.

The bills were to provide for the CPRS becoming the central policy mechanism for driving Australian emissions reductions from July 2011. Under the scheme, about 1,000 of Australia's biggest polluting companies would purchase carbon permits, covering 75 per cent of national emissions.

Climate Change Minister Penny Wong has committed the government to returning the bills in November for another vote, reinforcing the need for Australia to set a positive example for the international community prior to the conclusion of talks for a new global agreement on climate change in Copenhagen from 7-18 December.

Despite the result of the Senate vote, both the Prime Minister and the Leader of the Opposition agree that Australia's response to climate change requires an emissions trading scheme to place a cap on national emissions.

The Federal Opposition will seek to negotiate amendments to the CPRS bills with the government over coming months.

The Queensland Government's new climate change strategy, ClimateQ contains a range of initiatives to facilitate the transition of the state economy to a low-carbon future under the CPRS.

US progresses climate change legislation

On 26 June 2009, the US House of Representatives passed the American Clean Energy and Security Act, also known as the Waxman-Markey bill.

The key elements of the bill are:

Clean Energy: a renewable energy target of 20 per cent by 2020, strict efficiency conditions for new coal-fired generation (requiring carbon capture and storage), and significant investment in a range of clean energy technologies;

Energy Efficiency: new energy efficiency standards for appliances, buildings, transport and industry, and funds to support energy efficiency projects and technologies; and

Emissions trading: a national cap-and-trade scheme commencing in 2012 with emissions reduction targets of 17 per cent below 2005 levels by 2020 and 83 per cent by 2050; covering 85 per cent of US emissions, not including agriculture but providing for offsets from this sector; free allocation of approximately 85 per cent of emission allowances for a range of purposes, including transitional assistance to affected industries, offsetting increases in energy prices, and supporting adaptation and clean energy development.

The next step is for the bill to be considered in the Senate alongside a separate Senate bill on energy and climate change. The Waxman-Markey legislation will need to be reconciled with the Senate's legislation, which is likely to result in changes. If this reconciliation can be achieved, the joint legislation will be sent to both chambers for a final vote. Further progress is expected prior to the Copenhagen climate change conference in December.

Renewable Energy Target gets the go-ahead

Legislation for the expanded national Renewable Energy Target (RET) was passed by the federal Senate on 20 August.

The legislation amends the Renewable Energy (Electricity) Act 2000, extending existing Mandatory Renewable Energy Target (MRET) to ensure that 20 per cent of Australia's electricity comes from renewable sources by 2020.

Other changes to the Act include:

- allowing for the creation of multiple Renewable Energy Certificates (RECs) for small generation units such as solar photovoltaic and solar hot water systems;
- including existing generation from waste coal mine methane as an eligible energy source, but increasing the target to ensure that no renewable energy generation is displaced;
- providing partial exemptions from RET liability for activities that qualify for the emissions-intensive trade-exposed (EITE) assistance under the CPRS. The partial exemption levels, 90 and 60 per cent, match the levels of EITE assistance under the CPRS;
- providing partial exemptions (90 or 60 per cent) from liability under the existing MRET component of the new target if the REC price rises above \$40; and
- allowing firms that do not qualify for assistance to request the Commonwealth Government to commission the Productivity Commission to assess the impact of the RET on their industry.

The Council of Australian Governments is to review the eligibility of small-scale technologies such as heat pumps under the RET by the end of 2009.

The new RET will take effect as soon as the amendment legislation receives Royal Assent.

Communication update

More women sign up to cut greenhouse gas emissions

More than 1500 Queensland women have now joined 1 Million Women, a national campaign of daughters and mothers, sisters and grandmothers, colleagues and team mates to commit to cutting their individual carbon emissions by 1 tonne.

Minister for Climate Change and Sustainability Kate Jones said Queenslanders now made up more than 21 per cent of the total national membership.

"Every woman who joins has a personal goal to cut one tonne of carbon dioxide (CO₂) from their daily lives within a year of joining," Ms Jones said.

"Since its inception two months ago, the women have collectively pledged climate savings equating to an incredible 11,610 kg of greenhouse gas reductions.

"Overall the campaign aims, during the next two years, to stop one million tonnes of (CO₂) from entering the atmosphere – the equivalent to taking 250,000 cars off the road for 12 months.

The campaign encourages women to pledge to cut carbon pollution via the home, food, shopping, transport and travel by committing to undertake key activities.

Ms Jones encouraged women to use the start of spring as a trigger to get motivated.

“Spring is just around the corner – and many of us will spring clean our wardrobes and houses,” Ms Jones said.

“So why not spring clean your approach to how sustainability you live your life?”

For more information on the 1 Million Women campaign visit www.1millionwomen.com.au

Al Gore launches Safe Climate Australia

Former U.S. Vice President Al Gore recently visited Australia to launch a new environmental pressure group made up of scientists and civic and business leaders.

Launched in Melbourne on 13 July, Safe Climate Australia is an apolitical, non-government organisation of concerned scientists, business leaders and the community who share an understanding of the scientific and moral imperatives for emergency action to restore a safe climate.

Mr Gore’s visit was part of a push by activists to raise awareness ahead of international climate change talks in Denmark later this year.

Mr Gore told audiences the increasing ferocity of bushfires in Australia was an example of how quickly the climate is changing and urged the federal government to take a strong lead on carbon emission targets.

Mr Gore’s visit also coincided with the nation’s first Youth Climate Summit, aiming to mobilise a new generation of activists in preparation for the United Nations-sponsored talks in Copenhagen in December.

Safe Climate Australia aims to establish a team of researchers to develop a whole-of-society plan to restructure Australia’s economy, transitioning it out of fossil fuels to ‘net-zero carbon’ as quickly as possible.

It will develop the Safe Climate Transition Plan which will establish strategies to transition key sectors (finance/investment, stationary energy, built environment, transport, processing, land use and agriculture) to a low carbon intensive environment, whilst still protecting and enhancing the key economic, social and environmental parameters of Australian society.

Professor Ove Hoegh-Guldberg, Director for the Centre for Marine Studies, University of Queensland, is a foundation member. For more information on Safe Climate Australia visit www.safeclimateaustralia.org

More Queenslanders take to Low Carbon Diet

Sporting organisations, multicultural communities and volunteer groups have signed up for round two of the Low Carbon Diet with eighteen organisations sharing more than \$153,000 of the \$1 million community funding program, Climate Change and Sustainability Minister Kate Jones said.

Minster Jones said a range of people from the African Seniors Club to the Broadbeach Kindergarten Association were participating, displaying innovation and imagination in activities chosen.

“The grants range from \$2,000 to \$10,000 and thanks to the awareness-building programs undertaken by these organisations, we expect a flow on effect to around 142,000 Queenslanders,” Ms Jones said.

Applications are being called for the next round of the Low Carbon Diet grants which close this month. For more information on the Low Carbon Diet visit www.climatesmart.qld.gov.au

Communicating the science of climate change

On 19 August, the Australian Science Communicators presented a Hot Air Symposium on communicating the science of climate change with government, industry and business.

Held in Brisbane during the 10th International Congress of Ecology, the symposium identified 'best practice' in communicating climate change science to assist in generating and adopting useful mitigation and adaptation strategies.

The symposium included a keynote address from Professor Ian Lowe, President, Australian Conservation Foundation, and panel discussions on the challenges and needs of industry, business and government when communicating the science of climate change and strategies for communicating the science of climate change, and engaging people in the process.

Dr Helen Fairweather represented the Queensland Climate Change Centre of Excellence on the discussion panel. Other panel members included Robyn Williams, ABC Science Broadcaster, Anthony Swirepik, Department of Climate Change, Emma Marris, US-based environment freelance writer for Nature and Peta Ashworth and Anne Leitch, CSIRO.

The output of each symposium will be used to produce a set of guidelines about how to work most effectively with governments, industry, business and communities to achieve mitigation and adaptation solutions to climate change.

For more information on the symposium visit www.asc.asn.au/topic/hot-air-symposium/

Newsletter offers updates on local actions worldwide

The World Business Council for Sustainable Development (WBCSD) recently launched its latest Regional network brochure, highlighting the work of its 60 CEO-led partner organisations around the world.

The brochure, titled 'Thinking Globally, Acting Locally', is a snapshot of how the various organisations that make-up the Regional Network put sustainable development into practice.

Specially featured in this year's edition are the energy and climate activities of the partner organisations in Brazil, Russia, India, China and South Africa. B

For more information on WBCSD visit www.wbcsd.org

Preparing for climate and weather changes in the Tweed

NSW Minister for Lands, Tony Kelly and Queensland Minister for Climate Change and Sustainability, Kate Jones announced an agreement on the way forward for the long-term effective operation of the Tweed Sand Bypassing Project.

The Ministers met on the Gold Coast on Friday, 31 July, to discuss the movement of sand from the Tweed Sand Bypassing Project. They inspected the affected sites including Kirra Beach in order to see the impact of the sand build up in the area.

"The bypassing system may provide a buffer to the impacts of changing weather patterns associated with future climate change," Mr Kelly said.

The Queensland Government is investing \$1.5 million to improve beach conditions at Kirra. Future stages of this work are the subject of a community consultation program with local residents.

For more information visit

<http://statements.cabinet.qld.gov.au/MMS/StatementDisplaySingle.aspx?id=65540>

Climate change risk to world heritage properties

A report released on 2 August found that 17 of Australia's iconic World Heritage properties will experience increased risks from climate change.

Sites including Sydney Opera House, the Great Barrier Reef, Kakadu National Park, Lord Howe Island Group, the Tasmanian Wilderness and the Greater Blue Mountains Area are identified as particularly vulnerable to the effects of climate change.

These effects include reduced rainfall, higher sea and land surface temperatures, more severe storm events, ocean acidification and rising sea-levels.

The report is the first comprehensive report by any country into the impacts of climate change on all of its World Heritage properties.

This report will inform the Climate Change Adaptation Plan for Australia's World Heritage and Iconic Areas which will outline clear principles and key actions for incorporating climate change adaptation into management of Australia's World Heritage and iconic areas.

Senator Wong said the report showed the need for urgent action on climate change.

For more information on the report visit

www.environment.gov.au/minister/garrett/2009/mr20090802.html