



National Irrigators' Council

Climate Change

Position Statement

July 2019

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Introduction

National Irrigators' Council (NIC) recognises the challenges for Australia's productive irrigated agriculture sector posed by a changing climate. Farmers have long been at the forefront of leading adaptation and response to drought and climate change. Australia is able to grow its food and fibre, in a dry and variable climate, because it has built water storage and irrigation infrastructure. Such infrastructure will continue to play a vital role in securing food and fibre production as well as ameliorating some impacts of climate change.

As part of the broader Australian community, the sector is willing to bear its fair share in response to climate change while also responding to the growing global demand for food and fibre. The sector expects to be supported by policies to enable it to play its part in the response to climate change without the risk of perverse outcomes for the sector.

NIC Principles relevant to this Policy Paper

- Water property rights must be protected or enhanced.
 - Characteristics of water entitlements should not be altered by ownership.
- There must be no negative third party impacts on reliability or availability.
 - Potential negative impacts must be compensated or mitigated through negotiation with affected parties.
- Irrigators must be fully and effectively engaged in the development of relevant policy.
- Irrigators expect Government policy to deliver triple bottom line outcomes (*social, economic, environmental*)

Key Messages

- Irrigation is fundamental to sustaining food and fibre production, Australia's farmers continue to be at the forefront of leading adaptation and response to drought and climate change.
- NIC recognises the impact of climate change, and acknowledges the need for Australia to meet its obligations on carbon emissions reduction.
- NIC supports policies that address climate change without putting an unfair burden on agriculture by imposing unreasonable and unsustainable costs or regulatory restrictions.
- Adaptation is already occurring across the irrigated agriculture sector through:
 - The implementation of more water efficient irrigation systems, resulting in increases in water efficiency and productivity across many industries over the last decade.
 - A change in crop types with a shift to more drought tolerant or water efficient varieties and a spatial shift in where crops are grown.
 - Industry sectors investing in changes in crop management practices and taking up opportunities offered by climate R&D, identifying suitable crop varieties and water use efficiency measures, supporting innovation and resilience in the agriculture sector while maintaining viable industries and much needed regional employment.
 - The use of solar powered pumps for crop irrigation.
 - Reafforestation as carbon sinks that also support ecosystems.
- NIC supports amelioration projects, including capital works, to retain more water in storage and to more efficiently deliver water to key environmental assets.
- NIC expects equitable distribution of the burden in response to climate change, any sector that is bearing more than its fair share must be compensated.

- Adaptation should not be left to food and fibre producers alone; it is expected that all participants in related industries, policy makers and research and development providers must work in collaboration in contributing to solutions.
 - Successful adaptation will be underpinned by a system wide effort.
 - The sector needs the skills, access to information and advice and incentives to make changes.
- NIC requires genuine consultation with the productive agriculture sector and irrigation communities in the development of climate change policies in recognition that:
 - Policies do not risk unintended consequences for the sector, and
 - As a trade exposed sector, industries must remain internationally competitive as more than 75% of Australian agriculture produce is exported.
- Agriculture is well positioned to participate in greenhouse gas emissions mitigation through carbon sequestration in soils initiatives such as carbon markets:
 - Clearer pathways for establishing new and accessing existing opportunities under the Emission Reduction Fund, for example, must be communicated to the sector.
 - While acknowledging the role of vegetation in carbon sequestration, vegetation management policies should not unfairly burden the agriculture sector or unreasonably restrict development.
- NIC is working in partnership with Australia's agriculture peak bodies and with Government on programs that support the uptake of viable off and on grid renewable generation and storage.
- A national coordinated energy policy will assist in enabling agriculture industries to operate in a competitive environment within a fair pricing regime, while supporting the uptake of renewable energy without unintended energy price distortions.

Irrigated agriculture and climate change

With the world population forecast to exceed 9 billion by 2050, NIC has consistently acknowledged its role, and the opportunities for the irrigated agriculture sector, to be at the forefront of the increased world demand for food and fibre.

NIC also recognises the challenges and the sector's responsibility in meeting the climate change task, participating in the broader effort to contribute to global action and meeting community expectation to reduce emissions.

Climate variability is not new for farmers. The agriculture sector has over a long period worked with a variable climate, adapting to significantly reduced water during times of drought. For the irrigated agriculture sector in particular, irrigation storages and the trading platform have been built in Australia as a way to ensure capacity to produce food and fibre during prolonged dry conditions. The ability to store water for use in dry times is the very essence of irrigation, serving as one of many drought mitigation measures and to also serve as a climate change mitigation measure.

Climate change and climate change policy impacts on irrigators in two key areas – water supply (including changes in run-off into catchments) and energy policy.

While efforts to ameliorate climate change impacts on the environment are supported, it is not possible to avoid all negative impacts, and it would therefore not be reasonable to expect food and fibre producers and the communities to bear the whole burden.

NIC recognises climate predictions that suggest less run off overall and more variability with storm events and drought. This presents challenges for agriculture and the community and in the medium to longer term, it will mean long term averages change.

The success of agricultural businesses depends on the capacity of the sector to continue to innovate and adapt, using best practice to manage climatic risks and securing investment for the future. This includes the uptake of opportunities provided for the sector's participation in carbon markets to contribute to Australia's emissions reduction goals.

Energy costs continue to present a major barrier for Australian irrigated agriculture. Energy for pumping and pressurising irrigation water is a significant part of the cost structure for food and fibre production, reducing industry competitiveness.

The irrigated agriculture sector expects to play a part in moving to lower carbon emissions and meeting Australia's international obligations and community expectation. The evidence shows that agriculture has been an enthusiastic leader in the take up of renewable energy – where it is able to be shown to be cost effective for the farming business.

As convener of the Agriculture Energy Taskforce, NIC has actively participated in policy development on energy related issues and advocated programs supporting the take up of renewable energy by food and fibre producers.

Murray Darling Basin and climate change

- Murray Darling Basin Governments must continue their commitment to the implementation of the Murray Darling Basin Plan.
- The implementation of the Basin Plan is designed to respond to climate change, with a built in system of allocations, with authorities only allocating water that is available:
 - In the Murray Darling Basin the river's base flow is a priority, followed by human needs and then if water is available, allocations are made on irrigation licences.
 - The Basin Plan responds to climate change where each year irrigators' allocations change.

Background: Carbon and plant sequestration programs

In 2014 the Government established the Emissions Reduction Fund allocating \$2.55 billion to provide for purchasing in the Fund for activities that provide environmental, economic, social and cultural benefits for farmers, businesses, landholders and Indigenous Australians.

On 25 February 2019 the Australian Government announced the Climate Solutions Fund, with a further \$2 billion to continue the momentum towards reaching Australia's 2030 emissions reduction target. Total investment in the Emissions Reduction Fund is \$4.55 billion, with the aim to deliver around another 100 million tonnes of emissions reductions by 2030.

The Emissions Reduction Fund supports Australian businesses, farmers and land managers to take practical actions to reduce emissions and improve the environment.

Through projects to reduce emissions - businesses, local councils, state governments, land managers and others can earn Australian carbon credit units (ACCUs). These units can be sold to the Australian Government through a carbon abatement contract, or to other businesses seeking to offset their emissions. Over 770 projects have been registered under eligible activities, including energy efficiency, waste management, revegetation, livestock management and savanna fire management.

The additional Climate Solutions Fund supports Australian farmers, businesses and Indigenous communities to continue with opportunities to participate in emissions reduction projects that:

- Support revegetation projects to improve water quality, and reduce erosion and salinity.
- Replenish the carbon content of soils that improve the health and productivity of Australian farms.

- Enable savanna fire management projects in northern Australia that use traditional knowledge and provide jobs on Country.

Government programs now suspended or incorporated into other programs include:

- The Carbon Farming Futures (CFF) program which ran from 2012 to June 2017, where \$139 million was invested in 200 projects, involving 350 organisations with more than 530 farm trial sites. Detailed research findings and results from the Carbon Farming Futures can be found in the publication *Boosting farm productivity – Improved soils and reduced greenhouse gas emissions*. The publication also identifies some key growth opportunities and constraints that farmers will face over the coming decades, while showing how farmers can boost productivity and profitability; improve soil and reduce greenhouse gas emissions.
- Australia's Farming Future which closed on 30 June 2012, was the Australian Government's climate change initiative for primary industries. It provided funding to help primary producers adapt and respond to climate change.
- The Carbon Farming Initiative was a voluntary carbon abatement scheme that operated between September 2011 and December 2014, following which time it was integrated with the Emissions Reduction Fund.

International climate agreements

The **Paris Climate Agreement** came into force on 4 November 2016 and is made under the United Nations Framework Convention on Climate Change. Australia announced its ratification of the Paris Agreement on 10 November 2016. The Paris Agreement aims to hold the increase in the global average temperature to well below 2 °C above pre-industrial levels and to increase the ability to adapt to climate change. The Australian Government has committed to reduce greenhouse gas emissions to 26-28 per cent below 2005 levels by 2030. This target is a step up from Australia's current target to reduce emissions to five per cent below 2000 levels by 2020.

The Paris Agreement follows previous conventions and agreements:

- The Climate Change Convention was first agreed in 1992 following global climate change concern. The Convention establishes a framework designed to stabilise atmospheric concentrations of greenhouse gases (GHGs) to prevent 'dangerous anthropogenic interference with the climate system'. The Convention entered into force in 1994, and has a near-universal membership, with 197 parties having ratified the Convention.
- The Kyoto Protocol is an instrument made under the Climate Change Convention which was adopted in 1997, although it did not enter into force until 2005. The Kyoto Protocol obliges some developed countries to reduce their GHG emissions. The Protocol placed a heavier burden on developed nations in recognition that they are largely responsible for high levels of GHG emissions. Australia signed the Kyoto Protocol in 1998, but did not ratify until 2007. The first 'commitment' period of the Kyoto Protocol ran from 2008 to 2012. Australia met and exceeded its first period Kyoto Protocol target of 108 per cent of 1990 emissions levels by 2012.
- The 2009 Copenhagen meeting was set to achieve a new legally binding agreement to follow on from the Kyoto Protocol. Although the meeting fell short of those expectations, the Copenhagen Accord did recognise the need to reduce global GHG emissions to limit the increase in global temperature to below 2 °C.
- The Doha Amendment, adopted in 2012, provides for the operation of the Kyoto Protocol to be extended with a second commitment period that runs until 2020. The Doha Amendment is not yet in force, due to a sufficient number of parties not signing up, however Australia has ratified the Amendment.