

CLIMATE CHANGE POLICY

BACKGROUND

Climate change is among the most significant threats facing the sugarcane industry in Queensland.

Long-term changes to climate patterns expose the cane industry to an increased frequency of major weather events, an increase in secondary costs such as repairs and insurance, increased input prices, disruption to local supply chains and businesses, an increase in pest, weed and disease pressure, a potential loss of cane land to rising sea level or other land use, and even long-term changes to the cane production cycle. Adapting successfully to these changes will require industry, with government support, to develop modified farming systems and decision-support tools plus new technologies.

Mitigating the impacts of climate change is a global responsibility. In this respect the sugar industry is relatively well positioned compared to other agricultural commodities. Sugar is a key source of biofuels and bioplastics. The landscape position of some marginal production areas make these a candidate for "blue" carbon sequestration through conversion to wetlands, a potentially more permanent form of carbon sequestration than "green" carbon offsets such as planting trees. Moving towards an economy-wide target of net zero emissions therefore presents opportunities for the Queensland sugarcane industry if managed well.

The sugar industry a relatively low emitter of greenhouse gases (GHG), with crop production contributing less than 1% of Australia's national global warming potential¹. On-farm emissions from growing sugarcane are created by²:

- Non-renewable energy input, roughly half of the total warming potential from growing cane, arising
 predominantly from:
 - o The production of farm inputs, primarily the production of urea;
 - o Fuel use in farm machinery; and
 - o Electricity input for irrigation
- In-field emissions, arising from:
 - o Nitrous oxide from soil denitrification (the main source); and

Many of the farm practices that reduce emissions such as optimising nitrogen (N) rates, planting legume fallow crops, or more efficient irrigation practices, also increase productivity and reduce impacts on water quality. Many growers have already adopted these practices. To formally recognise these changes, the cane industry developed a voluntary program for best management practice, Smartcane BMP, and over 40% of Queensland's sugarcane crop is already accredited. Thus, significant progress toward reducing on-farm emissions through practice change has already been made.

Many of the emissions arising from non-renewable energy inputs, such as the need for diesel to power farm equipment, embedded emissions from fertiliser production, and the electricity grid being powered by fossil fuels, are somewhat outside the direct control of the sugarcane industry and will need significant investment and policy development from government to help address.

1 Renouf_et_al_2010_Int_J_LCA_accepted_manuscript_1.pdf (qut.edu.au) 2 ibid

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Some of the technologies that will eventually replace these non-renewable energy inputs (particularly alternatives to diesel-powered farm machinery) are still in the research phase. CANEGROWERS is technology agnostic and will embrace renewable alternatives as they become viable and affordable.

POLICY POSITION

- CANEGROWERS acknowledges that climate change is a threat to the profitability, productivity, and sustainability of the sugarcane industry.
- CANEGROWERS supports the Australian Government's commitment to an economy-wide target of net zero greenhouse gas emissions by 2050.
- CANEGROWERS strongly encourages growers to have their practice achievements, and associated impacts on GHG emissions, formally recognised and quantified through Smartcane BMP accreditation.
- CANEGROWERS will support growers to further reduce on-farm emissions by:
 - o Increasing awareness of practice changes that are good for both productivity and emissions reduction ("win-win" options), with a particular focus on increased participation in Smartcane BMP;
 - o Advocating for investment in the development and adoption of technologies and practices that enable growers to further reduce their on-farm emissions while maintaining profitability; and
 - Keeping growers updated on the risks and benefits of any substantive opportunities for participating in carbon and other environmental markets.
- CANEGROWERS supports government policy that prioritises meeting emissions reduction targets through actual reductions rather than promoting the use of agricultural land for offsets. Agricultural land must be prioritised for agriculture.
- CANEGROWERS is committed to working with government on co-ordinated policies which address embedded emissions while supporting economic and regional growth.
- CANEGROWERS is committed to working across the sugar value chain to secure incentives and opportunities that support adaptation and mitigation actions.
- CANEGROWERS is committed to ensuring growers receive an appropriate share of the value generated from using sugar for bioproducts.
- CANEGROWERS supports increased biofuel production as a cleaner alternative to fossil fuels.
- While CANEGROWERS supports working with government to achieve emissions reductions, we do not support proposals for burdensome regulation on growers to achieve national emissions objectives.
- CANEGROWERS strongly supports the participation of Sugar Research Australia in relevant cross-sector programs and projects on climate resilience and mitigation.
- CANEGROWERS recognises the value of improving soil health for productivity and water quality, but recognises the large weight of evidence showing soil carbon is currently not a viable pathway for carbon sequestration in sugarcane or other broadacre cropping.

CANEGROWERS SEEKS:

- Support for the Smartcane BMP program to quantify recent and future trends in farm emissions, and to promote practices and technologies that help growers adapt profitably to climate change.
- A strategic plan developed by government in collaboration with industry to increase local manufacturing of low emissions fertiliser.

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- Government recognition that action is needed to de-carbonise the electricity grid as a policy priority.
- Increased research and development in new farm technology and practices that reduce emissions, drive innovation, and build resilience.
- Funding for extension programs for growers to improve understanding of on-farm emissions, carbon offsetting, and carbon markets.
- Recognition that more than 80% of Australian sugar is exported, and that as a trade exposed sector we must remain competitive within international markets.
- Recognition that regional and rural Australia will face the disproportionate opportunities and challenges of the transition to net zero, and commitment to regional development funding to ease the transition.
- Support for the production and adoption of alternatives to diesel-powered farm equipment, including investment in regional supply infrastructure and assistance for the purchase of clean technology alternatives when they are available
- An increase in the production of biofuels and an increase in the biofuels mandate.

CANEGROWERS WILL:

- Work with Sugar Research Australia to investigate reasonable and practical emissions reductions targets for our industry based on existing technologies, and identifying gaps that can't be addressed by current technologies and where future research is needed.
- Work with Sugar Research Australia to investigate the emissions profile of our industry, and any potential unintended outcomes of commonly suggested remediations.
- Work with Sugar Research Australia on the identification of new methodologies for the Emissions Reduction Fund suitable for sugarcane farmers that would increase uptake of emissions-reducing farm management practices.



POLICY DOCUMENT

January 2023

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