



AUSTRALIAN
Sugar  **Milling**
COUNCIL

ANNUAL REVIEW 2010 Season



Chairman's Comments



In my second year as Chairman of the Australian Sugar Milling Council, there is much to reflect upon from 2010 leading into the 2011 crush.

When the Australian Sugar Milling Council commenced a priorities review two years ago, three key messages came through:

- Increase production/productivity – more cane;
- Improve government understanding of our environmental credentials; and
- Attract people to the industry.

Progress around these priorities could be summarised as follows:

- Productivity improvement continues to be a challenge. We are pursuing opportunities with GM and innovative seed technology. Conventional initiatives have had limited results in recent years;
- We have improved the government's understanding of our environmental credentials but have had to respond to the imposition of regulation on commercial cane farming in the Wet Tropics, Burdekin Dry Tropics and the Central region; and
- The industry is struggling to attract new people as we try to compete with the "fast economy" in mining.

Against a background of ever increasing change in our industry it is important that the role of The Milling Council and other representative bodies change at the same pace to maintain relevance. Focus will need to shift from activities that are more aligned to "form" to ones that deliver "substance". We need to look harder at what our focus is and how efficient we are in what we do. If representative bodies like The Milling Council fail to adapt to this change, they will lose relevance to their members and ultimately lose their members.

Undeniably, the extremely wet 2010 harvest, followed by the natural disasters in the first quarter of 2011 has delivered the Australian sugar industry with one of the most challenging years on record. But it has also demonstrated the sheer determination and resilience of an industry that has experienced the extremes of Australia's climate throughout almost 140 years of operation. Critically, these events have the potential to overshadow the positive direction and movement within the sugar industry during this time.

The growth in land under cane in 2010 breaks a 10 year decline that clearly demonstrates the industry is committed to increasing cane production, in years of good sugar prices. Short term price signals still drive behaviour, at the margin. Additionally, the re-purchasing by both milling companies and growers of land secured to grow trees by failed managed investment schemes should see a continuation of this trend of increasing total land under cane in the industry. New owners of sugar mills are playing a role in this as they seek to maximise throughput in their factories. They have the capacity to make these incremental investments, even in times of significant negative events like the weather and sugar pricing impacts from last season. This longer term view is a clear change from the more conservative shorter term view that our industry has tended towards in the past.

Our environmental credentials are progressively gaining government respect. As we have moved through the often arduous process of pursuing practical implementation of the Queensland Government's Reef Protection Regulation along side our cane farmers, we have continued to demonstrate our industry's strong commitment to sustainable resource management – we care for and actively work towards the protection of the environment.

Gravity still exists and eventually these issues come down to a sensible landing for all parties, albeit with a lot of work from our representative bodies and industry participants. Our proactive participation in renewable energy, biofuels and carbon policy development continues to reinforce the sustainability credentials and potential of our industry.

At the same time, our industry achieves one of the highest completion rates for apprenticeships in Australia, delivering training for the region, not just the industry. The sugar industry thrives on developing innovative solutions for increasingly challenging scenarios resulting in sugar industry-trained apprentices demonstrating exceptional skills as qualified tradespeople, whether working in the industry or further afield. And our commitment to industrial relations and workplace health and safety enables our industry to continue to negotiate for best outcomes for our companies and their employees. We have continued to make our worksites a safer place for our people. This is very important and we have more to do.

All of these factors contribute to an industry that maintains high market credibility. Internationally, Australian sugar continues to remain highly sought after, recognised over time for the reliability of its supply and quality. However, this reputation came under threat during the 2010/11 season, as a result of the significant shortfall in production from unprecedented in-season wet weather. We need to heed the lessons of this season carefully. The extreme weather of 2010/2011 has undeniably challenged the grower, harvester and miller relationships within the industry. All suffered significant financial losses from early pricing of the seasonal pool and then the inability to meet these commitments as a result of extreme in-season wet weather. This combination exposed the industry to a significant extra loss of profits, on top of the losses from not being able to harvest the crop that was there.

As an industry, we continue to spend a lot of time debating issues that will probably not make much difference to our future. At the same time, our competitors march on, doing new things, in new ways, using their time and energy to become more competitive. We need to get more focussed on building a better future rather than being caught up in the noise of unproductive debate.

Our R&D sector has been in need of major reform for the last decade. Costs in this sector have increased at the rate of inflation while the supplier funding base has fallen from a peak of 40 million tonnes of cane to 30 million tonnes. At the same time we have achieved little in terms of demonstrated productivity improvement. Clearly this situation is not sustainable into the future. The Milling Council has been instrumental along with CANEGROWERS in driving a process for change. An independent review was conducted. We are moving to one strategic plan. We have assistance with driving the recommended changes and this is a priority for the Milling Council.

The Boards of our R&D providers do not have the span of control to make the changes necessary. As owners, we in the industry need to provide the support and make change.

If we do not, grass roots support will fall and eventually we will lose our capacity to improve via R&D breakthroughs.

We are now seeing the fastest rate of change in industry ownership, in its history. One outcome of this will be an ever increasing scrutiny on performance of all industry bodies with owners and members demanding tangible results.





Broadwater Mill, NSW

Chairman's Comments continued...

With foreign parent companies holding an increasing proportion of Australian sugar assets, local representation and advocacy on key issues provides a strong value proposition. Strong performance and demonstrated results will deliver value to members that will be reflected in continued support, be it for marketing bodies, research organisations, representative groups, suppliers or other service providers.

The international connections will also provide new ways to access services and gains. The question will be whether organisations choose to seek out and take up these opportunities, or adopt a fortress approach to protect the past. I would suggest that the latter is a terminal approach. The former can offer some real opportunities to expand what has become a smaller customer base into a larger one, and at the same time maintain and, better still, enhance their offerings to Australian clients.

This is a challenge and a big opportunity for the Milling Council management and its Board, as it is for all other representative bodies in our industry. It will be an interesting time pursuing opportunities as they arise.

Good luck in the forthcoming year.

Mark Day

Mark Day Chairman

CEO's Report

The 2010 crush and leading into the 2011 season continues to see incredible change, challenge and opportunity for the Australian sugar industry and the milling sector: a level of unprecedented corporate activity; weather conditions not encountered for three decades; and global market conditions that offer a more favourable business base than we have seen for generations in sugar. This dynamism in the industry requires complimentary energy from the businesses that support it. The Australian Sugar Milling Council continues to evolve in performance and priorities to keep pace with the changing industry.

The look and feel of the Milling Council has developed over the past 12 months with a move to new premises, a change to the logo and a new website. The organisation has made significant effort around climate policy, biofuels and renewable energy. Traditional areas of Industrial Relations and Occupational Health and Safety continue to evolve as the industry operates under a new Federal Award and moves to harmonised safety legislation.

One of the more challenging elements of the past season and leading into 2011 is the ongoing effort to deliver a practical approach to reef regulations and resource management. The Milling Council will continue to promote a more constructive approach to environmental sustainability and the

regulatory framework which can work positively with land and resource managers to achieve truly constructive outcomes.

Perhaps the most significant work of the Milling Council are the collaborative endeavours around reform of Research, Development and Extension. Working with CANEGROWERS, research bodies and other industry organisations, the goal of reform is an industry supported, resourced and invigorated RD&E sector that builds on achievements of enhancing the competitiveness and sustainability of the Australian sugar industry through world class research outcomes.

The Milling Council's Annual Review of the 2010 season leading into the 2011 crush is a new format to previous years. It has a greater focus on the people of the industry and a forward looking perspective, as well as the overview of 2010. Structurally, the document follows the Milling

Council's efforts through the supply chain, reflecting the integrated nature of the industry, and the collaborative overlap with our partner industry peak bodies. The review timeframe has changed and will be published annually leading into the new season, enabling the capture of post harvest activities and events for the first time in this reporting format. As demonstrated in the first half of 2011, the lead up to harvest can drastically alter the dynamic of the forthcoming season.

All indicators are the 2011 season will be a better year than 2010. I hope you find this Annual Review informative, and we look forward to a strong year ahead for the Australian sugar industry.

Dominic Nolan

Dominic Nolan Chief Executive Officer

Our Milling Council Team



Rosie Brennan

Administration Assistant

Rosie is a first point of contact with the Milling Council. Rosie joined the Milling Council during 2011 working 2 days per week, and in collaboration with Emma, provides for the efficient functioning of the Milling Council Office and communication with our members.



Jim Crane

Senior Executive Officer

Jim's portfolio with the Milling Council reflects the broad range of issues which confront the sugar industry on a daily basis. Apart from the primary tactical role responding to the myriad of day to day issues Jim co-ordinates the Milling Council's Technical Committee and Industry Development Committee. He represents the Milling industry on government working groups related to Environmental and Transport issues and carries a broad resource management role.



Sharon Denny

Manager Industry Development & Government Relations

Sharon's role is to develop a policy pathway for future industry development that captures the needs of industry, negotiates the challenges emerging from government policies, and amplifies opportunities arising from government policy, technology developments and industry innovation. In this role Sharon coordinates the industry's Strategic Policy Committee and the Energy and Environment Management Network.



Warren Males

Adviser Alliances and International Affairs

Warren develops and manages trade policy on behalf of the Australian Sugar Milling Council ASMC and, through the Australian Sugar industry Alliance (ASA), the sugar industry more widely. He coordinates and manages the activities of the Global Sugar Alliance and ASA's Trade Committee. Warren is a member of the National Farmer's Federation Trade Committee and works closely with the Australian government to improve access to markets for the industry's sugar exports. He is also Chairman of ASA's Sugarcane – Gene Technology Group, which is preparing the pathway for the commercialisation of products from GM sugarcane.



Dominic Nolan

Chief Executive Officer

Dominic Nolan joined the Milling Council as Chief Executive in February 2009. As well as overall responsibility for the Milling Council's operations, Dominic's main efforts centre on the reform of RD&E, and collaborative efforts around the Australian Sugar industry Alliance.



Emma Roberts

Office Coordinator

Emma is the first point of contact with the Milling Council. She manages the smooth operation of the Milling Council office, working closely with the staff and Milling Council members. Emma will be on leave for approximately six months during 2011, but will return to the office in early 2012.



Peter Warren

Manager Industrial Relations & Occupational Health & Safety

Peter is responsible for ensuring members are well informed about regulation affecting the industry and that members' staff are advised, supported and represented, where necessary, when managing workplace or industrial relations (IR) and occupational health and Safety (OH&S) issues. He also manages the industry's Group Purchasing scheme maximising the purchasing power of the industry.

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The Milling Council

Who we are, what we do

Our Mission

The Australian Sugar Milling Council (ASMC) is the peak representative body for the Australian Sugar Milling industry. We are an independent and progressive organisation, providing our members with a forum to speak with one voice on common issues.

ASMC exists to drive a profitable and sustainable industry through:

- dynamic leadership;
- strong and effective advocacy; and
- creating new opportunities.

Our values are integral to our commitment to a sustainably focused, forward thinking and open to opportunities industry. Our culture of excellence and leadership in all interactions is based on:

- the courage to drive and respond to change;
- accountability;
- energy, enthusiasm and growth;
- integrity in what we say and do; and
- relationships built on respect.

As our industry continues to undergo structural and environmental change and challenges, our goal is to develop a growth industry that is:

- successfully competing in the world market through profitable businesses;
- diversified into related sugarcane products using world class research and development;
- recognised as global leaders in sustainability; and
- built upon dynamic and cooperative industry leadership.

ASMC represents approximately 99% of Australia's raw sugar production through its members.

Milling Council Members

Mossman Central Mill Company Limited

Chairman Bill Phillips-Turner
General Manager Alan Johnstone

Mossman Mill is a grower-owned, unlisted public company that has growers holding the majority of the shareholding. The company operates a factory from Mill Site, Mossman which is located approximately 75 kilometres north of Cairns. Since the commissioning of its bagging facility in 2007, Mossman Mill produces food grade bagged sugar as well as bulk raw sugar for export.

MSF Sugar Limited

Chairman James Jackson
Chief Executive Officer Mike Barry

Mills: Mulgrave, Babinda, South Johnstone, Tablelands, Maryborough

MSF Sugar Limited (formerly The Maryborough Sugar Factory Limited), is an ASX listed public company which has undergone rapid growth in recent times, with all raw sugar produced at its four mills exported into overseas markets. Having started as a single milling operation based in Maryborough in 1886, it now has milling operations in Gordonvale, South Johnstone and the Atherton Tableland. This provides a milling capacity of 4.7 million tonnes of cane per annum currently and its operations include infrastructure and farming properties to support these mills. In addition it has invested in Sugar Terminals Limited, the owner of six Bulk Sugar Terminals in Queensland.



Crushing train at Millaquin Mill, Bundaberg

Tully Sugar Limited

Chairman Dr Ralph Craven
Chief Executive Officer John King

Built in 1925 by the Queensland Government, Tully Mill became a grower owned cooperative in 1931 and changed its structure to an unlisted public company in 1990. The mill has expanded its production capacity and now services a cane supply area in excess of 27,000 hectares. The factory crushes cane at up to 725 tonnes cane per hour. It is a reliable supplier of electricity at 10 MW/hr to the state grid during the crushing season. The company operates a shopping centre (Banyan Plaza) which was constructed in Tully in 2001 on land owned by the company.

The company also owns and operates five sugarcane farms in the area with a combined productive capacity of 80 to 90000 tonnes depending on seasonal conditions.

Sucrogen Ltd

Chief Executive Officer Ian Glasson
Executive General Manager Cane Products Mark Day
Grower and Community Relations Manager Cane Products John Pratt
Operations Manager Cane Products Craig Doyle

Mills: Macknade, Victoria, Invicta, Pioneer, Kalamia, Inkerman, Plane Creek

Sucrogen owns and operates seven raw sugar mills in Queensland and operates ethanol distilleries at Sarina and at Yarraville, Melbourne. In a joint venture with Mackay Sugar Co-operative, it operates sugar refineries in Mackay and Yarraville; and in Auckland New Zealand, through the New Zealand Sugar Company Limited which is also a joint venture with Mackay Sugar Co-operative. Sucrogen also administers Australian Molasses Trading Pty Ltd.

Other sugar related activities include marketing ethanol, solvents and specialty chemicals, owning and operating sugarcane farms and electricity co-generation plants at Victoria, Invicta and Pioneer Mills.

Proserpine Co-operative Sugar Milling Association Limited

Chairman Lui Raitieri
Chief Executive Officer John Power

Proserpine Sugar Mill first operated in 1897. The grower owned cooperative was formed in 1931. During the nineties the focus was on increasing throughput and considerable investment was made in increasing the area under cane and increasing milling capacity. As a consequence, in 1996 Proserpine Mill became the first Australian sugar mill with a single milling train to crush two million tonnes of cane in one season. Since 2005, due to economic factors, weather conditions and pest incursions, the area under cane and the mill's throughput have declined. As such the Association has embarked on a program to add value to cane and has commissioned a new factory to produce and market furfural (Furaldehyde). It has developed a composted soil conditioner called ProSoil P which is produced from sugar mill by-products.

Mackay Sugar Limited

Chairman Andrew Cappello
Chief Executive Officer Quinton Hildebrand

Mills: Farleigh, Marian and Racecourse

Mackay Sugar was formed as a co-operative in 1988 when five formerly independent milling co-operatives in the Pioneer Valley merged and acquired Pleystowe Mill from CSR Limited.

The need to be flexible and to maximise value-adding opportunities led shareholders to vote in favour of incorporating Mackay Sugar Limited to a restricted public company in

July 2008. Mackay Sugar is amongst Australia's largest sugarcane producing and sugar manufacturing companies.

Mackay Sugar Limited is a 25% owner in the sugar refining joint venture Sugar Australia Pty Ltd as well as the New Zealand Sugar Company Ltd with its partner Sucrogen. Combined, it is one of the largest refining operations in the Southern Hemisphere.

Bundaberg Sugar Ltd

Executive Chairman Mr Colin Stitt
Executive General Manager, Operations Mr Ray Hatt

Mills: Millaquin, Bingera

Bundaberg Sugar is an integrated agribusiness with a focus on property, agriculture, sugar manufacturing and engineering services. Bundaberg Sugar, whose origins date back to 1880, owns and operates two sugar mills and a sugar refinery in Bundaberg, Queensland. The company is the largest sugarcane grower in Australia and is part of the Belgian family-owned Finasucre group. It manufactures and markets raw and white sugar and owns Bundaberg Walkers Engineering Ltd.

Isis Central Sugar Mill Company Limited

Chairman Peter Russo
General Manager John Gorringe

Isis Central Mill, located in Childers, has been crushing cane since 1896/1897. This grower-owned mill is the major contributor to the districts' economy. It was the first mill to produce Queensland High Pol brand Sugar.

New South Wales Sugar Milling Co-operative Limited

Chairman Ian Causley
Chief Executive Officer Chris Connors

Mills: Condong, Broadwater, Harwood

The NSW Sugar Milling Co-operative Limited was formed when cane growers purchased the three NSW sugar mills from CSR Limited in 1978. The mills are located at Condong on the Tweed River, Broadwater on the Richmond River and Harwood on the Clarence.

The cooperative also operates a sugar refinery, which is located alongside the Harwood Mill. This is owned by a joint venture company, Manildra Harwood Sugars, in which the Co-operative is a 50% partner with the Manildra Group.

In 2008 the NSW Sugar Milling Co-operative Ltd, in partnership with Delta Electricity, commissioned 30Mw cogeneration power plants at Broadwater and Condong, which generate renewable electricity by using bagasse.



Boiler station at Racecourse Mill, Mackay





“ One of the positives of the 2010 season, overlooked with the focus on challenging weather impacts, was that land area under cane increased by 10,000 hectares on the 2009 area – the first increase year on year in a decade ”



Pioneer Mill, Burdekin Region, QLD

2010/2011 In Review

A land of droughts and flooding rain

Reinforcing the sentiment expressed in the great Australian poem "My Country" by Dorothea MacKellar, the past two seasons in the sugar industry have certainly reflected a land of droughts and flooding rain with 2009 being amongst the driest on record and 2010 the wettest in living memory.

This most recent "turn" of the weather resulted in a record quantity of cane that could not be harvested during 2010 and stood over for the 2011 season. While difficult to accurately estimate the tonnage of cane not harvested, approximately six million tonnes of cane was left in the fields at season's end.

A focus of the early part of the 2011 season is to harvest this cane and give farmers the best possible opportunity to get their farms back into a normal crop rotation. Stakeholders across the industry became even keener students of the weather during the 2011 autumn, all looking for a change away from the La Niña pattern and the associated above average rainfall. Early indications are positive for a better crushing season in 2011.

2010 season – tonnes crushed and area harvested

The area harvested of 291,927 hectares was the lowest for Queensland since 1977. Clearly the nearly 63,000 hectares unable to be harvested was the major determinant of this number.

The cane crushed in Queensland totalled 25.776 million tonnes, the lowest since 1990. The Herbert-Burdekin region reported an average yield of 109 tonnes per hectare, the best experienced during the past ten years. In contrast, crop yields in the Central region were disappointingly low, averaging 72.86 tonnes per hectare.

The final crush figure for New South Wales in 2010 was a disappointing 1.67 million tonnes of cane producing just short of 185,000 tonnes of sugar. Good crops in New South Wales depend on a large proportion being two year old cane. After a run of growing seasons impacted either by frost forcing the harvest of one year old cane, or wet weather limiting planting opportunities, this proportion is now very low. This means that any significant recovery in crop size is still two years away.

Sugar content

Very low sugar content in cane compounded a disappointing seasonal result. The Queensland State average of 12.87 units of CCS was down a full unit on the average over the past ten years. The worst affected area of the State was the far north where the average CCS for the season of 11.37 was down more than 2.5 units on the previous year. To put this into perspective, at sugar prices of around \$500 per tonne a unit of CCS is worth in the vicinity of \$4.50 per tonne of cane.

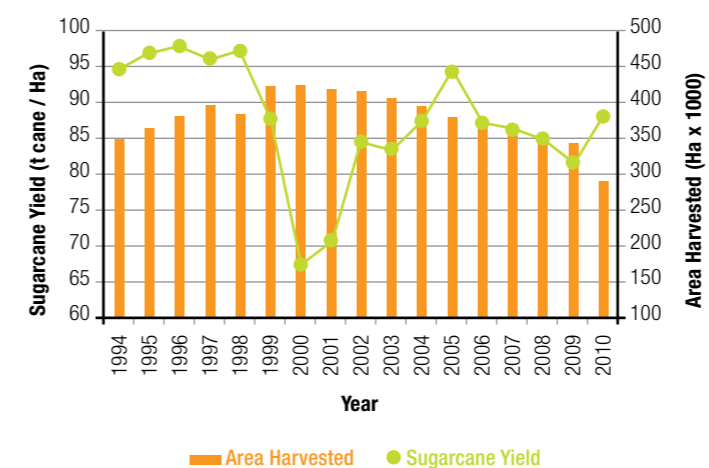
Positives of the season

While it is impossible to control the weather, there is much that can be done as an industry structurally to manage risks, and critically, increase productivity and efficiency. The challenges of the season have hidden some of the most critical signs that the industry's combined efforts are working, laying the foundations for an expanding industry. These include:

- Area under cane increased by 10,000 hectares on the 2009 area, the first increase in area year on year in 10 years;
- Second highest average state yield of harvested crop in Queensland in the last ten years, second only to 2005; and
- Both millers and growers are reacquiring former cane lands sold to managed investment schemes (forestry) that have subsequently failed. These lands will be brought back into production over the next two seasons.

While increased land under cane does not always guarantee an increase in cane harvested, the indications are highly positive that it will make an important contribution to industry long term viability.

Area Harvested and Sugarcane Yield (1994-2010)





Extreme weather has defined 2010/2011 in the Australian sugar industry - Racecourse Mill, photographed by Frank Marchetti

Weather Impacts

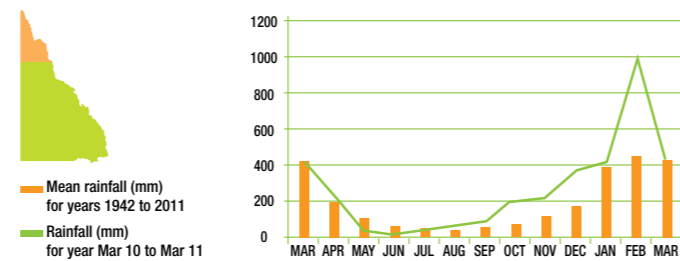
Throughout the regions

During 2010/2011, every region of the Australian sugar industry was impacted by extreme rainfall, followed by some form of natural disaster in the first three months of 2011. As weather plays such a critical role in the prosperity of the sugar industry, it's worth reviewing these impacts, particularly given the challenging harvesting conditions brought about through cyclones and flooding, and the unknown impacts of long term inundation and stand over cane on the 2011 crop. This year's harvest will be abnormal, and the best knowledge in the industry will need to be applied to these changed circumstances.

Far North Queensland

As one of the wettest regions in Australia, the Far North Queensland cane growing area is no stranger to high bouts of rainfall. However, from August to December 2010, the region received between twice and four times the average monthly rainfall month on month, during the region's traditionally "dry" season, with the Tully growing region particularly affected during harvest.

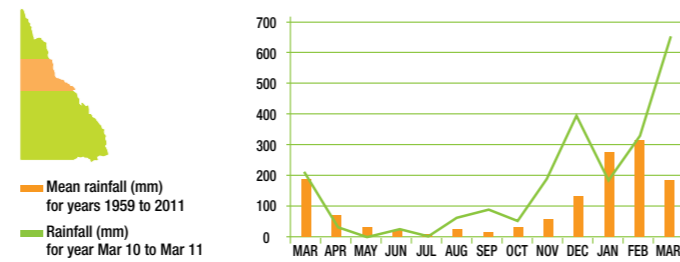
However, 2011/2012 has become increasingly challenging in this region with the impact of severe Tropical Cyclone Yasi, which crossed the coast on 3 February, 2011. The Tully Mill suffered extensive damage (insurance assessors valued this at more than \$12 million) including the destruction of two cooling towers and a number of standalone mill buildings including the mill store.



Herbert-Burdekin Region

The Herbert – Burdekin region also experienced rainfall patterns during 2010 that were consistent with the remaining coastline of the industry. Critically, peaks of rainfall in both September and December (between three and seven times the region's average for those months) ensured that the extraordinary efforts to prolong the harvesting period and remove further cane were unsuccessful. As the largest sugarcane production area in Australia, the largest amount of stand over cane from the 2010 harvest will come from this region.

This region was also variously impacted by severe Tropical Cyclone Yasi, with the Ingham growing area, directly south of the eye of the cyclone, sustaining substantial damage to farms and transport infrastructure, including the Lucinda bulk sugar terminal jetty.



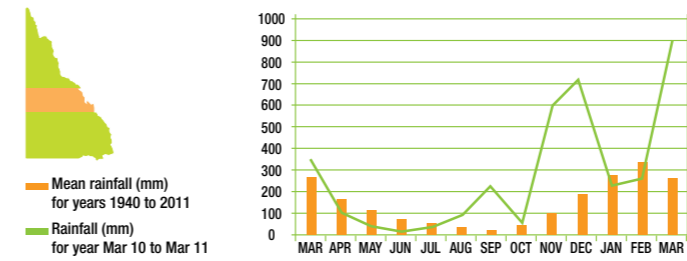
Proserpine-Mackay Region

Tropical cyclones also defined the Proserpine-Mackay region during 2010/2011. Prior to the season commencing, Tropical Cyclone Ului drifted around the Coral Sea for just over a week in March 2010 before re-intensifying into a severe tropical cyclone, crossing the coast near Airlie Beach on the Whitsunday Coast on 21st March, 2010. The entire region experienced significant damage with large areas of sugarcane destroyed and localised structural damage, particularly to roofs. Widespread flooding followed the cyclone, further impacting on the sugarcane crop in the Central region.

Consequently the 2010 harvest began with considerable concern about the level of residual debris from the cyclone and flooding. With weather impacts occurring during the crop's key growth period, the impact on harvesting, and the overall health of the crop has the potential to be significant.

As with every other region, unseasonal and abnormally high rainfall during the harvesting season, peaking in September and December compounded harvesting issues with heavy dirt loads substantially impacting the efficiency of milling operations while generating substantial maintenance issues for associated milling infrastructure. In this climate, Proserpine was forced to leave one third of its crop unharvested.

Although spared the worst of severe Tropical Cyclone Yasi, the region nevertheless shared in the natural disasters of the first few months of 2011 through Cyclone Anthony, the relatively tame precursor to Cyclone Yasi. Striking the coast between Bowen and Sarina on the evening of 30 January, 2011, this cyclone dumped an additional 300mm of rain across the Proserpine and Mackay growing regions, further inundating an already water-logged crop.



Wide Bay-Burnett Region

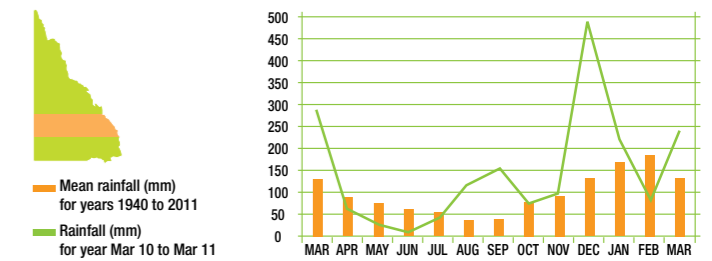
The Bundaberg-Maryborough region followed the rainfall trend of 2010, with an exceptionally wet 'dry season' impacting on harvesting. Although some cane remained as stand over, companies in this region generally fared better proportionately than the worst affected further north, although the Maryborough region was plagued by wet weather late in the season resulting in less than 40,000 tonnes being harvested during the final month of the season.

However, the real impact for this region commenced with flooding through December 2010 and January 2011. Maryborough growing area escaped the worst of these events

with cut roads and mild inundation of some farms. Closer to Bundaberg and Childers, the impacts were substantial, including:

- damage to rail infrastructure;
- severe damage to complete loss of farms; and
- loss or severe damage of pump and irrigation equipment for both mills and farms alike.

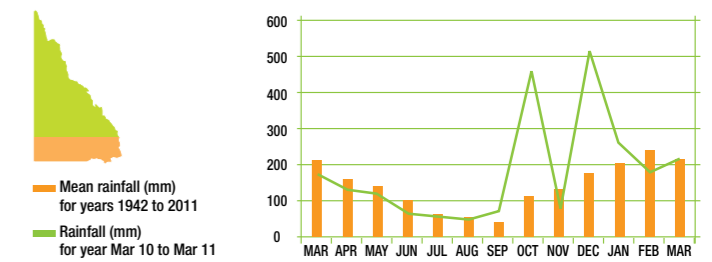
Critical to the broader Australian sugar industry, the Bundaberg-Walkers manufacturing workshop also experienced severe flooding. Given this workshop performs the bulk of re-shelling of rollers for the Australian sugar industry, an unserviceable workshop would run the risk of delaying commencement of the 2011 crushing season for the whole industry. Significant restructuring and rearrangement of work schedules by the company avoided this outcome. In addition, the Bundaberg Port closed following flood deposition of over a million tonnes of silt in the port. Although the port commenced movement of sugar again in April 2011, movement continues to be constrained by ship size and upper volume limits.



To the South

New South Wales was not spared from the harsh climatic conditions that prevailed across the Queensland industry for much of the 2010 year and most particularly during the last quarter, with their harvest being similarly disrupted through wet field conditions.

New South Wales experienced extreme rainfall and severe flooding from the same weather pattern generating the Brisbane floods of January 2011. While damage has largely been limited to farms and farming infrastructure, as a predominantly two-year harvest crop grown in the overlap of temperate and sub-tropic regions, recovery is a more challenging and time consuming prospect than for most sugar growing regions.



After effects of cyclone Yasi, North QLD





Case Study – when policy and practical implementation collide

The Nutrient Calculator

The introduction of the nutrient calculator method to determine the amount of fertiliser growers could apply to their crops in the regulated regions is a good example of where policy and practical implementation collided. It became clear that the regulatory implementation delays had cast great doubt over the analysis results from many soil samples that had been taken from paddocks where the trash blankets had already been incorporated back into the soil through cultivation. This meant that the regulated calculation method was providing results which were not commensurate with fertiliser rates required to achieve optimum yields.

Industry representation through the TTG achieved outcomes that saw growers able to use alternative 'typical' soil analysis information to calculate their fertiliser usage for 2010. In areas such as the Burdekin, this has led to growers being able to apply agreed appropriate rates of fertiliser for the next few years while comprehensive nutrient rate trials, funded by DERM, are conducted by BSES and DERM soil scientists.

With newly planted crops of cane and ratoon crops exposed to lengthy periods of inundation, the new regulation was significantly challenged to account for nutrient loss through leaching, de-nitrification and volatilisation. While industry worked with the Queensland Government to develop 'policy on the run' solutions, the experience of 2010/2011 highlights the dangers in attempting to overly prescribe dynamic activities like agriculture.

Milling by-products

Of particular interest for sugar milling operators was the proposed consideration of milling by-products in the nutrient calculation method. As reported in the 2009 season Review, the Milling Council had successfully deferred this consideration until July 2011. This deferral was granted on the basis that the industry had committed to schedule a milling by-products workshop. The purpose of the workshop was two-fold:

- To better understand the scope of the milling by-products issue in terms of the reef regulations; and
- To identify appropriate areas of research and development to resolve constraint limitations of prescribed quantities created by the new regulation (i.e. that growers could be reluctant to recycle mill mud due to uncertainty of nutrient availability to the crop).

A number of current and new initiatives were identified at the industry workshop, with specific activities and trials raised with the Department of Environment and Resource Management (DERM) for funding assistance through the Reef Protection Program. While the intervening weather has hampered the implementation of a number of these activities and trials, there have been some promising developments around application methods. This includes spreading mill mud at substantially lower rates, therefore returning mud to a much larger area annually.

With composting and pelletising trials continuing during 2010, the Milling Council has sought a further deferral of the consideration of milling by-products when using the regulated nutrient calculation method. The regulated method currently excludes milling by-products when applied at rates of less than 100 tonnes per hectare. The Milling Council has proposed that DERM make appropriate funding available for three years on a competitive basis, potentially through the Sugar Research and Development Corporation (SRDC), to fund eligible projects that lead to the use of milling by-products to reduce the overall farming environmental footprint.



Sugar Milling Council position on forestry activities

Forestry activity must be subject to long term economic impact on communities. Fragmented and unregulated forestry in established cropping areas alienates land from future use in annual agriculture. This in turn undermines the viability of sugar mills and the surrounding cane growing operations that make up the sugar industry and are the lifeblood of many communities and their economies.

Good Quality Agricultural Land

The Milling Council continues to advocate through all levels and forums of government for the preservation of good quality agricultural land. In particular, ASMC advocates for this resource to be considered as a finite national and state resource that must be conserved and managed for the longer term.

Queensland Planning Provisions

Newly introduced Queensland Planning Provisions during 2010 include forestry in the definition of cropping. This means that the establishment of forestry on rural zoned land will be classed as a 'self' or 'code assessable' development.

Both the State and Federal Government's ongoing support for forestry on agricultural land continues to pose a threat to established agriculture. Although Government continues to argue that policy which encourages the establishment of forestry is not a threat to annual cropping, the reality is that trees grow best in the fertile soils used for traditional cropping, such as where the sugar industry is located.

Local governments will have little opportunity to intervene through their own planning schemes to arrest the impact of forestry. They will need to find avenues via their strategic plans to enable them to consider economic, environmental and social drivers of their regional communities. One option could involve local governments describing (perhaps via mapping) priority cropping hubs or precincts within their rural zones that will require different levels of assessment for development that could be seen as counter-productive to the traditional uses and the long term economic benefit of the region.

Gary Nixon

GENERAL MANAGER CANE SUPPLY,
BUNDEBERG SUGAR LTD



When Gary completed a certificate in sugar technology and commenced work as a chemist at Millaquin Mill, he never anticipated where working for Bundaberg Sugar would take him. In the 34 years that Gary has worked with the company, he has progressed through the chemistry ranks before undertaking further tertiary studies and moving into sales and marketing, business planning, and even briefly managing the Tate and Lyle mills in China. Gary is currently the General Manager of Cane Supply, Deputy Chairman Bundaberg Sugar Services Ltd and a Director on the Avondale Water Board. Gary says "I really enjoy the challenge of this ever changing industry. Particularly in trying to provide improved services to growers. For example, developing new pricing options for growers which assists in increasing the sustainability of not only farming operations but the industry as a whole."



Strategic Cropping Land

The Queensland Government is also developing a new Strategic Cropping Land Policy that will influence this agenda. The Milling Council has been monitoring this process and again has made representations and submissions to Government.

The Milling Council has supported the publicly stated intention of the former Minister for Infrastructure and Planning, the Honourable Stirling Hinchliffe MP, that the Queensland Government "has moved to give greater protection to the State's most important food growing land from incompatible development". ASMC submitted that, without appropriate planning controls, food growing land in the State could be alienated for long term availability by uses that contribute neither directly nor indirectly to food production.

The current State Planning Policy (SPP 1/92) has been a major factor in slowing the alienation of good quality agricultural land (GQAL), and specifically land used for, or suitable for use for, cane growing. While supporting the need for some strengthening of the policy, it is essential that new Strategic Cropping Land policy does not erode any of the principles or guidelines currently in place.

Irrigation water pricing

In April 2010, the Queensland Premier and Treasurer directed the Queensland Competition Authority (QCA) to recommend irrigation prices to apply to a range of SunWater water supply schemes from 1 July 2011 to 30 June 2016. A final report was due by 30 April 2011.

This direction was subsequently amended in recognition of the additional time that the QCA required to conduct a thorough investigation. Representations to the relevant Minister, by CANEGROWERS and the Queensland Farmers Federation, convinced him that consideration of a rate of return on assets and spillway upgrades should not be included in QCA's assessment.

This matter has not been finalised as this Review was being prepared but early indications of the nature of the price increases currently proposed by SunWater is cause for concern for irrigation water users in a number of cane growing regions.



Irrigation in the Burdekin

The Australian sugar milling industry is reliant on, and committed to, the sustainability of its sugarcane supply and the farmers who grow the cane. This requires a long term outlook to ensure natural resources are responsibly managed for the benefit of generations to come.

Farming

The sugar industry illustrates the interdependency between grower and processor perhaps stronger than any other agricultural industry in Australia. The relatively short timeframe (9-16 hours) between harvesting and crushing relies on a healthy relationship between growers, harvesters and millers for a growing region's sustainability.

As such, milling companies take a strong interest in developments that affect the viability of the cane farming sector, and provide additional support where possible and appropriate. The Milling Council contributes in this area, working collaboratively with CANEGROWERS to provide appropriate policy support in relevant government forums. During 2010/2011, ASMC focused on three key areas of the farming sector for policy support:

- the Queensland Government Reef Protection Program;
- State Planning Policies and Strategic Cropping Land; and
- Irrigation Water Pricing.

Queensland Government Reef Protection Program

Roll out of the Reef Protection Program continued during 2010, revealing the practicalities of moving from policy to implementation had been substantially underestimated by the State Government and its proponents. The implementation phase has been epitomised by adjustment, deferral, exceptions and resistance.

Milling Council members and staff have served on the Technical Task Group (TTG), a reference group for the Queensland Government's Reef Policy Unit, continually advocating the regulatory provisions be adjusted to ensure a "reasonable and practical" template is developed for the industry.

While stakeholder opinions may vary on whether there has been a reasonable and practical outcome, the great majority of commercial cane farming operations in the Wet Tropics that were required to submit Environmental Risk Management Plans (ERMPs) successfully met the 30 September, 2010 deadline. To facilitate this reporting, CANEGROWERS secured almost \$1 million in funding from the Department of Environment and Resource Management to provide additional resources to assist growers with their ERMPs.

Weather impacts

A significant confounding factor for the introduction of a regulatory regime for agriculture was the extreme wet weather events experienced during 2010 and the early months of 2011.



Sugarcane is nature's own solar panel.

Through photosynthesis, sugarcane converts solar energy, carbon dioxide and water into plant material.

More sunshine = more sugarcane growth = more stored energy.

In this way, every tonne of sugarcane removes about 450 kg of carbon dioxide equivalent from the atmosphere.





Cane Harvesting and Transport

Cane harvesting and transport is the critical link between grower and miller in the Australian sugar industry. Harvesting and transport requires a high level of coordination and cooperation between all three parties to ensure an optimal industry efficiency of sugar production. The physical challenges of 2010/2011 were highlighted through the harvester-milling interface, with waterlogged fields and poor quality cane a key feature. Adapting to the extraordinary season has highlighted some of the ongoing issues for recruiting seasonal labour, and potential approaches to resolve this issue in the future.

The harvesting interface

The harvesting sector continues to be challenged by a shortage of skilled operators. And while the industry credo of 'all hands on deck' ultimately ensures cane is cut (as long as it can be physically harvested under the prevailing weather conditions), there is an ongoing question about the damage to long term production and efficiency to the individual farm when less skilled operators are involved. This has resulted in a concerted move supported by the sugar industry to encourage resource sharing across multiple industries where skilled labour is concerned.

As a result of the start-stop nature of the 2010 harvest, seasonal labour availability is again likely to be constrained during the 2011 harvest. Numerous seasonal workers experienced a high proportion of downtime during the past season and are likely to be reluctant to return. Adding further weight to this concern, the UD (undefined) Licence training conducted by CANEGROWERS in Mackay typically receives 40-100 applicants. This year only two applied. This licence program typically services the broader sugar industry, well beyond the Mackay region. With a shrinking applicant pool, the industry may well be considering other alternatives, such as outsourcing, to meet labour needs.

Frank Delaney

BRIDGE CARPENTER, MACKAY SUGAR



Frank Delaney has worked in the sugar industry for over 47 years. Despite passing retirement age, Frank continues to work as a Bridge Carpenter because he enjoys the work and the workplace. Frank commenced his career as one of Australia's seasonal workers, sharing his time between driving locomotives during the sugar harvest, and fruit picking in Shepparton in between. However, marriage, warmer weather and lifestyle ultimately encouraged Frank to move into the industry full time. Frank continued to develop a wide range of skills within the industry, before undertaking an industry apprenticeship as a bridge carpenter. As Frank puts it "I've really enjoyed the many challenges involved in the work - every new job comes with its own set of problems - and it's a real sense of accomplishment when the job is done. The industry has really changed over the last 20 years, appealing to a wider range of people, which helps with the pressures of the competitive labour pool. But what's really great to see is the diversification opportunities that are finally taking off in the industry - I just wish we'd done this years ago!"

Cane rail

networks keep the equivalent of 18,000 - 25,000 heavy trucks per day off the road between June and December. That's a huge greenhouse emissions and environmental benefit, and safer for our communities and tourism industries.

Outsourcing haul out drivers

2010/2011 has seen a distinct trend towards outsourcing of labour through recruitment agencies, both for short and longer term operations. These agencies started out servicing the mining industry, and consequently have a widening pool of applicants that are experienced in driving heavy, expensive machinery.

In addition, the cotton industry approached the sugar industry for harvesting assistance following completion of the sugar industry's harvest. Take up has been moderately successful, largely drawing from Emerald to northern New South Wales, working with the sugar season's downtime. Although the cotton harvest season commences in March, and runs for four to six months (overlapping the sugarcane harvesting season), there is recognised potential to develop a reciprocal harvesting relationship for labour between the two industries.

As the labour pool becomes increasingly competitive, agricultural industries may need to consider opportunities for resource sharing across the sector. This is not without its issues, particularly in regions like Mackay, where the shortage of accommodation ensures that house prices and rentals are at a premium.



Harvested cane, moving by rail into the mill, Burdekin

Dirty Cane

Dirt in cane was a major concern throughout the industry in 2010/2011. Several mills experienced considerable factory lost time arising from mill chutes damaged during processing, increased wear to shredders and other milling equipment, and extended processing during sugar production. The resulting constraints on production ranged from reduced crushing rates for extended periods to a halt in crushing, while factories recovered from mud loads. Average mud loads of 8% were recorded in some regions (i.e. 400kg of mud supplied for every five tonne bin of cane), increasing sugar losses attributable to mud by 90% above typical harvest.

This issue magnified the importance of the relationship between harvester and miller, particularly highlighting the importance of communication when the tolerances of the mill are being tested.

Cane Rail transport systems

The sugar mill's cane railway systems, while collectively one of the largest pieces of infrastructure in Queensland, are relatively invisible to the broader community. Eight companies separately own and operate 11 independent, mill-dedicated rail networks that serve 19 of Queensland's 22 mills. More than 30 million tonnes of cane can be moved through these rail networks during a crushing season. The prodigious



Off season maintenance of the cane rail network, Bundaberg

Robin Devonshire

MANAGEMENT ACCOUNTANT, TULLY SUGAR LIMITED



Having resided in Townsville for several years, Robin was looking for a fresh start for herself and her young daughter when she moved to Tully as Assistant Accountant at Tully Sugar Limited. Now in her eighth season with the company, and promoted to Management Accountant, Robin is still excited and energized by the industry. During this time Robin has continued her professional development, obtaining CPA qualifications, and continuously applies her professional accomplishments to the ever changing dynamic of the sugar industry. As Robin says "I really love working in this challenging, encouraging and valued environment. The work is always interesting, especially as the seasonal nature of the work throws up different priorities challenges and focuses throughout the year. I've not only been able to develop a diverse range of skills within my profession, but the "hands on" nature of the business keeps the job real and contextual." During Cyclone Yasi, Robin assisted in managing an evacuation centre which was temporarily located in the mill meeting hall. Tully mill was central to the township's emergency preparations and post cyclone recovery support.



social benefit to adjacent communities is often unappreciated by all levels of government. Yet these networks keep the equivalent of 18,000 - 25,000 heavy truck movements per day off Queensland roads from June to December, Queensland's peak tourism season, when national and international tourists typically travel the highways.

However, as the early months of 2011 have demonstrated, this infrastructure is vulnerable to natural disasters. Rebuilding throughout the regions either cyclone or flood affected has ranged from minor to full reinstatement, including:

- flooded hydraulics and mechanical components on bin indexing systems following submergence;
- loss of flashing light active crossing control systems following flooding of electronics and controls;
- hundreds of cane bins (stored on the rail network) with flooded axle boxes and subsequently washed off rail lines;
- heavy build-up of rubbish and debris on numerous rail lines;
- collapsed rail bridges and loss of sidings; and
- extensive washout of rail line.

Restoration of these networks has been a priority for all affected companies, with significant resources diverted to these activities. For the Milling Council, conveying the importance of these rail networks has been critical during government consultation on disaster recovery, as the relative invisibility of the network means that the community benefits are taken for granted or overlooked.

Features of the cane rail network

The industry's combined cane rail network is a relatively unique, purpose dedicated rail system. Features include:

- An estimated 4000km of line servicing the industry, with narrow two foot gauge;
- Dedicated track operating between sidings and mills;
- System interconnection between mills owned by multi-mill companies, optimising crushing capacity during the season; and
- Low operating speeds of 25-40km/hr, with no passengers and no dangerous goods requirements.



Raw Sugar Milling

Raw Sugar milling is the core business of our members. After more than 140 years of substantial technological innovation in Australia's commercial raw sugar production, the basic process within this time-honoured industry remains unchanged. However, the policy environment in which we operate is increasingly prescriptive through extensive regulation. During 2010/2011, the Milling Council focused advocacy efforts on environmental regulations, safety performance and industrial relations.

Environmental Regulation

Sugar milling is a highly innovative activity. Throughout the history of the industry, companies have continually strived for full utilisation of harvested sugarcane, maximising the number of by-products and reducing overall waste requiring management. Consequently, the industry triggers numerous and often disparate legislation, both state and federal. In more recent years, much of the legislation affecting sugar milling operations is tied to the recognition of sugar cane as an energy resource rather than sugar production. During 2010/2011, the Milling Council continued to focus on the reporting requirements associated with implementation of two major pieces of federal legislation:

- The Energy Efficiency Opportunity Program; and
- The National Greenhouse and Energy Reporting Scheme.



Environmental management pond, Burdekin

A 30 million tonne crop of cane produces bagasse fibre with the equivalent energy of over 3 million tonnes of coal, per year. This is all renewable energy, produced year on year, powering our own mills and sending excess electricity to the grid.



Energy Efficiency Opportunity Program

As environmental regulation goes, the Energy Efficiency Opportunity (EEO) Program has presented as particularly challenging for the sugar milling industry. Over the last five years the industry has attempted to remove itself from the program, on the basis that the real energy efficiency opportunities in the industry are tied to expanding our cogeneration activities. These 15-20 year payback projects well exceed the payback period of the EEO, effectively resulting in an industry standoff, with industry principally reporting for the sake of reporting without commensurate benefit. Consequently our approach to EEO reporting has been to achieve satisfactory compliance.

As EEO moves into its second phase of implementation (auditing and verification), and large electricity generators are finally captured by the program in 2011, removal of the sugar industry from the program is highly unlikely. Maintaining a minimum compliance approach is potentially more costly and labour intensive than corporate acceptance and integration of the program into a company's business model.

The Milling Council is working with companies to develop approaches that leverage the work already undertaken within the industry. Milling companies already consider energy efficiency in numerous aspects of their decision making – EEO compliance formalises this decision-making through evidentiary trails. Hence the artifice requires adapting and demonstrating EEO within a company's decision making framework, not to generate a new reporting paradigm.

All companies are moving in this direction following a Milling Council facilitated workshop with the Federal Government's Department of Resources, Energy and Tourism in February 2011. In addition, the Milling Council is currently developing a register of initiatives undertaken by companies to encourage greater opportunity for energy efficiency savings across the industry.

Nadine Thomas
LABORATORY MANAGER (MULGRAVE),
MSF SUGAR LTD



Coming from a farming family, Nadine knew little of the milling sector when taking a job analysing extraneous matter fourteen years ago. Moving into laboratory analysis, she took up full time employment ten years ago, and attained her Certificate III and IV in Laboratory Techniques. About her job, Nadine said, "I just love the challenge of this work. In addition to developing the laboratory management systems at Mulgrave, I've had the opportunity to multi-skill across a range of areas, and increase my knowledge by standing in as a Process Supervisor. That's the nature of this industry – everyone pitches in when there's a job to be done." Nadine has been the co-author of two technical papers published in Australia, and reprinted internationally. One of these papers was a recipient of the Australian Society of Sugar Cane Technologists President's Medal in 2007. When Nadine left reception work 14 years ago she never imagined that taking a seasonal job in a sugar mill would lead to a whole new career path in analytical chemistry.



Cane tipper, emptying transported cane into the milling process at Farleigh Mill, Mackay.

The National Greenhouse and Energy Reporting Scheme (NGERs)

The cooperative relationship between the National Greenhouse and Energy Reporting Division of the Department of Climate Change and Energy Efficiency (DCCEE) and the sugar milling industry continues to grow healthily, with ongoing NGERs support for Milling Council's workshops in 2010. Our industry commitment to a unified and consistent approach to reporting resulted in the industry performing well in the 2008/2009 reporting period, with suggested improvements for the 2009/2010 period on furthering consistency.

Importantly, this relationship has enabled negotiation around some of the critical reporting requirements and assumptions of significant concern in the first year of reporting. Our industry has made every effort to report information to a contestable level of accuracy where reasonable. Consequently this has strengthened our negotiations around critical reporting issues. Important points of agreement with the NGER Regulator prior to 2009/2010 reporting included:

- understanding of "operational control of contractors";
- reporting requirements on internal steam generation and consumption at the mill;
- methodology for bagasse movements between mills, consumption at single mills; and
- use of seasonal renewable energy target data.

The Milling Council further developed the industry reporting template for the 2009/2010 season, which is available on the Milling Council's website to members. This template will be updated when the NGERs Regulator provides feedback on last season's reporting. In the meantime, the Milling Council continues to challenge the Federal Government to ensure that NGERs reporting does ultimately lead to a reduction in the overall environmental reporting burden for industry, and improve communication on how data collected under the relevant legislation is being used. It is important to reassure our industry that the collated data is serving a national purpose, and is not simply a reporting exercise.

Bill Walker

SUGAR OPERATIONS MANAGER,
NSW SUGAR MILLING COOPERATIVE



Bill Walker seems to have always been destined to work in the sugar industry. Growing up in a sugar town, with his father working on the local mill locomotives, Bill was always intrigued by the level of activity in a mill. Bill entered the industry in 1969 in the Tully Mill rat gang. A process chemist at heart, he soon moved into the laboratory and on to production management. For the last 24 years, working up and down the eastern coast, Bill has been a senior manager in raw sugar production, ethanol, refined sugar and cogeneration in conjunction with whole crop harvesting and milling trials. Despite some of the challenges NSW Sugar Milling has gone through in recent years, Bill continues to be enthusiastic about the industry and its future opportunities. As he says, "It's one of the few industries where you can see so many processes in the one factory, and the opportunity to do so much with the one resource. I think the industry hides its light under a bushel, but we're important to our local communities – even today there's a "family feel" to the industry – and that makes it a really attractive place to work!"



Workplace Health and Safety performance

Member participation in the Milling Council's Safety Committee meetings continues to increase.

In March 2010, the annual industry safety conference was held in Cairns under the banner of Safely Managing High Risk Activities. More than 100 delegates participated in the program addressing legal perspectives; steam turbine maintenance management programming; a practical approach to worker safety in re-facing mill brasses; commentary by two regional inspectors of WH&S Queensland on practical approaches to high risk activity management; a discussion panel with some Workplace Health and Safety Officers on the observations of "newcomers" to the industry; application of computer-generated high risk activity permits; an individual's own responsibilities in workplace health and safety; and fitness for work.





Sugar mills
generate more than 50% of Queensland's renewable energy each year. Several of our mills store bagasse, and extend the generation season, delivering more power to their local townships, more often.



Through the rest of 2010, the Committee addressed a number of important issues for the industry including:

- contributing to the development of the Milling Council's own OH&S policy for staff, tenants, visitors and its facilities;
- the draft Regulation under the proposed Harmonized safety legislation, to commence on 1 January 2012;
- establishing an industry OH&S information sharing resource on the ASMC website;
- facilitating a forum of some senior WH&S Queensland Officers with the industry's cane supply managers and Workplace Health and Safety Officers to deal with cane transport issues; and
- consultation on the ASMC pre-budget submission on workplace health and safety.

Industrial Relations

The economic viability of our members, and ultimately the sugar milling industry, depends on the ability of our industry to restructure, have a flexible workforce and respond to market pressures. But to achieve this we need certainty around our continuity of production. Hence healthy industrial relations are critical to ensuring that meeting individual company goals is the result of mutual collaboration in all employment relationships. The Milling Council is a critical advocate for the industry, focusing during the 2010/2011 season on:

- Sugar Industry Award 2010; and
- implementation of the Fair Work Act 2009.

Sugar Industry Award 2010

Modern awards in the federal jurisdiction commenced on 1 January 2010 and the Australian sugar industry has almost all of its award coverage under the Sugar Industry Award 2010.

The Milling Council led work with other industrial parties, through a project spanning August 2008 until December 2009, to achieve a single award. This is a particularly important achievement, given the numerous awards that would have otherwise applied to the industry, including:

- railway construction and operation;
- building and construction activities;
- engineering maintenance; and
- electric power generation.

Significantly, this award recognises the multi-skilled nature of employment associated with sugar milling, and more critically the importance of maintaining this flexibility for the longevity of the industry.

Fair Work Act 2009

The Fair Work Act 2009 (the Act) was also fully implemented on 1 January 2010.

Sugar mills made an easy transition to the new Act; little change, if any, was required to their employment arrangements to meet the Act's new National Employment Standards. These standards are legislated, key non-negotiable terms and conditions of employment for staff and wages employees. Since the Act commenced, enterprise agreements have been concluded in 15 mills, operated by six of the industry's nine milling companies, covering an estimated 4000 employees.

Unfortunately, while the objectives of the Act, and specifically enterprise bargaining, are clearly stated, bargaining enterprise agreements under the new legislation has proved to be complex, inefficient, and in one case, caused significant economic loss to all parties including the community. Clearly, managing the impacts of new arrangements for enterprise bargaining will be an ongoing challenge for the industry, particularly when continuity of production plays such a critical role in industry viability.

Industry Training

Training provided through Australian sugar milling companies is highly regarded across a range of industries. As key stakeholders in a cornerstone Australian industry, sugar milling companies have endured the extremes of industry expansion, contraction, rationalisation and global competition. The industry has undergone successive transformations to increase productivity and efficiency, and maintain a global presence – while continuing to anchor the townships dependant upon its prosperity.



Supply chain impacts of protected action

During bargaining in 2010, protected industrial action affected 9 mills causing significant lost production and reduced productivity during the time of the season when the sugarcane was at its highest sucrose content.

Protected strike action was accessed readily during the crushing season through the less than onerous Act requirements. Mills stopped working, with ten days production time lost – six in one company.

The adverse impact of strike action in that company is much wider than the sugar miller and its employees. The dispute stopped the harvest and that disruption immediately affected the lives and livelihood of many across

the regional communities – farmers, harvesting and transport contractors, fuel suppliers, fertilizer suppliers and all those directly related to the farm. This loss of income impacted the broader communities around the mills – and the opportunity to process half a million tonnes of cane was wasted.

In a season where uninterrupted harvesting and crushing was highly desirable but rarely achieved through adverse weather conditions, the loss of an additional 10 days of production through industrial action at the height of season production was significant. The lost opportunity to process more cane, coupled with the season's premature termination because of the adverse weather, resulted in a loss of \$30 million revenue for regional Queensland. Taking account of a regional multiplier, the loss to the affected economies is an estimated \$100 million.

Consequently, the men and women of our industry are widely recognised for their innovative, problem-solving capability. Sugar milling companies continue to foster this capability, providing an extensive range of training opportunities, including:

- engineering trade certificates especially fitter, boilermaker, electrician and diesel fitter;
- Certificate II – IV) in Laboratory Techniques;
- Certificate IV in Front Line Management;
- SRI competency-based training for supervisors and operators;
- skill sets in the sugar industry certificate and food processing;
- Certificate III in Agriculture;
- high risk licenses such as boiler operator, turbine operator, rigger, scaffolder dogger, crane driver and forklift driver; and
- graduate and post graduate training while employed by the mill, ranging from associate diploma through to masters qualifications, including engineering, chemistry, business management and accounting.

Critically, the enduring resources boom has driven a highly competitive labour pool. Hence the sugar milling industry increasingly trains for the region rather than just the industry. With an average completion rate of greater than 95% for apprenticeships, sugar industry trained apprentices are highly sought after, such that while the industry has a high retention rate for most forms of training, less than 30% of engineering trade apprentices remain in the industry beyond completion of their apprenticeships. This is despite one of the largest proportionate intakes of apprentices in Australia.

The industry has continued to adapt to the labour pool challenge by redefining the labour pool. Where apprentices were once typically school-leavers, companies now provide additional opportunities for school based apprenticeships, existing employees to become adult apprentices, and increasingly, adult apprentices from new starter employees. Some companies have enhanced employee skills and provided year round employment through seasonal apprenticeships, while many are increasingly up-skilling

Indigenous Apprenticeship Program

Sucrogen launched the Indigenous Apprenticeship Program in 2010. The program is a demonstration of Sucrogen's commitment to the Indigenous Employment Covenant, which aims to create 50,000 sustainable jobs for Indigenous Australians.

The Indigenous Apprenticeship Program has been implemented with participation and support from the Department of Education, Employment and Workplace Relations, and is the first of its kind in the Australian sugar industry.

Four Torres Strait Islander young men, aged between 17 and 21, were selected to participate in the indigenous apprenticeship pilot program with Sucrogen. The selection process was a mirror of the current apprenticeship selection and intake program, including a rigorous selection process that commenced in September 2009. The selection process included an interview and a three-week work placement at Victoria Mill in late 2009.

The four apprentices are based at Victoria Mill and are completing an apprenticeship in Certificate III in Engineering Mechanical –Fitting and Turning.

Martyn Ryan

IT MANAGER,
ISIS CENTRAL SUGAR MILL



As Isis Central Mill's IT Manager, Martyn blends a long family tradition in the sugar industry with new frontiers. Martyn's ancestors were one of the first families to settle in the Isis district, starting a long succession of cane farmers continued by his uncle today, while he, his brother and father work for Isis Central Sugar Mill. After completing an IT degree at the Central Queensland University Campus in Bundaberg, Martyn recognized the opportunity to continue to enjoy the regional lifestyle that he loves, while exercising and further developing his professional training. As Martyn says "This is not a typical IT job – the problem solving is often highly complex and includes working with a range of evolving and disparate industry technologies, ensuring that they "talk" to each other meaningfully. Technological innovation is the modern face of sugar milling. Having an involvement in both the field and factory operations of sugar milling keeps the work fresh and challenging".

a number of their process workers with basic trades competencies in a range of maintenance related areas. This approach is enabling a greater number of seasonal workers to obtain year round employment, without locking into an apprenticeship.

Change of ownership

Investment interest in the sugar industry, both national and international, has been particularly heightened during 2010/2011. Key movements in the industry included:

- formation of the Northern Milling Joint Venture between Maryborough Sugar Factory and Bundaberg Sugar, operating Bundaberg's three northern mills (Babinda, Tableland and South Johnstone) and Maryborough's Mulgrave Mill. The joint venture was finalised in April 2011, with Maryborough Sugar Factory acquiring all assets within the venture owned by Bundaberg Sugar;
- commencing with a name change from CSR Sugar to Sucrogen in March 2010, the largest raw sugar producer in Australia also changed ownership, joining the Singaporean company, Wilmar International Limited, Asia's leading Agribusiness Group; and
- a strong contest between international and national interests in acquiring Tully Sugar Limited. At various stages during the 2010/2011 period Maryborough Sugar Factory, Bunge Australia Holdings Pty Ltd, COFCO Corporation and Mackay Sugar Limited have actively pursued acquisition of Tully shares. With Tully shareholders recently supporting constitutional changes to enable a company takeover, this contest is almost certain to be resolved in the first few months of the 2011 season.

The interest in the Australian sugar industry is underscored by a general movement of international investment towards agricultural resources around the world. As a food and energy producer, in a high growth demand market, the sugar industry's versatility provides a level of strategic opportunity unmatched by most other agricultural industries. The level of activity demonstrates the confidence international investors have in the future of the Australian sugar industry.

Sharon Laspina

CAPITAL MANAGER FOR CANE PRODUCTS,
SUCROGEN



After 25 years working in sugar mills, Sharon is a seasoned sugar industry professional and, somewhat of a pioneer for women in the industry. Sharon started work with Sucrogen as an Engineering Cadet after finishing Year 12 and completed a Mechanical Engineering degree with Honours. She has filled a range of roles at North Queensland sugar mills, including as Shift Engineer, Project Engineer and Reliability Engineer. Sharon, a married mother of two, said flexibility around her work hours and locations enabled her to raise her children, while still maintaining her technical profession – something which would not necessarily be possible in her profession in other industries. "Sucrogen allows me to balance family commitments with my professional development." She says it is the people within the sugar industry which help to make her job so enjoyable. "Engineering allows you to develop skills in a cross section of disciplines," she said. "There are lots of challenges and it feels great when you can accomplish something that makes a difference."





Condong Mill by night, NSW

One litre

of ethanol manufactured from molasses (a sugar by-product) has less than 50% of the life cycle emissions of a litre of petrol. Molasses based ethanol is renewable and sustainable.



Industry Diversification

Sugarcane is an annually regenerative crop that provides a renewable resource. One of the fastest growing forms of biomass, the stored energy in sugarcane has unlimited potential to complement a range of stationary and transport energy needs, and green chemical production, based on the by-products of sugar production – bagasse, molasses, mill mud, and cane trash. The Australian sugar industry has developed innovative uses to recycle these by-products into higher value streams over the lifespan of the industry.

While the industry has the technical potential to produce no less than 75 products from these derivatives (that is, additional to multiple sugar products), each with a low greenhouse emissions profile and multiple environmental benefits, without consistent demand for these products – they have limited commercial potential. Movement to less carbon intensive products throughout our energy economy will ultimately be driven by a range of environmental policies. The challenge for the Australian sugar industry is to ensure these policies develop a balance of opportunities, rather than increase industry vulnerability. The Milling Council's advocacy efforts around diversification throughout 2010/2011 have focused on:

- renewable electricity;
- biofuels; and
- Carbon Pollution Policy.

Renewable electricity

During 2010/2011 it has become increasingly clear that the renewable energy target (RET), more recently morphed into the Large scale Renewable Energy Target (LRET), is insufficient as a stand alone policy to encourage further investment in renewable energy by the sugar industry.

Renewable Energy Target

The renewable energy target (RET) continues to be a source of industry frustration. Although the announced split of the RET into a Large scale Renewable Energy Target (LRET) and Small scale Renewable Energy Scheme (SRERS) was finally assented in Parliament in September 2010, the intractable process and subsequent inadequate transition measures do little to motivate further investment in renewable energy technology beyond wind farms.

In the lead up to passing the legislation, the Milling Council's advocacy efforts were firmly focused on the lengthy Senate deadlock. Two critical issues fuelled this debate – a highly emotive and inaccurate argument that the dramatic increase in electricity costs were attributable to the RET (rather than transmission and the escalating cost of fuel approaching international price parity), and the linking of the RET legislation to the Government's proposed Carbon Pollution Reduction Scheme (CPRS), through the treatment of emissions intensive trade exposed (EITE) industries. While the Federal Government eventually decoupled the RET legislation from the CPRS, enabling the legislation to pass, the misinformation around renewable energy price impacts on the current electricity price continues to plague further policy discussion.

In passing the legislation to split the RET, transition measures were introduced to manage the oversupply of renewable energy certificates (RECs) brought about by household

technologies. These measures effectively raise the RECs target over 2012 and 2013, and reduce the target by the same amount over the 2016-2019 period. However, the current market oversupply of RECs swamps the transition measures, which are therefore providing insufficient price signals on the overall REC price. The slow rate of unwinding of the REC price is workable for wind farms, resulting in further wind farm investment, which in turn continues to slow change in the REC price. LRET may ultimately deliver a strong wind portfolio in Victoria and South Australia, but in the absence of complementary policies, is unlikely to deliver a diversified renewable energy portfolio across the nation.

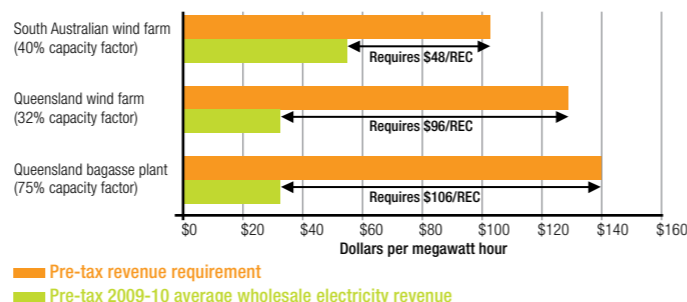
Jurisdictional Renewable Energy Policy

With 93% of the Australian sugar industry located in Queensland, the consequences of disproportionate investment in wind farms in southern states should not be lost on the Queensland Government. Queensland continues to have the fastest energy growth projected for any state in Australia – and by comparison, one of the lowest proportionate investments in new electricity generation, let alone renewable.

Clearly there is significant renewable energy opportunity in Queensland – provided that the price gap between black priced electricity and renewable electricity can be closed. Sugar mills supply in excess of 50% of Queensland's renewable electricity. However, wind farms in the southern states are currently the lowest cost renewable energy generators in Australia. Sugar cogeneration projects attract substantially less revenue from retailers on direct generation. In addition, Queensland's black electricity pool price is substantially lower than southern states – meaning that the required REC price to justify investment in a sugar cogeneration plant will be more than double that for a southern wind farm.

There is substantial strategic risk for the Queensland Government if it relies on southern states to meet its future renewable energy requirements as the LRET target ramps up to 20%. In addition, meeting the community service obligations of an extensive transmission network along the Queensland coast will grow disproportionately with an escalating black electricity price. The sugar industry's geographic location throughout coastal Queensland and Northern New South Wales makes it one of several industries strategically located to provide a range of complementary distributed energy solutions in key growth regions. The Milling Council continues to highlight this underlying benefit through submissions, parliamentary inquiries and stakeholder input to ongoing government policy development.

Figure 1: Required RET prices for Queensland renewable energy projects compared with Southern States.



Source: Policy Options for increasing uptake of renewable generation in Queensland; prepared for Sucrogen by Roam Consulting and Synergies Economic Consulting, 1 July 2010.

Policy delay – too little too late

Changes to the RET legislation have come too late for the New South Wales Sugar Milling Cooperative joint venture with Delta Energy. Housing two recently completed cogeneration projects, the joint venture has been reliant on a true price for renewable energy that remains unmet by the market. Instead, over the last three years the cooperative has encountered:

- the protracted introduction of the 20% target;
- RET policy failure through distortion by household technologies;

- Protracted negotiations to amend the legislation; and finally
- Insufficient transition measures post splitting of the RET legislation.

Renewable energy certificates (RECs) have continued to trade well below the price required by most renewable energy technology providers, with the exception of wind, throughout this period. In March 2011, both cogeneration facilities moved into receivership. In a stable democracy, the policy volatility in this sector is remarkable, particularly for a policy that has broadly shared bipartisan support. More critically, it has proved particularly punishing for the early mover.

Biofuels

The Australian biofuel sector remains intensely challenging. Seven years on from the proposed Energy White Paper reforms of 2004, successive governments are no closer to providing legislative certainty for the industry. Critically, there is no clear message from either incumbent government or opposition as to whether Australia wants a biofuels industry.

Biofuels Position Statement

While Federal Parliament continues to argue over the future of a carbon reduction policy in Australia, it is increasingly clear that a carbon price will have no tangible impact on the current biofuel uptake in Australia. The Milling Council consequently developed a biofuels position statement during 2010, based on linking life cycle carbon emissions of fuel production with excise. This approach is intended to provide certainty for investors, retailers, researchers and ultimately consumers. The Milling Council will continue throughout 2011/2012 to advocate for this approach, particularly during development of the Federal Government's Biofuel's Strategy, to be undertaken during 2011.

Alternative Fuels Excise Amendment Legislation

However, passing of the Alternative Fuels Excise Amendment legislation, intended to align excise allocation with energy content of the fuel, and provide industry certainty, remains elusive. Throughout 2010, and into 2011, the Milling Council has continued to advocate for bipartisan support of this proposed legislation. Without it, biofuel producers will be exposed to an excise of 38.14 c/L as of 1 July 2011. Policy certainty is critical for longevity of the existing biofuels sector – and the existing sector is critical for a future market pathway for next generation biofuels, by creating public acceptability and market demand.

Damien Kelly

FURFURAL MANAGER,
PROSERPINE MILL



Damien started his career as a chemical engineer in the sugar industry, but moved to the mining industry as a process engineer for a number of years. However, as Damien says "Money isn't everything" and the lure of an Airlie Beach lifestyle, family time and sense of accomplishment that comes with the completion of every season, ultimately brought Damien full circle, back into the sugar industry. Proserpine's furfural project is particularly energising for Damien, as this is the company's first foray into the biorefinery industry, producing the green chemical furfural. While there have been significant challenges along the way, Damien says "I'm really enjoying working at the leading edge of diversification within the industry. I come from four generations of sugar milling – but I can assure you, my great grandfather wouldn't recognise some of the things we're doing today. That's what makes this industry so exciting – the blend of tradition and innovation, and its future potential."

Queensland Ethanol Mandate

Policy uncertainty has been further compounded in Queensland by the Queensland Government's decision in October 2010 to delay introduction of the 5% mandate on ethanol-blended fuel. The mandate has been delayed for at least 12 months, on the basis of insufficient production capacity and national excise uncertainty. The potential consequences of this delay are severe. A shortfall in ethanol availability, driven by the weather impacts in the first quarter of 2011, resulted in the withdrawal of ethanol blended fuel from petrol pumps around Queensland. With no mandate in place, there is no compelling driver for fuel retailers to reintroduce ethanol as product becomes available again. The Milling Council is working with the Queensland Government to encourage a phased in approach to Queensland's ethanol mandate, based on recognising the existing production capacity, and providing certainty for further investment.

Carbon Pollution Policy

Climate change policy continued its rocky and uncertain path during 2010 and the first half of 2011. Even as this report was prepared for publishing, the debate over final design of a carbon pricing policy has grown intensely heated. However, the on again-off again nature of this policy is increasingly challenging the capacity of the broader industry sector to make critical investment decisions. In addition, where policies have developed to converge and integrate under a carbon policy, the policy lag reduces the effectiveness of the policies individually, and increasingly as a whole. For example, the protracted negotiations around splitting of the RET were increased due to the link of emissions intensive trade exposed industries with carbon pricing – and further squandering another generation season with insufficient movement on REC prices.

While the Federal Government continues to meet with a range of large companies, the food processing sector is largely overlooked in these discussions. There seems to be little understanding or sympathy for the trade exposure of these industries as high volume, low cost commodity producers, and therefore highly trade exposed when competing with transitional economies.

One of the government's key initiatives for the agricultural sector, released in 2010, is the Carbon Farming Initiative. This policy is intended to provide opportunity for the agricultural sector to participate in emissions trading, by creating a secondary market for mitigation and sequestration activities, where supported by recognised science and approved methodology. While it is difficult to determine clear opportunities for the industry in the short term, these are likely to become more evident as government supported research increasingly explores the gaps in current science and methodology.



Marketing & Trade

2010 began as a year of such optimism and promise. It delivered many challenges and became a year to forget even as world sugar prices moved higher.

As calendar 2010 commenced world sugar prices were high and rising, with the world entering its second year of global deficit. In the Centre-South Brazil, rains had disrupted the harvest, resulting in low yields, the sugar content of cane less than the long term average; and expectations that a significant amount of cane would be left in the field. Indian crop estimates were also being marked lower as adverse weather conditions were taking their toll across the sub-continent. Although the European Union was producing surplus sugar, the market expected the EU would comply with its WTO obligations and retain the surplus sugar in the EU, quarantined from the world market.

As production estimates for Brazil and India deteriorated, it became apparent that the USA would need to import more sugar to meet its supply needs, despite increasing imports from Mexico. By 1 February 2010 the March-10 ICE#11 raw sugar futures contract price reached US\$30.40c/lb.

Then the raw sugar price dropped. On 7 May 2010, just 13 weeks after the high, the price had fallen to US\$13c/lb. The coincidence of three critical factors had reversed market sentiment:

- the European Commission announced the export of an additional 500kt of subsidised sugar, in breach of its WTO undertakings;
- it became apparent that India would produce 19.3 million tonnes of sugar – five million tonnes more than projected in December 2009; and
- mills in Centre-South Brazil continued crushing cane through their inter-harvest maintenance period to meet supply commitments for both ethanol and sugar. Some mills also exported sugar that had been made for the domestic market to fulfil their export supply commitments.

Despite the price downturn, the 2010 Australian harvest commenced with optimism. In the previous two years the world had consumed more than 28 million tonnes of stocks and most sugar market analysts expressed concern at the very low level of world stocks and vulnerability of world prices to supply disruptions. World sugar prices began to move higher as the shipping queue in Centre-South Brazil grew to 120 vessels, with ships waiting for up to four weeks to load sugar; and news of drought impact across the region exacerbating supply concerns emerged. Late August UNICA reduced its estimate of the Centre-South cane crop and the adverse impact of hot dry conditions on the Russian beet crop was becoming apparent.

As prices moved higher, the rain started in Queensland. Initial estimates suggested Australian sugar production would exceed 3.6 million tonnes from 32.5 million tonnes of cane. But as the season progressed, it became clear that Australia would also contribute to the widening world sugar production shortfall, producing just three million tonnes of sugar. The effect of this lower production became a significant industry challenge as world prices moved higher.

Haydn Slattery

DEPUTY GENERAL MANAGER
– OPERATIONS,
MOSSMAN CENTRAL MILL



Haydn has spent most of his career in the sugar industry. Starting as a Laboratory Chemist with CSR Limited's Melbourne refinery, Haydn spent 16 years in the refined sugar business, working in various managerial roles before being seconded into the role of production chemist at the Racecourse Refinery in Mackay. The Queensland lifestyle became a critical factor for Haydn and his family, and after completing his secondment and returning to Melbourne, Haydn exited the industry briefly to manage an environmental company in Cairns. After two years, Haydn returned to the sugar industry, finding his nirvana at Mossman Central Mill; Queensland lifestyle, and working in the sugar industry. As Haydn says "I really enjoy the career diversity available in the industry, and the comradeship is universal. Spending a little time outside of the industry really made me appreciate just how diverse the skillset is in the sugar industry – and how very well regarded these skills are by other industry."



India

The recovery in Indian production continued during 2010/2011. At the outset of the Indian harvest, the range of sugar production estimates was very wide, 22.5 to 28.5 million tonnes. With higher production, Indian mills were able to fulfil their obligation to export previously imported sugar. With strong world prices, and a production recovery in prospect, the Indian industry lobbied for an ability to export additional sugar and for changes to sugar regulations. The government reduced the share of sugar directed to the public distribution system but did not allow additional exports.

European Union

Having allowed the export of surplus sugar earlier in 2010, the EU's 2010-11 marketing year began with the European Commission announcing it would limit exports for the year to 650,000 tonnes. With declining internal production, it became apparent that the EU was short of sugar. The European Commission second tranche of exports (350,000 tonnes) announced late in the year was not approved. To ease internal supply concerns, the Commission allowed the sale of up to 500,000 tonnes of out-of-quota sugar on the internal market and opened a new duty free import quota of 300,000 tonnes.

China

Poor weather conditions in China resulted in smaller cane and beet crops than expected. To supplement domestic market needs and to ease price pressures the government released sugar from its strategic stocks. In addition to the Cuban protocol imports, China is expected to buy sugar from Brazil, once the 2011 Centre-South harvest is in full swing.

Thailand

From a production perspective the Thai sugar industry was one of the few for which production, more than 9 million tonnes, exceeded early expectations, 6.9 million tonnes. Despite the additional production, the Thai government increased the domestic quota from 2.2 to 2.5 million tonnes, to avoid a repeat of the previous year's domestic supply shortage. World sugar prices, significantly higher than internal prices, have again encouraged the export of Thai sugar. In one attempt to stem the flow of smuggled sugar in small consignments Thai authorities closed the border with Myanmar (Burma) to sugar trade.

Australian sugar in demand

The market opportunities and demand for Australian sugar are increasing quickly and dramatically. This provides opportunities for the growth and economic development of the Australian sugar industry and the regional communities it supports. International interest and investment in the Australian sugar industry demonstrates that others are also seeing the opportunities.

Trade Rules do work

In January 2010 the European Commission reneged on its international commitments to limit its subsidised exports to the WTO maximum. The decision to export an additional 500kt filled immediate market demand, created a short term surplus and was the catalyst for a significant price collapse. However, with strong industry support, Australia, Brazil and Thailand raised concerns in the WTO and worked with the European Commission to ensure there would be no future breaches of commitment.

As the year progressed, the opportunistic nature of the EU exports became even more apparent. A poor EU crop led to reduced sugar production,

a failure to meet internal needs, fewer EU exports and additional sugar imports to meet internal market needs.

The experience of 2010 shows clearly that trade rules work. Implementation by the EU of its WTO obligations has significantly improved the operation of the world sugar market, providing opportunities for efficient producers. The reneging of the EU on those commitments was a significant factor contributing to the 2010 price slide and the emerging EU import needs later in the year a contributor to the price upswing.

In the period since the EU reduced its exports to comply with its WTO obligations in 2006, the world raw sugar price has increased from an average US\$7-8c/lb to average more than US\$20c/lb.

USA and Mexico

The US-Mexican sugar market is rapidly integrating, with the US now relying on sugar imports from Mexico. In 2010 almost 1.5 million tonnes of sugar produced in Mexico was consumed in the USA. Mexico has been able to meet this sugar supply by replacing some of its domestic sugar production with HFCS imported from the USA. As it always does, the trade has benefited both countries. Selling almost one million tonnes to Mexico, US HFCS producers have been able to increase production. Mexican sugar producers in turn have been able to sell sugar into the higher priced US market by diverting from their domestic market, and subsequently acquiring sugar from their Central American neighbours for consumption in Mexico.

World White Sugar Prices: London USD/t



World Raw Sugar Prices: ICE#11 USc/lb



Longer Term trends

While the 2010 harvest produced a range of production challenges that will likely extend into the 2011 harvest, the longer term outlook for the world sugar market remains positive. According to FO Licht "the world will need to produce another 35 million tonnes of sugar by the end of this decade", and Czarnikow estimates that global sugar demand will increase by 90 million tonnes over the period to 2030. These global estimates mask the skewed distribution of growth in world demand. Asia, the fastest growing region is already the world's largest consumer of sugar. Australia's largest sugar export destination, Asia is expected to increase its share of global consumption from 40 per cent to 49 per cent, more than doubling its sugar import demand. With Australian export supply challenged by a series of adverse seasons in recent years, importers across the region are looking to diversify their supply base, sourcing sugar from Central America and Brazil.

"Trade liberalisation is the pathway to growth, jobs and prosperity."

The Hon Dr Craig Emerson MP, Minister for Trade (Speech delivered at the launch of the Australian Services Roundtable report on services in the Australian economy, 4 October 2010).

World Trade Organisation

During the year Doha Round negotiations became process oriented. Some gains were made but progress was slow and laborious. There are differences between developed and developing countries on some issues and differences between developing and developed countries on others. US negotiators are keen to be seen negotiating better access to developing country markets for US exports, but are reluctant to provide improved access for those same countries to the US market.

One of the key outstanding issues is developing a framework for the operation of the Special Safeguard Mechanism (SSM). Many developing countries see this as an important mechanism to protect them from either sudden price drops or sudden surges in the volume of imports. The introduction of protective measures such as this and the flexibilities offered elsewhere in the agreement make any assessment of the benefits of new market access flowing from the round difficult. Without certainty in these assessments, it is difficult for political decisions to increase the level of ambition required in each component of the negotiations – agriculture, industrials and services – that would bring the round to a conclusion to be made.

The concerted effort made by negotiators to bring the round to a conclusion in 2011 has not been able to overcome these difficulties. It remains to be seen whether the political imperative is there to reach conclusion. For sugar, the elimination of remaining export subsidies and the promise of worthwhile improvements in new market access would be worthwhile.

Free Trade Agreements

Given the slow pace of progress in the WTO, the Australian sugar industry continues a united approach, encouraging the government to continue its active and pragmatic stance in the FTA negotiations as a means of improving the terms of trade with key export partners.

The Korea – Australia FTA

This agreement is proceeding and nearing conclusion. An outbreak of foot and mouth disease in the Korean livestock industry, and efforts by Korean negotiators to see the implementation of the separate FTAs they have negotiated with the European Union and the United States of America, has diverted attention and slowed negotiations with Australia. In a separate decision the Korean government suspended duties on sugar raw and white entering the country until 30 June 2011.

Japan – Australia FTA

The Japan-Australia FTA negotiations have slowed as a result of the impact of the March 2011 earthquake, devastating tsunami and nuclear crisis faced by the Japanese government. In the lead up to the earthquake, the new Japanese government had signalled a clear intention to continue with its economic reform programme as a means of revitalising the Japanese economy. The ensuing debate amongst those in favour of change in Japan and those seeking continued protection is likely to influence the nature and extent of improved access for Australian agriculture to Japan.

Trans-Pacific Partnership Agreement

The regionally focused Trans-Pacific Partnership Agreement negotiations are progressing, and initial market access offers have been exchanged. While details of the offers are not known, it is clear that Australia is seeking a comprehensive 21st century regional agreement that removes the tariff and other trade barriers that characterised trade in the last century. Reminding Australian negotiators that the Australia-US FTA is the only trade agreement either country has entered that totally excludes sugar, the sugar industry continues to impress upon Australian negotiators the importance of a worthwhile outcome that includes improved market access for sugar.



Industry Statistical Appendices

TABLE 1. AREA HARVESTED FOR MILLING (HECTARES)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northern	94,237	90,606	92,676	89,104	88,097	84,121	80,558	79,095	74,488	70,635	68,574
Herbert-Burdekin	133,108	132,987	130,585	132,745	130,722	128,620	127,321	127,005	120,880	119,816	89,398
Mackay-Proserpine	126,728	121,624	122,778	117,874	118,105	115,477	116,026	114,853	111,465	108,854	89,669
Southern	70,277	74,365	70,194	67,874	59,630	52,812	55,061	49,716	46,595	44,797	44,286
QUEENSLAND	424,350	419,582	416,233	407,597	396,555	381,029	378,966	370,669	353,428	344,102	291,927
NEW SOUTH WALES	18,772	19,807	20,650	19,968	20,234	17,827	17,542	17,155	14,723	15,561	14,162

TABLE 2. CANE CRUSHED (TONNES)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northern	5,950,578	6,241,178	8,226,369	7,907,226	7,377,162	7,576,486	5,631,724	5,968,425	6,160,453	5,406,722	5,970,031
Herbert-Burdekin	10,285,675	10,455,437	12,899,919	13,248,574	13,578,799	13,986,949	12,921,548	12,511,375	12,332,782	11,154,444	9,752,738
Mackay-Proserpine	7,175,979	7,622,608	9,335,108	7,868,789	9,021,914	9,839,573	9,745,779	9,839,287	8,123,242	8,124,844	6,533,232
Southern	5,369,601	5,524,676	4,695,583	5,086,999	4,492,072	4,492,296	4,824,881	3,629,487	3,554,844	3,475,400	3,520,347
QUEENSLAND	28,781,832	29,843,900	35,166,979	34,111,587	34,672,947	35,895,304	33,123,932	31,948,574	30,171,321	28,161,410	25,776,348
NEW SOUTH WALES	1,977,087	2,089,919	2,355,757	2,310,458	2,360,944	2,393,950	2,643,174	2,225,503	1,931,894	1,653,768	1,666,171

TABLE 3. SUGAR PRODUCED (TONNES)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northern	741,628	751,965	1,110,649	1,013,495	985,051	975,320	660,370	771,029	826,875	765,951	687,740
Herbert-Burdekin	1,510,749	1,603,136	1,968,810	2,006,050	2,040,337	2,009,488	1,853,542	1,839,127	1,791,903	1,693,194	1,320,937
Mackay-Proserpine	914,434	1,155,519	1,402,066	1,103,677	1,339,027	1,339,154	1,347,357	1,372,501	1,183,000	1,233,509	874,817
Southern	756,800	776,073	651,521	724,909	685,645	598,674	662,389	475,510	484,492	505,500	478,870
QUEENSLAND	3,923,611	4,286,694	5,133,047	4,848,130	5,050,060	4,922,635	4,523,658	4,458,167	4,286,270	4,198,154	3,362,364
NEW SOUTH WALES	235,188	242,384	275,512	264,252	275,957	262,137	290,666	225,547	188,198	186,583	176,563

TABLE 4. TONNES CANE PER HECTARE HARVESTED	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northern	63.14	68.88	88.77	88.74	83.74	90.07	69.91	75.46	82.70	76.54	87.06
Herbert-Burdekin	77.27	78.62	98.79	99.80	103.88	108.75	101.49	98.51	102.03	93.10	109.09
Mackay-Proserpine	56.63	62.67	76.03	66.76	76.39	85.21	84.00	85.67	72.88	74.64	72.86
Southern	76.41	74.29	67.04	74.95	78.74	85.06	87.63	73.00	76.29	77.58	79.49
QUEENSLAND	67.83	71.13	84.49	83.69	87.44	94.21	87.41	86.19	85.37	81.84	88.30
NEW SOUTH WALES	105.32	105.51	114.08	115.71	116.68	134.29	150.68	129.73	131.22	106.28	117.65

TABLE 5. TONNES CANE PER TONNE SUGAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northern	8.02	8.30	7.41	7.80	7.49	7.77	8.53	7.74	7.45	7.06	8.68
Herbert-Burdekin	6.81	6.52	6.55	6.60	6.66	6.96	6.97	6.80	6.88	6.59	7.38
Mackay-Proserpine	7.85	6.60	6.66	7.13	6.74	7.35	7.23	7.17	6.87	6.59	7.47
Southern	7.10	7.12	7.22	7.02	6.85	7.50	7.28	7.63	7.34	6.88	7.35
QUEENSLAND	7.34	6.96	6.85	7.04	6.87	7.29	7.32	7.09	7.06	7.07	7.11
NEW SOUTH WALES	8.41	8.62	8.55	8.74	8.56	9.13	9.09	9.87	10.27	8.86	9.44

TABLE 6. TONNES SUGAR PER HECTARE HARVESTED	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northern	7.87	8.30	11.98	11.37	11.18	11.59	8.20	9.75	11.10	10.84	10.03
Herbert-Burdekin	11.35	12.05	15.08	15.11	15.61	15.62	14.56	14.48	14.82	14.13	14.78
Mackay-Proserpine	7.22	9.50	11.42	9.36	11.34	11.60	11.61	11.95	10.61	11.33	9.76
Southern	10.77	10.44	9.28	10.68	11.50	11.34	12.03	9.56	10.40	11.28	10.81
QUEENSLAND	9.25	10.22	12.33	11.89	12.73	12.92	11.94	12.03	12.13	12.20	11.52
NEW SOUTH WALES	12.53	12.24	13.34	13.23	13.64	14.70	16.57	13.15	12.78	11.99	12.47

TABLE 7. SUGAR CONTENT	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northern	12.61	13.11	13.28	12.73	13.24	12.70	11.83	12.93	13.24	13.94	11.37
Herbert-Burdekin	14.25	14.90	14.84	14.69	14.49	14.07	14.06	14.52	14.31	15.13	13.43
Mackay-Proserpine	12.71	14.90	14.67	13.75	14.41	13.33	13.47	13.56	14.28	14.80	13.11
Southern	13.88	13.87	13.80	14.12	14.47	13.27	13.59	13.07	13.54	14.40	13.43
QUEENSLAND	13.46	14.34	14.29	13.93	14.20	13.48	13.44	13.76	13.99	14.72	12.87
NEW SOUTH WALES *	11.97	11.69	11.81	11.67	11.79	11.16	11.13	11.85	11.61	12.94	12.10

*Where sugar production figures are used it is on the basis of Tonnes IPS for QLD and Tonnes Raw for NSW. Sugar content is reported as CCS for QLD and POL for NSW.





Looking To The Future

The Australian sugar industry continues to reinvigorate and innovate to meet the changing operating environment. There is a mix of challenges and opportunities. The coming year will see a strong industry focus on growth, efficiency, consolidation and capturing opportunities.

The unprecedented **corporate activity and changes** within the industry shows no sign of slowing in the next 12 months, and the Milling Council will continue to meet the changing face of our industry.

The **restructure and rationalisation** of sugar industry research is a high priority, with considerable resources and effort to be directed towards this activity over the next 12 months. The industry will need an efficient, focused and resourced research platform to maintain and grow our international competitiveness, and critically, to ensure the viability of the regional Australian townships that depend on sugar. The industry has the capacity to meet this challenge – but we need to ensure greater resilience within our structures to weather the challenges that will continue to occur over time.

Environmental credentials will continue to be tested and assessed by customers, Governments and Non Government Organisations. Our industry has to respond formally and more strongly to demonstrate our performance in this area. The Milling Council will continue, over the next 12 months and beyond, to advocate recognition and understanding of the industry's knowledge, capability and credibility, and grow wider community endorsement of our industry's role in environmental sustainability.

Renewable energy will become increasingly important to the direct energy security of regional townships, and indirectly to Australia's energy security. While the sugar industry is strategically located to provide a range of renewable energy solutions, investment is hampered by a lack of commercial drivers to realise potential, and there is no evident "silver bullet" government policy on the horizon. There is a substantial price gap between Queensland renewable energy and southern states – and the Milling Council will continue to keep pressure on government policy to close the price gap over the next year.

The re-emergence of **carbon pollution policy** in the last six months will create a mix of opportunity and challenge for sugar. The green credentials of the industry will be critical to determining the overall impact of the policy, including its interaction with other policies. This will be a key area of analysis and advocacy for the Milling Council over the next 12 months.

As our industry continues to develop, our **workplace relations** become more sophisticated – and we need to find new ways to embrace the challenge of labour shortages. Our sugar communities are attractive, offering diverse career opportunities, lifestyle, and a safe work environment across regional Australia. The Milling Council

will continue to promote the social values of our industry, as best reflected by our members.

Trade policy is a long term industry investment. A significant outcome every decade can be a game changer for the industry; the successful 2005 EC sugar case in the World Trade Organisation continues to have a positive impact on global market conditions. Trade policy with a long term view will continue as an ongoing priority for the Milling Council.

National and international interest in Biofuels has re-emerged in the last six months, and will intensify over the next 12 as the Federal Government finalises its Biofuels Strategy. International technology developers and researchers are continually approaching the industry, seeking investment partnerships, while aviation companies are setting biofuels targets to be realized in the next few years. But investment from end users remains elusive, and government commitment to policy uncertain. The Milling Council will continue to pursue policy based on commercial reality and shared risk over the next two years.

The **potential for GM sugarcane** to significantly change the outlook of the industry remains – the Australian industry has invested heavily in the early work and the BSES Joint Venture with DuPont continues to be the focus of industry activities over the next 4-6 years.

Our industry is committed to **increasing land area under cane**. The increase by 10,000 hectares in 2010 on the previous year, the first increase year on year in a decade, is a strong indication of this commitment. The Milling Council will continue to advocate for the best possible land, planning and resource management policies to enable this trend to continue.

The 2010 season and leading into the 2011 crush has challenged our industry's knowledge, capability, resilience and purpose. The industry has demonstrated its capability and capacity to respond to change, and must continue to do so. The coming year will host a new variety of challenges – and we look forward to meeting them.



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New South Wales Sugar Milling Co-operative Ltd

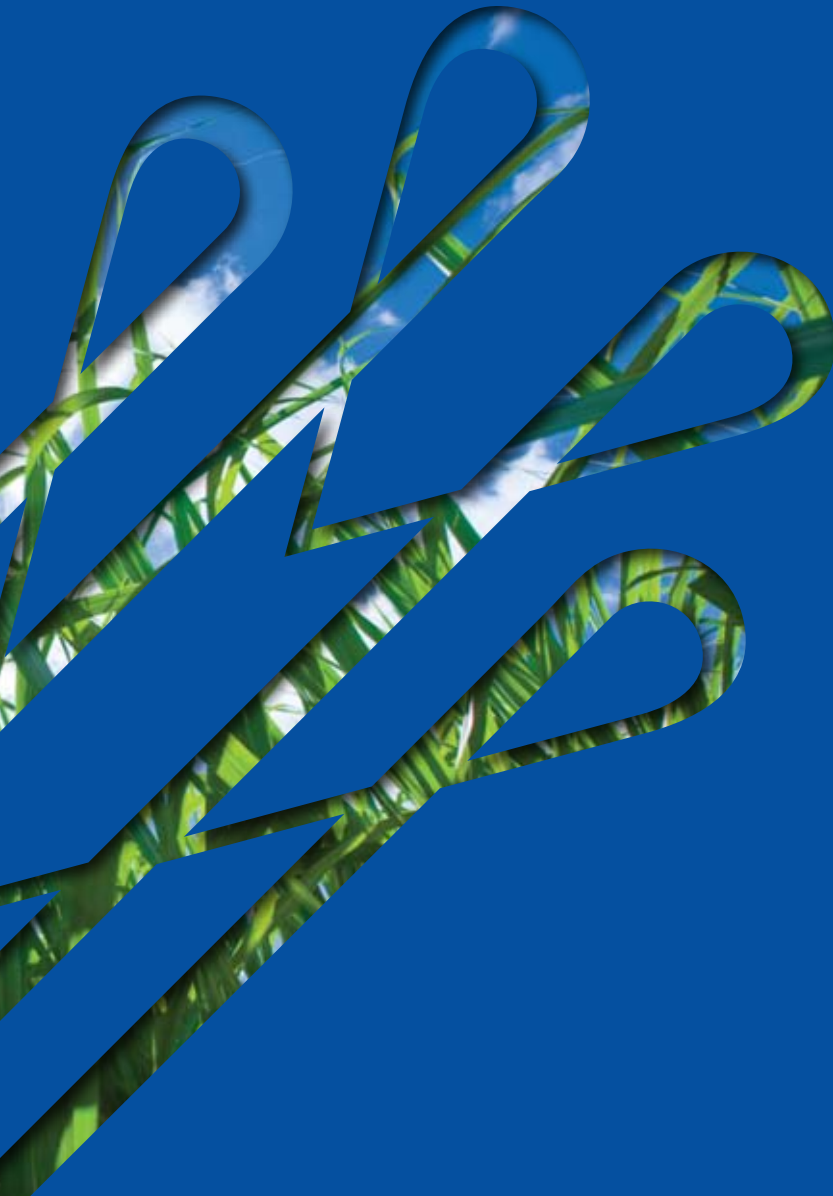
Sucrogen Ltd

Tully Sugar Ltd

Halcon Photography

In addition, the Milling Council would like to thank each of the individuals who agreed to be profiled for this year's Annual Review.





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