

The sugar milling industry is one of Australia's largest and most important rural industries.

- ◇ An innovative and diversified agricultural and regional manufacturing industry
- ◇ Third largest exporter of sugar after Brazil and Thailand with around \$1.5 billion in export earnings
- ◇ Employs 16,000 people with more than 300 apprentices in training
- ◇ Significant infrastructure investment across rural and regional communities
- ◇ Remains the lifeblood for many regional centres.

## Milling Companies & Mills



There are 24 sugar mills in Australia owned by eight companies. These mills produce raw sugar, which is either directly exported or refined in four Australian refineries. Around 80% of raw sugar is exported while most refined sugar is sold domestically. Approximately 95% of Australian sugar produced comes from Queensland with the balance from northern New South Wales.

While sugar and molasses are currently the primary products from sugarcane,

the industry is continually looking to diversification opportunities such as cogeneration of electricity supported by innovative research and development. Through the industry owned company Sugar Research Australia, the Australian sugar industry invests an average of \$24 million annually on research activities. This industry investment attracts more than \$6 million each year from the Federal Government as part of the Government's commitment to rural research and development corporations.

### Industry Snapshot for 2016

- ◇ 371,000 hectares harvested
- ◇ 4,400 growers
- ◇ 24 mills, owned by 8 separate milling companies
- ◇ 36.5 million tonnes sugarcane crushed
- ◇ 4.77 million tonnes of sugar produced
- ◇ Total industry revenue was \$2 billion

## Raw Sugar Milling

The processing of sugarcane generally occurs from May until December. After harvesting, cane is transported to the mill for processing. Sugarcane is perishable and needs to be processed as quickly as possible after cutting. The mills shred and crush the stalks to separate the juice from the fibre (bagasse). The juice is then filtered and heated, to remove water and impurities such as dirt. It is then heated again and cooled to form crystals which are dried and stored in bulk bins ready for shipping.



The milling process involves a variety of large, heavy-duty machinery, which requires a significant amount of maintenance during the non-crushing season.

In the order of \$300M to \$400M is invested annually by milling companies along the east coast of Queensland and northern New South Wales to have the 24 factories and associated cane transport infrastructure ready for each crushing season.



## Energy Efficiency

Sugar mills are self-sufficient in energy, burning the sugar processing by-product bagasse, (which is a renewable fuel) to generate electricity and steam for factory operations. In addition, more than half of the 1270 GWh total electricity generated



in 2015 is exported to the electricity grid reducing greenhouse gas emissions. The use of renewable bagasse for the production of 'green' energy reduces the nation's greenhouse gas emissions by over 1.5 million tonnes of carbon dioxide equivalent annually.

Some mills have made significant investment in cogeneration to increase the use of bagasse for generating electricity. In the past 5 years more than \$500m has been invested by mills to significantly increase their capacity to export electricity in Queensland and New South Wales.

### Industry products

- ◇ Raw sugar (refined into white, brown, golden syrup)
- ◇ Molasses (used for cattle feed)
- ◇ Bagasse (used to generate steam and electricity)
- ◇ Mill mud (organic fertiliser usually spread on farms)
- ◇ Mulch (for landscaping)

*Nothing is wasted*

## Cane & Sugar Transport



Cane railways are used to transport freshly harvested cane to the sugar mill for processing within 24 hours and generally sooner. Sugar mills that have cane railways are located in a 1530 km coastal strip from Childers in the south to Mossman in the north.

The cane railway track network and all rolling stock is owned, operated and maintained by sugar mill owners.

Mill-owned cane railway systems make a significant indirect contribution to state infrastructure by transporting up to 32 million tonnes of cane



in a year over a five to six month period. The operation goes on 24 hours a day and in most cases seven days a week during the crushing season. The cane railway network keeps the equivalent of 18,000-25,000 heavy trucks per day off the road each year.

After processing, raw sugar is transported to one of six bulk sugar terminals in Queensland for storage. Approximately 2.4 million tonnes of raw sugar (just over half the average annual production) can be stored at these terminals enabling the sale of raw sugar to be matched to market requirements.

## Australian Sugar Milling Council

The Australian Sugar Milling Council is the peak industry organisation for sugar milling in Australia. Member companies are Bundaberg Sugar Ltd, Isis Central Sugar Mill Company Limited, Mackay Sugar Limited, MSF Sugar Limited, Tully Sugar Limited and Wilmar Sugar Australia Limited.

We exist to drive a profitable and sustainable sugar industry through dynamic leadership, strong and effective advocacy and services that builds value for members and the broader industry.

Our shared vision is for a growth industry that is: competitive in the world market; diversified, using world class R&D; global leaders in sustainability; and built on dynamic and cooperative industry leadership.

### Australian Sugar Milling Council Pty Ltd

ACN 010 779 496 ABN 44 010779 496

Level 3/348 Edward Street, (GPO Box 945), Brisbane, Queensland AUSTRALIA 4001

T (07) 3231 5000 F (07) 3229 2113 E [asmc@asmc.com.au](mailto:asmc@asmc.com.au) W [www.asmc.com.au](http://www.asmc.com.au)