

Queensland: leading Australia's biorevolution

Our biofutures vision

The Queensland Government is building a **\$1 billion sustainable and export-oriented industrial biotechnology and bioproducts sector**. We are determined to attract industry leaders to Queensland to achieve this vision.

Your biofuel and biobased products business or investment can benefit from Queensland's mix of raw materials, location to international markets, expertise and business advantages.

The Queensland Government can accommodate your infrastructure and skill requirements and connect you with the right people.

Queensland is open for business – talk to us about investing.

International markets



Why Queensland?



Our people



Our ideas



Our infrastructure



Our suitable growing land - 20 million hectares



5 international airports



15 trading ports



10,000km of reliable freight rail network



Our world-class research institutions



Our subtropical climate



Our streamlined approval process



Our well-developed supply chains



We are the gateway to the Asia-Pacific, neighboured with some of the fastest growing economies in the world.

Our advanced sugarcane and forestry processing facilities including 21 raw sugar mills



Your opportunity

The Queensland Government is inviting interested parties from across the globe to inform us on options to establish a new or expanded bioindustry.

If you're a potential supplier of feedstock, commercial operator in the biorefinery supply chain, biorefinery investor, technology provider or a consumer of bioproducts, we want to hear from you.

Be part of Queensland's biorevolution.

Sustainable aviation fuel

Wide Bay Burnett region

Over the last decade, industries with a heavy reliance on fuels have been seeking alternative sources.

Target objectives established by the International Air Transport Association are driving measures to reduce greenhouse gas emissions. The recent request for proposal process undertaken jointly by Virgin Australia and Air New Zealand demonstrates the emerging demand for commercial supplies of sustainable aviation fuel.

There are numerous combinations of feedstocks, intermediates and conversion technologies which can yield biofuels.

In Queensland, the Wide Bay Burnett region is an attractive location for biorefining, which includes a sustainable aviation fuel product.

Advantages



Ample
feedstock



Largest population outside
South East Queensland
(growing population)



Close proximity to major resources
Bowen, Galilee and Surat Basins

First rate airports at Bundaberg
and Hervey Bay



Port of Bundaberg,
possible Bundaberg State
Development Area



National highway
and rail links

Biobased diesel

Mackay region

The demand for diesel in Queensland alone is ~6,900 ML/y. For example, consumption from the 28 mines operating in the Bowen Basin is estimated to be 0.9 PJ/y (930 ML/y).

Future diesel demand from Queensland's coastal region is characterised by automotive demand, demand from coal mines and possible US Navy 'Great Green Fleet' demand.

The Mackay region in Queensland provides a strong example of a competitive location for biofuel refining.

Advantages



State and nationally significant road
and rail networks link centres



One of Australia's
largest sugar and bio
commodity producers



Mackay Port



Home to the
Bowen Basin



Sub-tropical
climate with
warm winters
and hot summers



We are ready to work with you

We have developed [Queensland Biofutures 10-Year Roadmap and Action Plan](#) to show how we will capitalise on our competitive advantages and realise the opportunities for growth. It sets out a pathway to achieve our vision.

Funding of almost \$20 million over three years has been approved to implement the Road Map and Action Plan including:



\$5.7 million

for the establishment of Biofutures Queensland including the appointment of a Biofutures Industry Envoy and a jointly-funded Research Chair for Advanced Biofuels



\$5 million

Biofutures Industry Development Fund



\$5 million

Biofutures Commercialisation Fund



\$4 million

Biofutures Acceleration Program

Southern Oil's Advanced Biofuel Refinery

'The decision to co-locate the new pilot plant in Gladstone was made much easier with the **Queensland Government's biofutures commitment.**'

*Tim Rose,
Managing Director of
Southern Oil Refining.*

\$16 million

advanced biofuels pilot plant at Gladstone



Australia's first commercial-scale advanced biofuels production facility



The pilot plant is expected to be operational by late 2016



1M litres of fuel

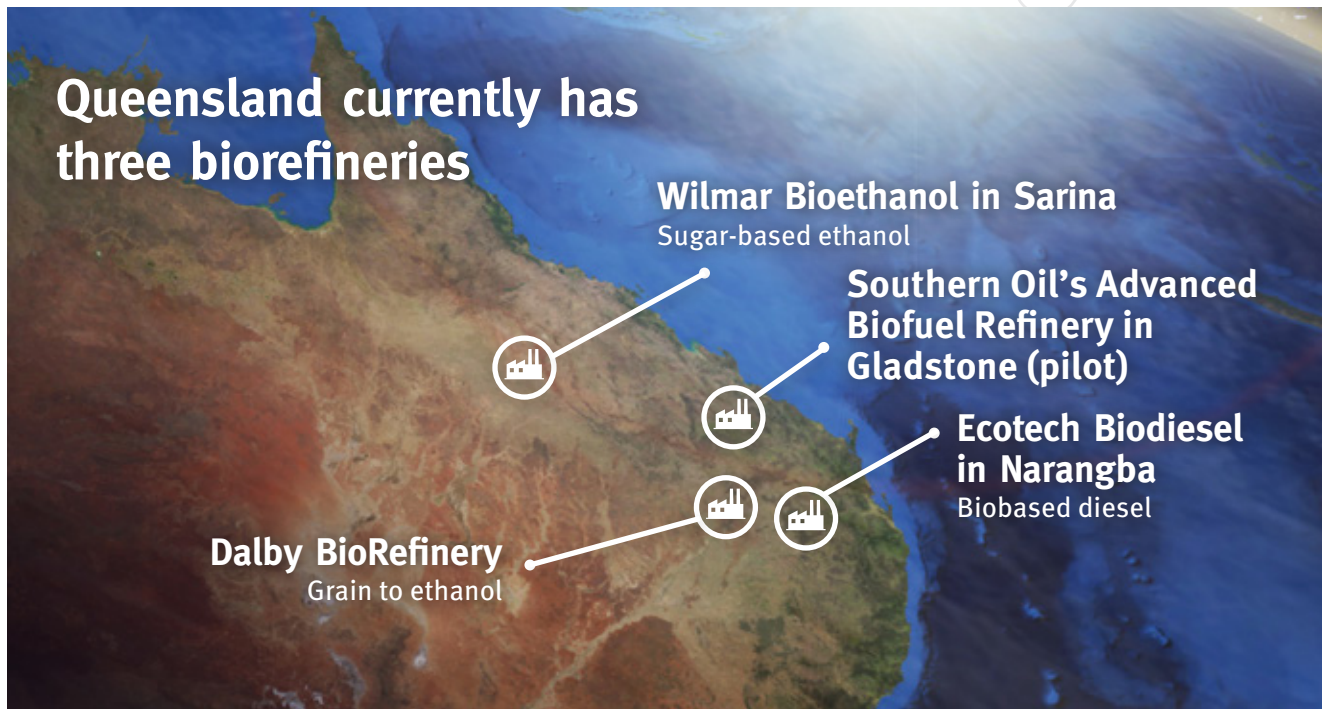
aimed to be produced within the next three years



US Navy Great Green Fleet is anticipated to require **1 million litres of fuel** for field trials

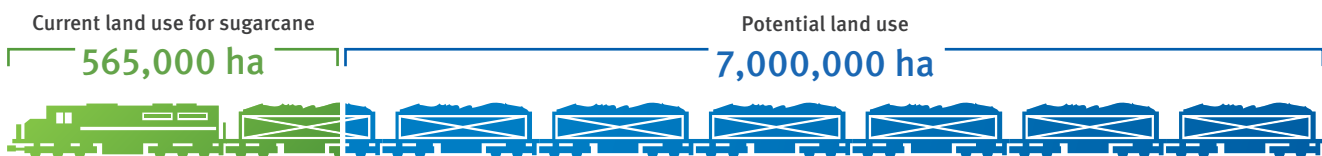
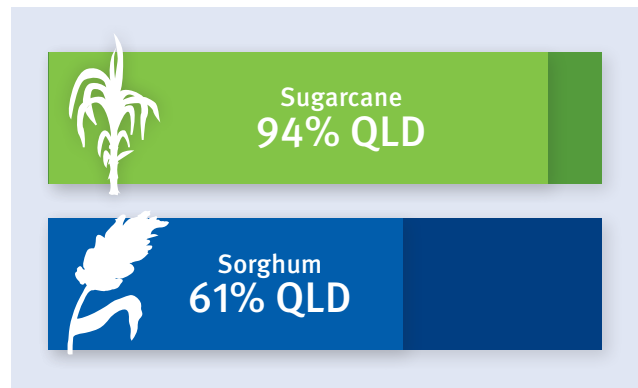


Queensland currently has three biorefineries



Feedstock facts

- Sugarcane is grown on 380,000 ha in Queensland producing up to **35 million tons** annually generating **\$2 billion** in export earnings.
- Much of the bagasse is currently used for electricity generation in mills.
- Queensland produces 60 per cent of Australia's sorghum crop worth \$250 million.
- Additional feedstocks include native grasses, crop stubble, eucalypts, acacia, mallee, cassava, agave, algae, pongamia and exotic pines.



The future

According to the World Economic Forum, the global biorefinery products market is expected to reach **\$US1 trillion by 2028**.

Queensland's biofuel mandate was designed to provide certainty to the biofuels sector to encourage investment and growth. It creates the foundation for a new **high-value, knowledge-based biofutures industry in Queensland**.



The Queensland Government is committed to attracting international investment and growing overseas trade. Its dedicated officers and agencies can assist with information and advice.

Queensland is Australia's pro-business state — the place to expand your business and undertake major projects. Let us help you develop your business case.

For more information, contact us at:

biofutures@dsd.qld.gov.au or
www.statedevelopment.qld.gov.au/biofutures