

A photograph of three carrots with green tops, resting on a rustic wooden surface. The carrots are of varying sizes and shapes, with some showing small root hairs. The image is partially enclosed by a green circular graphic on the right side.

## Advancing regional agri-food waste valorisation

### The challenge

Toowoomba city currently sends 16,600 tonnes of food waste and commercially collected organics to landfill per annum. This practice is detrimental to the environment and is significantly contributing to the overall cost of production for business. It also presents management challenges to receivers of the waste like Toowoomba Regional Council.

There is increasing interest in regional areas of Australia to investigate and transition to the processing of organic waste sourced from municipal waste and agro-industrial waste, including food waste. By processing this waste, it is diverted from landfill, and can be transformed into higher-value products, rather than be a cost to businesses and councils.

In the Toowoomba region, it is known that food and beverage producers generate significant quantities of waste during production and processing. While some organic waste such as manure is recycled back to land, the council sends food waste to landfill. However, there is currently no clear understanding of the quantity and quality of the waste going to landfill, which is first required to examine the commercial viability of diverting this waste to higher-value products.

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# Advancing regional agri-food waste valorisation



## Our plan

The Toowoomba region boasts a rich and diverse agricultural and food processing sector. The mapping of the region's agricultural and municipal organic waste will identify significant opportunities for industry to divert food waste from landfill and to encourage further recycling of agricultural organic waste from the region.

The target sectors for the mapping are municipal organic waste (via Toowoomba Regional Council) and the intensive livestock and related food processing industries.

The University of Southern Queensland will work with Toowoomba and Surat Basin Enterprise (TSBE) Food Leaders Australia and its members to identify business opportunities in the intensive agriculture, food processing and municipal waste industries in the Toowoomba region, review technologies available and gaps identified for processing the waste, and develop a strategy to increase the processing of municipal organics.

## Timeline

September 2020 - February 2022

## Participants



Case studies applying the application of learnings to candidate business owners for a business opportunity will also be applied to inform future detailed investigations and development.

The methodology developed for mapping the organic waste and opportunities within the region will be applicable to assist other regions to conduct similar studies.

Use of appropriate technologies to process surplus/waste produce into higher-value products can help to reduce the waste in this sector by at least 70%. This will not only mitigate the crop wastage but also saves resources utilised in the production and will reduce carbon footprint.

## Project Leader

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