

Our Research Partners

University of Southern Queensland is committed to performing research that is not only of academic relevance, but is engaging with industry and our stakeholders and contributing to innovation that benefits our communities and the nation. They focus on tackling challenges affecting agriculture, natural resource management, and people living and doing business in regional areas, and have demonstrated research capability and expertise to service industry needs in a number of areas.

Key research strengths relevant to our fight against food waste include:

Transformation of agro-industrial waste into renewable energy and biofertilisers

Led by [Professor Bernadette McCabe](#), the [Centre for Agricultural Engineering's](#) (CAE) Energy and Bioresource Recycling Research Program Team has extensive industry experience spanning a range of areas which provide circular solutions in food waste including: energy recovery from crop residues and municipal food waste using anaerobic digestion and gasification, biomethane potential testing and landfill organics diversion strategies including composting and food organics and garden organics (FOGO). The team has expertise in optimising the physicochemical properties of digestates, biochar and biosolids for the production of advanced biofertilisers and works with regulatory bodies in the development of guidelines and policy for safe land application.

Regional circular economy solutions

The [Rural Economies Centre of Excellence](#) led by [Associate Professor Ben Lyons](#) has research interests in building capacity, behavioural change and resourcing urban, regional and remote communities and industries for adoption of priority waste treatment and recycling technology.

Food waste valorisation

[Dr Polly Burey's](#) research group at the [Centre for Future Materials](#) has expertise in food process and product development, process energy optimisation, sensing technology for quantification of food components, analytical chemistry expertise and pharmacology knowledge. One of the core focuses of the team is technoeconomic modelling of simultaneous pathways for excess food to prevent waste which also incorporates life cycle analysis principles. The pathways are analysed for profitability or cost neutrality and minimisation of environmental impact. The team generally has a focus on horticultural produce but has also worked on livestock by-products from abattoirs.

www.fightfoodwastecrc.com.au



FIGHT FOOD WASTE
Cooperative Research Centre
REDUCE - TRANSFORM - ENGAGE



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