



FIGHT FOOD WASTE

Cooperative Research Centre

REDUCE - TRANSFORM - ENGAGE

A thriving, efficient and sustainable food industry is central to Australia's economy, regional job security and prosperity, yet 40% of all the food we produce goes to waste.

Food waste is costing Australia an estimated \$20 billion each and every year and is directly effecting Australia's food industry efficiency and reputation as a clean and green food producer.

Food waste is also a global issue with losses valued at \$1.6 trillion p.a. Much of the developed world is now committed to the United Nations Sustainable Development Goal 12.3: By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including postharvest losses.

In November 2017 Australia committed to this goal through the National Food Waste Strategy (NFWs). The best way of achieving this goal is through turning 'waste' in to a resource through adopting circular bio-economy principles.

To secure Australia's food future, the Fight Food Waste CRC will reduce

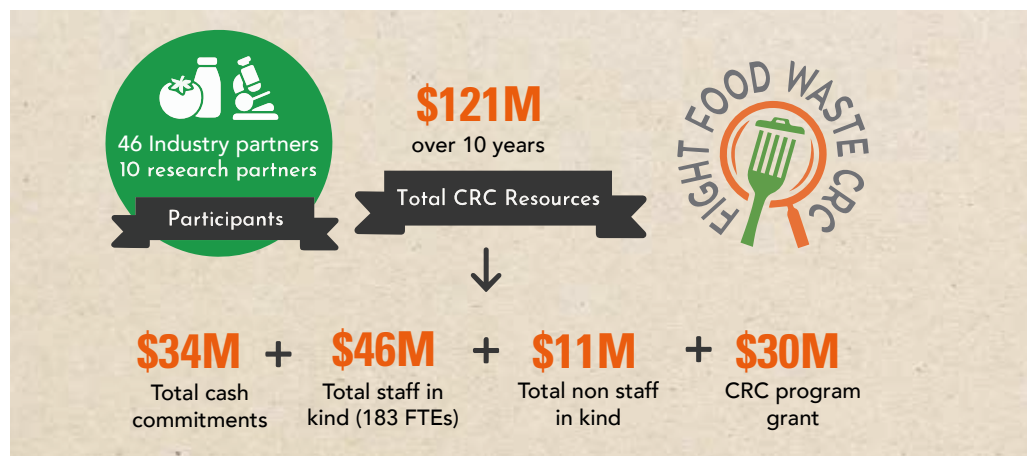
food waste throughout the supply chain, transform unavoidable waste into innovative high-value co-products and engage with industry and consumers to deliver behavioural change.

Winning this fight has a \$20 billion annual prize by increasing industry profitability, tackling food insecurity and enhancing Australia's reputation as a sustainable and trusted producer of premium food products.

Outcomes

The CRC and participants will deliver:

- » **New sources of revenue and market growth for food companies**
- » **Less wasted resources through the supply chain from grower through to consumer**
- » **Less waste ending up in landfill**
- » **More donated food to feed hungry Australians**



Value-chain food waste/losses in Australia: \$20 billion per annum



The CRC Program supports industry-led collaborations between industry, researchers and the community



Business
Cooperative Research
Centres Program

Activities

PROGRAM 1: REDUCE (Reducing Supply Chain Losses)

- » Map resource flows, waste and root cause analysis
- » Review functions and consumer perceptions of packaging and processing
- » Investigate product specific supply chains and identify opportunities
- » Investigate methods to increase food donation and measure its social impact

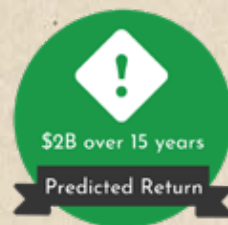
PROGRAM 2: TRANSFORM (Transforming Waste Resources)

- » Identify and prioritise valuable products from waste streams
- » Identify technology gaps and process limitations in waste transformation
- » Deliver tool kit for optimising technology and feedstock combination choice
- » Conduct socio-economic assessment of alternative policy settings

PROGRAM 3: ENGAGE (Education and Behavioural Change)

- » Educate future industry professionals
- » Disseminate industry and skills training
- » Develop household and business behaviour change instruments.

Impacts



- » **REDUCE:** More efficient supply chain management practice. Better understanding by the consumer of the role of packaging in reducing food waste. Longer shelf life for food products. Lower volumes of food wastage. Ability to access new markets for Australian food. Less packaging in landfill. Additional 20M kg pa of rescued food distributed. 2,600 welfare agencies supported. Reduction in number of hungry people turned away from welfare agencies. \$136M pa social return on investment. Reduce greenhouse gas emissions and landfill costs.
- » **TRANSFORM:** Innovative new food products from surplus food. Health benefits from bioactives and functional foods. At least 87 GL of water savings through recovery and reuse. At least 30M tonnes in reduced food waste. 5,200 jobs (direct and indirect), most in rural areas. \$600M reduction of waste produce and waste handling costs. A saving of at least 44M tonnes of greenhouse gases emitted over 10 years.
- » **ENGAGE:** Future industry professionals, including at least 30 PhD and 12 Masters graduates in a rapidly growing field. New industry training packages and tools. Upskill industry through an extensive extension network involving many peak industry associations and institutes. Unite existing household and business food waste behaviour change activities in Australia while learning from the best -WRAP (UK)- who have saved UK consumers at least £13 billion.

The Delivery Team

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- » **A/Prof Karli Verghese** REDUCE Program Leader (karli.verghese@rmit.edu.au)
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- » **Prof David Pearson** ENGAGE Program Leader (d.h.pearson@cqu.edu.au)
- » **Dr Valeria Torok** Food Safety & Integrity Theme Leader (valeria.torok@sa.gov.au)

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Fight Food Waste CRC Participants

1. Abalone Association of Australasia
2. Abalone Council of Australia Ltd
3. Australian Council of Prawn Fisheries
4. Australian Country Choice Production
5. Australian Food & Grocery Council
6. Australian Institute of Food Science & Technology
7. Australian Institute of Packaging
8. Australian Organics Recycling Association
9. Australian Packaging & Processing Machinery Association
10. Australian Food Cold Chain Council
11. Bowen Gumlu Growers Association
12. Central Coast Industry Connect
13. Central Queensland University
14. Chameleon Asset Protection
15. ChemCentre
16. Curtin University
17. East Gippsland Food Cluster
18. Empauer
19. Entopia Biotechnologies
20. FAVCO/Green Valley
21. Fisheries Research & Development Corporation
22. Food Innovation Australia Limited
23. Food South Australia
24. Foodbank Australia
25. Green Industries SA
26. Gretals Australia
27. Honey and Fox
28. KPMG
29. Mitolo Group
30. NSW Environmental Protection Agency
31. OzHarvest
32. Pacific Coast Produce
33. Peats Soils and Garden Supplies
34. Piper Alderman
35. Planet Protector Packaging
36. Potatoes South Australia
37. Primary Industries & Regions South Australia
38. Queensland Department of Agriculture and Fisheries
39. Queensland University of Technology
40. Queensland Urban Utilities
41. Regional Development Australia Murraylands & Riverland
42. RMIT University
43. SA Potato Company
44. Sampano
45. Sustainability Victoria
46. Swinburne University
47. Swisse Wellness
48. T-Provenance
49. Thomas Foods International Fresh Produce
50. University of Adelaide
51. University of Queensland
52. University of Southern Queensland
53. Waste & Resource Action Programme (UK)
54. Whitsunday Regional Council
55. Woolworths Group
56. Zerella Fresh