2021 - 2028 Investment Framework

FIGHT FOOD WASTE
Cooperative Research Centre
REDUCE - TRANSFORM - ENGAGE

Australian Government
Department of Industry, Innovation and Science

Business
Cooperative Research Centres Program

The Fight Food Waste Cooperative Research Centre gratefully acknowledges the Australian Government's Cooperative Research Centre Program financial contribution as well as the participants of this project.

This document should be cited as Fight Food Waste CRC (2021) *2021-2028 Investment Framework*. Fight Food Waste Cooperative Research Centre, Adelaide, Australia.

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Introduction

The $120 million 10-year Fight Food Waste Cooperative Research Centre (CRC) commenced on 1 July 2018. Our vision is an Australia without food waste. To achieve this, we will ENGAGE with industry and consumers to REDUCE food waste across the supply chain and to TRANSFORM unavoidable waste into innovative products.

The purpose of the Fight Food Waste CRC is to reduce food waste, increase industry profitability and enhance food rescue to deliver economic, social and environmental benefits for Australia.

The strategic objectives of the Fight Food Waste CRC are to deliver:

- a transformation in the way Australian industry and consumers view food waste as well as contribute to food rescue;
- a suite of new tools and technologies for extracting the maximum value out of primary production, food manufacturing, supply chains and product sales, whether through supply chain innovation or waste transformation;
- reduction in food waste entering landfill and associated greenhouse gas emissions; and
- future industry professionals skilled in capturing opportunities identified by industry.

As outlined in the *2018-2028 Strategic Plan,* and summarised in our strategy on a page (next page), the Fight Food Waste CRC aims to deliver on its strategic objectives through two key mechanisms:
(1) Deliver the Grant Agreement, and
(2) Deliver Future Initiatives.

The purpose of this investment plan is to provide a clear framework in regard to the types of projects that the Fight Food Waste CRC will co-invest in to ensure that the organisation delivers maximum impact in relation to our key performance indicators. This is required to ensure that the Fight Food Waste CRC not only meets its Department of Industry, Science, Energy & Resources (DISER) Grant Agreement obligations but exceeds them.

As depicted below, the *2018-2028 Investment Framework* builds on our comprehensive *2018-2028 Strategic Plan*, which captures the contractual requirements of the DISER Grant Agreement between the Australian Government and Fight Food Waste Limited, the Limited by Guarantee company established to manage the Fight Food Waste CRC. The DISER Grant Agreement, executed in August 2018, was based on the Fight Food Waste CRC Full Business Case that was submitted in December 2017.

Full Business Case › **DISER Grant Agreement** › **2018-28 Stategic Plan** › **2021-28 Investment Framework** › **2018-33 Impact Model** › **Annual Operational Plans**

2018 – 2028 Strategy

An Australia without food waste

The Fight Food Waste Cooperative Research Centre will increase industry profitability, address food insecurity and enhance Australia's reputation as a sustainable food producer

By uniting science and industry we will

REDUCE food waste throughout the supply chain

TRANSFORM unavoidable waste into innovative products

ENGAGE with industry and consumers to deliver behavioural change

2018 → **2028**

Baseline

1/3
of all food produced

$20 Bn p.a.
in Australia

7.3 M T
food waste p.a.

298kg
per Australian per year

13.5 M T
of CO2-e

4 M people food insecure

Deliver the Grant Agreement
We will first establish our initial 30-project research, development and extension program based on the best science and expertise with our existing participants. We will then develop and deliver new projects with existing and newparticipants that ensures we effectively deliver on all Grant Agreement performance milestones.

Deliver Future Initiatives
We will identify and target additional food loss and waste opportunities based on the National Food Waste Baseline and other key reports that will deliver significant food waste reduction and industry benefits to help achieve SDG 12.3. Additionally, we will scope and potentially develop a 10-year national behaviour change program that targets the entire food system, particularly consumers, with the Australian and state and territory governments and industry that reduces and prevents food waste from entering landfill.

Grant Agreement targets

30 M T
of reduced food waste

$2 B
Increase in industry profitability

20 M Kg
of rescued food distributed

5200
circular economy jobs

40
Future Leaders graduated

250 industry people trained p.a.

Our Core Values

Collaboration
We will be greater than the sum of our parts

Innovation
Real impact on food waste reduction and commercial outcomes from the CRC activity

Participant Value Creation
Our participants get more than they expected from being part of the FFW CRC

Our People
To be a workplace of choice for for our salaried and in-kind staff

Excellence
To deliver the best that we can for our participants

Accountability
We stand behind our people and our work

FIGHT FOOD WASTE Cooperative Research Centre
REDUCE - TRANSFORM - ENGAGE

SUSTAINABLE DEVELOPMENT GOALS

Australian Government Department of Industry, Innovation and Science | Business Cooperative Research Centres Program

Current investment strategy

As of January 2021, funding for the Fight Food Waste CRC consists of $34.3 million in cash, $44.4 million in staff in-kind (178 FTE's) and $11.3 million in non-staff in-kind from participants, matched by $30 million in CRC Program cash funding from the DISER. Cash resources are therefore $64.3 million over 10 years, with indicative expenditure shown below. Current estimates are subject to change over time based on a range of variables, such as actual contributions received from participants and the CRC Program, as well as final project and administration expense levels.

Currently 94% of cash resources are allocated to delivering the Grant Agreement. The Grant Agreement involves 57 performance milestones that have been outlined in the *2018-2028 Strategic Plan*. Our initial 3-4 year research portfolio of 43 projects will address all or part of 40 of 57 milestones.

New projects will need to be identified to address the remaining milestones (see Under-addressed Grant Milestones) that will utilise existing forward industry contributions and tied CRC leverage.

It is important to note that the initial research portfolio was the basis of the Full Business Case and in turn the Grant Agreement, and delivering on the Grant Agreement will always take precedence over funding future initiatives.

All project funding involves providing matching leverage for industry participant contributions (including state and territory government participants) to undertake research, development, education, extension and commercialisation activities with one or more of the Fight Food Waste CRC's eight university or three state government research providers.

	Deliver the Grant Agreement	Current funding Future Initiatives	Total CRC
REDUCE	$14,663,723		$14,663,723
TRANSFORM	$21,603,330		$21,603,330
ENGAGE	$9,843,915		$9,843,915
Operational costs	$14,147,446		$14,147,446
Untied funds*	$1,687,818	$2,330,028	$4,017,846
TOTAL	**$61,946,233**	**$2,330,028**	**$64,276,260**

*Estimate subject to change over time based on a range of variables such as actual contribution and expense levels and whether grant funds need to be utilised in order to meet expected research organisation returns. Amount allocated to 'delivering the grant agreement' relates to leverage promised to original sponsors who have withdrawn (net of those who have joined). Balance allocated to 'future initiatives'.

Deliver the Grant Agreement

Match existing industry participant contributions to projects. Development of projects that fully utilise the existing participant commitments (+ CRC matching where applicable), deliver on the Grant Agreement & original business case.

Deliver Future Initiatives

Use untied funds to attract new industry participant funding. Investment strategy to be developed following Strategic Plan, Impact Model and Gap Analysis. Aim to grow the Fight Food Waste CRC's industry cash contributions by 5% per annum to deliver future initiatives.

Due largely to our intention of keeping operational costs to an average of 20% or less as a percentage of income over our 10 year life, compared to the long-term average for CRC's of 30% central expenditure spend, the Fight Food Waste CRC has up to $4 million in untied funds to deliver REDUCE, TRANSFORM and ENGAGE future initiatives that will accelerate food waste reduction in Australia and maximise our chance of achieving SDG 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 post-harvest losses.

In undertaking these future initiatives to help achieve its impact targets, the Fight Food Waste CRC aims to increase participant cash contributions from existing and new members by 5% per annum to firstly replace funding lost due to participant withdrawals during year one, and secondly to co-fund future initiatives.

The Fight Food Waste CRC is also committed to monitoring its impact and meeting accumulative targets set out in its original business case across seven key impact areas.

As depicted on the strategy on a page, all Fight Food Waste CRC projects, irrespective of whether they are part of the initial research portfolio or a future initiative, must also address one or more of these seven key impacts that will be monitored to determine the overall long-term impact of the organisation.

An impact model has been created that involves each impact that every Fight Food Waste CRC project will feed in to. Baseline data and predicted impacts have been collected for each Fight Food Waste CRC project as they have gone through the project approval process. Actual impacts of each project will be monitored annually throughout the duration of the project and for five years after the project is completed.

30 MT
of reduced food waste

$2B
increase in industry profitability

20 M Kg
of rescued food distributed

5200
circular economy jobs

40
future leaders graduated

250
industry people trained p.a

44 MT
CO2-eq Greenhouse gas emission savings

Principles of future investment

As described in the *2018-2028 Strategic Plan*, Deliver Future Initiatives refers to:

We will identify and target additional food loss and waste opportunities based on the National Food Waste Baseline and other key reports that will deliver significant food waste reduction and industry benefits to help achieve SDG 12.3. Additionally, we will scope and potentially develop a 10-year national behaviour change program that targets the entire food system, particularly consumers, with the national, state and territory governments and industry that reduces and prevents food waste from entering landfill.

With future initiatives, the Fight Food Waste CRC is looking to fund high-quality and high-impact industry-led research, development, education, extension and commercialisation projects that involve:

1. extensive collaboration and include multiple, multi-disciplinary research providers and industry partners
2. whole sectors and/or value chains to maximise the impact of projects
3. working across the three Fight Food Waste CRC Programs – REDUCE, TRANSFORM, ENGAGE
4. multi-years in duration
5. targeted, leading edge PhD and Masters research
6. the potential to collaborate with other rural Research & Development Corporations (RDCs), CRCs, and the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All projects must address one or more of our 11 areas of activity detailed below:

Program 1 REDUCE: reducing supply chain losses
Activity 1.1 Map resource flows, waste and root cause analysis
Activity 1.2 Review functions and consumer perceptions of packaging and processing
Activity 1.3 Investigate product specific supply chains and identify opportunities
Activity 1.4 Investigate methods to increase food donation and measure its social impact.

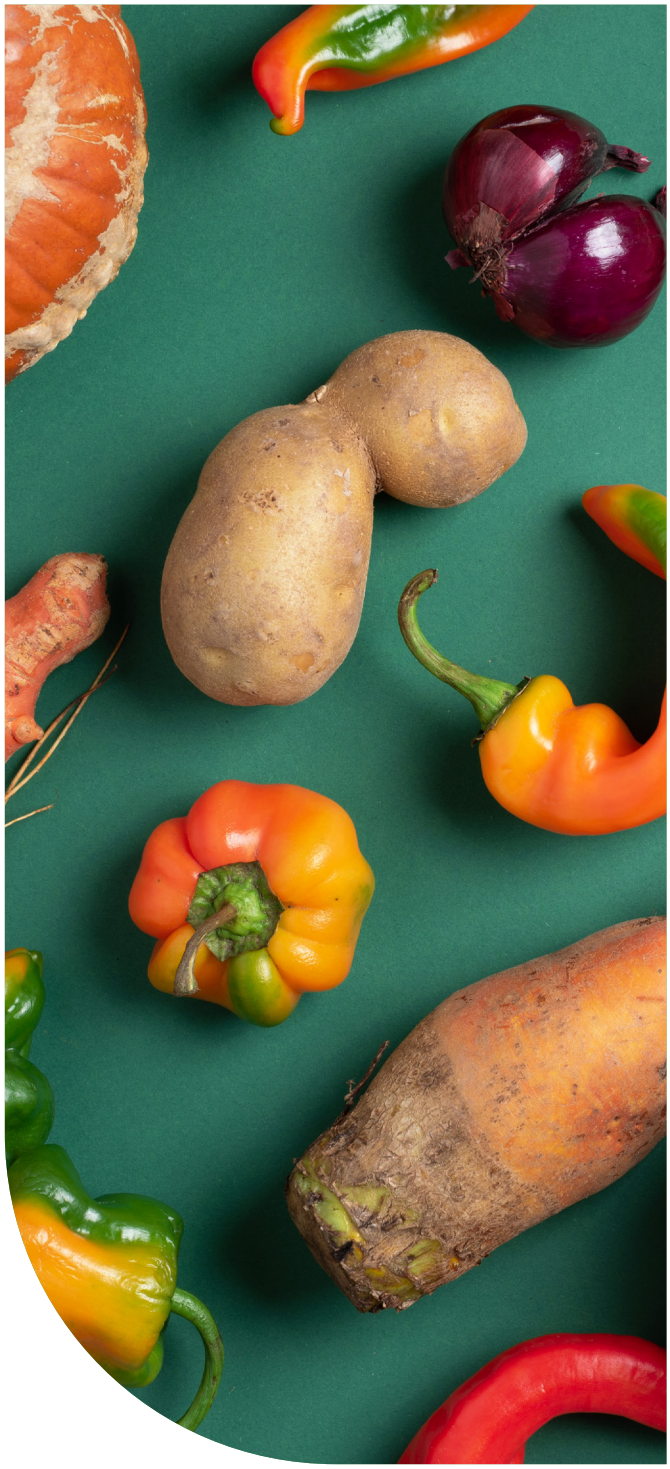
Program 2 TRANSFORM: transforming waste resources
Activity 2.1 Identify and prioritise valuable products from waste streams
Activity 2.2 Identify technology gaps and process limitations in waste transformation
Activity 2.3 Deliver tool kit for optimising technology and feedstock combination choice
Activity 2.4 Conduct socio-economic assessment of alternative policy settings.

Program 3 ENGAGE: education and behavioural change
Activity 3.1 Educate future industry professionals
Activity 3.2 Disseminate industry and skills training
Activity 3.3 Develop household and business behaviour change instruments.

As highlighted earlier, all projects must involve at least one industry or state government (where they are not the research provider) funding participant and a research provider from our eight university or three state government research providers.

The internal funding arrangements within the Fight Food Waste CRC are that industry/non-research provider state government cash (not in-kind) contributions will be leveraged dollar for dollar with CRC Program funding and contracted to the industry-participant chosen research provider/s to undertake research projects. University contributions are to be used to fund operational costs. As such, operational costs are not funded by industry contributions and no central overheads are applied to research projects.

The one exception to this principle is for the state government research providers, Primary Industries and Regions South Australia (acting through the South Australian Research and Development Institute), the Queensland Department of Agriculture and Fisheries, and ChemCentre, Western Australia, to co-invest part of their significant annual cash contributions in research projects that will provide industry economic development outcomes for their respective states.



Fight Food Waste CRC funding arrangements by participant type are detailed on the following pages.

Participant Category	Cash Contribution	Investment of Cash Contribution	Matching by CRC?	Returns to Participant
Industry/End User (incl association, government non-research providers & NFP's)	Ranging from $20K - $3M per participant	> 100% into projects of choosing, ideally alongside other industry/end user participant contributors. > Funding will typically flow to research participants but on occasion it may be appropriate for industry/end user participants to receive project funding to undertake research	> Yes, CRC matches industry/end user cash contributions apart from those from federal government agencies	> Leveraged research (min 2x cash + in kind) > Access to broad research network > 1st right to submit IP utilisation plan + non-commercial use > IP ownership share and right to commercialisation returns based on cash and in-kind contributions > R&D tax incentive (for profit sponsors)
SME participating in SME Solutions Centre projects	Ranging from $25K-$50K per participant	> 100% into a commercially focussed project up to 1 year in duration with research to be conducted by one or more of the CRC's research participants	> Yes, CRC matches SME's cash contributions utilising funding provided for this program by Food Innovation Australia Ltd	> Leveraged research (2x cash + in kind) > Access to broad research network > 100% IP ownership (subject to being able to commercialise within agreed period) > R&D tax incentive (for profit sponsors)
Gov't Research Provider: QDAF (QLD)	$4.3M	> ~ $1.4M over life of CRC to fund business development > Balance to research projects involving QDAF provided that each project includes a minimum cash contribution from industry/end user participants that is 50% of the QDAF cash contribution to that project. > No prescribed minimum return to QDAF on a project by project basis, each project is for negotiation, priority is to assemble best research solution and team possible across the research participants. Monitor overall QDAF returns at the portfolio level, target is a minimum $2:$1 cash return.	> No, CRC matches the industry/end user cash contribution only > Therefore (at a minimum) each project has a cash funding ratio of 1:1:2 (industry, CRC, QDAF) but ideally with higher industry and CRC where possible	> R&D funding > IP ownership share and right to commercialisation returns based on cash and in-kind contributions > Default right to utilise IP for non-commercial purposes > Business development package ~$1.4M

Participant Category	Cash Contribution	Investment of Cash Contribution	Matching by CRC?	Returns to Participant
Gov't Research Provider: SARDI (SA)	$3.5M (+$1M from PRIF grant)	> ~$1.2M over life of CRC to fund business development > Balance to research projects involving SARDI provided that each project includes a minimum cash contribution from industry/end user participants that is 50% of the SARDI cash contribution to that project. > No prescribed minimum return to SARDI on a project by project basis, each project is for negotiation, priority is to assemble best research solution and team possible across the research participants. Monitor SARDI returns at the portfolio level, target is a minimum $2:$1 cash return.	> No, CRC matches the industry/end user cash contribution only > Therefore (at a minimum) each project has a cash funding ratio of 1:1:1 (industry, CRC, SARDI) but ideally with higher industry and CRC components where possible.	> R&D funding > IP ownership share and right to commercialisation returns based on cash and in-kind contributions > Default right to utilise IP for non-commercial purposes > Business development package $1.2M > Postgrad top-up scholarships $400K (to be placed at participant universities) > Share of ~20% overhead on external revenue (through UA partnership arrangements)
Gov't Research Provider: ChemCentre (WA)	$990K	> 100% into projects involving ChemCentre, no minimum cash contribution from industry/end user participants although this is highly desirable. > 100% of project expenditure expected to flow to ChemCentre	> Yes, CRC matches ChemCentre cash contribution, which includes a project-dependent industry funding component, and any additional applicable industry/end user contributions > Therefore (at a minimum) each project has a cash funding ratio of 1:1 (CRC, ChemCentre) but ideally with some additional industry component where possible	> R&D funding > 1st right to submit utilisation plan + non-commercial use > IP ownership share and right to commercialisation returns based on cash and in-kind contributions

Participant Category	Cash Contribution	Investment of Cash Contribution	Matching by CRC?	Returns to Participant
University – Large: CQU, RMIT, UA, UQ	$2M each	> 100% applied towards CRC operational expenditure which is budgeted to be no more than 20% of overall expenditure over 10 years > Universities are expected to receive most of the direct research funding within the CRC on a competitive basis. > No prescribed minimum return to Universities on a project by project basis, each project is for negotiation, priority is to assemble best research solution and team possible across the research participants. Monitor overall University returns at the portfolio level, agreed target is a minimum $2:$1 cash return, with higher expectations desired by most universities.	> No CRC matching on University contributions > All projects must include an industry/end user	> R&D funding > IP ownership share and right to commercialisation returns based on in kind contributions (not on cash contributions) > Default right to utilise IP for non-commercial purposes > Program support package $1.5M per Uni > Postgrad top-up scholarships $600K per Uni > ~20% overhead on external revenue via Research Block Grants
University – Small: Curtin, QUT, USQ, Swinburne	Ranging from $500K-$1M	> 100% applied towards CRC operational expenditure which is budgeted to be no more than 20% of overall expenditure over 10 years > Universities are expected to receive most of the direct research funding within the CRC on a competitive basis. > No prescribed minimum return to Universities on a project by project basis, each project is for negotiation, priority is to assemble best research solution and team possible across the research participants. Monitor University returns at the portfolio level, agreed target is a minimum $2:$1 cash return, with higher expectations desired by most universities.	> No CRC matching on University contributions > All projects must include an industry/end user	> R&D funding > IP ownership share and right to commercialisation returns based on in kind contributions (not on cash contributions) > Default right to utilise IP for non-commercial purposes > Postgrad top-up scholarships $250K per Uni > ~20% overhead on external revenue via Research Block Grants

Food waste definition

As not all food waste projects will contribute to the Fight Food Waste CRC performance milestones, the *National Food Waste Strategy (2017)* or Australia's UN SDG 12.3 target of halving food waste by 2030, not all food waste projects can be funded. Four questions will be asked as to whether a proposal is in scope:

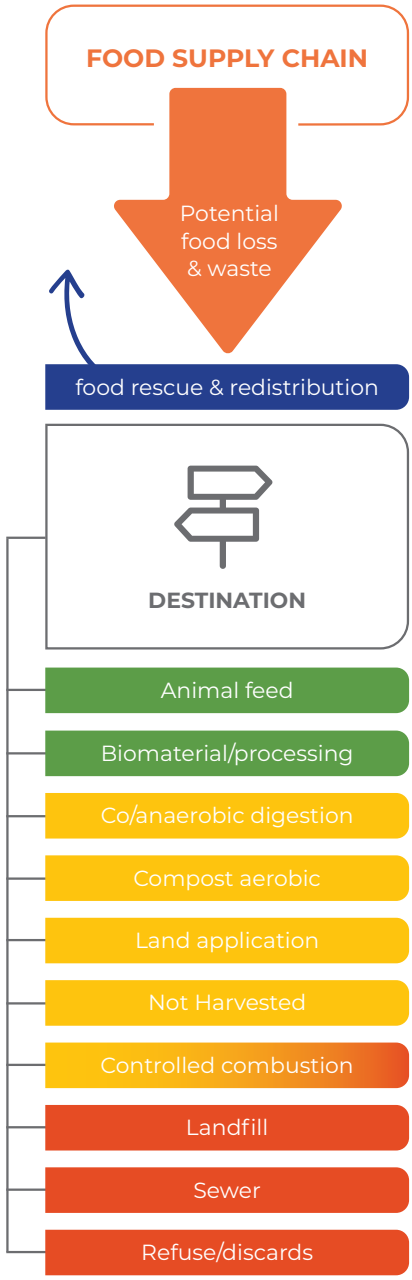
1. Does it fit with the food waste definition adopted by the Fight Food Waste CRC? (Based on the definition by the Food and Agriculture Organisation of the United Nations):
"The decrease in quantity or quality of food along the food supply chain that was intended for human consumption". As such, food not intended for human consumption based on an Australian cultural context, such as abalone shells or chicken feet, will be out of scope.

2. Is the food waste included in the National Food Waste Baseline report?
The original *National Food Waste Baseline* study was delivered by Arcadis in 2019. A revised baseline will be delivered as part of the National Food Waste Strategy Feasibility Study in 2021. Ideally all projects funded by the CRC should directly contribute to reducing the 7.3 million tonnes of food waste identified in the 2019 report. It should be noted that while inedible food parts are included in Australia's food waste definition, this is currently being questioned as part of the Feasibility Study, and has recently been changed overseas by some countries.

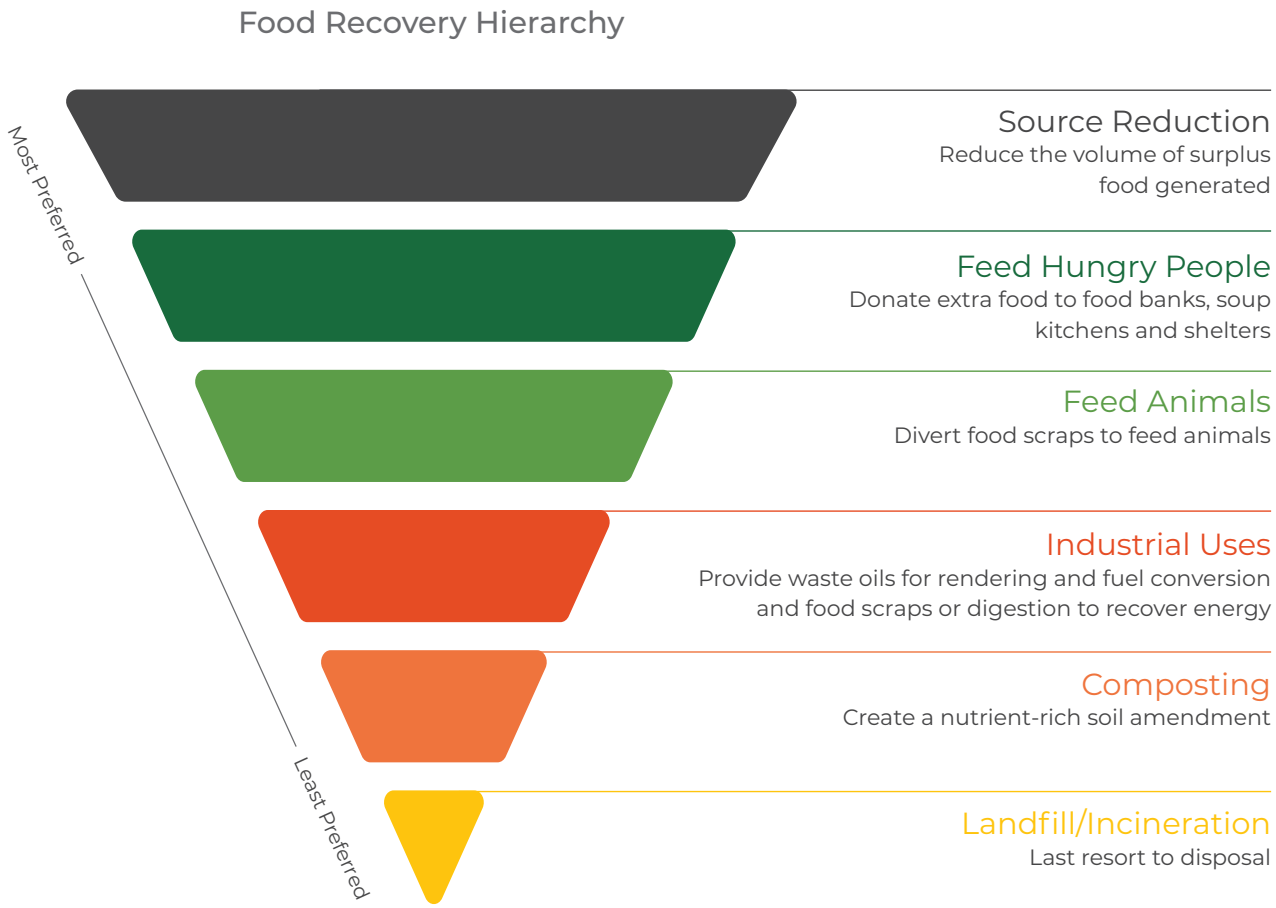
3. Will the project outcome contribute to meeting SDG Target 12.3?
As reported by Champions 12.3 (2019) in *Guidance on interpreting SDG Target 12.3* (depicted to the right), and in our *2018-2028 Strategic Plan* (pg 27), only three food waste destinations contribute towards the global goal of halving food waste by 2030:

1. Prevention and redistribution to people
2. Animal feed
3. Biomaterial/processing.

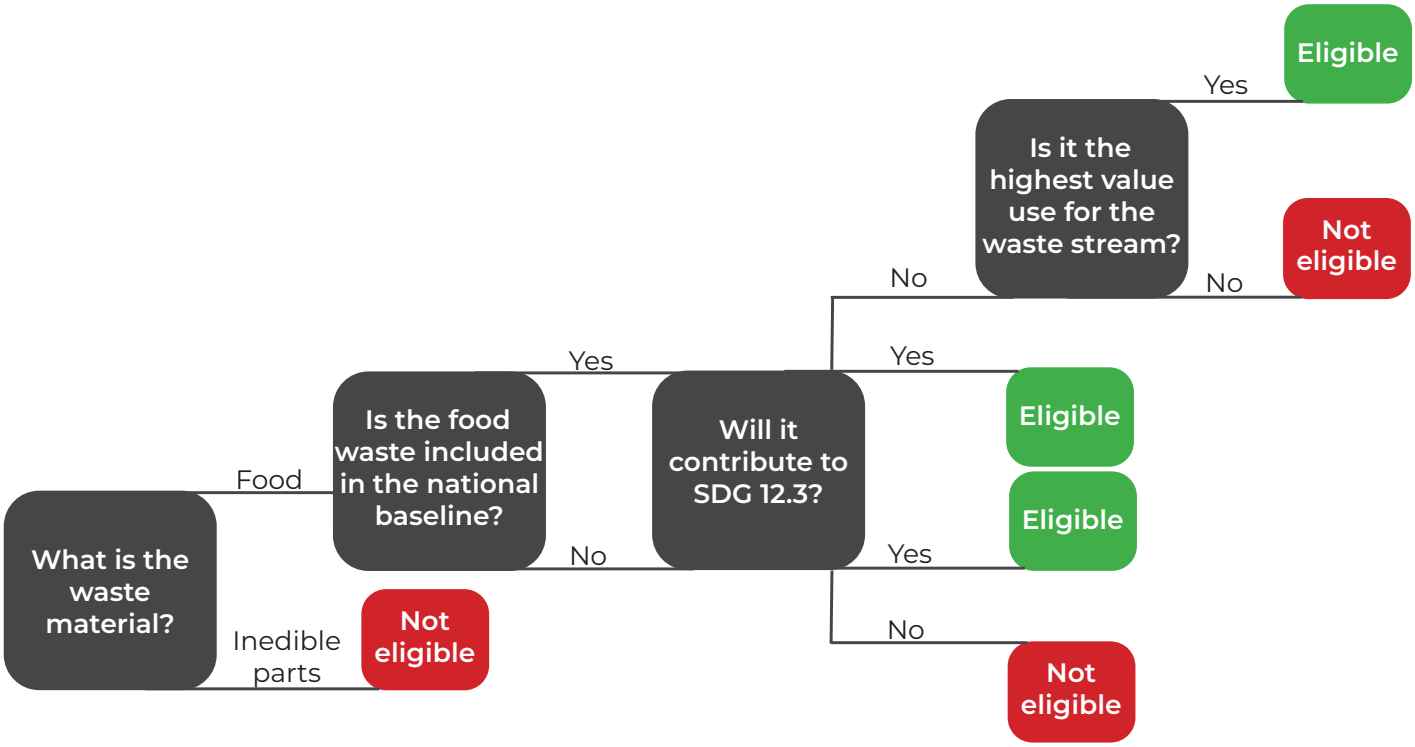
As such, they will remain the highest priority for future Fight Food Waste CRC investment. This does not exclude funding additional anaerobic digestion or composting projects, however to be considered they will need to significantly deliver against other CRC impact targets.



4. Is it the highest value use for the waste stream?
As outlined on page 26 of our *2018-2028 Strategic Plan*, the food recovery hierarchy has been used to guide the initial development of the original business case for the Fight Food Waste CRC as well as the initial research portfolio. The hierarchy will continue to be used to address the question "Is what's proposed the highest value use for the waste stream?". This approach acknowledges that avoiding food waste in the first place through source reduction must always come first.



This decision tree can be used to help determine whether a food waste feedstock or destination will contribute to Australia's target of halving food waste by 2030, and therefore whether the project is in scope.



Future Initiative projects

Untied funding will be applied against future initiatives that will deliver the greatest return on investment in regard to the above criteria which are summarised below:

1. involve whole of sector, large-scale approaches to increase impact
2. address one or more of our 11 areas of activity
3. target under-addressed Grant Agreement milestones
4. deliver against one or more of our seven impact areas
5. involve edible food benchmarked in the *National Food Waste Baseline* or has the potential to contribute to achieving SDG 12.3
6. represents world-class research and development
7. adheres to our funding/leverage principles as outlined in this document.

As a guide, new projects should involve minimum industry contributions (can be from more than one company) of $50,000 cash per annum and run for 2-3 years ($200k-$300k cash including leverage plus in-kind). Ideally though, future initiatives should be larger and involve additional participants and co-investment.

It is acknowledged that existing participant contributions to new projects or new participant contributions to existing projects may be less.

Under-addressed Grant Agreement milestones

As of January 2021, the following Grant Agreement milestones are currently under addressed by the initial research portfolio and will require the development of additional Fight Food Waste CRC projects in years four to ten of the CRC to address them.

The Fight Food Waste CRC Program Leaders look forward to working with existing and new participants to address these milestones.

REDUCE

RP1.5	Pilots, data systems, model and benchmarking metrics reviewed and evaluated. Outcomes embedded into at least 20 additional organisations. Benchmarks released.
RP1.6	Data models and metrics modified and enhanced based upon feedback and pilot reviews; Sector benchmark metrics released. Data modelling expanded into new sectors/supply chains.
RP1.7	A robust data collection system, benchmark metrics and resource efficiency models delivered.
RP1.13	Continuation of assembling and sharing industry case studies; Guidelines embedded into NPD processes; Consumer perceptions database built upon.
RP1.14	Updated consolidated packaging design guidelines and frameworks delivered; Industry case studies & consumer database expanded.
RP1.17	Whole of supply chain pilot testing undertaken and monitored with new packaging and processing options for each targeted product.
RP1.18	LCA assessment of identified alternatives / modifications undertaken and compared against existing product-packaging systems and supply chains.
RP1.19	Performance testing undertaken; Cost benefit/logistical/feasibility assessment of scale-up and implementation completed; Stakeholders and end-users/consumers consulted
RP1.20	Review of the product-packaging pilots, assessments, performance testing, and stakeholder engagement. Finalise and deliver the product-packaging solutions for the identified products.

ENGAGE

ENGAGE milestones will be well addressed by existing projects, many of which will likely run the full term of the Fight Food Waste CRC. Notwithstanding, the program will require at least 30 high-quality industry-focussed PhD projects and 12 Masters by Research projects. All industry participants have the opportunity to factor in Masters and PhD projects into their projects and we would encourage them to do so.

In many instances this will attract additional core CRC funding to a project. Fight Food Waste CRC scholarships are $100,000 over 4 years for PhD's and $50,000 over 2 years for Masters by Research. PhD scholarships require a base scholarship from the host university through the Research Training Program or through project funding equivalent to the CRC scholarship.

TRANSFORM	
RP2.3	Further waste streams relevant to partner organisations surveyed for both known and novel products. Further market opportunities and food safety hazards identified and reviewed. Intellectual property for new product solutions registered.
RP2.6	Future product roadmap developed.
RP2.9	Further full scale review of new technology gaps across all project partners conducted and technology needs identified. New conceptual solutions for modular technologies developed and proof of concept testing completed. Intellectual property for new product solutions registered.
RP2.11	Iterative proof of concept testing for new solutions completed. Intellectual property for new product solutions registered.
RP2.12	Future technology roadmap delivered.
RP2.16	Updated data set on waste composition and volumes and product markets relevant to partner organisations compiled; Sector focussed state-of-the-art technology review completed; Process models for state-of-the-art technology delivered.
RP2.17	Models of optimal feed/technology combinations delivered for selected regions relevant to partner organisations; Protocols delivered for consistent techno-economic analysis.
RP2.18	Updated data set on waste and product markets relevant to partner organisations delivered; Sector focussed state-of-the-art technology review updated. Models of optimal feed/product/ technology combinations delivered for large-scale integrated market opportunities.
RP2.19	Methodology toolkit for optimising the combination of feedstocks and technologies delivered.
RP2.20	Initial review of existing policy and legislation in food waste transformation complete. Stakeholder survey to identify investment barriers for producers conducted.
RP2.21	Initial review identifying regulatory barriers and policy settings that limit investment opportunities for producers delivered.
RP2.22	Socioeconomic assessment to identify impacts of alternative policy frameworks completed. Alternative policies prepared, circulated and promoted to relevant government departments and agencies.
RP2.25	Further socioeconomic assessment undertaken to identify impacts of alternative policy frameworks. Further reports to form the basis of advice to relevant government departments on alternative policies prepared.
RP2.26	Final review prepared outlining perceived future risks and barriers for producers in existing policy settings.

High impact future initiative projects

Listed on pages 47 (REDUCE), 58 (TRANSFORM) and 63 (ENGAGE) of the *2018-2028 Strategic Plan* are non-exhaustive lists of potential future initiative projects for each of the Fight Food Waste CRC's three research programs. In addition, below represents a further refined list of projects that are anticipated to have the greatest return on investment regarding the organisation's seven areas of impact measurement. Business development activities related to these projects will commence in earnest in 2021.

Program	Impact Areas	Headline impact
REDUCE		
> Implementing standardising food-date labelling and guidance in Australia	> Food waste reduced; industry profitability gained; rescued food distributed; greenhouse gas savings.	> Regarded as the most impactful intervention for reducing the financial impacts of food waste by ReFED (USA)
> Best practice guidance and technologies for reducing food waste in hospitality and food service	> Food waste reduced; industry profitability gained; rescued food distributed; greenhouse gas savings; industry people trained.	> 1.2 million tonne p.a. based on revised National Food Waste Baseline
> Improving cold food chain performance in Australia	> Food waste reduced; industry profitability gained; greenhouse gas savings; industry people trained.	> $3.8 billion p.a. based on DAWE/Refrigerants Australia report
TRANSFORM		
> Transforming surplus horticulture, including regional food processing hubs	> Food waste reduced; industry profitability gained; circular economy jobs created; greenhouse gas savings; future leaders graduated; industry people trained.	> 0.9 million tonne p.a. based on revised National Food Waste Baseline
> Health by Stealth- upcycling nutrients into functional foods & nutraceuticals	> Food waste reduced; industry profitability gained; greenhouse gas savings; future leaders graduated.	> 2.5 million tonne p.a. Top 5 food trend of 2021. Will target dairy, animal product, fisheries and horticulture processing waste
> Whole of supply chain waste mapping starting with livestock production	> Food waste reduced; industry profitability gained; circular economy jobs created; greenhouse gas savings; industry people trained.	> 64 KT p.a. based on National Food Waste Baseline

Program	Impact Areas	Headline impact
TRANSFORM (cont)		
> Seafood valorisation	> Food waste reduced; industry profitability; circular economy jobs created; greenhouse gas savings; industry people trained.	> 15 KT p.a. based on revised National Food Waste Baseline
> Bioplastics/biodegradable packaging from food waste	> Food waste reduced; industry profitability; circular economy jobs created; greenhouse gas savings; industry people trained.	> Will target 4 million tonne p.a. of non-harvest primary production and food manufacturing waste
ENGAGE		
> National Behaviour Change Program	> Food waste reduced; Greenhouse gas savings; future leaders graduated; industry people trained.	> Targeting the 3.1 million tonnes p.a. based on revised National Food Waste Baseline
> Industry food waste training through the Industry Connection Hub	> Food waste reduced; industry profitability; circular economy jobs created; greenhouse gas savings; industry people trained.	> Targeting the 1.4 million tonnes of manufacturing food waste going to low value uses

New participants and project approval

Whilst already enjoying the support of near 60 Core (cash contributing) and Supporting (in-kind contributions only) participants, the Fight Food Waste CRC is looking for opportunities to work with new participants where so doing will contribute to achieving Fight Food Waste CRC impact targets and Australia's target of halving food waste by 2030 (Sustainable Development Goal 12.3).

As outlined in the project guidelines, all projects are evaluated against the following 13 criteria:

Impact and commercialisation

1. Has a demonstrable outcome to reduce food waste.
2. Has demonstrable benefit for industry/ participants.
3. Ease of adoption by the industry – Commercial risk assessment.
4. Includes detail on potential IP and commercialisation opportunities likely to arise from the project.

Feasibility and team

5. Are the deliverables and timelines achievable?
6. Return on Investment - justifies project budget
7. Is the team comprehensive, should other members of the FFW CRC be involved?
8. Does the proposal address staff and other in-kind budgets for the program?
9. Includes students and international collaboration?
10. Includes stop/go project milestones?

Science excellence and innovation

11. Assessment on the quality of proposed scientific experimental design and likely research outputs.
12. How innovative and cutting edge is the proposed work?
13. Does proposal address the priorities of the program, and the FFW CRC Grant Agreement KPI's?

Existing or potential industry participants should first talk to the relevant Program Leader or CEO about potential projects prior to commencing the application process.

A project-on-a-page template (see final page) has been created to help conceptualise potential projects and ensure that they are likely to meet the above Fight Food Waste CRC funding criteria before the formal application process commences. Should the initial proposal be supported then the project will follow the full project development and management process (also on the final page).

For existing or potential new participants wanting to develop projects related to the Grant Agreement or future initiatives, project guidelines are available.

New participant admission guidelines are available from the Fight Food Waste CRC website: **www.fightfoodwastecrc.com.au**

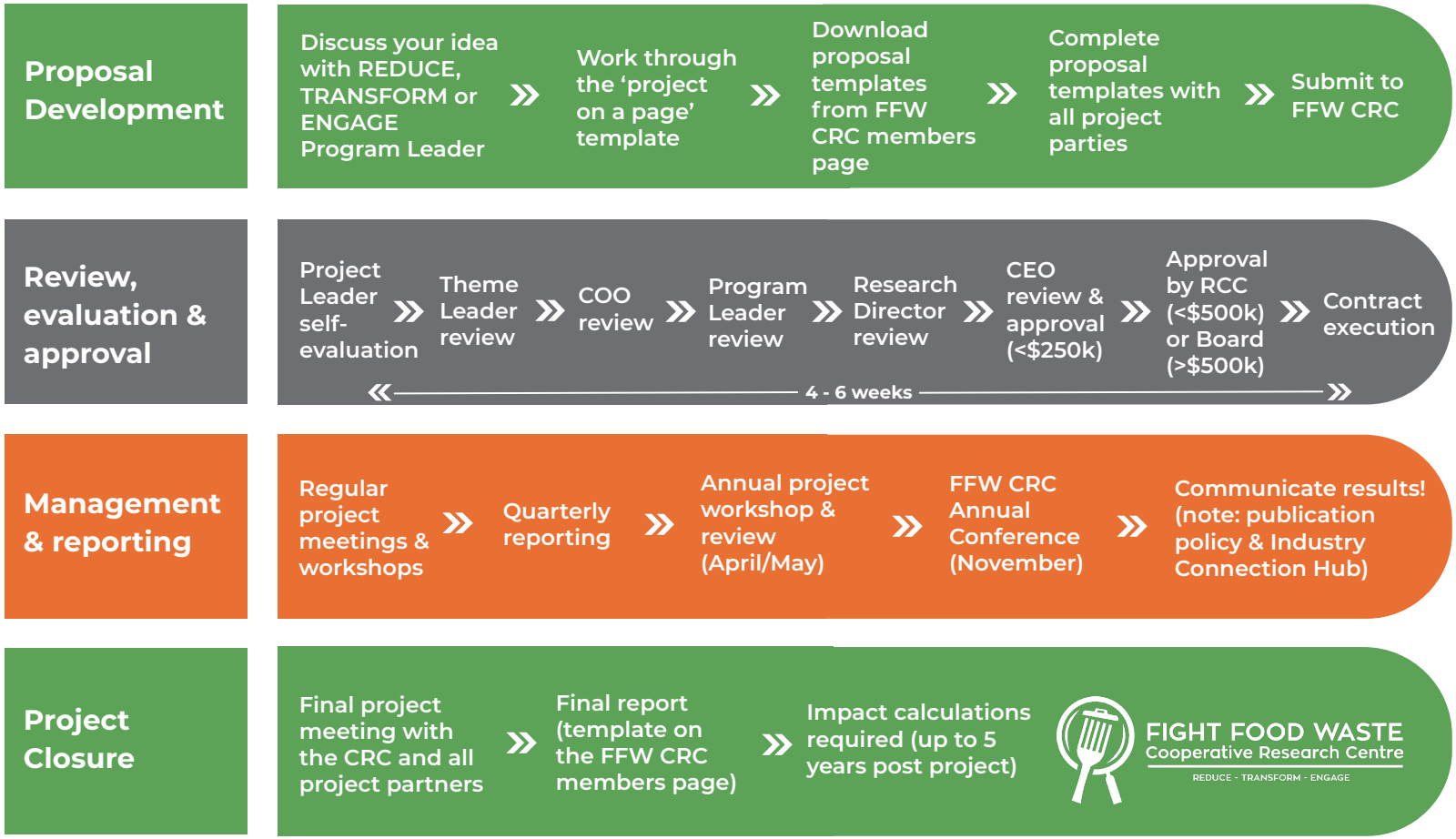
As outlined in the Australian Government CRC program fact sheet for eligible CRC expenditure, the following are eligible:

- salaries for project staff
- operating costs directly related to the project
- contractors and independent laboratory analyses supporting the research project
- purchase or lease equipment under $5,000 in value
- publication costs
- education, extension and adoption activities
- travel expenses directly related to the project
- students costs.

Ineligible expenses include:

- capital works or the purchase or construction of buildings
- activities that have already been funded by other Australian Government sources
- reimbursement for in-kind project contributions
- IP protection and commercialisation costs
- indirect research institution costs
- overseas research costs unless agreed with the Fight Food Waste CRC prior.

The Fight Food Waste CRC looks forward to working with current and new participants to achieve our performance milestones, impact targets and ultimately halving food waste by 2030.



Project development & management process
February 2021

Fight Food Waste CRC project outline

Project title: <Enter a brief descriptive title here>

Date: _____ **Version:** _____

Food waste problem

- Describe the scale and nature of the food waste problem
- Include quantities of waste being dealt with (volume &/or value)
- There must be an identified waste issue evidenced as an industry issue

Our solution

- Describe the solution in plain English. How will the solution benefit society? How will the solution benefit industry?

Unfair advantages

- List the unique advantages that the team will bring to the project
- Consider IP, access to data, access to customers, infrastructure etc

Predicted impacts

- Food waste reduced
- Industry profitability gained
- Rescue food distributed
- Greenhouse gas emissions reduced
- Circular economy jobs created
- Future leaders graduated
- Industry people trained

Current solutions

- Describe any current solutions to the food waste problem and if appropriate, list their deficiencies

Project goal

- Provide a brief overview of the overarching goal of the project
- What will be achieved through the completion of this project?

Project outcomes

- Describe up to four key outcomes that will exist at the end of the project.
- Outcomes are tangible, measurable, and quantifiable

Participants

- List the FFW CRC participant organisations who will take part in the project
- Provide key contact names for each organisation involved
- If additional industry or research participants are sought, describe the desirable characteristics of the organisation

Expected contributrions (cash and in-kind)

Organisation	Cash	Inkind
Total		

Anticipated timeline

- What is the expected duration of the project?
- When would the project ideally begin?
- Do any restrictions exist around timelines?

End-users

- Who are the end-users of the project outcomes?
- Which organisations could adopt the solution?

'Project on a page'
January 2021

fightfoodwastecrc.com.au

FIGHT FOOD WASTE
Cooperative Research Centre
REDUCE - TRANSFORM - ENGAGE

Australian Government
Department of Industry, Innovation and Science

Business
Cooperative Research Centres Program