

OPPORTUNITIES IN THE CIRCULAR ECONOMY

OZHARVEST SUBMISSION

OzHarvest would like to thank the Committee for the opportunity to make a submission to this inquiry. This submission discusses food waste as it relates to the circular economy, and opportunities for interventions and innovations, including three case study projects currently being delivered by OzHarvest.

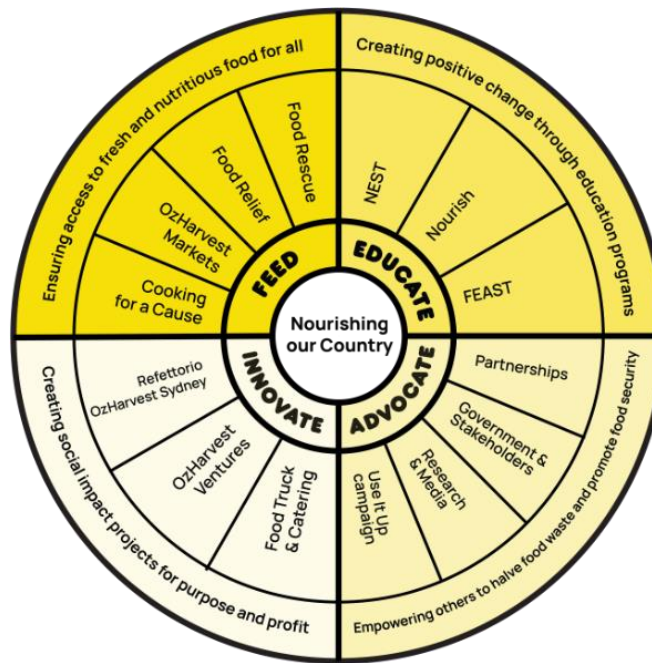
About OzHarvest

OzHarvest is one of Australia's leading food rescue organisations. We collect quality 'surplus' food from more than 3,000 businesses reaching wide into the food supply chain, including supermarkets, restaurants and hotels. Every week we save over 300 tonnes of food from landfill and deliver it to 1,900+ partner charities free of charge.

In addition to food rescue, OzHarvest is committed to ending food waste across the food system through:

- Delivering **educational programs** in schools and communities.
- Running a national **behaviour change campaign** for household food waste including an innovative food waste reduction tool, Use It Up tape, now in over 100,000 homes.
- Advocating for **policy change** to tackle food waste on a national scale.
- Valorising food 'waste' through the development of **upcycled food products**.





Impact Wheel: OzHarvest's impacts through Feed, Educate, Innovate and Advocate

OzHarvest operates in Sydney, Adelaide, Brisbane, Canberra, Gold Coast, Melbourne, Newcastle, Launceston and Perth and in regional communities. Since inception OzHarvest has delivered over 275 million meals and saved over 102,000 tonnes of food from landfill.

FOOD WASTE AND THE CIRCULAR ECONOMY

Food waste represents a critical and often overlooked component of the circular economy. Given the scale of the problem, plus the significant opportunities for impact and intervention, food waste should form a central point of the conversation when considering opportunities for Australia in the circular economy. Benefits of addressing food waste are multi-fold:

- **Economic:** Food waste costs the Australian economy 36.6 billion annually
- **Environmental:** Food waste contributes to 10% GHG emissions annually and is a significant source of resources waste (outlined below).
- **Social:** A third of all Australian households' experience food insecurity (3.4 million households last year).

Understanding food waste

- More than a third of all food produced is wasted.
- If food waste was a country, it would be the third highest emitter of greenhouse gases after USA and China.
- In Australia, 7.6 million tonnes of food is wasted annually (enough to fill the MCG ten times over) - 70% of this is edible food.
- Households are the largest source of food waste (32%) in Australia, see Figure 1. below.

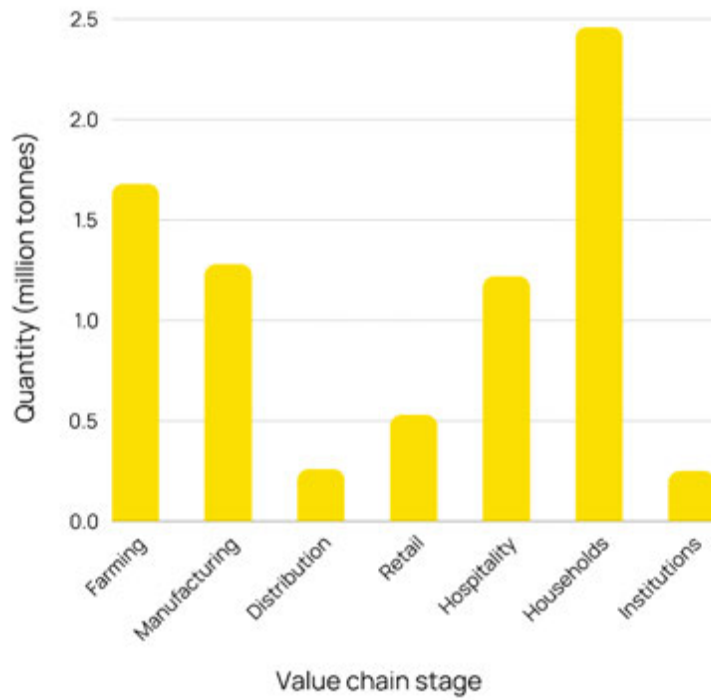


Figure 1: Food waste sources and amounts in Australia (FIAL 2021)

Food waste causes climate change

When food rots in landfill, it produces methane, a greenhouse gas 28x times more powerful than carbon dioxide. This is due to the lack of oxygen and microbes in landfill environments. By the best current estimates (DCCEEW), every kilo of food rotting in landfill emits the equivalent of 2kg CO₂. Globally, food waste is responsible for up to 10% GHG emissions.

Wasting food wastes everything

When edible food is discarded, this wastes all the resources that went into producing that food, including water, soil nutrients, energy, human resources, and land. Every year, land larger than the size of Victoria is used to grow food that ends up wasted.

By adopting circular economy principles and the below food recovery hierarchy, we can reduce food waste (and the waste of the resources that went into producing it) before it occurs, and then transform unavoidable food waste into a valuable resource.

Best practice: Observe the food recovery hierarchy

The following hierarchy is a useful frame to consider best practice when it comes to food waste. Prevention above all else, then solutions to feeding people (prioritising those in need first) and upcycling, before considering animal feed alternatives, and material and nutrient recovery. This is especially important to consider in the context of opportunities in the circular economy - food to fuel often receives significant attention as a solution, but there are six alternative pathways that need to be considered before food to fuel, see below.

Note that on-farm/land application disposal should be prioritised before other forms of landfill.

THE FOOD RECOVERY HIERACHY

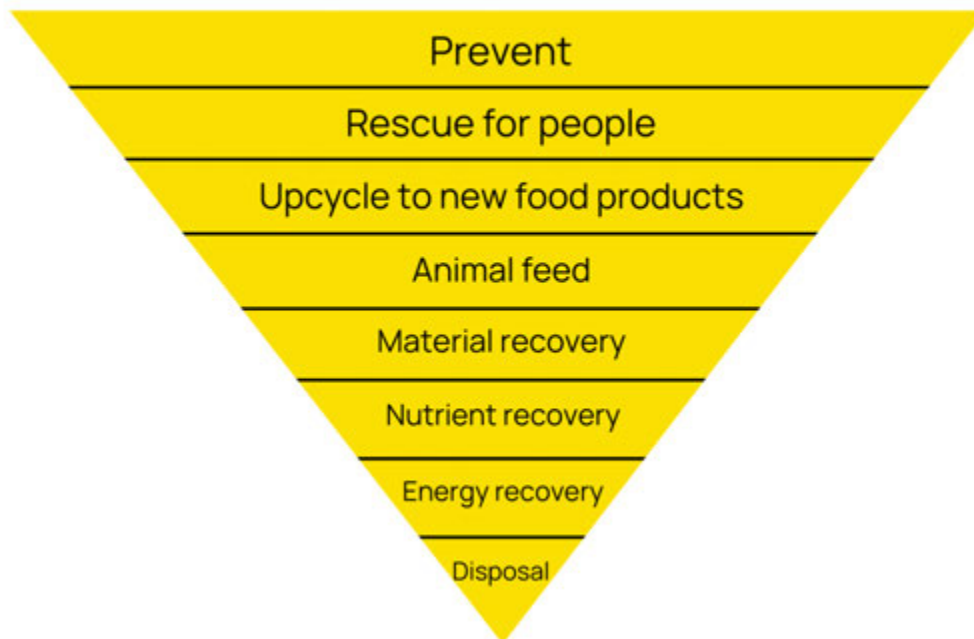


Figure 2. The food recovery hierarchy, demonstrating priority actions for food waste.



National food waste targets are not on track

In 2017, the Department of Climate Change, Energy, the Environment and Water (DCCEEW) launched the National Food Waste Strategy, setting an ambitious target to halve food waste by 2030. However, as highlighted in Senate Estimates Question SQ24-000523, asked of DCCEEW on June 13, 2024, recent data (from 2021) indicates that 'the target is not on track to be met'.

While we commend the development of the National Strategy and the National Waste Policy Action Plan, there remain very few national initiatives specifically addressing food waste. To make substantial progress, we urgently need increased action, policy reforms, and dedicated funding. The initiatives outlined in FIAL's *Roadmap for reducing Australia's food waste by half by 2030* must be urgently implemented if we hope to approach the 2030 target and meaningfully reduce food waste on a national scale.

Solutions addressing food waste as part of the circular economy

Below are three examples of circular economy successes, all demonstrating the work being done by OzHarvest at the top three levels of the Food Recovery Hierarchy: prevent; rescue; and upcycle. These examples outline the ways that OzHarvest works to tackle food waste and contribute to the circular economy, and the importance of prioritising society's resources and circular economy focus around a human-centred hierarchy. Each includes opportunities to support and amplify this work, including a role for the Federal Government.

CASE STUDY 1 – PREVENT

OZHARVEST'S USE IT UP CAMPAIGN



Every year 2.5 million tonnes of food is wasted from homes across Australia - costing the average household over \$2,500. To meet Australia's target of halving food waste by 2030, we need to reduce household food waste by 30%.

OzHarvest commissioned BehaviourWorks Australia to conduct Australian-first behavioural science research to understand which behaviours are the most effective when it comes to reducing household food waste. Armed with these insights, OzHarvest launched **Use It Up™**, a campaign to inspire citizen action and make it easy for Aussies to waste less.

The campaign includes an innovative new product - **Use It Up tape** - to be used in your fridge or pantry to mark out a place for food that needs using up or to use as stickers on food items. And it works, proven to **reduce household food waste by 40%**! With over 100,000 tapes distributed nationally and 40,000 internationally we're helping households to save food, money and the planet.



CASE STUDY 1 – PREVENT (CONTINUED)

OZHARVEST'S USE IT UP CAMPAIGN

The government can amplify this program by

- Updating the *National Waste Policy Action Plan 2022* to include provisions to fund state governments to support local councils to deliver annual food waste avoidance consumer education (including campaigns and proven tools).
- Commit ongoing funding for national consumer behaviour change campaigns (minimum 5-year funding periods), ensuring any consumer campaigns are underpinned with updated behavioural science research.

CASE STUDY 2 - RESCUE

OZHARVEST'S FOOD RESCUE MODEL



OzHarvest has around 70 food rescue vans across the country, collecting surplus food from hospitality, retail and institutions.

Our fleet, including an extensive network of drivers and food rescue coordinators, uses agile logistics to target fresh and short-life food, preventing it from going to waste.

We are primarily a B2B model, so food is delivered to other partner charities, agencies and community organisations. These receiving agencies are often very local and very small, and our unique direct delivery model is crucial to the viability and fabric of local community networks. The receiving agencies then pass the food onto those experiencing food insecurity. We also operate some direct-to-client services like free supermarkets using rescued food.

Why it works

- **We prioritise engagement**
 - With food donor businesses and staff – purpose-driven, connection to work, share stories, view to relationship longevity.
 - With food recipients (our partner agencies) - our drivers understand the needs and challenges of individual agencies, and we match donors with recipients accordingly.

CASE STUDY 2 – RESCUE (CONTINUED)

OZHARVEST'S FOOD RESCUE MODEL

Why it works (contd.)

- There's a **financial incentive**
 - Due to our fundraising, it's a service we are currently able to offer for free
 - While our drivers are paid, we have thousands of volunteers who support and amplify the impact of our food rescue program and allow us to continue offering free of charge.
 - By rescuing we lower waste costs for our donors.
- There's an **ethical incentive**
 - Donors understand the issue of food waste and the urgent need for food relief.
- The **need for food relief is significant**
 - We work with over 1500 partner agencies across the country, almost 70% of these agencies state they are unable to meet demand.
 - We have around 900 partner charities on our waitlist (resources are the limiting factor).
 - Our rescue and delivery work keeps many of these small local agencies viable – they would not have the capacity to rescue and collect on the scale that OzHarvest, as a nationally-coordinated organisation, is able to.

How do we measure our food rescue?

- Kgs saved from landfill
- Kgs CO2 equivalent saved from being emitted
- Number of donors
- Charity partners (recipients)
- Meals delivered
- Food balance (nutrition)

CASE STUDY 2 – RESCUE (CONTINUED)

OZHARVEST'S FOOD RESCUE MODEL

How can the government elevate the impact and reach of food rescue?

Food rescue and the provision of food relief is an essential ingredient in a robust circular economy – solving two critical issues at once. Unfortunately, the need for both food rescue and food relief is an ongoing need, and not just one that arises in instances of emergencies and natural disasters. The federal government can support our mission by:

- Providing much-needed, **ongoing funding** for food rescue and relief beyond the current “emergency relief” footprint of funding that the federal Government currently covers
 - Infrastructure (including additional vans, storage, refrigeration)
 - Staff to deliver the extensive program
 - Running costs
- Supporting food donation from manufacturing, retail and hospitality businesses through **training, policy incentives and tax incentives**
- Introducing the **National Food Donation Tax Incentive**
 - Currently we rely on supermarkets for around 70% of our donated food
 - Incentivising donations from primary producers would enable us to diversify our food sources, improving the quality and consistency of our food relief.

CASE STUDY 3 - UPCYCLE

OZHARVEST VENTURES



Adopting the circular economy model is essential for transforming our food system, as it promotes sustainability, collaboration and waste reduction while fostering innovation.

OzHarvest Ventures, the social enterprise related entity to OzHarvest, exists to tackle some of our complex challenges through innovative commercial solutions that drive positive impact for people and planet.

One area of focus is through the collaboration with industry along the food supply chain to transform food waste into valuable products and localise food production and manufacturing while using resources that would otherwise have ended up in landfill.



CASE STUDY 3 – UPCYCLE (CONTINUED)

OZHARVEST VENTURES

Not only do these circular initiatives add more value along the supply chain, but they also create economic prosperity, employment and meaningful contribution for business and communities.

Initiatives like OzHarvest's collaboration with OzGroup and Kakadu Kitchen to create the Conscious Drink which utilises blueberries that would have gone to waste, demonstrates how businesses can create value from surplus food and materials, driving new opportunities for companies to innovate and adapt.

However, several barriers impact the faster adoption and take up of this transition. Small to medium sizes businesses often struggle with high infrastructure and capital costs necessary for implementing circular practices, making it challenging to compete with larger companies that can leverage economies of scale to maintain lower prices.

Additionally, the complexities of establishing a circular supply chain can deter small players from fully engaging in these sustainable initiatives, highlighting the need for supportive policies and resources to level the playing field as well as investment across the supply chain that will encourage further industry collaboration and innovation.

OzHarvest Ventures will continue to lead the way in this space, paving the way for transformation of the food sector in years to come.



RECOMMENDATIONS AND PRIORITY OPPORTUNITIES FOR AUSTRALIA

Given the huge amounts of financial (\$36.6 billion annually), environmental (10% greenhouse gas emissions globally) and social (3.4 million households experiencing hunger) – any circular economy initiatives, funding and/or programs must consider food waste.

- Rapidly implement all initiatives in FIAL’s Roadmap for reducing Australia’s food waste by half by 2030
- Fund research-backed, nationally-coordinated education, campaigns and food reduction initiatives such as those delivered by OzHarvest
- Invest in infrastructure that supports food upcycling, creating jobs and diversifying income streams
- Deliver policy interventions that are proven to reduce food waste nationally, such as:
 - National Food Donation Tax Incentive
 - Date labelling reform to reduce food waste from Best Before items
- Bolster the food rescue sector to continue diverting quality food from landfill to those experiencing food insecurity, extending support beyond emergency situations in recognition that unfortunately demand for food relief is an ongoing feature of our existing economy
- Work with OzHarvest and those in the food waste sector to develop agile initiatives to intervene on food waste across the food supply chain



Sources

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- FAO (2013) Food Wastage Footprint Report
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- FIAL (2021) National Food Waste Strategy Feasibility Study
- Intergovernmental Panel on Climate Change (2019) Special Report on Climate Change and Land
- Senate Estimates Question SQ24 - 000523 asked of Department of Climate Change, Energy and Water
<https://www.aph.gov.au/api/qon/downloadattachment?attachmentId=71ca9f0e-8c36-41a9-bb64-c843e985aa80>, 13 June 2024.
- United Nations Environment Program (2021) Food Waste Index Report

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