

# QUICK SERVICE RESTAURANTS FOOD WASTE SECTOR ACTION PLAN

Summary 2026





**This summary report is based on the Sector Action Plan Report<sup>1</sup> providing valuable insights into food waste reduction for Quick Service Restaurants.**

This summary report should be cited as:  
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Learn more:  
[endfoodwaste.com.au/sector-action-plans](https://endfoodwaste.com.au/sector-action-plans)

End Food Waste Australia creates Sector Action Plans as a key tool to reduce food waste through collaboration across the industry, acknowledging the unique challenges for different sectors and the mix of systemic change and individual action that will help Australia reach the goal of halving food waste by 2030.

This Sector Action Plan is part of a wider suite of Foodservice Sector Action Plans and is supported by research conducted through the End Food Waste Cooperative Research Centre.

# WHY END FOOD WASTE?

Food waste presents a significant challenge both globally and within Australia, contributing to environmental damage (Planet), food insecurity (People), and economic losses (Profit). Insights into food waste in QSRs is limited. This research has identified opportunities for the industry.

## FOR THE PLANET



If food waste was a country, it would rank as the **third largest** emitter of greenhouse gasses, behind the USA and China.<sup>2</sup>

Of the total Australian food service sector, the QSR sub-sector (takeaway outlets) contributes approx. **40%** (130,600 tonnes) of all food waste per annum with 95% disposed to landfill.<sup>3</sup>



**27.3**  
million  
hectares

In Australia, **a landmass the size of Victoria** is used to grow food that ultimately **goes to waste.**<sup>4</sup>

Overall, food waste generates 3.5% of the nation's total greenhouse gas emissions, and wastes 2,600 gigalitres of water annually, depleting valuable resources while fuelling climate change.<sup>4</sup>

## FOR PEOPLE



**3.5** million  
households

In 2025, over 1/3 of Australian households – 33% or 3.5 million – experienced moderate to severe food insecurity.<sup>5</sup>

**Fighting food waste is fighting hunger.**

## FOR INDUSTRY PROFITABILITY



Food waste costs the Australian economy **\$36.6 billion annually.**<sup>4</sup>

The Australian hospitality sector is responsible for 1.2 million tonnes (16%) of food waste per year, mostly disposed to landfill.<sup>4</sup>



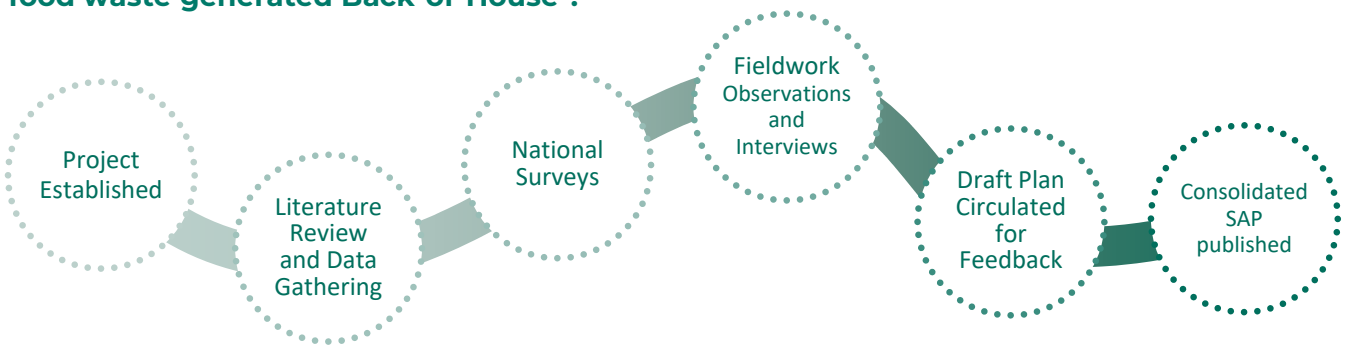
A 2024 Australian QSR study reported a **25kg** daily average of pre-consumer food waste.<sup>6</sup>



# HOW WAS THIS PLAN DEVELOPED?



End Food Waste Australia is leading the development of Sector Action Plans (SAPs) as a key tool to reduce food waste through collaboration across the supply chain. This Sector Action Plan was co-funded by the acknowledged members, The Australian Government, the Australian Retailers Association, the National Retail Association and the End Food Waste Cooperative Research Centre. **This SAP focuses on actionable recommendations for QSR businesses to mitigate food waste generated Back-of-House\*.**



A review of academic literature and published industry reports was conducted to map key terms and definitions in QSR food waste and strategies. The QSR sector was engaged through fieldwork research consisting of store-manager interviews and in-store observational studies, followed by two national online surveys to gain insights from QSR employees, managers, and owners. Results were analysed to identify key waste hotspots and root causes, Findings were synthesised and peer-reviewed for final reporting as a Sector Action Plan (SAP) chapter report.

## RESEARCH FOCUS AREA

### Back-of-House Food Waste\*

Generated before food is handed over to customers

### Front-of-House Food Waste

Generated after food is handed over to customers



## THE AUSTRALIAN QUICK SERVICE RESTAURANT SECTOR.

**Quick Service Restaurant (QSR) refers to foodservice businesses that serve fast or quickly prepared food with minimal table service, including fast food and takeaway outlets.**

QSR businesses may operate under a corporate franchise model and can provide food delivery through online platforms.

The QSR sector is a major player in the Australian hospitality and food service industry. In 2025, The Australian QSR sector generated nearly a quarter of the total revenue in the wider hospitality industry at \$25.3bn.<sup>7, 8</sup>

QSR is a term with a muddled definition, leading to some varied perceptions in the types of

businesses that fall into the category.

The Australian QSR sector is large yet fragmented, with significant disparities in market share, business types, and locations. As of January 2025, there were 26,630 QSR businesses employing 226,000 people, but the top five companies held 43.2% of the market—mainly major fast-food chains.

While QSRs operate nationwide, over 75% are concentrated in Victoria, New South Wales, and Queensland, where population density offers greater consumer access and market insight. This uneven distribution and dominance by a few players highlight the sector's unique fragmentation within Australia's hospitality industry.

# UNDERSTANDING FOOD WASTE IN QSRs.

Food waste is defined as any food intended for human consumption which is thrown away, including food recycled to make compost. This research focused on back-of-house food waste, identified as key hotspots and root causes occurring across the 6 stages of food handling. The insights from interviews, the two surveys and literature confirm the Top 3 QSR food handling stages with the most food waste occurring — presented for QSR businesses to consider as opportunities for positive change.

## TOP 3 QSR food waste hotspots. 1 = most mentioned



### STAGES OF FOOD HANDLING

### HOTSPOTS — ROOT CAUSES

#### STOCK ORDERING Stage 1

- **Overstocking of Ingredients and Beverages** — occurs when restaurants order more stock than needed, leading to surplus items that may expire or go unsold.
- **Limitations of AI Prediction in Digital Tools** — current tools struggle to account for unpredictable external influences (e.g. sudden changes in customer demand, weather, events).

#### STOCK DELIVERY Stage 2

- **Delivery of poor-quality fresh produce** — reported issues with lettuce and other fresh items arriving in poor condition leading to waste.
- **Food temperature fluctuations** — slow transfer from delivery trucks with cool room doors left open due to low staffing results in loss of food.

#### STOCK STORAGE Stage 3

# 3



- **Limited Shelf-Life After Opening** — Corporate shelf-life guidelines restrict how long opened or prepared items can be kept, causing waste.
- **Mismatch between Pack Size and Demand** — Low-demand items are ordered in quantities too large to be used before spoilage.
- **Equipment Maintenance Gaps** — Inadequate support for timely maintenance and replacement of equipment to avoid malfunctions.

#### PRE-PREPARATION Stage 4

# 1



- **Unused edible food** — Off-cuts or trimmings not used.
- **Imperfect cooking** — due to equipment malfunction, unsupervised cooking times, temperature-related issues, food damage or spoilage.
- **Smaller portion sizes** — not offered or customers enticed to upsize and overorder.

#### SERVICE-READY Stage 5

# 2



- **Food safety hygiene policies** — discard unsold food by a set time.
- **Human error** — Staff incorrectly taking or delivering orders causing returned cooked food.
- **Spillage** — rushing to deliver food and food is dropped or spilled.

#### END-OF-SHIFT PRACTICES Stage 6

- **Discarding all unpurchased food** — due to company policies.
- **Poor food waste tracking methods** — food waste not measured or incorrect estimations.

# TOP 10 FOOD WASTE REASONS IN QSRs.



**Process-driven or staff-driven reasons** for edible food waste such as 'mistakes in order' (68%), 'lack of time to consider saving food'(63%), or 'poor handling' (59%) were highly ranked in interviews.

**Forecasting issues** included 'ordering too much stock' (62%) and 'preparing too much food' (58%) were supported by both surveys and literature.

Less prevalent reasons for food waste were 'inadequate stock rotation', 'technology costs', 'management oversight', 'infestation' and 'temperature issues'.

## TOP 10 REASONS FOR WASTE IN QSRs

136 Employee and Manager responses

	REASON	AGREED
1	Mistakes in orders / Customer returns	68%
2	Lack of time to consider saving food	63%
3	Ordered too much stock	62%
4	Poor handling (dropped / Spilled food)	59%
5	Prepared too much food (oversupply and expired)	58%
6	Lack of motivation to save food	57%
7	Training Issue	53%
8	Edible off-cuts not used	52%
9	Cannot donate leftover food	52%
10	Poor storage	50%

**68%** TOP REASON FOR QSR FOOD WASTE IS MISTAKES IN ORDERS



# TRAINING IMPACTS MOTIVATION TO REDUCE FOOD WASTE

REINFORCED FOOD WASTE TRAINING STRENGTHENS EMPLOYEE'S MOTIVATIONS TO ACTION FOOD WASTE REDUCTION (n=136)



- Not motivated, no reason to reduce food waste
- Motivated, but do not know how to reduce food waste
- Motivated and actively managing food waste

**61%** EMPLOYEES MOTIVATED AND ACTIVE WHEN RE-TRAINED



**Increased Targeted Training =** Employees motivated and actively looking to reduce food waste.

## FOCUS ON HOTSPOTS & ROOT CAUSES

### Effective reduction

requires addressing root causes, including operational, behavioural, and structural factors.

- **Preparation and storage** are key food waste hotspots in QSRs, making them efficient targets for intervention.
- **Waste tracking systems** can boost visibility and guide action.
- **Time-poor** QSR staff prefer practical solutions, so focusing on high-impact stages increases implementation likelihood.
- **Awareness** Staff Awareness of the link between food handling and food waste is low, highlight the need for staff education campaigns.

# INTERNAL AND EXTERNAL FACTORS IMPACTING FOOD WASTE IN QSRs

## MOTIVATIONS TO REDUCE WASTE (MANAGERS / OWNERS)

QSR staff are generally motivated to do the right thing. Using the right motivational reason can help change behaviours.

110 QSR managers and owners ranked Motivational Reasons to reduce food waste.

1. **Saving money = Most Motivating**
2. Saving time
3. Saving the planet
4. Doing the right thing
5. Easing guilt
6. Education
7. It is part of my job
8. There is someone that monitors this in my workplace

## MOTIVATIONS TO REDUCE WASTE (EMPLOYEES)

136 QSR employees surveyed responses reveal that motivation to reduce food waste is high among workers across all QSR business types, but this motivation is not always matched with the tools, training, or support need to act.

### Level of Motivation and Practices



## WASTEFUL TIMES OF THE DAY

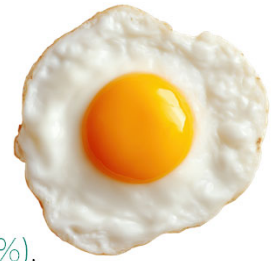
136 QSR employees surveyed respondents were asked to rank different periods of the business day by how wasteful they perceived them with 1 = most wasteful time. 'Busy times' and 'Quiet times' were considered the two most waste-prone times:

1. **Busy times = Most Wasteful Time**
2. **Quiet times**
3. Normal mealtimes
4. Unexpected rushes
5. Hours just before closing
6. Hours just after opening

**Restaurants to focus on having strong procedures to avoid corners being cut at peak times and to focus on both forecasts and just-in-time delivery at quiet times.**

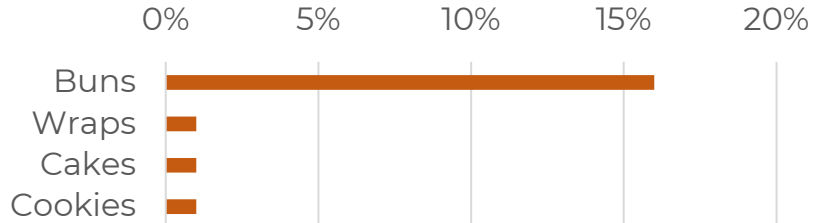
Longitudinal tracked sales of peaks and slow-down periods over days, weeks and years can improve future prediction models to allow for management of food orders and preparation for foreseeable customer traffic – QSRs can consider adopting or refining these models that can record local weather patterns, scheduled large crowd events, festivals, etc. These enable closer alignment of food production predictions to actual sales, resulting in less waste.

# MOST FOOD WASTED IN QSRs.

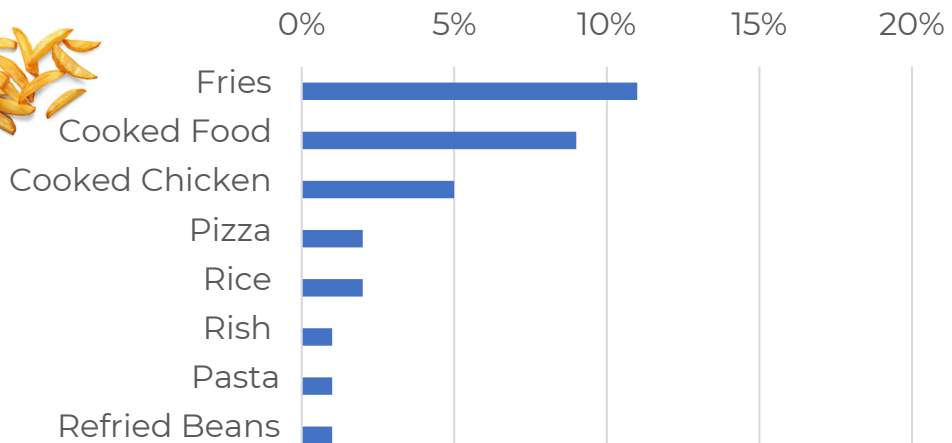


QSR managers reported food waste tracking data (Survey 2, n=94) and identified the top food categories that caused the most food waste being 'Bakery' (33%), 'Cooked Food' (29%), and 'Fresh Produce' (28%). The top 3 wasted individual food items were 'Buns' (16%), 'Vegetables' (15%) and 'Fries' (11%).

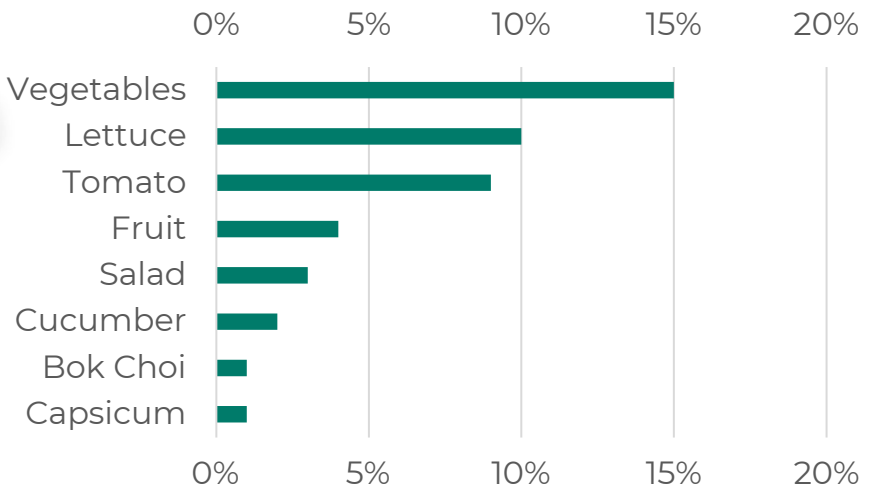
## Bakery 33%



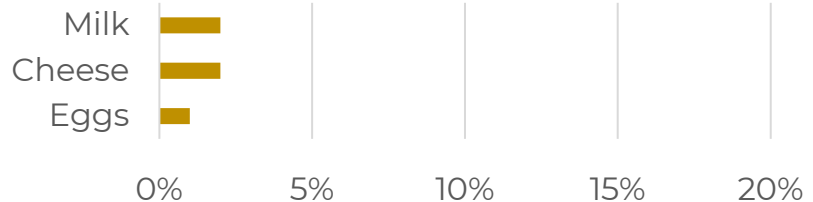
## Cooked Food 29%



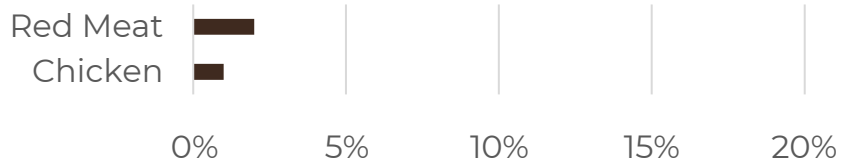
## Fresh Produce 28%



## Dairy & Eggs 5%



## Fresh Meat 3%



## Other 2%



# STAFF ARE KEY IN REDUCING FOOD WASTE IN QSRs

## Staff are key to the solution

QSR Staff, both employees and managers, are essential in reducing food waste. Upskilling through education and training is imperative. Another opportunity is to recognise staff as 'on-the-ground experts' that can map daily pain-points and unmet needs. Through regular consultations and tactics to empower agency, novel reduction strategies can be realised in back-of-house areas.

Although, 70% of respondents (Survey 1, n=136) reported receiving some form of food waste training, only 21% said they received ongoing or refresher training after the initial onboarding. **Correlation between the amount of training received and ensuing motivation to act on food waste was evident.**



## ✓ Training Yields High Returns

- Despite short staff tenure, research shows food waste training offers strong ROI and can be framed as part of a broader staff retention strategy.

## ✓ Empowering Staff to Lead Food Waste Reduction

- Balance Protocols with Staff Judgment.
- Corporate systems should support — not override — staff's real-time decision-making, especially when digital tools fall short.

## ✓ Recognise Staff as Key Agents

- Staff are often best placed to identify and respond to food waste risks; engaging them in co-designed solutions improves outcomes.

## ✓ Invest in Targeted Training

- Food waste-specific training is often missing or misunderstood; integrating it into existing compliance module platforms and training can boost uptake and effectiveness.

## ✓ Bridge the Management–Staff Gap

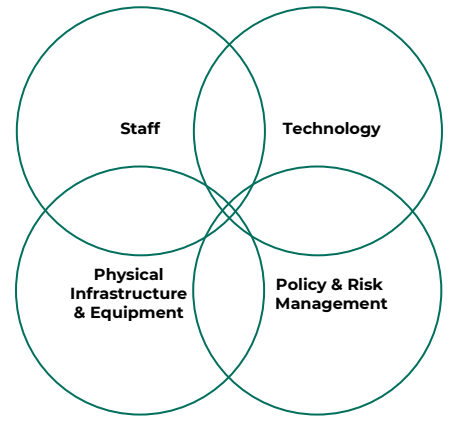
- Surveys show a disconnect between what managers think is delivered and what staff perceive as training — highlighting a need for clearer communication and follow-up.

# HOW CAN WE EFFECTIVELY REDUCE FOOD WASTE IN QSRs?

## 4 Key Recommendations

for reducing back-of-house food waste.

Focusing on concentrated food waste hotspots and root causes identified through the research, these recommendations offer reduction opportunities to be driven by QSR restaurant decision makers, managers and owners.



### STAFF HOW

#### Staff Investment

Frontline QSR staff are motivated to reduce waste but lack adequate training and agency. Managers report delivering training, yet staff often fail to recognize or apply it, highlighting a disconnect.



- **Introduce Food Waste-Specific Training Modules:** Focus on practical skills such as stock rotation, portion control, and waste tracking.
- **Empower Staff for Real-Time Decisions:** Guide staff with forecasts while providing guidelines to accommodate flexibility when conditions change.
- **Co-Design Solutions with Store Teams:** Engage staff in developing waste-reduction strategies to increase ownership.
- **Assign a Food Waste Manager:** Assign responsibility for monitoring and improving waste practices across outlets.
- **Increase Staff:** During peak periods and delivery times.

### PHYSICAL HOW

#### Physical Infrastructure & Equipment Investment

Poor storage conditions and faulty equipment are major contributors to waste. Warm storerooms, inadequate refrigeration, and broken communication systems lead to spoilage and order errors.



- **Upgrade Refrigeration and Prep Equipment:** Maintain cold chain integrity for salads and perishables in hot kitchens.
- **Improve Storage Practices and Labelling:** Use clear stock rotation systems and efficient packaging to extend shelf life.
- **Maintain and Upgrade Equipment Regularly:** Prevent operational errors caused by faulty intercoms and kitchen machinery.
- **Reconfigure kitchens for food waste reduction:** Streamline production and processes to ensure staff can prepare, cook, and serve without waste.



### TECHNOLOGY HOW

#### Technology-led Efficient Processes Investment

Technology offers significant potential for waste reduction through predictive analytics and real-time tracking. However, adoption is slowed by cost, complexity, and lack of sector-wide coordination



- **Pilot AI and IoT-Based Systems:** Validate predictive tools for demand forecasting and spoilage prevention using sales and weather data.
- **Implement Smart Scales and Cloud Platforms:** Provide real-time feedback on waste and enable centralized auditing.
- **Leverage Mobile Apps for Redistribution:** Use platforms like Too Good To Go to redirect surplus food to consumers.
- **Advocate for Government Incentives:** Secure rebates or grants to support smaller operators in adopting advanced technologies.

### POLICY HOW

#### Review Company Policies and Risk Management

Safety policies and liability concerns often force QSRs to discard surplus food rather than repurpose or donate it. Regulatory complexity and risk aversion hinder sustainable practices.



- **Embed Waste Reduction in KPIs:** Make food waste metrics part of performance evaluations for managers and staff.
- **Diversify Donation-Eligible Items and Use Apps:** Expand donation programs and integrate digital redistribution platforms.
- **Simplify Food Safety Regulations:** Advocate for reforms that balance safety with sustainability, reducing risk aversion.
- **Separate Donation in Reporting:** Track donated food distinctly to encourage compliance and transparency.





# TAKE ACTION NOW.

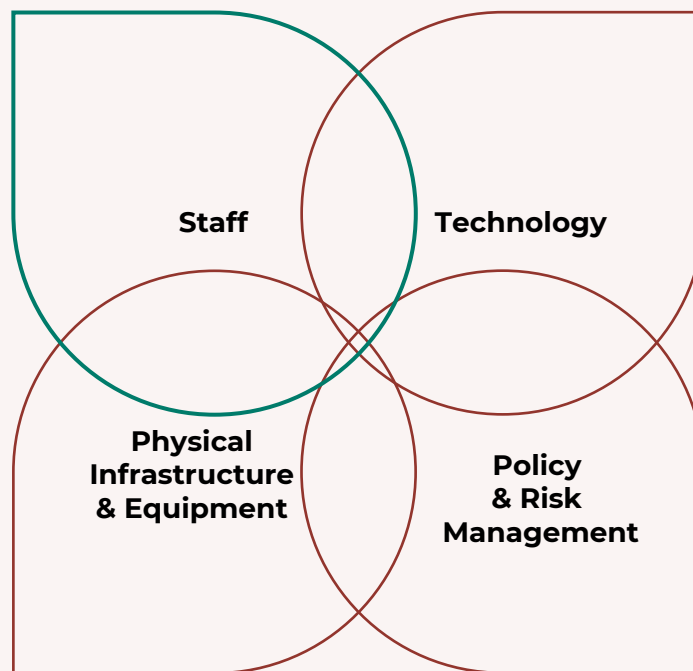


**Staff are key – Staff Motivation and Action increase with reinforced food waste training.**

Equip staff with the skills and knowledge to identify, prevent, and manage food waste resulting in motivated and active employees.

**Invest in reliable infrastructure and equipment**

Maintain cold rooms, air-conditioning, and storage areas to preserve food quality and safety. Maintain food temperatures whilst transferring from delivery to storage to pre-areas.



**Pilot/Refine AI and IoT-Based Systems:**

Validate predictive tools for demand forecasting and spoilage prevention using sales and weather data. Ensure staff can override digital tools if experienced judgment is required.

**Embed Waste Reduction in KPIs:**

Make food waste metrics part of performance evaluations for managers and staff. Celebrate food waste reduction wins and staff who have made concerted efforts in food waste reduction.



**Times of Day Matter**

Track food waste time and reasons over the course of the day to identify when and why food waste occurs. Use the 4 areas above to address your QSRs unique needs.

**Target the top 3 QSR Food Waste Hotspots**

- 1** PRE-PREPARATION STAGE
- 2** SERVICE-READY STAGE
- 3** STOCK STORAGE STAGE

# LIMITATIONS AND FURTHER OPPORTUNITIES.



## FOOD WASTE PERCEIVED AS PART OF BUSINESS

- **Shifting Mindsets:** Many in QSR view food waste as inevitable. To encourage sustainable practices, recommendations must be practical, value-adding, and suited to the fast-paced nature of the sector.

## MEASURES OF FOOD WASTE

- **Self-assessed Food Waste Measures:** Data from interviews and surveys rely on subjective estimates from employees, managers, and owners. Future research could use actual food waste tracking sheets to compare objective, quantifiable waste across QSR sub-sectors.

## DIVERSE OPERATIONS

- **QSR Sector is Diverse and Competitive:** The Quick Service Restaurant industry spans from family-owned businesses to global franchises, each with unique circumstances. Recommendations are designed to fit a general model to accommodate this variety.

## GAPS IN QSR LITERATURE

- **QSR-Specific Insights Needed:** There's limited evidence on how food waste strategies work within QSR sub-sectors, particularly in Australia.
- **Engage the Industry:** Dialogue and observation with QSRs can reveal effective strategies and challenges - supporting tailored solutions.

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## ACKNOWLEDGEMENTS

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The participating QSR industry members are acknowledged for their contribution and insights informing future actions and positive impact on reducing food waste in the Australian QSR sector.



