

Coffs Waste Conference 2025

# Navigating the mandate: Best practices, technologies and collaboration

14 May 2025



# Overview

- Problem – Scale
- Regulatory drivers
- What do we need to do and when?
- Best practice project delivery
- Lessons learnt

# Scale of the problem

Australian households generate

**2.5mt**

food waste per year

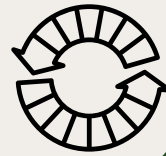
Food waste accounts for about

**3%**

of Australia's annual greenhouse gas emissions

## Potential benefits

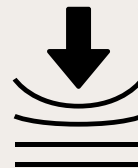
Reduced GHG emissions



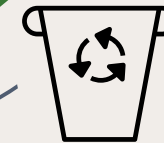
Improved soil health and structure – crop growth



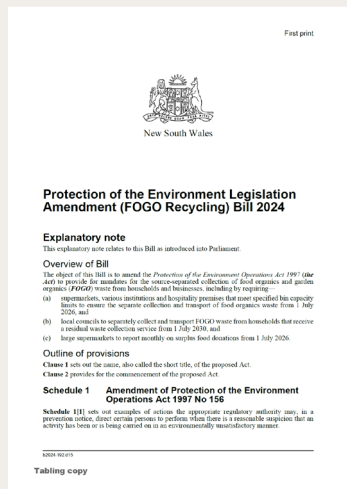
Reduced landfill costs



Improved waste management



# Key drivers - Improvement



**NSW FOGO mandate –**  
Councils must provide household FOGO collections by 2030



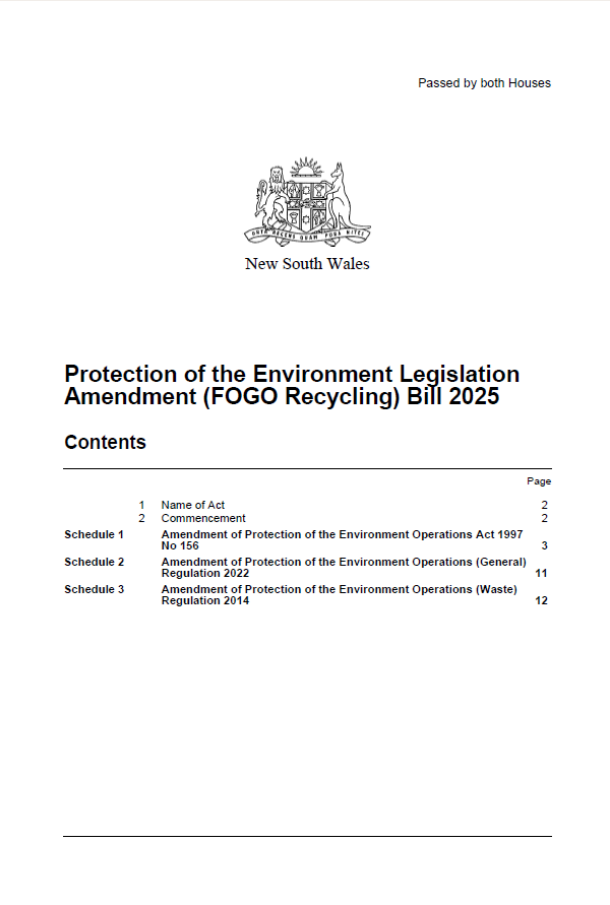
**NSW Waste and Sustainable Materials Strategy 2041 –**  
Reduce the environmental impact of organic waste (circular economy)



**National Waste Policy Action Plan 2024 –**  
Halve the amount of organic waste sent to landfill for disposal by 2030

# Summary - NSW FOGO mandate

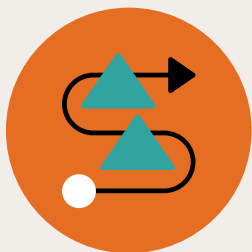
Commenced 2 March 2025



**Schedule 1. Amendment of Protection of the Environment Operations Act 1997 No 156**

	Household mandate	Business mandate
What?	FOGO bins to all households	Organics collections
When?	1 July 2030	2026 to 2030

# Key considerations for FOGO project development



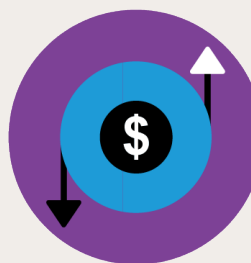
**Project lifecycle –**  
Can be a complex and  
lengthy process



**Funding and procurement –**  
Engagement with the market  
is crucial



**Timing challenge –**  
2-6 years from an idea  
to construction



**Political considerations –**  
Impact to ratepayers and  
time to absorb/ramp up

# Project lifecycle – Best Practice

## Phases



ACT Government

Central Coast Council

Dulverton

Confidential Client



Lessons learnt across the project lifecycle



# Context

- Structured project delivery
- Evidence based
- Larger Councils / Government Agencies – for PPP type approach
- IVC or similar – 20,000 tpa plus
- Risk – fast moving space – PFAS/Emerging Contaminants etc

# Initial project review & direction

## Phase 1

- Critical **scene setting** stage – sets direction of project
- Establishes project parameters with **stakeholders** and decision makers – the ‘WHY’
- Reviews **technology** type, scale, site selection – examines the ‘WHAT’
- Establishes **delivery model** options ‘HOW’
- Considers impacts on **residents** early on – allows planning for:
  - Kerbside collection service
  - Education / carrots and sticks etc
- Important to appoint an **Executive sponsor** – need to be laid out for executives and councillors



# Detailed technical and financial feasibility

## Phase 2

- Builds on findings of the directions phase
- Needs to be **robust and informed** – don't underestimate the THINKING TIME and BUY IN needed
- Additional design development – may need to **fill gaps** at this stage – geotech, etc
- More accurate **CAPEX and OPEX** estimates – requires a detailed understanding of the workings of a typical facility
- **Engage with procurement!** Agreement on delivery models is crucial BEFORE business case
- Sizing is fundamental. **Feedstock volume analysis** – seasonality, population growth, etc
- Internal engagement with Council staff on **education** recommended



# Business case development

## Phase 3

- Procurement / financial focus
- Lock down CAPEX, OPEX
- Alignment with external parties / requirements such as NSW Treasury might be required
- Need for qualified practitioners to prepare to Treasury guidelines
- Be comprehensive –compelling case will be needed for funding applications
- Failure to complete an inclusive and rigorous risk process leaves the proponent open to commercial risks



[Proposal name]

[Full / Preliminary] Business Case

## Proposal details

### Background

Agency	[Insert agency name]	
Proposal name	[Insert proposal name]	
Proposal type	[Capital / Recurrent / Recurrent including capital]	
Proposal location	[Insert location (for example, rural, regional, remote NSW)]	
Budget result	[\$ million (4 year)]	[\$ million (10 year)]
Total cost	[\$ million (4 year)]	[\$ million (10 year)]
Net lending	[\$ million (4 year)]	[\$ million (10 year)]
Delivery timeframe	[Insert an estimated start and end date. For example, month and year.]	
Gateway registration	[Not Registered / Registered]	
Risk tier	[Tier 1 / Tier 2] [self-assessed / endorsed]	
Gateway review status	[Provide details of completed Gateway reviews.]	
Gateway framework	[Infrastructure Investor Assurance Framework (IIAF) / Digital Assurance Framework (DAF) / Recurrent Expenditure Assurance Framework (REAF)]	
Election commitment	[Yes / No] [Please provide details.]	
Federal funding	[Yes / Partial / No] [Please provide details.]	

### Integrity and accountability attestation

**To be completed by the senior responsible officer (SRO):**

In my opinion (tick appropriate box):

☐ Reasonable processes have been followed to ensure that actual or perceived conflicts of interest have been identified and managed (please provide details in the comments below if required).

☐ Assumptions used in the business cases are reasonable and based on available evidence.

Name	[Insert text here.]	Contact details	[Insert text here.]
Comments	[If any.]	Date reviewed	[Insert text here.]

[Month and year]

[Agency name]

# Tender development and evaluation

## Phase 4

- **Tech Specification** for RFT / **KPIs**
- Australian standards, codes of practice, health and **safety standards** and other relevant codes and standards
- Contracts need to reflect the realities of dealing with FOGO – it isn't an easy stream to process e.g. Practical Processing Limit for **Contamination – 2%**
- Allowable contamination rates is a hot topic in the industry
- **Equitable risk sharing** between proponent and contractor. Cannot divest risk, cost must be borne somewhere in the project.
- Focussed list of market participants
- **Market fatigue**. More projects than delivery partners.



# Planning and approvals

## Phase 5

- The State Significant Development (**SSD**) pathway is a complex and lengthy process – Experience both sides.
- **Early engagement** with DPHI and EPA is critical both from a regulatory compliance and project support perspective
- Quality of **scoping report**. The more detail given to DPHI the better.
- Community awareness – **openness** – confront head on – **dedicated resource**



# Design and build

## Phase 6

- Owners Engineer (OE) – client **PM support** – challenge design – operations / VFM
- Bring **operational** expertise – more heads
- **Independent verification** of the works
- **Support decision making** on the project delivery team – design / cost / risk / safety considerations





# Implementation & commissioning

## Phase 7

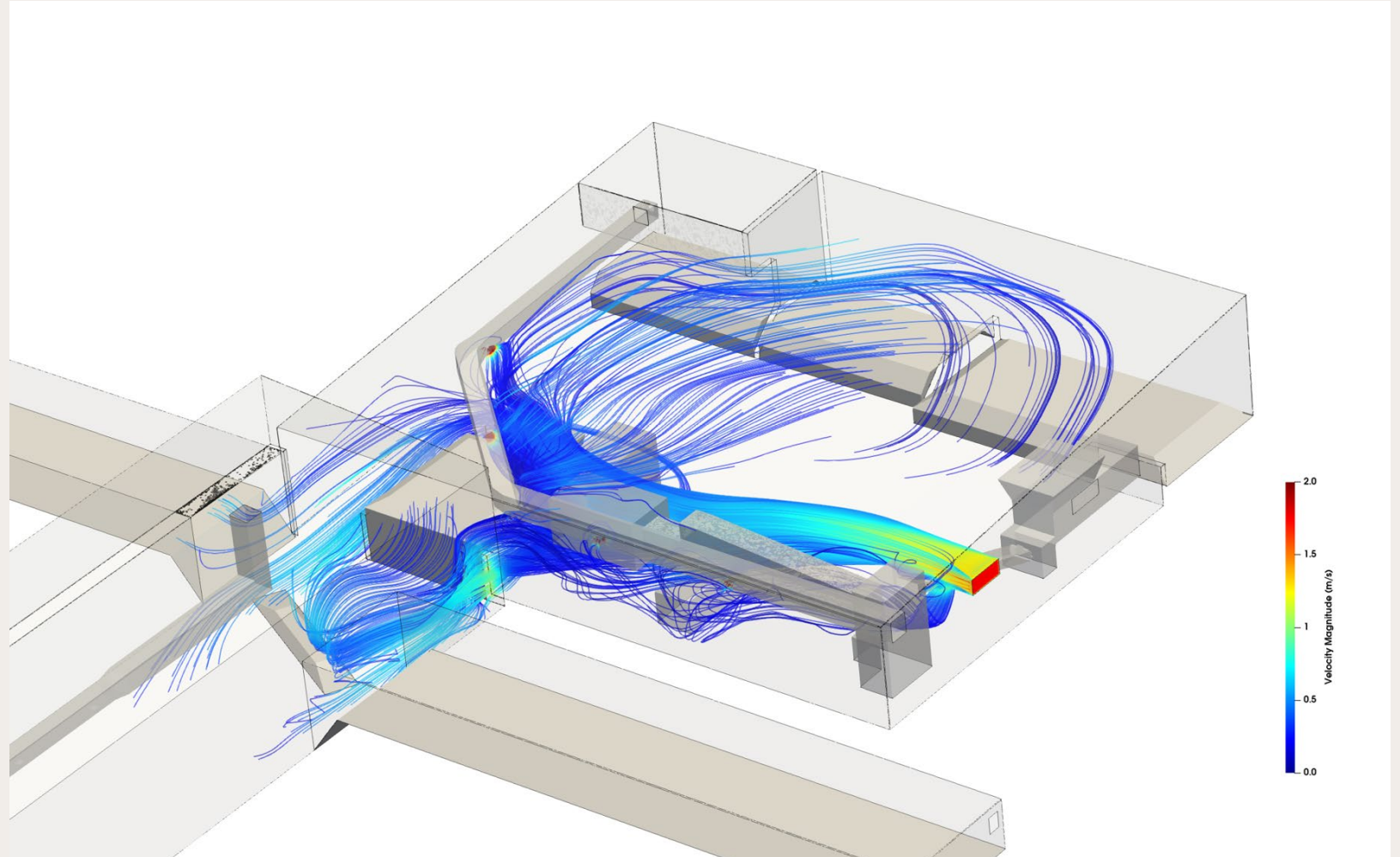
- Technical advice may be needed during **commissioning**
- It's a living thing
- An **in-depth understanding** of the process is critical – experience counts
- **Commissioning Plans** may need to be developed – don't underestimate
- A number of key plans required prior to Operations – e.g. **20+ SOPs**





# Implementation & commissioning

- Assessment of odour dispersion inside a IVC composting facility
- 3D CFD model reflects the airflow throughout the facility
- Useful for visualising critical health and safety considerations



# Summary

- Complex delivery – 2-6 years minimum
- Early stakeholder engagement crucial – don't underestimate
- Rigorous process prevents rework
- Set up for all future funding requirements e.g. Treasury
- A clear understanding of facility operation will reap dividends in project setup



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# THANKYOU!