

# Methods of contextualising

*From Precision to Improvisation*

# Initial Research

## Why Waste?

- Structurally legible data
- Existing visualisation framework
- Waste is physically present in student life
- Connects behaviour, infrastructure, contractors, reporting
- Institutional relevance
- Positioned between individual action and systemic responsibility

### Ual Waste overview:

total waste generated: 909.48 tonnes

General Non-Hazardous Waste IC | 532.93 |

Dry Mixed Recycling IC | 128.76 |

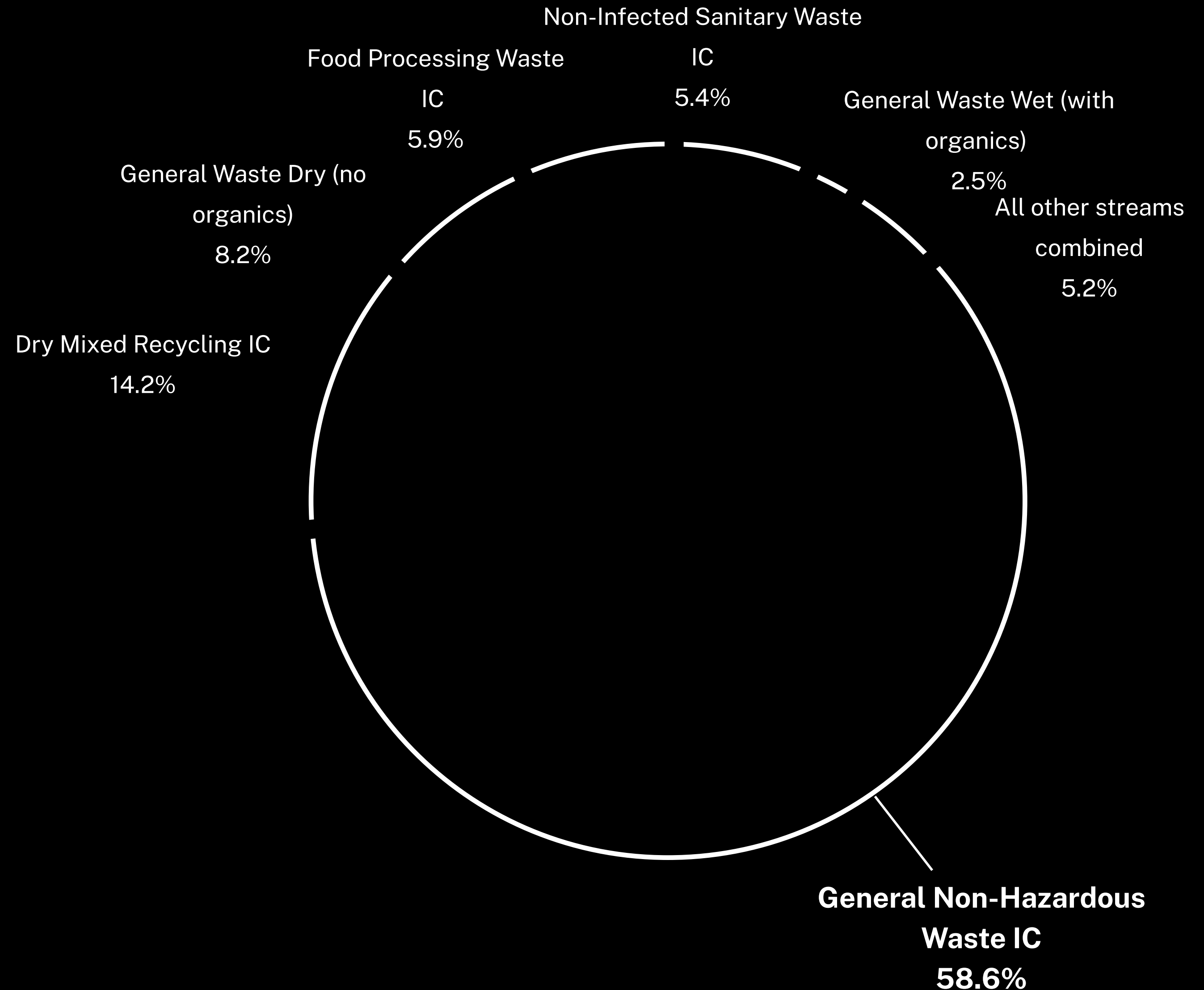
General Waste Dry (no organics) | 74.36 |

Food Processing Waste IC | 53.89 |

Non-Infected Sanitary Waste IC | 49.40 |

General Waste Wet (with organics) | 22.46 |

All other streams combined | ~47.68 |



# First Divergent Idea

- IDEA 1 — Decision Tree Book
  - Game-based narrative
  - Readers make choices at each structural layer
  - Reflects system stages: generation → stream → coordination → contractor → treatment
  - Wrong decisions expose hidden dependencies
  - Restarting builds systemic understanding
- IDEA 2 — Coordination Game
  - Players take on institutional roles
  - Five rounds under increasing waste pressure
  - Individual benefit vs collective stability
  - System may collapse despite rational decisions
  - Reveals structural misalignment.
- IDEA 3 — Digital Campaign
  - Data-driven awareness campaign (“909.48”)
  - Pop-ups, widgets, live counters, calculator tools
  - Visualises tonnage and reduction scenarios
  - Call to action: collective percentage reduction
  - Focus on visibility and behavioural nudges

## Why we moved on:

- Idea 1 focused on individual navigation through a system.
- Idea 3 focused on data visibility and behavioural nudges.
- Neither fully addressed collective coordination in real space.

→ The project shifted toward a structured workshop that stages the waste network as a shared, physical system.

# From Crit to Research Question

## Visibility is not Coordination

Digital campaign ideas increased exposure, but did not alter how the system is understood.

## Awareness is not Infrastructure

Students may know the numbers, but the network behind waste remains invisible.

## Communication must become Experience

The issue is not lack of information, but lack of systemic comprehension.

## Research Question

How can graphic communication translate institutional waste data into an experiential understanding of waste as a coordinated system?

The focus shifted **from communication to educational intervention**. The workshop stages waste as a coordinated system, guiding participants from institutional scale to segregation, circulation, and finally individual agency.

## Latour (1986)

Visualisation is powerful not because it shows data, but because it allows distant systems to be gathered, stabilised, and argued over.

## Meadows (2008)

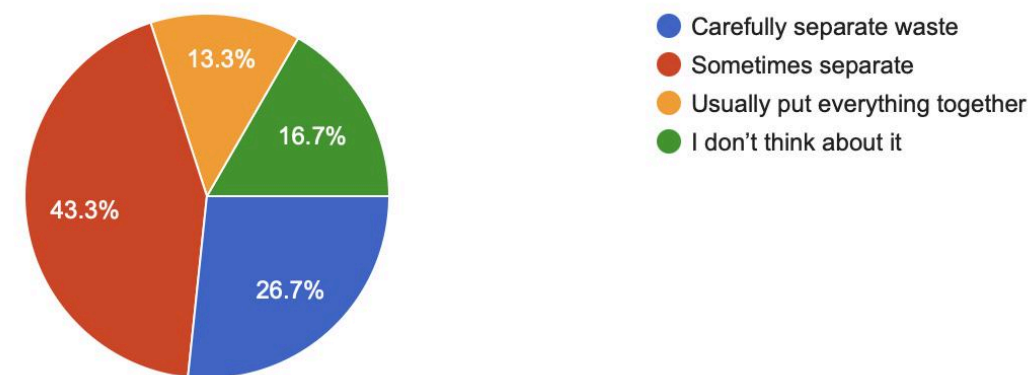
Systemic change requires understanding structures, feedback loops, and interdependencies, not isolated data.

# Field Research & User Insight

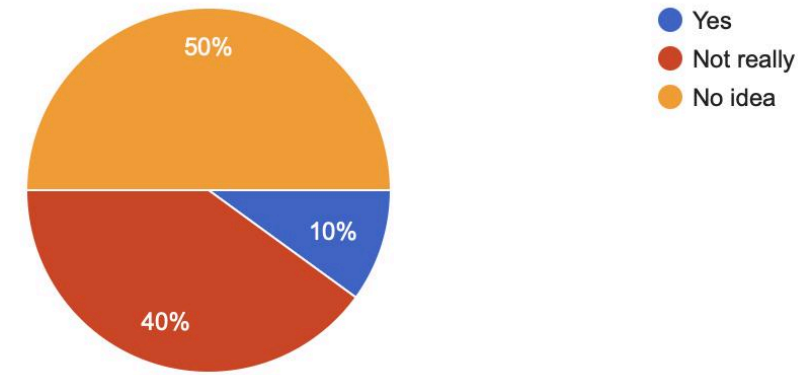
## Key Findings

- Most students do not know where waste goes after disposal
- 909.48 tonnes is not a known figure
- Confusion around bin categories
- Low engagement with Moodle-based communication
- Higher interest in physical, collective formats

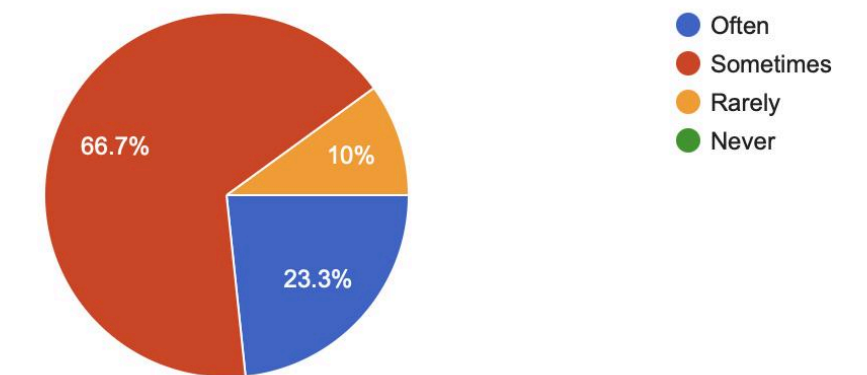
3. When you throw something away at UAL, do you usually:



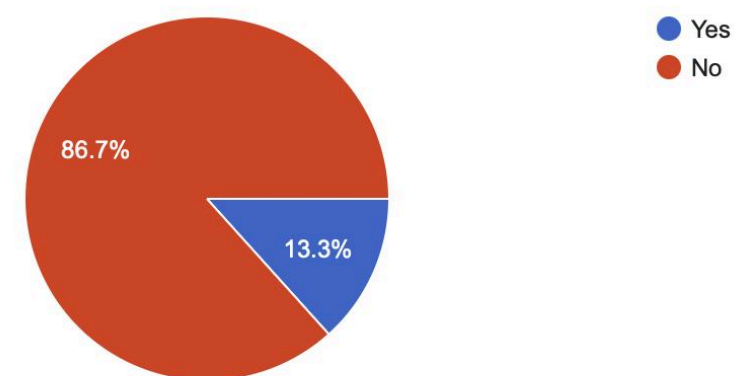
4. Do you know where UAL waste goes after collection?



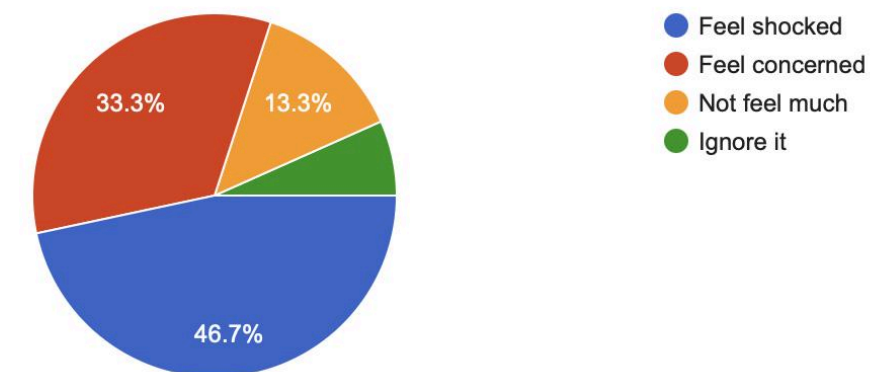
5. Have you ever been unsure which bin to use?



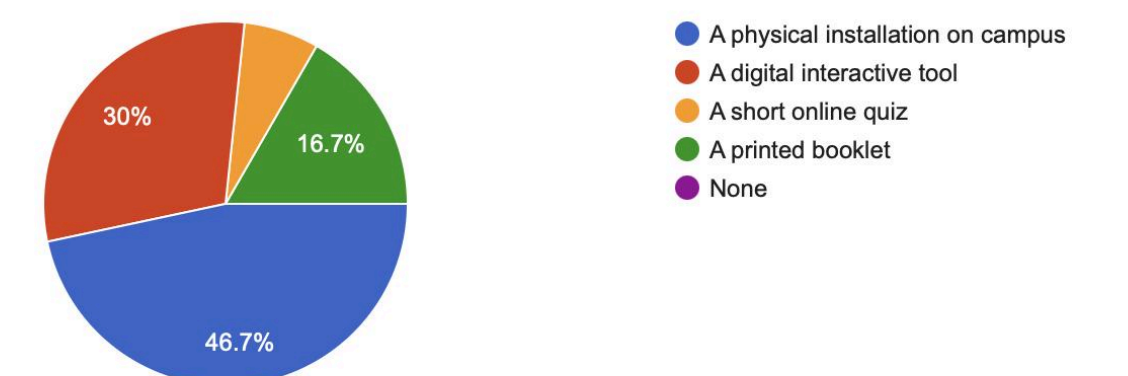
6. Did you know CSM produces around 900+ tonnes of waste annually?



7. Seeing a large number like "909 tonnes" makes me:



9. Would you engage more with something that is:



# The Workshop Kit

The Waste Workshop Kit reorganises UAL's waste data into a structured experience that participants can move through and understand. It includes:

## 1. Website

It act as the main framework, guiding users through stages of generation, classification, treatment, and outcome to reveal how these processes connect.

## 2. Mini lectures

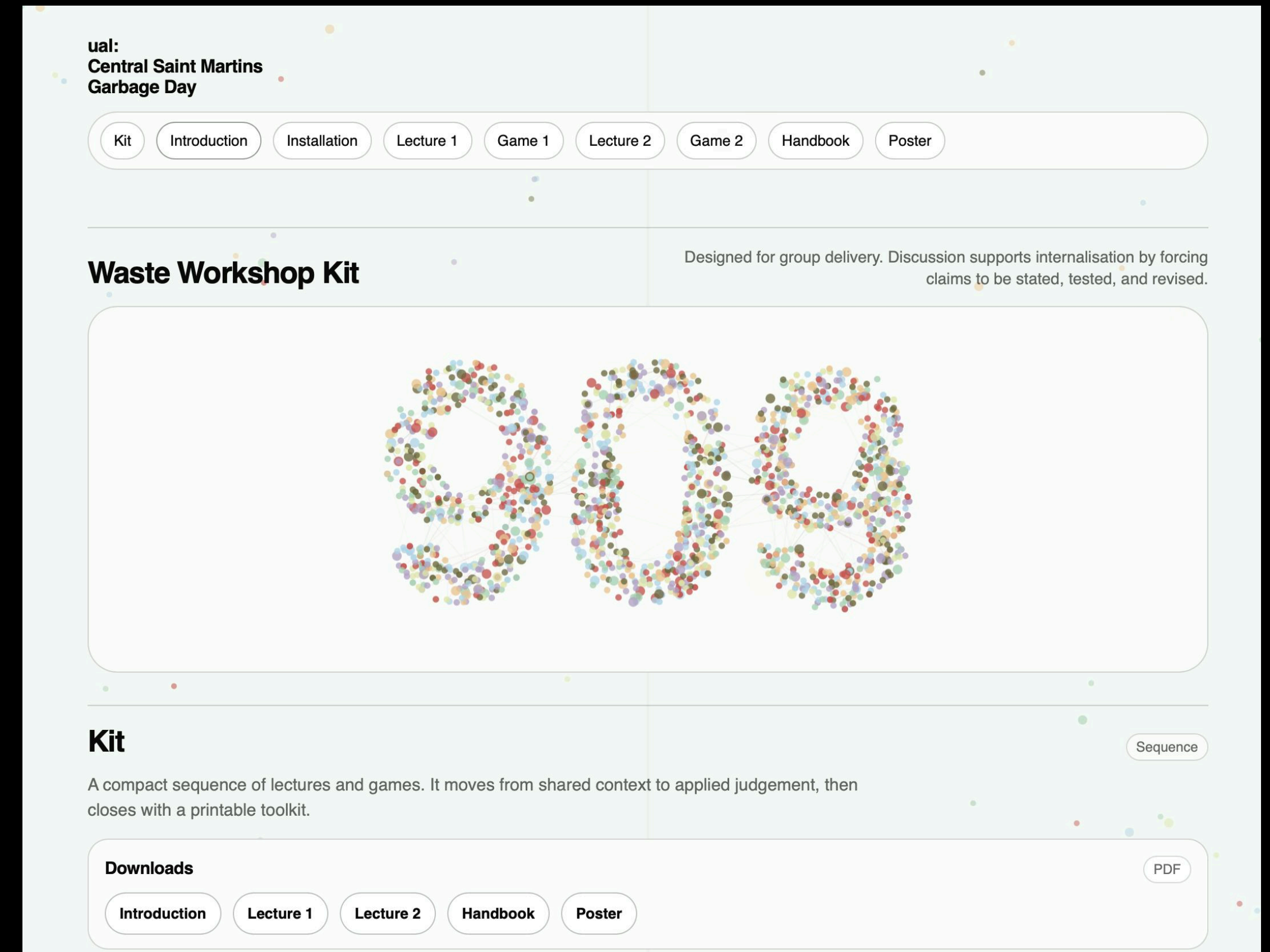
## 3. Digital games

It's designed to test and reinforce this knowledge. They translate lecture content into interactive decisions and scenarios

## 4. Handbook

## 5. Interactive building cards

Used as a workshop installation. Each card represents data from a major waste category. When assembled together, the full set forms a physical representation of UAL's 909 tonnes of annual waste.

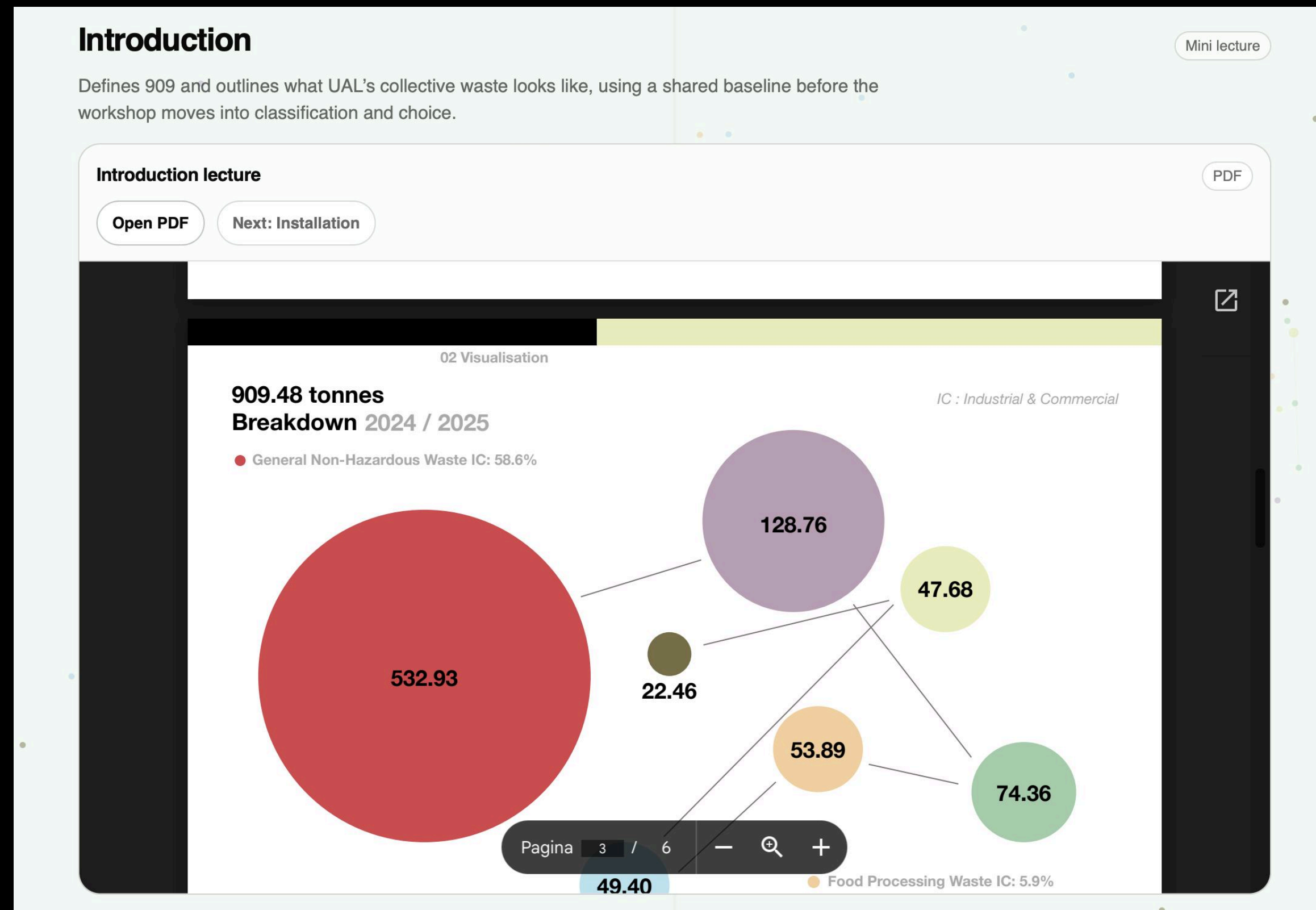


[Link to access the website](#)

# Workshop structure

## Segment 1 — 909 Tonnes

Introduction to UAL's total waste and its main streams.  
Participants encounter the scale through the physical installation and break it down into tangible units.



# Workshop structure

## Segment 1 — 909 Tonnes

For visual language is used system of interconnected dots and arrows. The dots represent different actors within the waste system. Each colour represent a specific type of waste, the back shows the percentage and number of tonnes the waste. The cards are printed on seed paper so they can be taken away and planted. This keeps the material temporary and prevents the installation itself from becoming another static object.



Detail of the cards



Physical installation. image created by AI

# Workshop

## Segment 2 — Segregation

Understanding waste categories through a sorting activity. Classification becomes a test of structural knowledge.

Upload images to populate the installation slideshow.

### Mini Lecture 1: Segregation

Introduces waste streams, contamination, and the practical effect of repeated sorting errors at campus scale.

Segregation lecture

Open PDF Next: Game 1

03 Mixed

**Mixed Recycling (Dry) Bins Examples**

**PUT IN**  
Plastic bottles (rinsed), Aluminium cans, Cardboard (clean), Paper, Empty aerosol cans, Clean takeaway containers

**DO NOT PUT IN**  
Food, Liquids, Greasy cardboard

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Location: Central Saint Martins Garbage Day

# 909

Waste Awareness & Management Workshop

Time 02:30 Progress 0 / 10 Start Reset

WASTE CARDS Drag or tap → choose bin

Ready. Press Start for a timed round.

- Coffee cup (plastic-lined) Trick item.
- Banana peel Easy.
- Aluminium can (empty) Rinse if possible.
- Bubble wrap / soft plastic Trick item.
- Apple core Easy.
- Greasy pizza box Food-stained card.
- Sandwich wrapper (laminated) Looks recyclable.
- Oat milk carton (Tetra Pak) Varies locally.
- Clean paper Easy.
- Broken ceramic mug Hard ≠ recyclable.

BINS Drop into a bin

- Residual** (energy recovery / landfill)  
Non-recyclables, mixed materials, contaminated items.
- Dry mixed recycling** (sorting facility)  
Clean paper/card, cans, accepted plastics.
- Food waste** (anaerobic digestion)  
Food scraps only (follow local signage).

**Contamination:** wrong items can trigger rejection or downgrading of whole loads.

# Workshop

## Segment 3 — Reuse

Exploring institutional reuse pathways. Participants trace how materials circulate instead of being discarded.

### Mini Lecture 2: Reuse

Reuse pathways within student constraints. Focuses on time, money, and material flow.

Reuse lecture

Open PDF

Next: Game 2

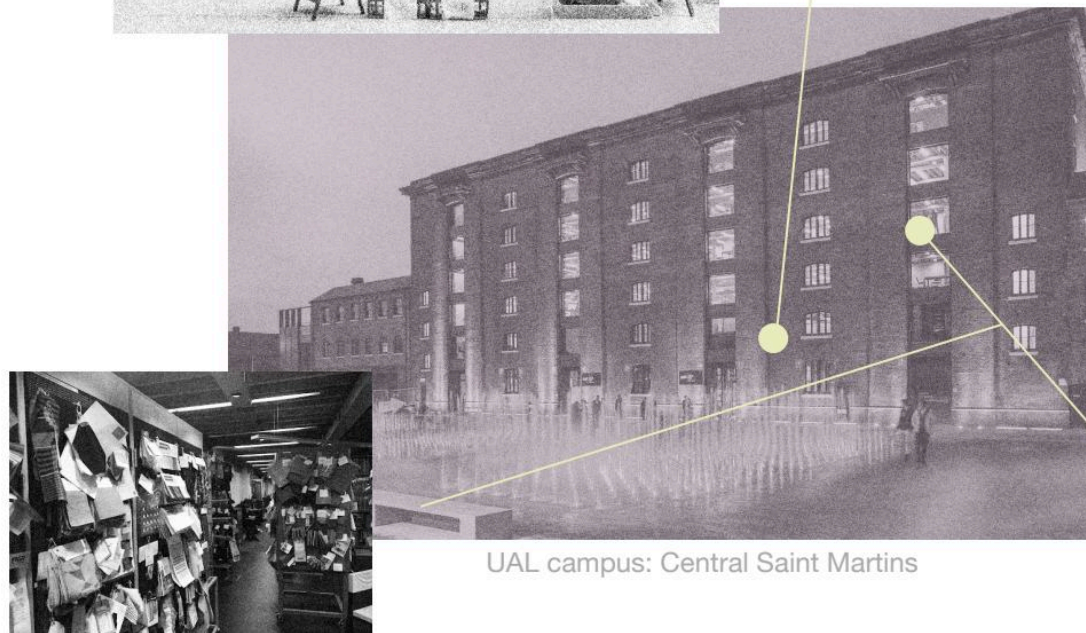
#### Reuse Systems Accessible to Us



**Swap Shop**  
A student-led exchange space where materials, clothing, and supplies can be given and taken for free. It keeps usable items circulating within the community instead of entering the waste stream.



**Online Resale**  
Contaminated packaging, Online resale platforms such as Vinted, Depop and Facebook Marketplace allow clothing, materials and equipment to circulate beyond campus. They extend product life, reduce demand for new production, and offer a lower-cost alternative to buying new.



UAL campus: Central Saint Martins



**Material Library**  
A shared resource that provides access to material samples, references and sustainable alternatives without individual purchasing. It supports informed design decisions while reducing unnecessary material orders and waste.

ual:

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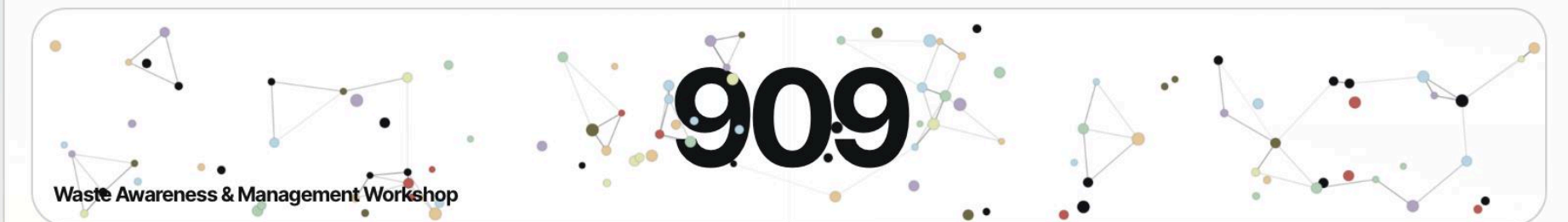


Waste Awareness & Management Workshop

### Game 2

Design school scenarios. Select the most appropriate reuse pathway for the materials and constraints.

ual:  
Central Saint Martins  
Garbage Day



Waste Awareness & Management Workshop

Round 1 / 10

Score 0 / 1425

Time 09:55

sara

Pause

Reset

SCENARIO

Decide, then read the system note.

CSM REUSE MAP

Unlock info by using pathways

Round started. Choose a pathway, then read the system note.

CSM / MATERIALS RESEARCH

You need to choose a material but want to avoid buying full quantities.

You're early-stage and need to compare feel, finish, and durability.

**Swap Shop**

On-campus exchange of reusable items.

select

**Material Library**

Borrow / sample materials for research.

select

**Repair services**

Fix to extend useful life.

select

**CSM internal channels**

Internal channels for quick matching.

select

**Online resale platforms**

External resale platforms (when suitable).

select

**Recycling**

Material recovery (when reuse isn't viable).

select

**Residual waste**

Residual route (last resort).

select

Next

**Swap Shop**

Physical exchange

For clean, reusable materials and objects that can stay within the CSM ecosystem.

Unlock by using this pathway at least once.

**Material Library**

Borrow / sample

For exploring materials without buying full quantities; reduces waste from early-stage uncertainty.

Unlock by using this pathway at least once.

**Repair services**

Life extension

Repair keeps function and value — often higher impact than replacing or discarding.

Unlock by using this pathway at least once.

**CSM internal channels**

Matchmaking

Studio group chats, internal lists, noticeboards, and course networks that move items to the right person quickly.

Unlock by using this pathway at least once.

**Online resale platforms**

External resale

Vinted/Depop/eBay can suit durable, higher-value items — but adds friction, travel and packaging.

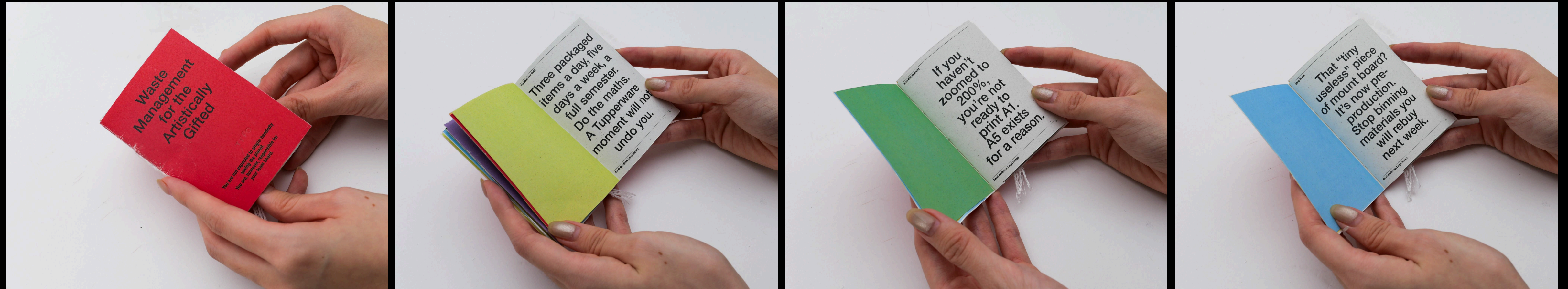
Unlock by using this pathway at least once.

**Mechanic:** pathways only reveal details once your group "uses" them in play.

# Workshop

## Segment 4 — What Can You Do?

A practical toolkit situates individual actions within the wider system. The zine has an a7 format, with everyday suggestions for participants.



## Reflection and improvement

We need to focus on one strong core idea and develop it more deeply. "909" could become a clearer and more consistent symbol across all outputs. The project could also concentrate on one high-waste space at CSM and design a more direct, hands-on activity there, possibly using real waste materials. Finally, the digital kit and physical installation should be more integrated, so the online experience clearly supports and extends the physical workshop.