

# Food Rules (FOR-U)

17th Meeting of  
EU Platform on Food Losses and Food Waste  
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# FOOD-RULES

- Financed by SMP, HADEA.A – Health and Food A.2
- Timespan: 2023-2024
- Partners
  - Shair.Tech – Socially vocationed Innovative Startup
  - RISTO3 – Catering Cooperative
  - Banco Alimentare del Trentino Alto Adige – Food Bank



# FOOD-RULES - Focus

- Waste generated by **food services**
- (Mainly) University Canteens in Trentino Alto Adige
- Small fraction of the total food thrown (3-4% of total waste?), but one the **most valuable** and **challenging waste to recover**

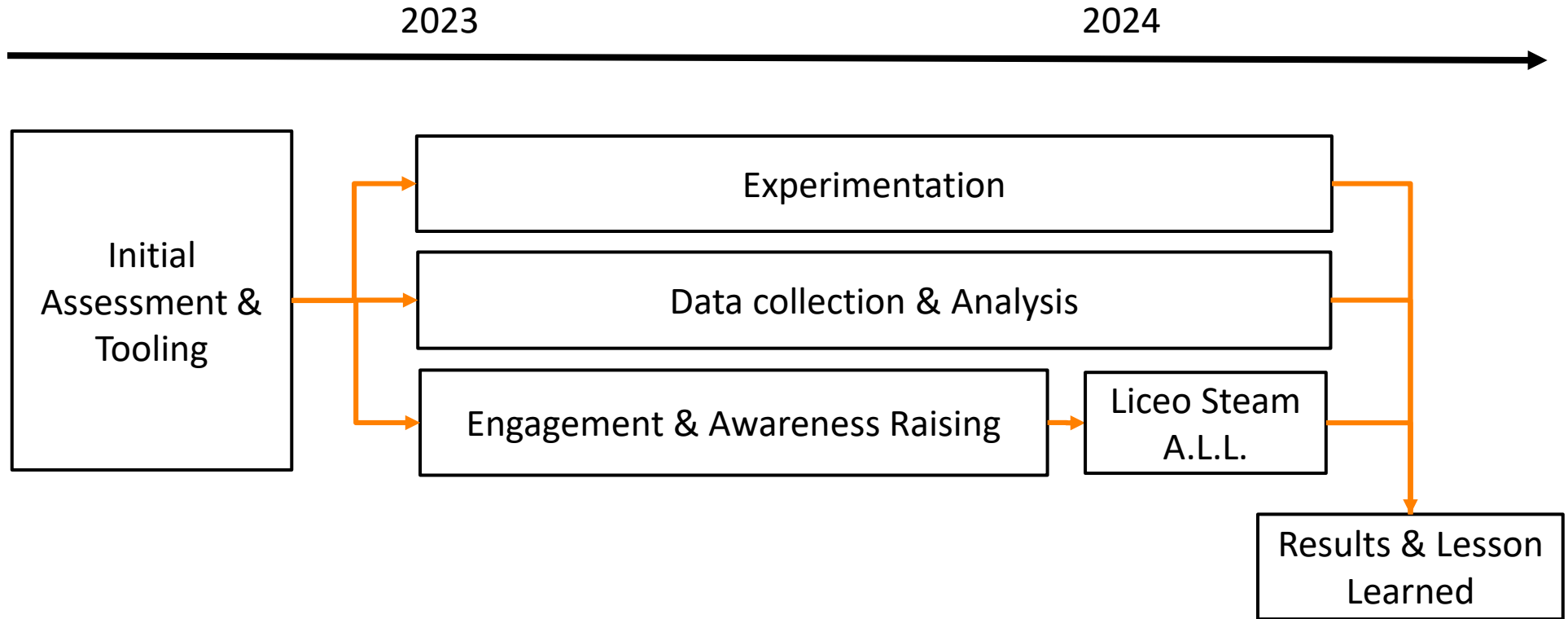


# Project Goals

- **Waste Measurement:**
  - Data collection about the waste generated **in the kitchen and on the plate**, by category, day, and place
  - Feedback gathering
- **Reduce waste-streams by strengthening food donation program**
- **Increase awareness and involvement of customers:**
  - Passive (communication), active (involvement, questionnaires, volunteering, idea creation)



# Project Organization & Timing



# Project Experimentation Setting

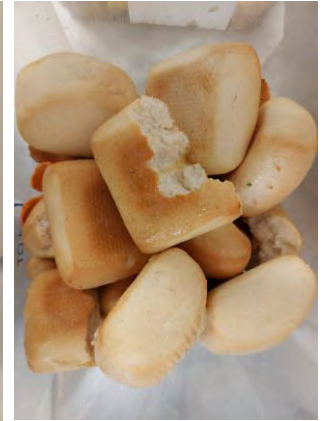
<b>Canteens</b>	Ristorante Universitario Povo 0 Ristorante Universitario Povo 1 Ristorante Universitario T. Gar Ristorante Universitario Mesiano Ristorante Universitario 24 Maggio C. F. P Enaip Villazzano, BLM- ADIGE SALA
<b>Period</b>	01/06/2023 – 30/12/2024
<b>Calendar days</b>	579

- Seven Canteens
  - 5 University, 1 School, 1 Company
- Training of RISTO3's personnel
- Donations ongoing throughout the project
- Waste measurements in specific periods
  - Difficult to keep customers (and personnel) committed
  - Relatively little variance on waste data



# Waste Measurement Program

- Kitchen + Plate
- Graduated bins in the preparation areas (two different categories of waste)
- Collection stations in the eating areas (four collection stations for students)
- Two collection bins in the washing area
- Data entered in BringTheFood by personnel at the end of the day





No

> 1000  
data points



about 2 tons of waste  
(both inevitable and evitable)



insights about systematic  
waste and way to reduce it

# Engagement



Data collection accompanied by a communication campaign (press, leaflets, events, cooking labs, conferences, and gadgets)

Feedback collection via questionnaires

Average daily presence in a canteen between 100 and 450 (multiply by seven and by days)



# Liceo Steam: Action Learning Lab

(Ongoing) initiative with **Liceo Steam** (Rovereto)

Two classes, last year, developed ideas for FOR-U. Will be part of their final exam.

Ten initial ideas (process, data, tools), converging to four, prototyped

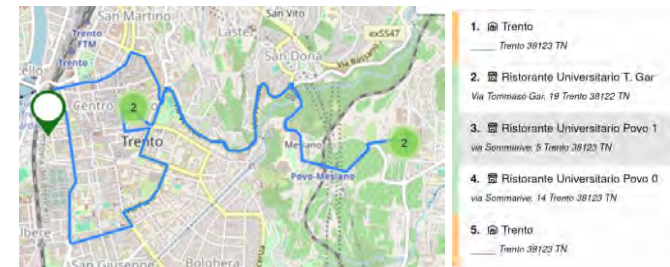
Ideas presented at the annual stakeholders meeting of RISTO3



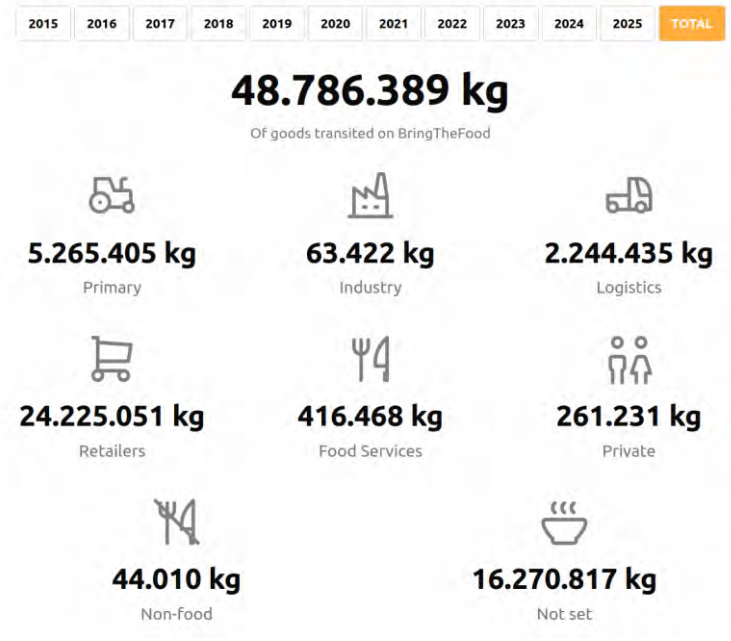
# Donation Program

- Program run by the Food Bank in collaboration with the project partners
- Donatable left-overs deep-frozen at end of service, collected every few days and immediately redistributed upon collection
- BringTheFood helps organize collection, distribution, and data analysis (signal-recover, cost/impact analysis)

Total quantity	M/F	Date	Location	User	Primary	Secondary	Tertiary	Value
10.00 kg	2024/34	Dec 09 24	Ristorante Universitario T. Gar Sitticibo Trento	Sitticibo TN				€0.00
5.00 kg	2024/119	Dec 03 24	Ristorante Universitario Mesiano	Roberto Scarpari	1.00 kg	2.00 kg	2.00 kg	
9.00 kg	2024/32	Dec 03 24	Ristorante Universitario T. Gar Sitticibo Trento	Sitticibo TN				€0.00
7.00 kg	2024/118	Dec 02 24	Ristorante Universitario Mesiano	Roberto Scarpari	2.00 kg	2.00 kg	3.00 kg	
8.00 kg	2024/31	Nov 28 24	Ristorante Universitario T. Gar Sitticibo Trento	Roberto Scarpari				€0.00
13.00 kg	2024/30	Nov 26 24	Ristorante Universitario T. Gar Sitticibo Trento	Roberto Scarpari		10.00 kg	3.00 kg	€0.00

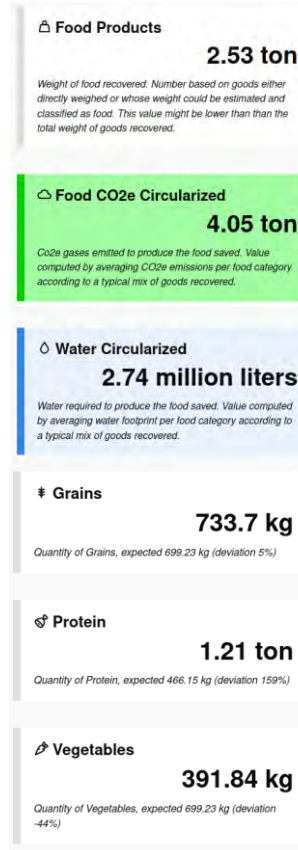


- WebApp used in the FOOD-RULES project
- Mainly used by food-banks, BTF covers the management of leftover food from origin to destination
- Extensive workflows and reporting capabilities (including ESE KPIs)
- <https://bringfood.org>



# Some Data

- Main courses are the most donated food, together with bread → **highly valuable recover from a nutritional point of view**
- Some fluctuations in the quantities (season's breaks), variation in sizes, according to day due to → **the importance of tooling**
- We call it the **Environmental value of food** → **environmental impact of operations**



in-platform data  
(screenshots)



# Lesson Learned and Results

- **(the ugly)** Difficulties in engaging University students (active engagement prolonged “exposure), but **excellent response from younger students**
- **(the bad)** Quite a bit of waste, but stream analysis enabled some organizational changes driven by data
- **(the good)** The donations program managed to recover more than 450 donations for a total amount of **2.5 tons of food**, with an environmental value of about **4 tons of CO<sub>2</sub>e** and **2.7 million liters of water**.



# Food Rules

Thank you!

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