

Interreg



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Central Baltic Programme

Ce4Re

Digital Waste Reduction Tool

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Circular Economy for Restaurants - Ce4Re

- Satakunta University of Applied Sciences (FIN)
- Pyhajarve Institute (FIN)
- Ecomatcentrum (SE)
- Vidzeme Planning Region (LV)



*Interreg
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Our goal – reduction of food waste in restaurant sector

- Digital tool to assist restaurants in registration and reduction of their food waste
- Web based solution, available free of charge
- Available in English, Latvian, Swedish and Finnish languages
- Elaborated by Estonian company WasteLocker
- 15 enterprises were involved in pilot measuring their food waste during 2025:



5



5



5

Pilot on food waste reduction

- Period: April – December, 2025
- Length of weighting: minimum 5 month
- Before measurements Baseline were set according to restaurant data
- Measurements were compared after 1 st and 5th month of weighting
- Food waste were classified according to waste sources
- Restaurants chose from which sources/flows they want to measure their waste

Food waste categories according to sources:

Preparation waste

Created in preparation of food, including cooking mistakes



Serving waste

Waste from buffet, food showcase, not sold



Storage

Spoiled, expired products from fridges, etc



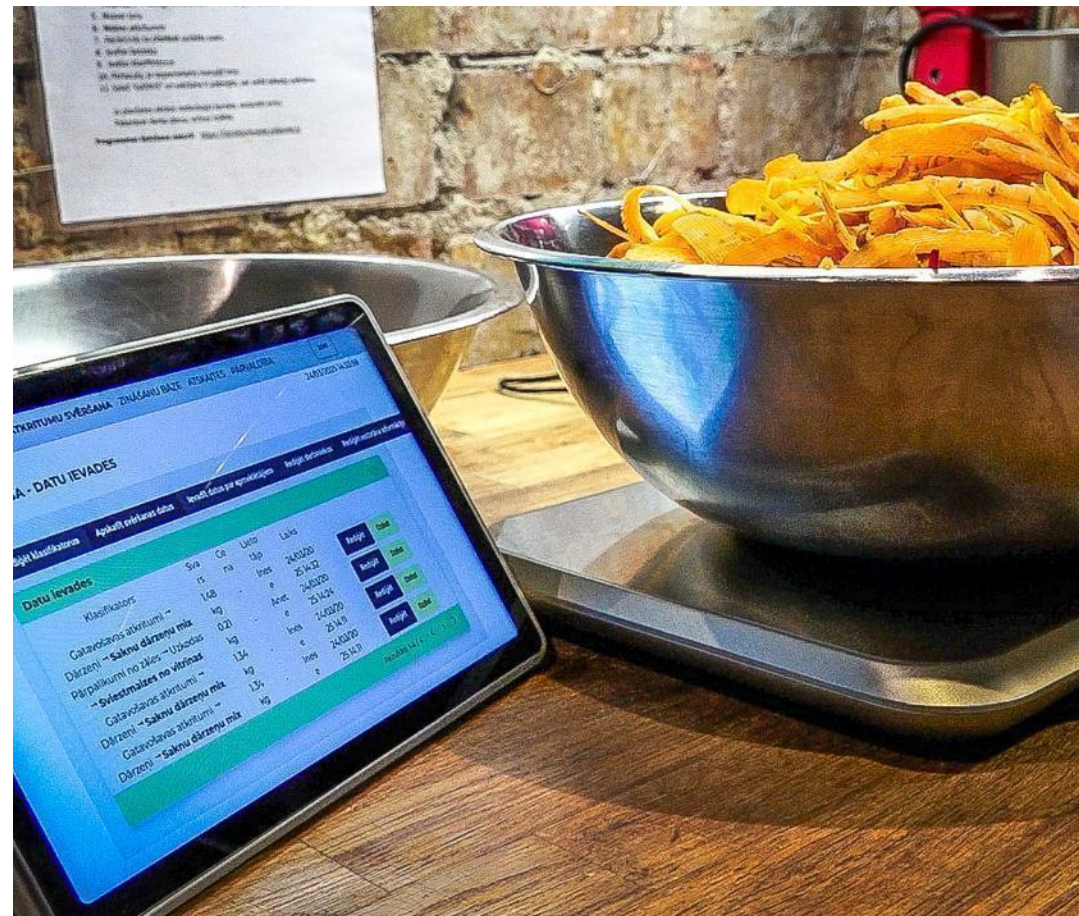
Plate waste

Residues from clients plates



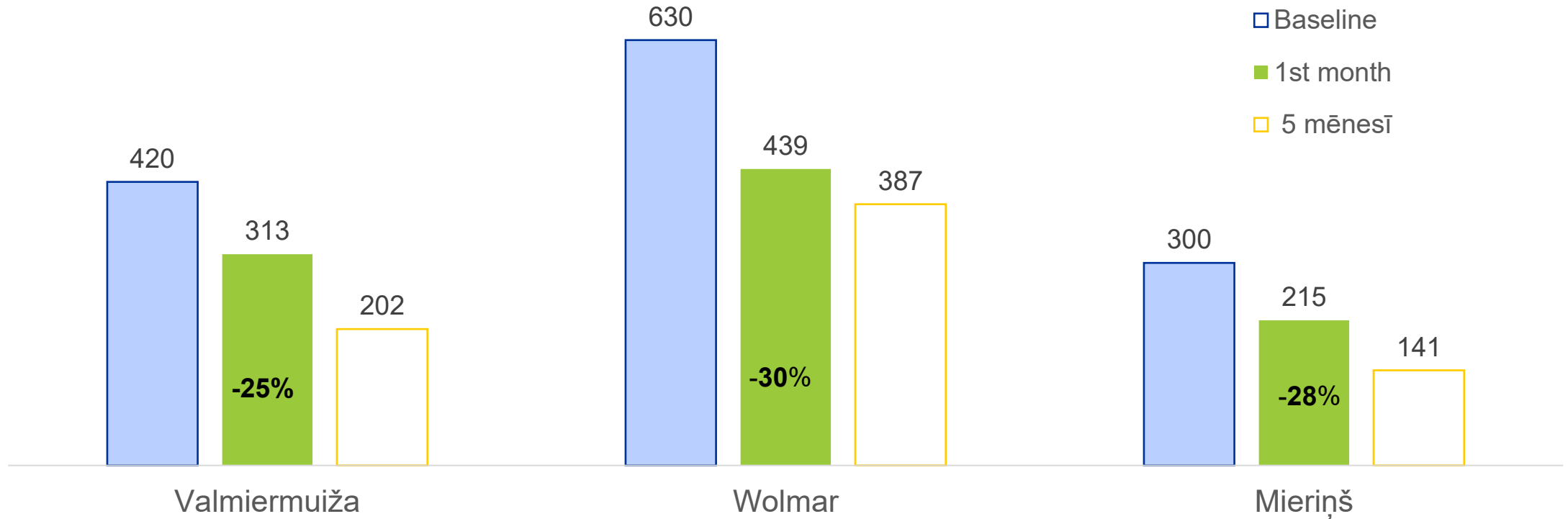
Results of Pilot:

- ✓ Reduction of food waste in all pilot restaurants
- ✓ Managers acknowledge an increased sense of responsibility among employees towards the food
- ✓ New solutions introduced to reduce food residues















1st month of weighting shows reduction against the Baseline

Food waste in kg and % reduction compared to Baseline



Pilot restaurants show reduction in food waste

		<i>Baseline (kg/day)</i>	<i>5th month (kg/day)</i>	<i>5th month (kg/day)</i>	<i>Reduction (%)</i>
Yteri Golf Restaurant		12	6.1	4.8	-22
Fresco		10	10.3	9	-12
Johanna & Mat		5.4	4.9	4.5	-8.2
Karlaplan		4.1	3.8	3.5	-7.9
Galmastan		9.6	8.8	8.0	-9.1
Bently		8	7	6.5	-7.1
Högbo Brukshotell		4.5	4.1	3.7	-9.8
Mieriņš		10	7.2	4.7	-34.4
Wolmar		21	14.6	12.9	-17.7
Valmiermuiža		14	10.4	6.7	-35
MrBiskvīts		n/a	94	57	-38
Bazārs		n/a	68	46	-31

Restaurants follow «wasted» money

Food waste value in EUR (according to restaurant calculations)



	1st month	5th month
Mr Biskvīts pastry	358	↓ 219
Bazārs serving waste	353	↓ 241

Invented practices reported by restaurants

- Menu editing – remove "non-popular" dishes from the lunch buffet
- Reuse of serving waste in other dishes (f.e.boiled eggs in wraps, grilled vegetables in tarts)
- Preparation of smaller food volumes for the buffet, topping up when the dish begins to run out
- Smaller serving trays and more frequent buffet refilling
- The use of vegetable cuttings and peels for the preparation of broths
- Offering takeaway trays to customers

What were the main factors influencing changes in your restaurant food waste volumes?

Assess the impact according to your situation from the given factors. If any category is not fully applicable, you can select "not applicable (n/a)". Significance rating: 1- not at all; 5 – very much”

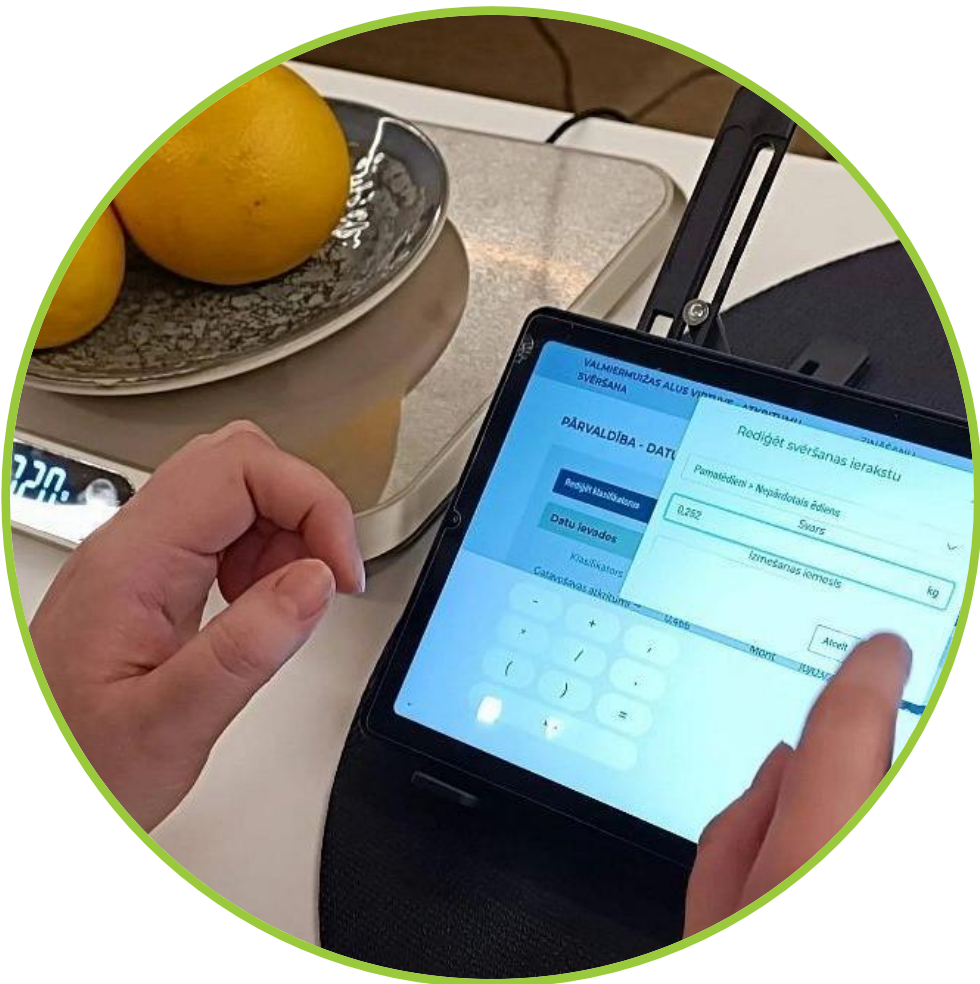
Significance	1	2	3	4	5	n/a
We changed our daily kitchen routines and preparation practices						
Ingredients were used more comprehensively (e.g. nose-to-tail, root-to-stem)						▼
We Improved storage & labeling						
Better forecasting and planning						
Reuse of surplus food for other dishes/staff meals						
We changed the menu (reduced menu complexity / seasonal or limited menus to reduce overstock)						
We changed portion sizes on plates						
We started to encourage take-away of leftovers						
We changed the product delivery system						
WRT presence made employees think more carefully						
Seasonality impact						
Change in customer volume (or different segments)						
others...(please specify)						

Opinions on causes of waste reduction during pilot (n=12)

	points	mentions
WRT presence made employees think more carefully	53	12
We changed our daily kitchen routines and preparation practices	43	12
Ingredients were used more comprehensively (e.g. nose-to-tail, root-to-stem)	42	11
Better forecasting and planning	40	11
Reuse of surplus food for other dishes/staff meals]	36	11
Seasonality impact	35	10
We changed the menu (reduced menu complexity / seasonal or limited menus to reduce overstock)	33	10
We improved storage and labeling	28	10
We changed portion sizes on plates	25	7
Change in customer volume	24	9
We started to encourage take-away of leftovers	20	7
We changed the product delivery system	7	4

Functionality of the tool:

- ✓ Creating profile of restaurant with multiple users
- ✓ Customizable waste classifiers
- ✓ Simple registration of waste pressing on menu buttons
- ✓ Daily, weekly, monthly reports
- ✓ Tracking of lost money and CO2



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← → ↻ zerofoodwaste.vidzeme.lv



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English (United States)  ▾

Chefs preparing meal

Track and Reduce Food Waste in Your Restaurant

The Ce4Re Waste Tool helps restaurants monitor food waste, understand where it comes from and reduce both waste and costs using real kitchen data.

Create a free account

Login



Download the **Waste Reduction Tool Handbook (PDF)**

A practical guide explaining the methods behind the tool.

CUSTOMIZABLE FOOD CLASSIFIERS

MANAGEMENT - CLASSIFIERS

Edit classifiers View data-entries Enter count of guests Edit employees Edit restaurant info

> Plate waste	Add sub-classifier for Plate waste	Edit		
> Preparation waste	Add sub-classifier for Preparation waste	Edit		
✓ Serving waste	Add sub-classifier for Serving waste	Edit		
Salad	Add sub-classifier for Salad	Edit	Delete	Archive
Soup	Add sub-classifier for Soup	Edit	Delete	Archive
Snacks	Add sub-classifier for Snacks	Edit	Delete	Archive
Main dish	Add sub-classifier for Main dish	Edit	Delete	Archive
Dessert	Add sub-classifier for Dessert	Edit	Delete	Archive
Pastry	Add sub-classifier for Pastry	Edit	Delete	Archive
> Storage	Add sub-classifier for Storage	Edit		

POSSIBILITY TO ADD VALUE TO WASTED FOOD

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ESTONIA - WASTE SCALING KNOWLEDGE BASE REPORTING MANAGEMENT

Logout 07/04/2026 11:00

Plant based vegan production	Add sub-classifier for Plant based vegan production	Edit	Delete	Archive
Cooking errors	Add sub-classifier for Cooking errors	Edit	Delete	Archive
✓ Serving waste	Add sub-classifier for Serving waste	Edit		
Salad (15,00 €)	Add sub-classifier for Salad	Edit	Delete	Archive
Soup	Add sub-classifier for Soup	Edit	Delete	Archive
Snacks	Add sub-classifier for Snacks	Edit	Delete	Archive
Main dish	Add sub-classifier for Main dish	Edit	Delete	Archive
Dessert	Add sub-classifier for Dessert	Edit	Delete	Archive
Pastry	Add sub-classifier for Pastry	Edit	Delete	Archive
✓ Storage	Add sub-classifier for Storage	Edit		
Vegetables	Add sub-classifier for Vegetables	Edit	Delete	Archive
Fruits & Berries	Add sub-classifier for Fruits & Berries	Edit	Delete	Archive
Dairy and eggs	Add sub-classifier for Dairy and eggs	Edit	Delete	Archive
Meat	Add sub-classifier for Meat	Edit	Delete	Archive

Edit classifier Soup

Classifier name *

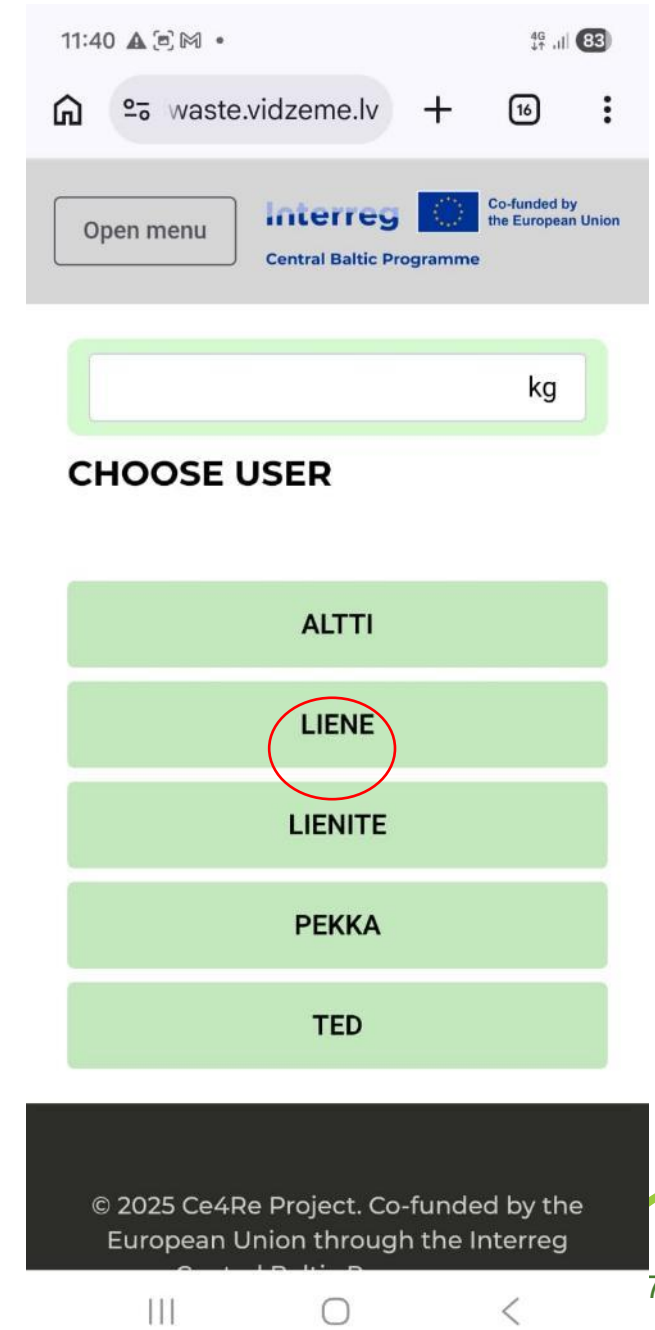
Soup

Price per kg

8.50 €

Cancel Save

Screen layout for cell phone





CHOOSE ITEM **User: Liene**

Employee → Select Group

- PLATE WASTE
- PREPARATION WASTE
- SERVING WASTE**
- STORAGE

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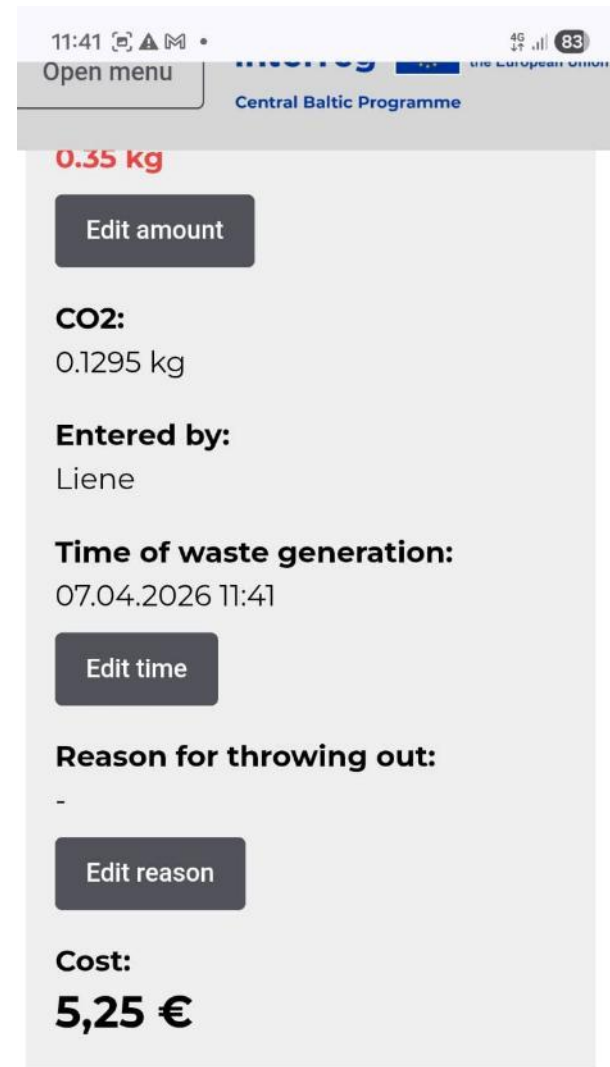
 kg

CHOOSE ITEM **User: Liene**

Employee → Select Group →

Serving waste

- DESSERT
- MAIN DISH
- PASTRY
- SALAD**
- SNACKS
- SOUP



0.35 kg

Edit amount

CO2:
0.1295 kg

Entered by:
Liene

Time of waste generation:
07.04.2026 11:41

Edit time

Reason for throwing out:
-

Edit reason

Cost:
5,25 €

BACK

DONE

**GUEST COUNT ENTRY
FOR MORE PRECISE
STATISTICS**

MANAGEMENT - ENTRIES

Edit classifiers

View data-entries

Enter count of guests

Edit employees

Edit restaurant info

Add New

Guests count entry

Date

Add new entry



Date

04/07/2026



Count of guests

150



Cancel

Save

REPORTS - PERIODIC

Periodic

Export raw data to excel

Select report filters

From 04/06/2026

Until 04/07/2026

Value group by Absolute values

Period group by Weekly

Create

Daily

✓ Weekly

Monthly

Yearly

REPORTS - PERIODIC

Periodic

Export raw data to excel

Select report filters

From 04/06/2026

Until 04/07/2026

Value group by Absolute values

Period group by Absolute values By guest count

Create

Izvēlēties atskaites filtrus

No 04/01/2025

Līdz 11/30/2025

Vērtības sagrupēt pēc Absolūtas vērtības

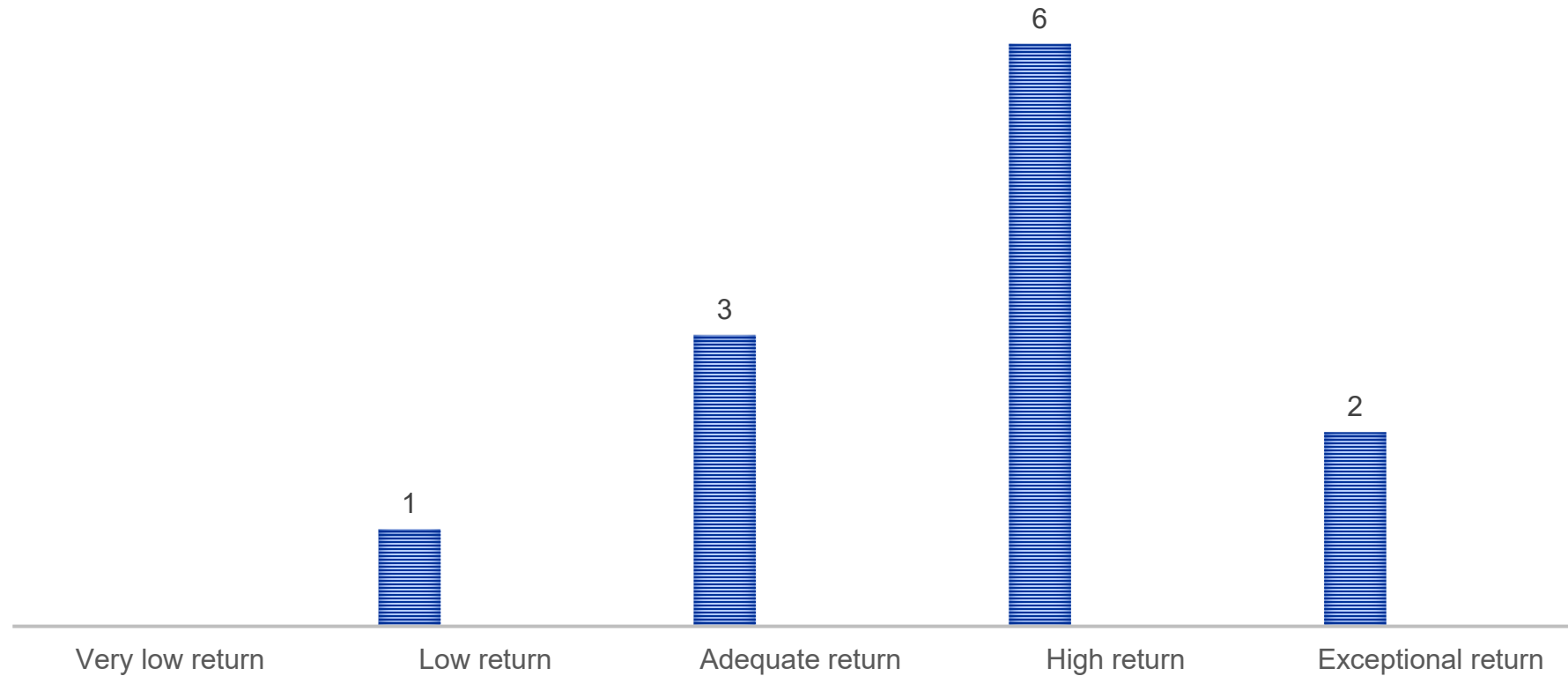
Periodu grupēt pēc Mēnesī

Izveidot

	Number of clients	42755	4579	4612	5059	5530	4903	5527	6352	6193
	Total	3071.00 kg / 1 707,04 €	449.66 kg / 187,13 €	395.10 kg / 188,50 €	422.67 kg / 165,62 €	325.19 kg / 150,85 €	334.72 kg / 199,26 €	407.75 kg / 279,93 €	448.48 kg / 352,15 €	287.42 kg / 183,60 €
	Mēnesis	Kopā	Aprīlis (2025)	Maijs (2025)	Jūnijs (2025)	Jūlijs (2025)	Augusts (2025)	Septembris (2025)	Oktobris (2025)	Novembris (2025)
>	Storage	18.55 kg / 0,00 €	9.86 kg	2.32 kg	1.03 kg	1.82 kg	0.95 kg	2.23 kg	-	0.33 kg
>	Preparation waste	1727.29 kg / 1 705,54 €	246.96 kg / 186,29 €	247.82 kg / 188,50 €	205.86 kg / 165,62 €	157.03 kg / 150,85 €	164.28 kg / 199,26 €	239.70 kg / 279,27 €	287.32 kg / 352,15 €	178.32 kg / 183,60 €
>	Serving waste	185.69 kg / 1,50 €	62.96 kg / 0,84 €	32.29 kg	44.74 kg	12.50 kg	22.24 kg	3.39 kg / 0,65 €	4.52 kg	3.05 kg
>	Plate waste	1139.47 kg / 0,00 €	129.89 kg	112.67 kg	171.04 kg	153.83 kg	147.25 kg	162.44 kg	156.64 kg	105.73 kg

Restaurants see added value to food weighting

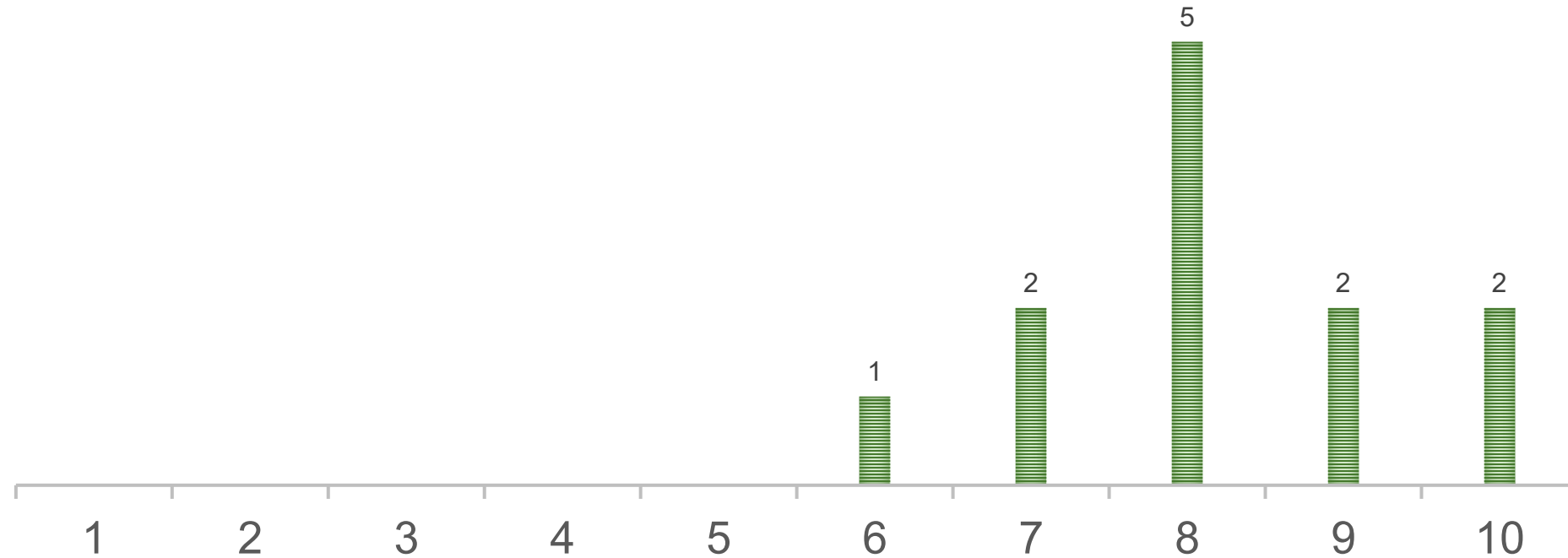
How valuable your efforts were in terms of results gained? (n=12)



How likely are you to recommend this WRT solution to other restaurants?

(where 0 - extremely unlikely to recommend; 10 - absolutely certain to recommend)

N=12



Thank you!

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