



# **GO LOCAL! HOW A LOCAL APPROACH CAN HELP PREVENT FOOD WASTE**

**PORTUGAL: Enablers of Circular Food Waste Hubs (City-to-City Learning Experiences)**

**Circular Food Waste Community Hubs: Preparing the Pilot Models for Circular Neighbourhoods**

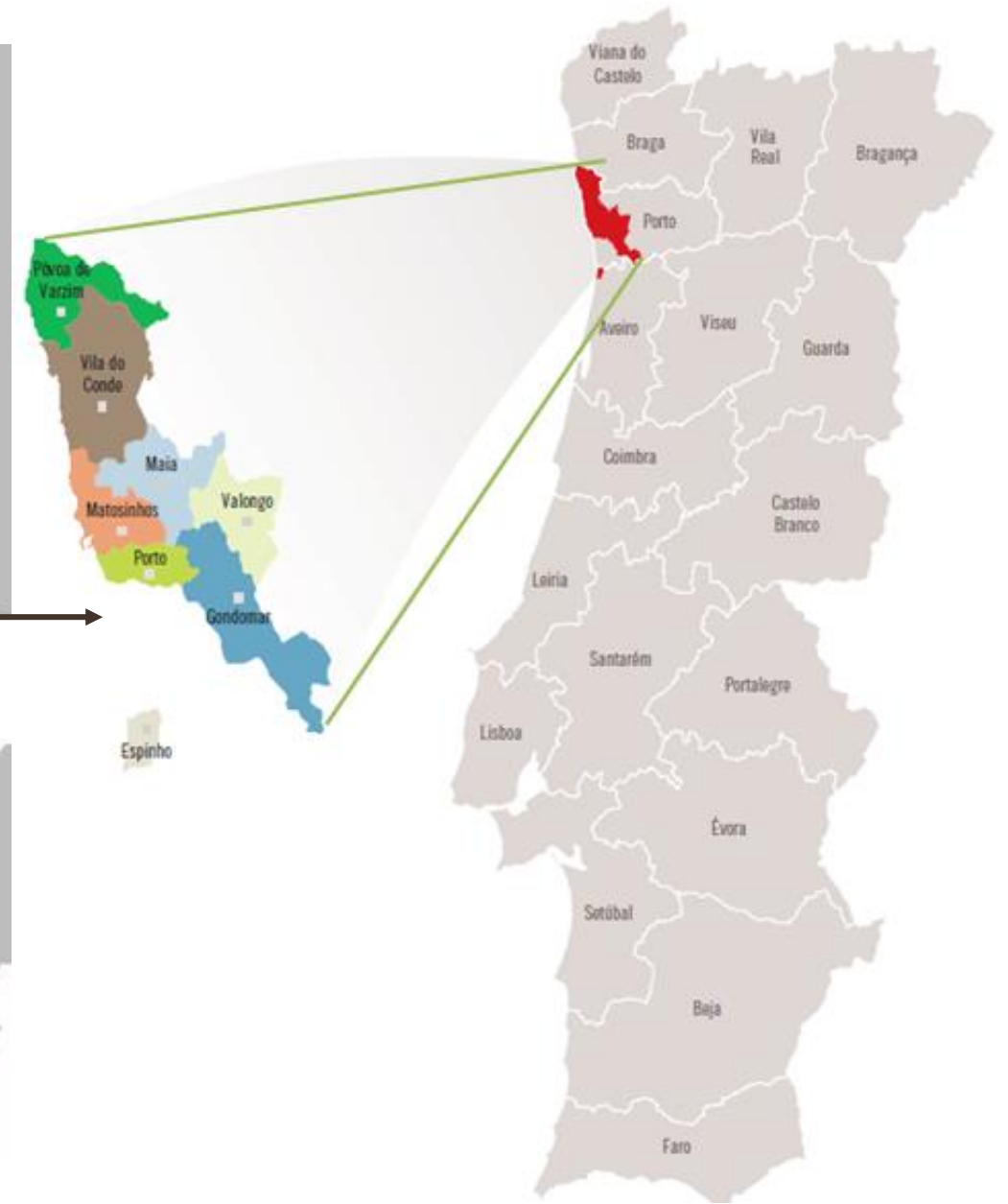
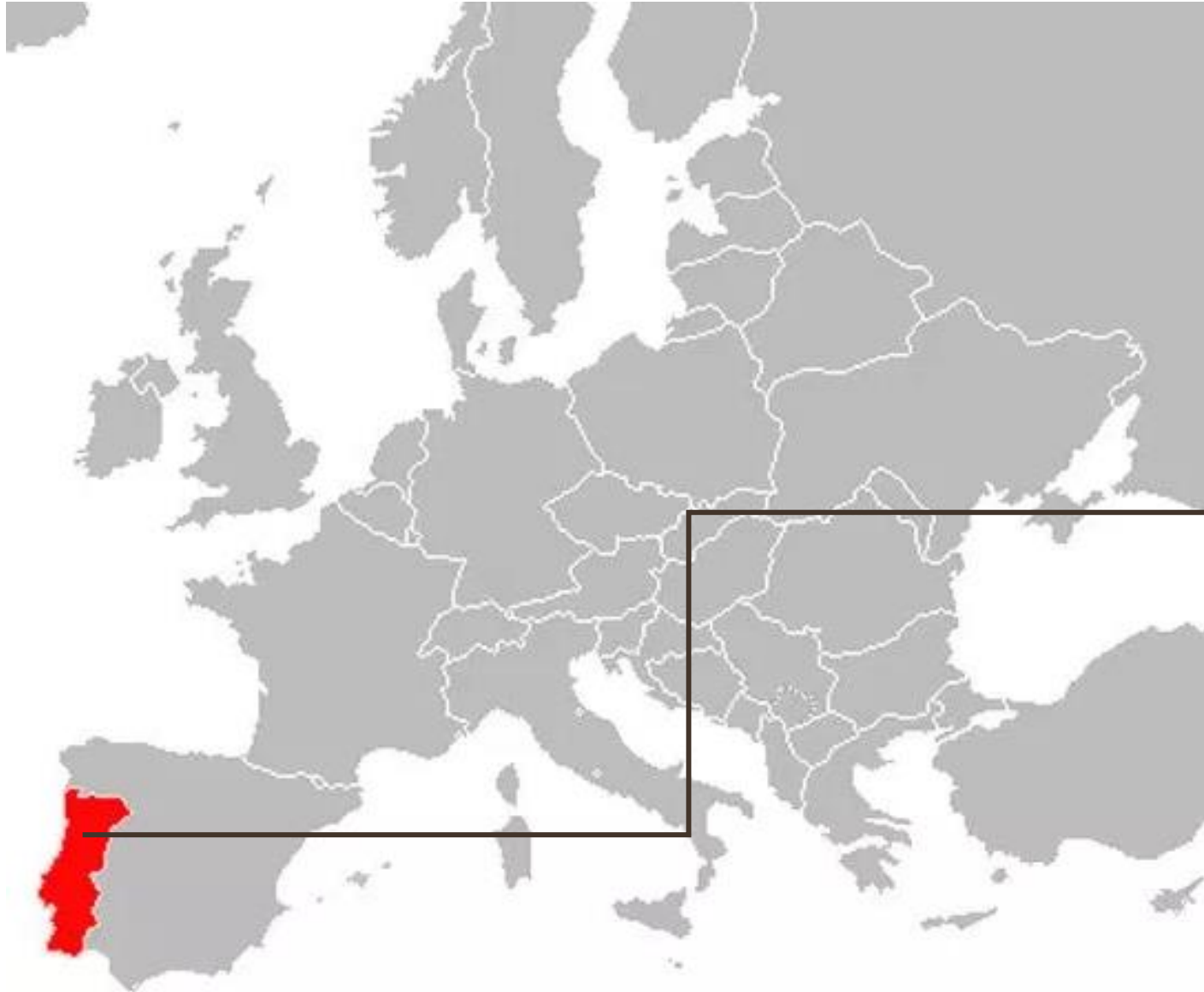
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We love food in Portugal, as you would know  
if you've ever been here!

# LIPOR – INTERMUNICIPAL WASTE MANAGEMENT COMPANY OF GREATER PORTO





*"Tripas à moda do Porto"*



*"Migas à Alentejana"*



*"Bacalhau"*



*"Sardinha"*

But... this is not a story about the food we  
eat...

**This is a story about the food we don't eat!!!!**



PORTUGAL



## IN PORTUGAL

WE ESTIMATED THAT **17%**  
**OF EDIBLE FOOD**  
PRODUCED FOR HUMAN  
CONSUMPTION IS LOST OR  
WASTED

**AROUND 1M T/YEAR**

(PERDA, 2012)



**1.000.000**

**INHABITANTS**

**≈ 500.000 t**

**MUNICIPAL WASTE PRODUCTION**

**≈ 40%**

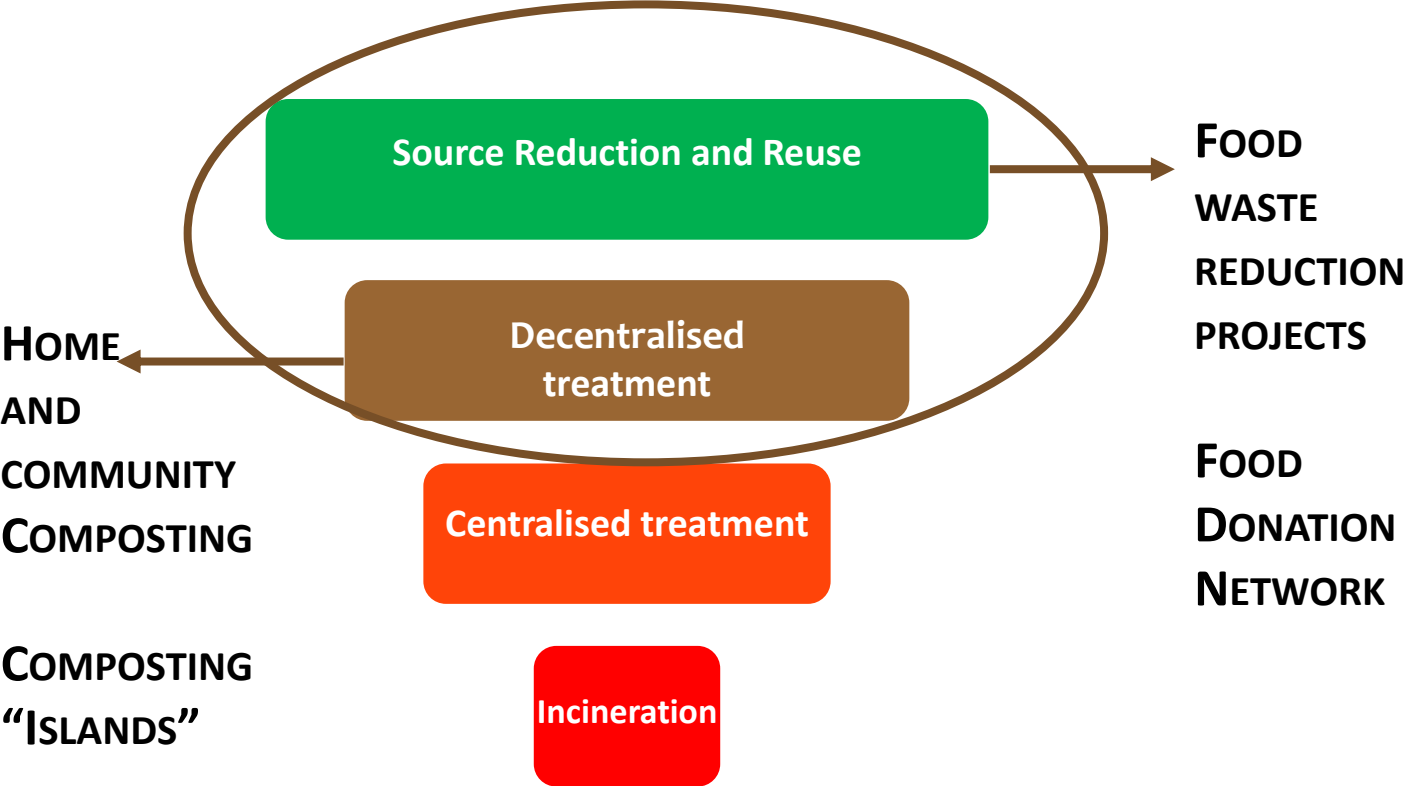
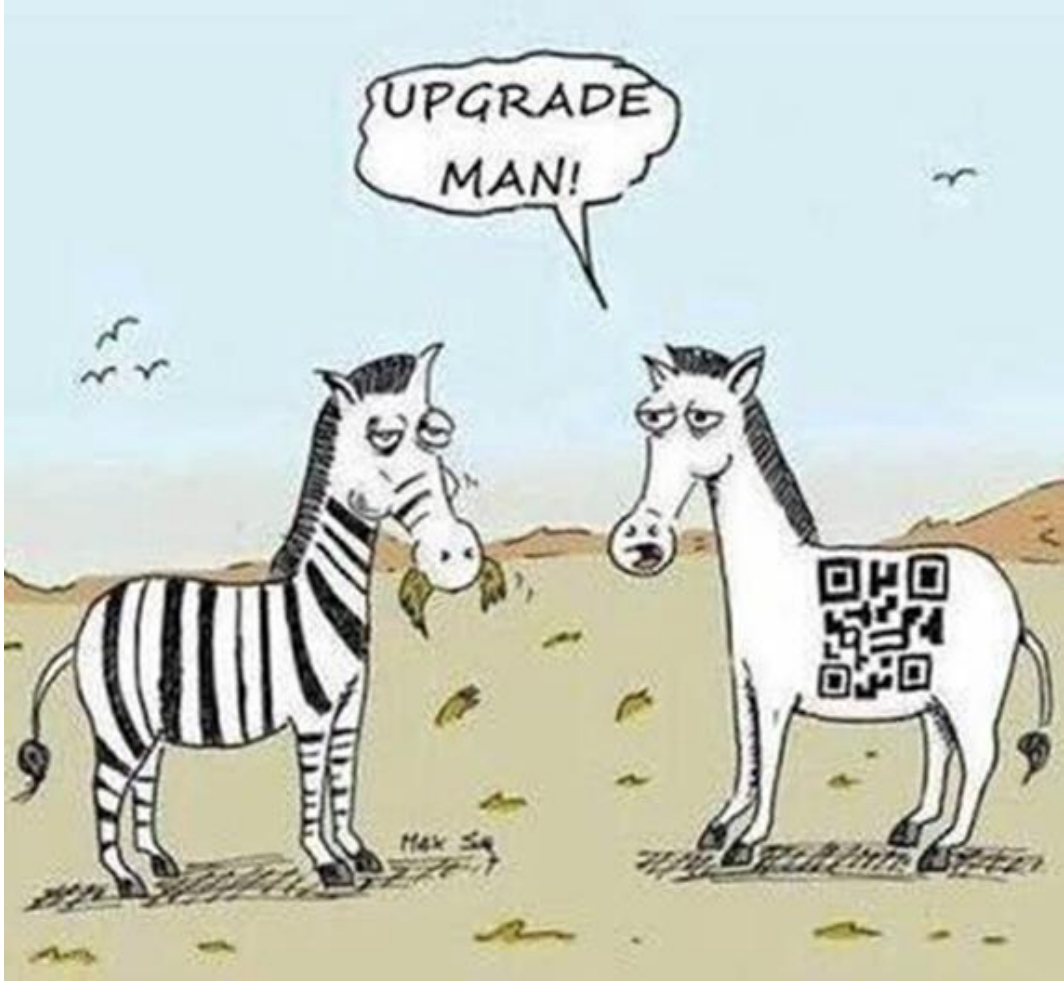
**BIOWASTE IN MUNICIPAL WASTE...**

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**...And ≈ 25% IS FOOD WASTE**



# FOOD WASTE REDUCTION STRATEGY



# FOOD WASTE REDUCTION STRATEGY

## OUR TARGET: LOCAL BUSINESSES AND THE COMMUNITY



### RESTAURANTS

**DOSE CERTA (SINCE 2008)**

**EMBRULHA. (SINCE 2016)**



School lunch

### CANTEENS

(SCHOOLS, HOSPITALS, COMPANIES)

**DOSE CERTA**



### PARTNERSHIPS WITH ENTITIES OR ASSOCIATIONS

(with impact on Food Waste reduction) (SINCE 2017)



### FAMILIES

**WORKSHOPS; BEST-PRACTICE DOCUMENTS (SINCE 2008)**

- cooking without waste | sustainable meals | leftover uses | knowing and cooking seasonal fruits and vegetables

# FOOD WASTE REDUCTION STRATEGY

- **REDUCE FOOD WASTE AND PROMOTE A BALANCED AND SUSTAINABLE DIET**
- **ENCOURAGE CITIZENS TO CHANGE THEIR EATING HABITS** (with the collaboration of the Portuguese Association for Nutrition)
- **CHANGE CITIZENS HABITS: FIGHTING A MENTALITY BUILT ON DESCARTABILITY BY SHOWING RESPECT FOR THE FOOD WE EAT**



# FOOD WASTE REDUCTION INITIATIVES



## DOSE CERTA

RESTAURANTS

CANTEENS

(SCHOOLS, HOSPITALS, COMPANIES)



Diagnosis phase (1 week): where food waste is weighted and the number of meals sold is registered



Training (environmental and healthy practices | Sustainable purchasing, cooking and menus)) (LIPOR | APN)



Awareness phase (1 week): Food waste awareness campaign with a 2<sup>nd</sup> analysis on food waste production \*



Dose Certa Certification



Follow-up and Monitoring

\* same procedure

The key success factor is mandatory weighting of the wasted food!

# OUR SOLUTIONS



## DOSE CERTA

RESTAURANTS	
FOOD WASTE REDUCTION/QUARTER (KG)	% /QUARTER
<b>326</b>	<b>53</b>

CANTEENS	
FOOD WASTE REDUCTION/QUARTER (KG)	% /QUARTER
<b>624</b>	<b>37</b>

AVERAGE (%)			
<b>39,8</b>	<b>±</b>	<b>9,33</b>	<b>CI95%</b>
			UPPER LIMITS <b>30,5</b>
			LOWER LIMITS <b>49,1</b>

# FOOD WASTE REDUCTION INITIATIVES

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## **EMBRULHA.** RESTAURANTS

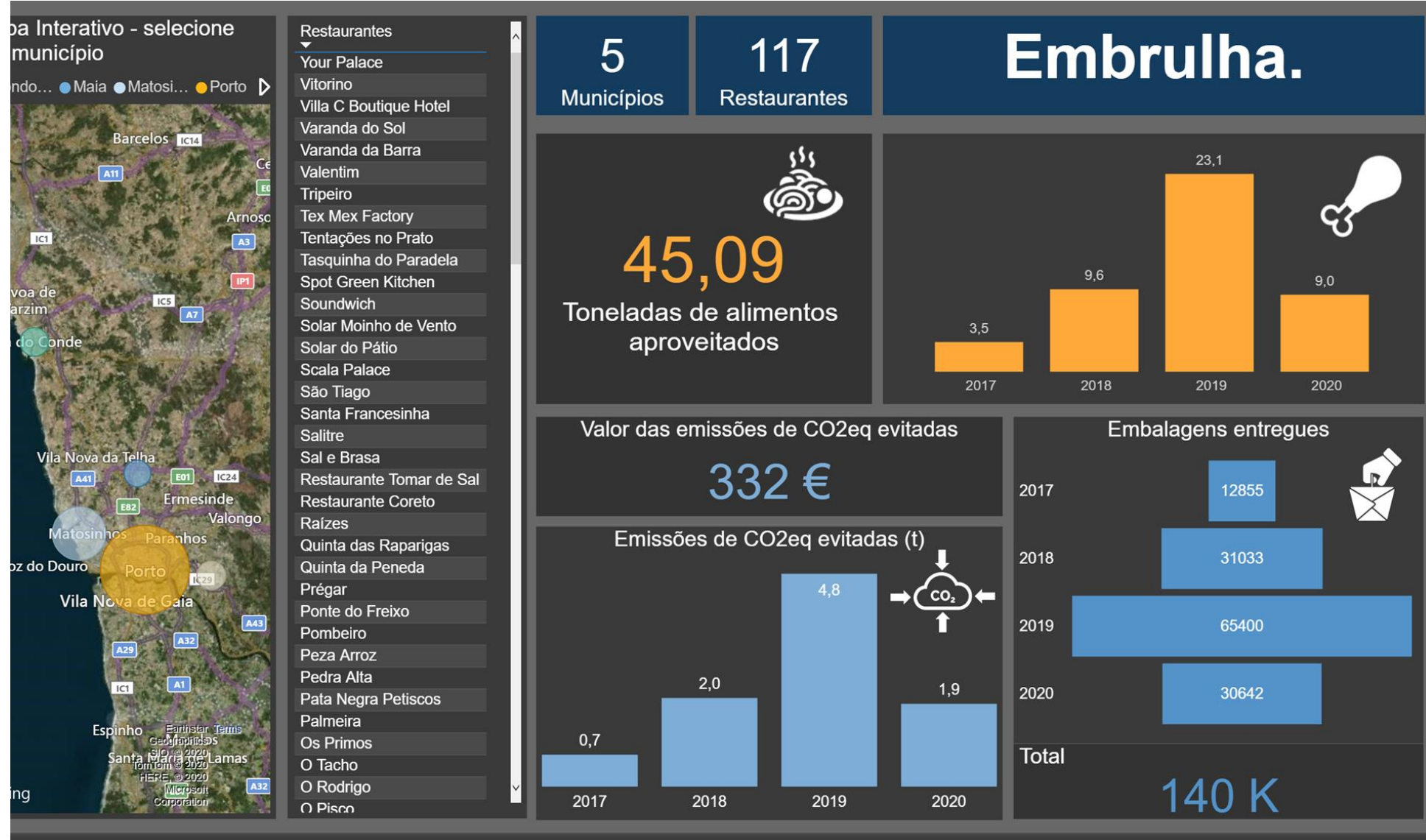
- Increase Food Waste Reduction
- Encourage citizens to take home their leftovers
  
- “If you don’t it all... Wrap it”



# OUR SOLUTIONS



## EMBRULHA.



# OUR SOLUTIONS



## PARTNERSHIP WITH ENTITIES OR ASSOCIATIONS

*(with impact on Food Waste reduction) (since 2017)*

Local entities, associations, initiatives or businesses that, despite of their scope (either social, economic or environmental), contribute to the reduction of food waste production.

### Social Entities



### Environmental Entity



### Economic Businesses



A novel, successful network with high impact in food waste prevention.





# GLOBAL ACHIEVEMENTS

YEAR	FOOD SAVED (TONNES)	CO2 EMISSIONS AVOIDED PER YEAR (TONNES)	AVOIDED WASTE TREATMENT COSTS (€)
2017	8 400,1	1 765,5	420 007,1
2018	4 727,3	993,5	236 364,9
2019	6 263,0	1 316,3	313 150,1
2020	6 686,6	1 405,3	334 329,7
2021	6 258,1	1 315,3	312 905,9



**FOOD SAVED**  
32 335,1 T

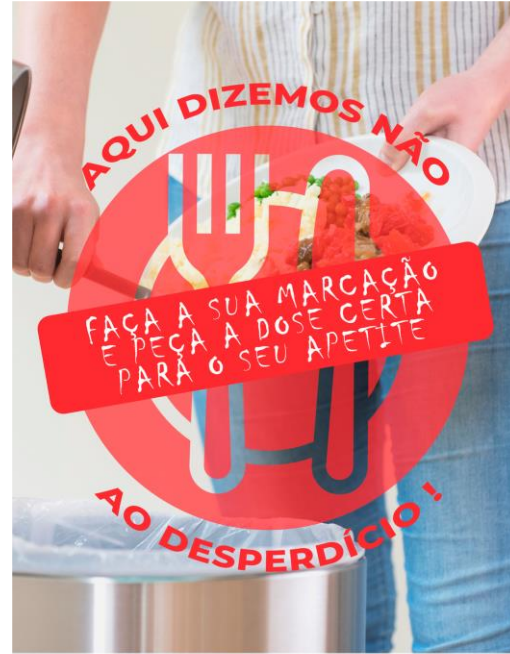


**CO2 EMISSIONS AVOIDED**  
6 795,9 T



**AVOIDED WASTE TREATMENT COSTS**  
1 616 757,7€

# AWARENESS CAMPAIGNS AND MATERIALS



lipor | Porto. | ASSOCIAÇÃO PORTUGUESA DE NUTRIÇÃO | NATIXIS | SINRL MAIS



# FOOD WASTE REDUCTION - EUROPEAN PROJECT

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SEVEN EUROPEAN CITIES ARE PILOTING ACTIONS TO CLOSE THE LOOP OF BIO-WASTE, AND CONSTRUCTION AND DEMOLITION WASTE.



## **Food demand management model**

A mathematical model for predicting food waste flows in the social economy and tourism sectors. This will be used to form the bases of a tool for the daily management of food demand and supply fluctuations in these sectors.

## **Circularity decision making support tool**

A tool to support social institutions, hotels, restaurants, citizens and tourists in assessing the circularity impacts of their decisions. This tool will guide users towards the most circular choice of what to do each time organic matter is used, bought, eaten or discarded.

## **Circular Procurement Guidelines for the Social Economy and Tourism Sector**

A tool for Biowaste circular procurement (canteens, catering and sustainable management practices of green spaces ). This tool is a complex excel database with a lot of variables on procurement.

# SOME LESSONS

- **THERE'S NO SINGLE SOLUTION, BUT SEVERAL INTERDEPENDENT SOLUTIONS**
- **AWANERESS AND COMUNICATION CAMPAIGNS ARE NEVER ENOUGH**
- **ENGAGE WITH THE CITIZENS**
- **INVOLVEMENT OF SEVERAL STAKEHOLDERS**
- **MOTIVATING RESTAURANTS TO JOIN AND GET INVOLVED;**
- **RAISE AWARENESS FOR A MORE BALANCED AND SUSTAINABLE DIET WITHOUT WASTE;**
- **MONITOR THE ENVIRONMENTAL AND ECONOMIC IMPACTS OF ALL THE INITIATIVES.**



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**IN A CONSUMER SOCIETY, CHANGING HUMAN BEHAVIOUR COULD PRESENT A CHALLENGE...  
BUT... WHEN PEOPLE KNOW MORE, THEY WILL DO BETTER!**

<https://www.lipor.pt/en/>