



**URBAN
WASTE**
URBAN STRATEGIES FOR
WASTE MANAGEMENT
IN TOURIST CITIES



Doggy bags





Doggy bags

What is the measure about?

Description and scope of the measure

The distribution and promotion of small food containers to take home leftovers in restaurants, also called “doggy bags”, is an efficient way to reduce the production of food waste, considering that it is an important part of the waste produced by restaurants. Indeed, an average of 125 grams of edible food products are wasted per meal served in commercial restaurants¹. Restaurants and other food providers can propose doggy bags or other food and drink containers to their customers when they have leftovers to avoid producing food waste. A related measure would consist on the delivery of reusable bags to take away food from restaurants and other establishments offering food to take away. Interested restaurants and food providers could adopt this measure to reduce the amount of packaging and encourage customers to consider the benefits of waste prevention. In order to encourage customers to reuse these bags, every time they would take it to the restaurant and reuse it they would get a stamp on it. After reaching a certain number of stamps, the restaurant would reward them by, for instance, offering free desserts. An association of involved restaurants and other food providers could be created to provide a wider service. This measure will result in a win-win situation that contributes to waste prevention, as customers obtain a reward from their good practices and restaurants will save money from the reduced number of bags to be purchased.

Integration in a waste management plan

This action can be part of the prevention part of a waste management plan, in particular regarding food waste.

At the scale of private establishments, the measure can be easily adopted and included in the waste management plan of the restaurants. Every Environmental Management Systems, such as ISO 14001 or EMAS, which entities can be certified against include waste management plans and strategies where food waste prevention measures can be integrated.

¹ Source : ADEME-FAO (<http://www.gesper.eu/nos-actions/compostage-et-gaspillage-alimentaire/operation-gourmet-bag-doggy-bag.php>)

How to implement this measure?

Economic aspects to consider and potential solutions for the financing of the measure

Costs

- Costs of a container, box or bag: 1.36€/doggy bag²

Costs savings

- Implementing doggy bags would reduce the amount of food waste generated and, hence, the costs of treating this fraction would be reduced/avoided. In average, the general costs of incineration and landfilling of residual waste in EU are³ :
 - Incineration of residual waste: 64€/ton
 - Landfilling residual waste: 56€/ton
- If commercial waste are collected and treated by the municipal waste management service, then the municipality could provide the restaurants and hotels with doggy bags in order to avoid municipal treatment costs. They could use the municipal logo on the doggy bags.

Financing options

- Restaurants and hotels could put their own logos on the reusable “doggy bags” in order to use them as promotional goodies.
- Restaurants and hotels could involve artists/designer in the design of the doggy bag and use them as promo material
- Doggy bag can be provided by pilot cities in partnership with voluntary restaurateurs. Pilot cities can provide restaurateurs a certain number of take-away boxes with the Project’s stamp, and communication tools to promote the action. Restaurants that join the action can be easily identifiable with a ‘gourmet bag’ stamp set on their shop windows.
- Pilots can implement a food waste reduction programme and promote it distributing free gourmet bags at highly frequented points with a wide food service offer. Gourmet bags can be placed at the entrance of each food service establishment/catering, for instance.

² Source: (<http://www.preventiondesdechets.org/le-gaspillage-alimentaire/>)

³ Source : IPCC (https://www.ipcc.ch/publications_and_data/ar4/wg3/en/ch10s10-4-7.html)

Type of stakeholders to involve

Main stakeholders to involve

- Restaurants, caterings and other food providers managers and staff
- Hoteliers and trade associations
- Kitchen staff (i.e. chef, kitchen assistants, etc.)
- Tourists/customers

Other possible stakeholders to involve

- Waste management department of local authorities
- Local sanitary agencies with a role on food safety surveillance
- Local designer for the design of the bag
- Suppliers of containers, boxes or bags

Description of the operational steps to follow

Depending on the type of stakeholders behind the initiative of doggy bags, several actions can be established to develop and promote the use of doggy bags in restaurants:

- selection of the type of containers/boxes/doggy bags
- creation of communication tools targeting restaurants owners and general public
- identification and involvement of restaurants (potential creation of an association of interested food providers) thanks to a specific sticker that can be stuck on the restaurant' front door so that customers can identify those restaurants as providing doggy bags
- equipment and training of the staff on the use of doggy bags
- awareness raising of the customers on the use of doggy bags (and system for reuse, stamps and rewards)

The information of the customers on this practice and its benefits, and the information of the restaurant owners, especially on the regulatory framework, are key factors during the implementation of this measure.

Gender aspects to consider

Who will do the additional work required, and will this increase the work load? Attention needs to be paid to whether this will lead to gender imbalance in workload, and how this will be managed. It is also important to bear in mind the gendering of the trainer/trainee relationship, and whether expertise can be found amongst the people already doing waste management tasks (e.g. cleaning/food preparation).

Examples of good practices

- Métropole Nice Côte d'Azur together with the Nice Côte d'Azur Chamber of Commerce and Industry launched a project to tackle food waste in restaurant, as part of their waste prevention plan. Pre-diagnostics were realized in the restaurants located in the highlands and the coastline areas of the metropolis. The diagnostic aimed at evaluating the quantity and the type of waste produced. The waste sorting instructions were also reminded and the doggy operation to reduce food waste was promoted. During the diagnostic, the voluntary establishments were given waste prevention kit and proposed to participate to a doggy bag initiative. The kit were composed of food containers for leftover, plastic bags to carry the food containers and bottles. One kit costs 1.36€. All the distributed kits have been paid by the municipality itself and provided for free to the participating restaurants. Around 80 restaurants now have been given the doggy bag kit and use it by proposing to their customers to take back home their leftovers.⁴
- The Intermunicipal Waste Management company of Greater Porto (LIPOR), which is responsible for the management, recovery and treatment of the municipal waste produced in the eight associated municipalities around Porto, committed in 2016 to organic waste prevention thanks to a project called “Embrulha” (“Wrap it”). In order to reduce food waste in restaurants, LIPOR developed a new biodegradable doggy bag for customers to take food leftovers home. The implementation of such initiative was completely for free for restaurants and customers - as it was LIPOR and associated partners the responsible entities for purchasing all the materials. First, a pilot case was implemented for a week in 2016 so as to evaluate the potential success of the measure as well as the desired environmental and social impact. Given the good results achieved, LIPOR decided to re-launch and extend the project to 30 restaurants in 2017. Currently, the project involves 30 restaurants in the Porto Municipality and the target is to increase the participation.⁵
- In Denmark, the NGO “Stop Wasting Food” (Stop Spild Af Mad) gives doggy bags (called “goodie bags” for free to restaurants, together with flyers and promotional material to reduce food waste in restaurants. The NGO has started a collaboration with Unilever for the bags. Together with the Danish Agriculture and Food Council, they also launched a trust based certification, called “Refood” label. Restaurants can sign up for the Refood label, and get doggy bags to give to their customers.⁶

⁴ (<http://www.preventiondesdechets.org/le-gaspillage-alimentaire/>)

⁵ *Embrulha project* (LIPOR) (<https://www.youtube.com/watch?v=GhZ5HIS6MaU>); (<http://www.lipor.pt/en/news/embrulha-wrap-it-re-launch-of-the-project-against-food-waste/>)

⁶ <http://refoodlabel.dk/>

- The Scottish Government gives free doggy bags to voluntary Scottish restaurants to reduce food waste. These bags are branded with the “good to go” slogan. Around a hundred restaurants are now participating. Some interesting results came from the pilot scheme. It showed that food waste from leftovers could be reduced by 40% thanks to the doggy bags. Also, the research carried out by Zero Waste Scotland showed that three-quarters of the customers would like to be offered a doggy bag, and sometimes are too embarrassed to ask for it. Some restaurants even mentioned that offering doggy bags to their customers improved their sales: customers who could fear not being able to manage big portions order them anyway knowing they can take it back home.⁷
- The “Oups Sour Bar” (in Ixelles, Belgium) is a snack-type restaurant which offers soups with bread, quiches, etc. to eat in or to take away. The restaurant has developed a waste reduction approach based on the implementation of reusable “take away” bags which was presented during the EWWR in 2009 (being implemented already since 2002). Food to take away was packaged in a reusable paper bag on which a stamp was put each time it was brought back and reused by customers. As a reward, customers would receive a dessert free of charge after a few reuses.⁸

⁷ How the humble doggy bag reduced food waste in Scotland by 40 per cent - Independent (<http://www.independent.co.uk/news/uk/home-news/hundreds-of-scottish-restaurants-sign-up-to-offer-customers-doggy-bags-to-reduce-food-waste-a7316731.html>)

⁸ “Le grand mix des bonnes idées” (EWWR Guide of Good Practices, July 2012) (http://www.ewwr.eu/docs/case_studies/EWWR_Guide_GP_EN_LD.pdf)

Guidance for setting up monitoring indicators

Two groups of indicators are to be set:

1. The first group aims at monitoring involved stakeholders:

- Restaurants involved [**number**]

These two data will enable to compute the following indicator:

- Percentage of restaurants involved: $\text{Restaurants involved} / \text{Total number of restaurants in the pilot area} [\%]$

The pilot area can be the whole city or a part of it: down town, old town, port area...

- Mapping of restaurants that implement the measure [**Name and address**]

In case doggy bags are distributed to restaurants, the following indicators can be set:

- Number of doggy bags printed and distributed to restaurants [**number**]

2. The second group aims at monitoring waste production in involved restaurants and the performance of the measure:

- Quantity of waste produced [**kg**] or [**number of bins or garbage bags**]: the number of bins or garbage bags can be chosen as a unit of measurement if it is not possible to weight waste produced, the average weight of a fulfilled bin or bag will have to be estimated beforehand for further calculation
- Number of customers [**number**]

These last two data will enable to compute the following indicator:

- Quantity of waste produced per capita: $\text{Quantity of waste produced} / \text{Number of customers} [\text{kg} / \text{customer}]$

Time frame

It is recommended to start the monitoring at least one week before doggy bags are distributed to assess the effect of the measure on waste production.

Quantity of waste produced and number of customers can be registered **continuously** (every day every week) or **randomly** (one day per week or every day one week per month).

Additional performance indicators

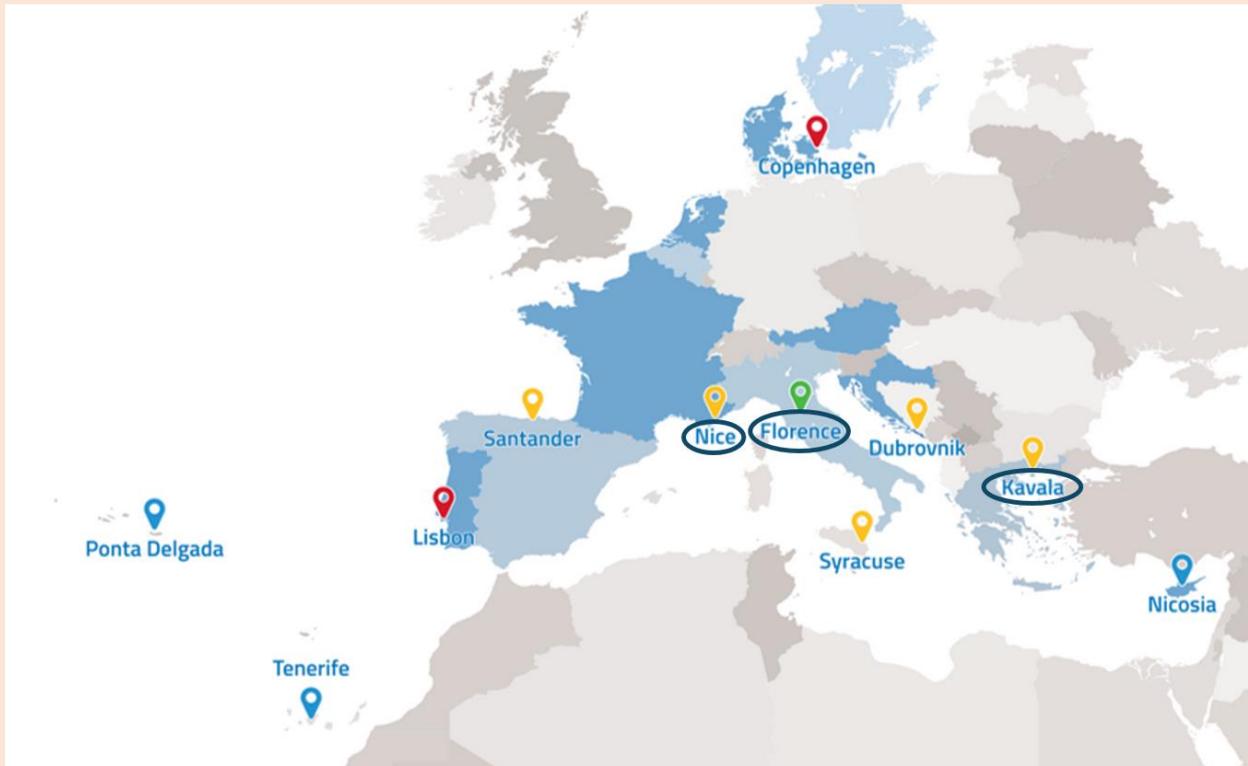
Depending on the means at disposal for monitoring, organic waste and unsorted waste can be registered separately (see measure n°20: Food tracking device):

- Quantity of organic waste produced [**kg**] or [**number of bins or garbage bags**]
- Quantity of unsorted waste produced [**kg**] or [**number of bins or garbage bags**]
- Doggy bags distributed to customers [**number**]

Gender considerations:

- Who prepares the 'doggy bags' (e.g. servers, kitchen staff?) [**specify...**]
- Are these mostly male or female? [**male-female**]
- Who makes ultimate decisions in establishment? [**male-female**]
- Approximate gender distribution of extra work involved? [**% female**]

Lessons learnt from the implementation phase and fine tuning



Pilots implementing doggy bags within Urban Waste

Doggy bags have been implemented in Nice Metropole, Florence and Kavala from July to December 2018 in the framework of URBAN WASTE.

In Kavala, 5.000 doggy bags were printed and 400 distributed involving **7 restaurants**. In Nice Metropole, 9.000 printed and 4.000 distributed for **39 restaurants**. In Florence, 15.000 printed and 8.900 distributed for **128 restaurants**. In the three cities, doggy bag were offered for free, one condition to easier the setting the measure.

The relative success of Florence and Nice Metropole in terms of restaurants participation comparing to Kavala is mainly due to the fact that there was, in these cities, a **tight follow-up of restaurants and regular visits and relaunches** via emails and phone calls by pilots. Moreover, deputy mayor for the environment in Florence and deputy major of Nice Metropole in charge of waste showed their **strong political support several times in the media at the beginning of the measure launch and during its implementation promoting involved restaurants and making them visible**.

The collection of monitoring data was challenging for the employees. Restaurants in Nice Metropole recorded waste bags (unsorted) every day at the end of the service and lead to a better collection of data but less accurate than in Kavala and Florence where food waste was weighted in kilogram with a device (see measure n°20). Involved restaurants gave up after a short time and could not provide sufficient data. The training for using the device took place in July during the peak period of tourists, hence too late.

Key points

- **Tight follow-up of restaurants and regular visits**
- **Organisation and training of personal to be made imperatively before the high season**
- **Media promotion of the restaurant to be made at the beginning of the implementation**
- **Strong and visible political support**