

THE STORY OF Bruges

CASE STUDY

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After assessing that 750 000 kg of food were wasted every year, the city of Bruges launched an ambitious Zero Food Waste strategy. Becoming a European forerunner with up to 43% of Food Waste prevented in the Healthcare sector.



FOODWIN



When you mention Bruges, the first things people think of are: a picturesque tourist hotspot with many small channels, the movie 'In Bruges' and chocolate. Few people know that the city has a burning ambition to become a Zero Food Waste City!

Let's get to know the various parts of the food landscape. The city of Bruges is located in the West of Belgium, with its 117.000 citizens, it is one of the biggest cities in Belgium. It is characterised by a historic city centre and a high concentration of restaurants and hotels. Its submunicipality, Zeebrugge, is a big port and harbours a fish auction. As a provincial capital, the city has a relatively high amount of schools (among which two cooking schools) and healthcare institutions on its territory. It hosts relatively little agriculture and food processing industries because of the the soil characteristics.

HOW IT ALL STARTED

In 2015, Bruges decided to start working on a sustainable food strategy. Food Waste became one of the four main topics, which would lead to the creation of the Bruges Food Lab. Indeed, the Bruges Food Lab and **Mieke Hoste**, alderman of environment in the city of Bruges, were the visionary drivers of the Food Waste actions. Mieke Hoste explains the reason for their transition towards Zero Food Waste: 'For our department, it's a really important topic because reducing Food Waste is an excellent way to reduce CO2 emissions. It plays a significant role in attaining our climate goals'. Indeed, as stated in the comprehensive study Drawdown [1], reducing Food Waste is ranked as the third most effective solution to reduce greenhouse gas emissions, even before solar farms and plant-rich diets.

Apart from reducing CO2 emissions, Mieke finds more motivations 'Food Waste is an easy and fun topic to work on. People appreciate the fact that our city makes Food Waste reduction a priority. They ask us what the city is doing about it. Citizens sometimes even contact me because they have too many courgettes and want to make sure they get eaten. This would have never happened 6 years ago. Today, we link those citizens to relevant organisations in the Bruges Food Lab.'

DIAGNOSING FOOD WASTE: A WAKE UP CALL

As part of the European project 'Food Smart Cities For Development', Bruges received funding to co-create an urban food strategy. Mieke Hoste explains 'At the beginning of the process we hadn't thought of including Food Waste.'



When we heard the numbers and facts in a meeting with Tristram Stuart, (the author, changemaker and pioneer who put Food Waste on the international agenda) we decided to do something about it.' Global estimates show that one third of all food is wasted. That's not only the food itself that gets wasted, but also the farmers' work, the fertilizers, pesticides and gasoline used to grow the food, the energy to transport it and, finally, the impacts of disposing the food. The FAO calculated [2] that no less than 8% of global greenhouse gas emissions are attributable to food waste.

During its Food Waste reduction journey, the realisation of how much food gets wasted with what impact, was crucial for the city of Bruges. Before drafting its urban food strategy, Bruges did a SWOT-analysis to get a good overview of the biggest food challenges. Food Waste seemed to be one of the main challenges to achieve a more sustainable food chain. However, only recently, real numbers revealed how big Bruges' Food Waste challenge really was. Mieke Hoste explains: "Vannessa Aneca, a student from Bruges, conducted a research on Food Waste in

supermarkets. She found that no less than 750.000 kg of edible food per year (15.000 kg per week) were wasted by retailers in Bruges. Reducing this amount of Food Waste by 20% would save as much CO2 as 2.540 sun boilers altogether! Financially, it's more or less the same whether we'd invested in solar panels or in reducing Food Waste." A recent study [3] confirms the financial benefits. In fact, reducing Food Waste has a huge return on investment for cities. **For every euro invested in Food Waste reduction, a city saves 8 euros.**

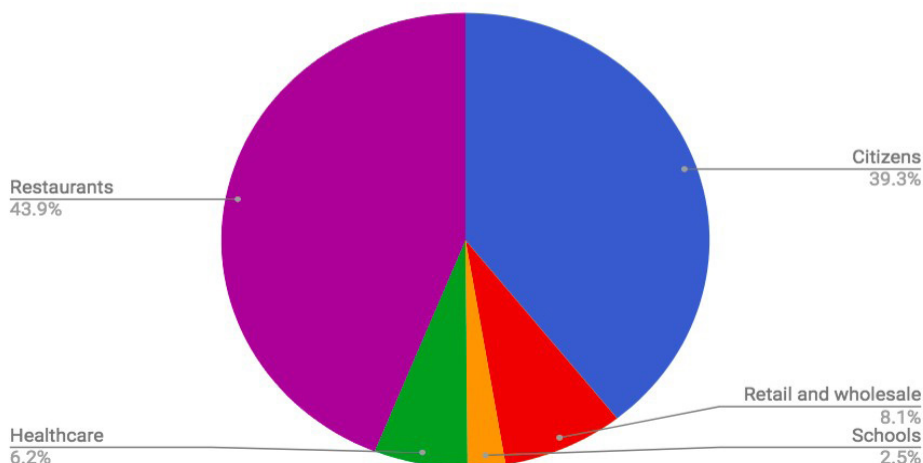
Thanks to the **FoodWIN Food Waste Calculator**, the city of Bruges managed to have a precise estimation for the Food Waste generated. It revealed that restaurants, citizens, retail and healthcare waste most of the food in Bruges. Mieke continues 'The numbers are huge! After seeing them, reducing Food Waste became even more important. We had to do something about it!'

CO-CREATING A FOOD WASTE STRATEGY

Since its kick-off, the Food Waste strategy co-creation process was supported by civil society organisations, particularly by FoodWIN and Coduco. With their support, the city of Bruges co-created its strategy with local stakeholders. Mieke Hoste **"The participatory approach made all the difference. We don't work top down anymore. We want the input of the citizens. This creates more awareness. Their voice is important to us. They want change, we want change. Together we go for it."**

The city, together with the local stakeholders, created the **Bruges Food Lab: a local stakeholder council on sustainable food**. Mieke Hoste emphasises the importance of these stakeholders 'There are quite a few important organisations in Bruges which work on Food Waste: Kaba [4] is a social grocery that redistributes food surplus; Soepcave [5] is an organisation that cooks with food surplus to raise awareness and Sobo [6] is a restaurant employing people in need using food surplus. Without them, there would be less action on Food Waste.'

Total amount of food wasted



The Food Lab and the City of Bruges organised a crowdsourcing day to shape the urban food strategy. Food Waste has a prominent place in this food strategy with the following objectives:

1. To redistribute food surplus by actors with large quantities of food surplus (fish auction, schools, industrial kitchens, events).
2. To reduce Food Waste at public organisations.

To implement this strategy, the Food Lab crowdsourced 75 ideas and a good amount of them got implemented throughout the years. FoodWIN co-facilitated the Food Lab from the start until the end of 2017. Joris Depouillon of FoodWIN explains: 'The Bruges Food Lab has functioned as a Food Waste task force throughout the last years. Some of the Food Lab members took the challenge to reduce Food Waste in their own organisation. Other organisations have supported actions initiated by the Food Lab or by the city government.

REDUCING FOOD WASTE AT THE BRUGES FISH AUCTION

Bruges has a port and a fish auction. In 2015 179 tonnes of the traded fish did not get sold and were processed into animal food. These are usually unknown and less popular species. Maarten Dubois (representative of the fish auction at the Bruges Food Lab) and his team took three actions. Firstly, the fish auction created a webshop for consumers to buy fish online promoting less popular fish. Secondly, the auction started a collaboration with cooking school Ter Groene Poorte. The school now only uses discarded fish to train their students to fillet fish. And finally, it developed a fish burger called 'Pretty Girl', made with less popular fish that would have gone to waste. The burger is served in hospitals, schools and other public institutions.

The Food Lab took the role of sounding board to support the fish auction in developing their projects. Furthermore, the fish auction was supported twice by the Food Lab and the City of Bruges through a grant to realise its projects.

SUSTAINABLE FOOD MANUAL FOR EVENTS

In 2016, the Bruges Food Lab co-created a sustainable food manual [7] for events. The manual gives tips and tricks on using local, seasonal, fairtrade, vegetarian and organic food at events in Bruges. The manual also covers how to prevent Food Waste and use food surplus. Events tend to work with registrations in order to estimate the amount of food they have to make. Furthermore, they can donate food surplus to local charities who feed people in need.

In 2017 the Bruges College of Mayor and Aldermen approved the manual to be the applicable guideline for any event organized by the city government. For the Bruges Food Lab, this was a big achievement. **Bruges is the first city in Belgium taking the commitment to only use sustainable food at events.** Guidelines have proved to be very helpful as the rules are very concrete and the various city services are obliged to follow them. In addition to the guidelines, the city has organised workshops for civil servants, so as to further spread their implementation.



FEEDING THE 5000 AND SUSTAINABLE FOOD FESTIVAL

In May 2016, the City of Bruges and the Bruges Food Lab organised the first edition of (H)eerlijk Brugge (Fair and Delicious Bruges in English), a yearly sustainable food festival. The festival aims at raising awareness of sustainable food and promoting the work of the Food Lab organisations. In 2016 the focus was on Food Waste. To launch Bruges' sustainable food strategy the city and the Food Lab organised 'Feeding the 5000': 5000 meals were prepared entirely from food that would have gone to waste.

Although challenging for its big dimension, with the help of FoodWIN and Coduco, the city managed to organise the event working along as many Food Lab organisations as possible, such as Kaba (social grocery), Soepcafe and SOBO (social

restaurant). This resulted in enough food surplus for 5000 meals. In addition to that, the city worked with a famous chef and chocolatier to create the recipes and cook the food. Cooking school Spermalie was indispensable for cutting the vegetables and cooling the food. And finally, all organisations promoted the event with their followers and members. Having leftovers was one of their biggest concerns, but all 5000 meals were eaten. 'I will never forget how people were queuing to get their portion of food, added Mieke Hoste.'

The yearly event has had its impact on Bruges. In 2018 the third edition took place. Each year the number of visitors seems to increase. With it, the interest in sustainable food also grows, even from outside of Bruges, as noted by the City council. After all, it remains an interactive family event where people can taste

sustainable food and win fun prizes like organic seeds.

DARE TO (HEALTH)CARE

In 2017 Bruges started focusing its efforts on helping specific sectors to reduce Food Waste. The first target group was healthcare. The involvement of the city was a key factor for hospitals in order to put in place a Food Waste reduction plan and to get funding from OVAM (the Flemish waste agency) to support Bruges' healthcare organizations to reduce Food Waste. FoodWIN's involvement in the project was also fundamental for the project successful implementation'.

The project supported two hospitals, a residential care centre for elderly people and an industrial kitchen for residential care centres.



These organisations went through the following stages:

- Measuring how much food goes to waste
- Creating an action plan
- Testing the solutions on a small scale
- Measuring the impact
- Upscaling the solutions

For each organisation a multi-disciplinary task force of nurses, directors and kitchen staff managed the project. Some patients were involved as well.

Mieke Hoste reflects on the process. 'We were really lucky to use this **participatory approach**. It's the people in the field who have all the knowledge. We noticed that communication between the

different services of an elderly home or hospital was crucial. For instance, in one organisation the nurses complained the steaks were too cooked. The chefs were surprised because they put so much effort in preparing the steaks 'a point'. But the nurses didn't have time to serve the food 20 min after the delivery. Together they developed a system to serve the food right away.'

Both hospitals and elderly homes wasted between 25 and 40% of the food they bought. For hospitals this amounted to an estimated 170.000 euro per year. For elderly homes an estimated 25.000 euro per year. If we extrapolate those figures to the Bruges healthcare sector, this amounts to 318 tonnes of Food Waste per year (just from hot

meals), which comes down to 1.017 tonnes of CO2 emissions.

As a response, the participating organisations changed their communication processes, reduced the portion size and adapted the offer to the demand. **These actions were successful: one of the participating organisations reduced Food Waste by 43%!**

After helping these four organisations in reducing Food Waste, a manual was produced in order to help the remaining healthcare organisations in Bruges. **This project won the special mention award on Food Waste at the Milan Urban Food Policy Pact conference in 2017.**

FOOD WASTE IN BRUGES RETAIL SECTOR



**750.000
kg of food
waste per
year in
retail
sector**

**Only 10% of the food
waste is rescued**

REDUCING FOOD WASTE IN RETAIL

Per year, no less than 750.000 kg of food is wasted at the main supermarkets in Bruges. Mieke Hoste explains. 'Supermarkets, bakeries and neighbourhood shops are the next sectors we're targeting. We would like to help these shops in preventing Food Waste as much as possible. After all, that helps our local economy. In this regard, we are very pleased that Too Good To Go recently was launched in Bruges, enabling shops and restaurants to sell their leftovers at a discount price at closing time.'

Furthermore, the city is planning to launch a logistical platform to redistribute food surplus to social organisations. With this platform,

a logistical service would drive (or bike) around the city to recover food surplus from various supermarkets and shops and supply it to social organisations. Ultimately, these organisations often don't have the capacity to pick it up themselves. Mieke Hoste illustrates. 'Currently there are three organisations in the Food Lab that pick up and use food surplus in Bruges. Together they save about 10% of all food surplus. This is not enough. We want to ensure that as much food as possible is saved.'

WHAT'S NEXT?

The last three years have been interesting and impactful for Bruges. Mieke Hoste reflects on the success factors. 'Bringing all

the key stakeholders from the food sector together in the Food Lab was crucial. These organisations now know each other and collaborate. Their influence and support were crucial to create our sustainable food strategy and our sustainable food manual for events. Because of that, **all the city government departments work within a sustainable food framework.**

The City of Bruges has now built the foundation to become a Zero Food Waste city. But there still is work ahead. Mieke Hoste on what's next 'Thanks to FoodWIN's Food Waste estimation, we learned that citizens and restaurants have the biggest impact on Food Waste in our city. Those sectors will be our next focus.'

Sources

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Zero Waste Europe is the European network of communities, local leaders, businesses, experts, and change agents working towards the elimination of waste in our society.

We empower communities to redesign their relationship with resources, and to adopt smarter lifestyles and sustainable consumption patterns in line with a circular economy.

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