

# Good Examples from Sweden on Reducing Food Waste

Sweden, the largest country in Northern Europe with a population of 10.4 million, made it compulsory for all municipalities to draft municipal waste plans already in 1994. This means that the municipalities regulate what type of infrastructure to provide for waste management locally and how households and individuals should source separate and handle waste.

The Swedish Government sets national goals to clarify where efforts should be made. When it comes to food waste, the new targets set in 2020 focus not just on recycling, but also on preventing the waste from occurring in the first place.

The two milestone targets for reduction of food waste in Sweden are:

1. The total food waste must be reduced by at least 20 percent by weight per capita from 2020 to 2025.
2. An increased share of produced food must reach stores and consumers by 2025, so as to avoid food losses.

This catalogue highlights the approaches and solutions that contribute to the achievement of these targets.

## NATIONAL EXAMPLES

### ● Handbook for Reducing Food Waste

The Swedish Food Agency has, in collaboration with the Swedish Environmental Protection Agency (EPA), catering services, county councils, trade organizations and research institutes, developed a national method for measuring food waste. The method is applicable in small and large-scale kitchens from preparation until serving. This is based on the Gothenburg model and has been published in the form of a handbook, *Handbook for reducing food waste – for health care, schools and care services* (Swedish Food Agency, 2020).

### ● National Action Plan

*Fler gör mer* (More do more) is the Swedish government's commission to the Swedish Food Agency together with the EPA and the Board of Agriculture to reduce food waste in the country. In close collaboration with stakeholders, an action plan was developed in line with SDG 12.3 and the UN's Agenda 2030.



The action plan consists of 42 suggested mitigation measures with four identified conditions:

1. National goals and development of follow-up measures
2. Active collaboration within the sector
3. Change in consumer behaviour
4. Inquiries, research and innovation



### ● Guidelines for safe food

*Branschriktlinjer för offentlig säker mat* (Guidelines for public safe food) have been issued by Sweden's Municipalities and Regions. They say, amongst other things, that food that has been out for serving can be saved if it is kept warm less than two hours with a protecting screen from coughing and is actively chilled. Food that has been protected by a lid and

stood out for serving less than one hour can also be saved and reserved.

### ● Best before, often good after

The Swedish Food Agency has encouraged complementary information to the "best before" date on food products. Several dairy companies in Sweden (Arla, Norrmejerier och Skåne-mejerier) took on the task and have written "Best before, often good after" on their products, which has resulted in an extensive information spread.



### ● Close-to-expiry discount

*Datum-Rabatten* (date discount) is a station in supermarkets where food products close to expiry date are offered to consumers at a reduced price.



● **Mealmakers**

Mealmakers focuses on food waste early in the supply chain, at primary production and wholesale. They sell products with deviations in e.g. packaging or short dates. Mealmakers' services are directed towards other wholesalers, producers and restaurants.

● **Food2Change and Allwin**

Food2Change and Allwin are non-profit organisations that help supermarkets redistribute food to people in need. A life cycle analysis study showed that providing food bags to socially exposed people generated the largest reduction of greenhouse gas emissions per kg of redistributed food (Bergström et al., 2020).

● **Doggy bag**

It is now common to provide doggy bags or encourage customers to bring their own boxes for take-away if they are not able to finish their meal at the restaurant.



**INTERNATIONAL EXAMPLES**

**Initiatives active in Sweden and other countries**

● **Karma, Res-Q-Club, Too Good To Go**

Several digital services have seen a market opportunity in redistributing food for human consumption in order to avoid food waste. Karma (founded in Stockholm), Res-Q-Club (Helsinki) and Too Good To Go (Copenhagen) have similar services with private consumers as target groups. They focus on ready meals, pastries, bread and groceries. Business models vary depending on the source of food – restaurants or supermarkets.

● **Matsmart**

Matsmart (founded in Stockholm) is similar to Mealmakers and focuses early in the food chain. The difference is the target group – Matsmart focuses on private consumers.



**LOCAL EXAMPLES**

● **Sundsvall: Naturaj**

Naturaj is a restaurant situated in Sundsvall which aims to utilize all parts of a food. For example, they always buy the entire fish. The filets are part of a dish on the menu, meat left on the bones and tail are confit and deep fried as croquettes. Bones go to stockpots and the skin is cleaned and dried as crisps.

● **Sala: The leftover's chef**

*Resterkocken* is a challenge held for school children to come up with new recipes based on food that potentially would be wasted in their homes. The competition is arranged by several waste management companies in southern Sweden and the winning dish is rewarded with money.

Sala municipality tried four ways of reducing food waste in **school canteens**:

1. Tasting spoons: Before taking a serving from the buffé, the pupils can taste the meal with the tasting spoons.
2. Plate waste tracker: A scale placed under the food waste bin to directly display the weight wasted from each plate.
3. Awareness campaigns: Table talkers placed around the canteen with tips on how the pupils could reduce their food waste.
4. Demand forecasting: Better insight for kitchen staff in the number of guests.

All these measures were found to contribute to reduced plate waste in comparison to previous years.

### ● Sigtuna: SvinnGott

A collaboration of hotels in Sigtuna has made use of the otherwise wasted hen from egg production. The network has developed a collection of recipes called SvinnGott with several examples of how to cook hen and utilize other types of commonly wasted food.

### ● Stockholm: Minced bream

*Braxenfärs* (minced bream) is another example of **using a raw material that otherwise is wasted**.

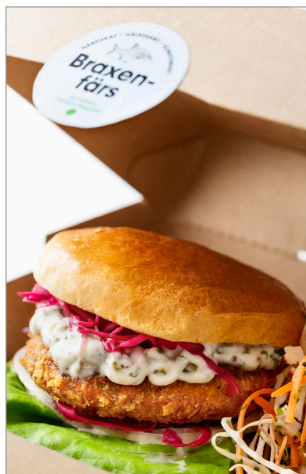
The fish bream is often a by-catch in the fishing industry and has had a bad reputation in the kitchen due to its bones and sometimes muddy flavour. In the mince format, it is easy to cook for private households.

The mince was developed in collaboration with the fishing industry, wholesalers, the county council and was tested in well-established restaurants. The wholesale chain Martin & Servera provides several recipes for the mince of bream.

### ● Stockholm:

#### **Kalf-Hansen and Restauranglabbet**

Kalf-Hansen offers meals in different sizes and sets the menu to be flexible according to the season and supply. Restauranglabbet offers a buffet, also



allowing a **flexible menu**. They always place the greens first in line and meat dishes come last. The meal is then paid by weight.

### ● Stockholm: UpCycle Challenge

Gröna Lund is an amusement park located in central Stockholm. Restaurants established within the park were challenged by the park management to find collaborations and **synergies to reduce food waste**. One example is the liquid from chickpeas in a restaurant that serves hummus. This was used as a base for mayonnaise in another establishment and baking bread in a third. The bread was later used for croutons at a fourth place, all within the roof of Gröna Lund.

### ● Stockholm, Gothenburg: Sopköket, Oaxen and Nordish

These restaurants serve dishes made out of collected or donated food items that otherwise would have become food waste. Nordish has a plant based focus and tries to serve nutritiously dense meals. Oaxen uses their own leftovers such as coffee shavings in their cooking. Sopköket has a large social engagement and also focuses on creating new job opportunities.



### ● Gothenburg: Public procurement

In the city of Gothenburg, amongst others, public procurement is used to create a new market space for foods with short best before date, incorrect labelling or packaging. Kitchens in schools and elderly care can purchase colonial goods and frozen products from the new digital market space.

### ● Gothenburg: The Gothenburg model

**30 kitchens for pre-schools measured the serving waste** from lunch every day. The unit manager collected the measurement results every month and presented them at joint workplace meetings. There, all employees also got to discuss how to work to reduce wastage. This led to a reduction in food waste by 70 percent, from about 1,000 kg to around 300 kg per month. This has now been developed to a national level model.

### ● Mölndal: Micvac

Micvac provides a packaging method with a combination of materials and design that allow in-pack cooking and pasteurisation. Through the cooking technology, the products have a longer shelf life that helps to prevent food waste.

### ● Helsingborg: Vegetable flakes

Helsingborg city in southern Sweden has together with local producers developed a new product called *Grönsaksflis* (vegetable flakes). The flakes are made in primary production and reduce waste of those **vegetables that do not meet the market standards in appearance**.



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