## The COOK BOOK

# No Opportunity Wasted







# FOREWORD

Line

## Ruut Louwers, Program director INTERREG IVB North West Europe.

You bought more groceries than planned? The fridge is full of food close to its expiry date? What can you do with the leftovers of yesterday's soup? These questions are familiar to most consumers and to chefs and are at the core of what the GreenCook project seeks to address: how can we reduce food waste?

With 90 million tonnes of food wasted in Europe per year, the issue is of considerable importance. In addition to the shocking loss of the food itself, this means that the natural resources and greenhouse gas emissions from food production and transport are also wasted. In its roadmap towards a resource-efficient Europe, the European Commission highlights food as key sector requiring efforts to limit waste not only in private homes but throughout the entire supply chain. The North-West of Europe is especially prone to high waste volumes because of intense urbanisation and economic activity.

"With 90 million tonnes of food wasted in Europe per year, the issue is of considerable importance."

The EU has therefore supported the GreenCook project through the INTERREG IVB NWE Programme as part of its drive to find new ways to

> achieve more sustainable food and waste management throughout the European Union.

In the GreenCook project, 12 partners from 5 North-West European countries have worked together to create and test innovative measures helping consumers and professionals in the food sector to reduce waste and change behaviour towards less wasteful food retailing, preparation and consumption. This cookbook is one of the outputs of the GreenCook project.

I hope you have an inspiring read and learn new ideas, tips and recipes from this transnational project!



-OREWORD

## INTRODUCTION

## Tristram Stuart, author of "Waste: Uncovering the Global Food Scandal", founder of "Feeding the 5,000" and co-founder of "The Pig Idea" campaign.

When we throw away food, we throw away everything that went into producing that food - the oil for the tractors and delivery trucks, the water and fertiliser that raised the crops, and the grain that went to feed so many of the animals that we eat. This waste has an enormous impact on our environment, and on the planet's ability to feed us, now and in the future.

The United Nations estimates that if farmers all around the world fed their animals on left-over crops, and on the food that we currently waste, enough grain would be liberated to feed an extra three billion people - more than the additional number expected to be sharing our planet by 2050.

As well as food waste from agriculture, 2.3 million tonnes of fish are discarded in the North Atlantic and the North Sea each year, with 40 to 60% of all fish caught in Europe being discarded - either because they are considered to be the wrong size, species, or because of the European quota system. So it is encouraging to see European nations, at long last, starting to work together to end this disgraceful waste.

The time has come for everyone to take action whether as a citizen, a caterer, a supermarket or a policy-maker. Most people now agree that tackling food waste is a number one priority. Indeed, the United Nations has launched a global

campaign called "Think, Eat, Save"

"Most people now agree that tackling food waste is a number one

children.

(www.thinkeatsave.org), which has partners like "Feeding the 5,000" among many others. So at a European level, it is good to see the GreenCook project producing this book to provide expert advice and inspiration to householders, restaurants, supermarkets and canteens all over Europe to join in and do their bit. Together, we can fix the food waste problem, to secure a reliable food supply and a good environment for ourselves and for our

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## FOOD WASTE IN FACTS AND FIGURES

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## Food waste in facts and figures

Our story about food starts at the farm, fresh from the soil. Food is grown with a lot of attention and care by the producer, to be consumed at home or out of home at restaurants, at work and at school. In the end, and shockingly, a third to a half (30-50%) ends up in the dustbin even though it is still perfectly edible<sup>1</sup>. In other words, each year, this represents between 1.2 and 2 billion tonnes<sup>2</sup> of food lost between production and consumption of the product.

It is unacceptable, in environmental, economic and social terms as well as on an ethical level.

The biggest volume of food is wasted during production due to cosmetic demands of retailers and consumers with regards to size and shape. In retail, the "use by" and 'best before' dates are one of the main reasons why perfectly edible food is thrown away. In restaurants, the food is mainly wasted during preparation of the food in the kitchen. In canteens, the size of portions and eating habits are the main reasons that food goes to waste. At household level, on average, 15 to 20 kilos of food are wasted per person and per year, whether through ignorance, worries about food safety, or by accident. This waste totals approximately 174 euros per family<sup>3</sup>.

These examples show that many people have a role to play in reducing the unacceptable quantity of food that remains unharvested in fields or ends up in waste bins.

Realising the full value of food, changing our perspective on what we eat and reorganising the whole of the food system are priorities that the GreenCook project was set up to tackle, applying enthusiasm and determination to this issue of global concern.

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    <sup>1</sup> Food and Agriculture Organization of the United Nations, 2011
    <sup>2</sup> Global Food : Waste Not, Want Not, Institution of Mechanical
Engineers, 2013
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<sup>3</sup> CRIOC, Le gaspillage alimentaire: mieux le comprendre pour mieux le prévenir (Food waste: better understanding for better prevention), 2008

## A EUROPEAN AND MULTI-DIMENSIONAL RESPONSE TO FOOD WASTE

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## GreenCook: a European and multidimensional response to food waste

Faced with the scandal of food waste, 12 organisations from 5 North-West European Countries (Belgium, France, the United Kingdom, Germany and the Netherlands) decided to join forces and act to reduce food waste.

Since 2010, the Interreg IVB GreenCook project has mobilised institutions and stakeholders to tackle food waste, each with their own specialities and areas of expertise, as follows:

- Local and regional authorities in charge of management and/or prevention of food waste: Bruxelles Environnement (Belgium), Artois Comm. (France), AVL - Ludwigsburg (Germany).
- Public authorities organising food to be served in school canteens (high schools) and networking of consumer groups (particularly those serving disadvantaged people): Nord-Pas de Calais Regional Council (France).
- The Green Dot organisation, which represents producers and users of food packaging: Fost Plus (Belgium).
- An environmental marketing agency directly linked to the E.Leclerc hypermarket and

supermarket chain: Greentag (France).

- Research institutes: CRIOC (Belgium), the University of Stuttgart - ISWA (Germany), the University of Wageningen - FBR (the Netherlands).
- Networks of chefs, restaurants and other catering outlets: De Proeftuinen (the Netherlands), Sustain: The alliance for better food and farming (the United Kingdom).
- A project leader and coordinator of transnational cooperation: Espace Environnement (Belgium).

The action plans deployed are based on 4 communities of practice, whose objectives are to:

- Enable,
- Exemplify,
- Engage,
- Encourage,

where food is sold in shops, in the home, at the canteen and in restaurants.

The main findings and comments from the GreenCook project are set out in the following pages, embellished with delicious recipes that use every scrap of our delicious food, without waste, to be tried without delay!



# AT THE SUPERMARKET

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## **THOMAS POCHER**

Director of E.Leclerc franchised supermarkets in the north of France GreenCook partner

North of France

🛛 Greentag

thomas POCHER

Otrant

Thomas Pocher founded Greentag in 2008. Main mission: to improve the environmental impact of the hypermarket and supermarket sector. He has earned renown from his peers for his pioneering commitment to tackle food waste.

## For how long have you been preoccupied by the subject of food waste?

"Over the last several years, we have tried to establish a sustainable consumption model. We launched carbon labelling of products in 2008, for example. In addition to this, I was appalled by the quantity of food disposed of as waste each day in my stores. We were throwing out tonnes of perfectly edible food! It was an unacceptable situation. We were losing money each day, and that's before we even consider the negative social and environmental effects."

## What are the actions that you have accomplished?

"Greentag has created an "ecosystem" that includes the store, its employees, local producers, customers and charities. Together we work to find solutions to avoid food waste: checking stocks, donating food to charities and employees and

in-house composting of unsold products that can still be consumed."

## What advice would you give to your fellow supermarket managers?

"To assess the situation and measure the amount of food waste is crucial to identify the parts of the store that are responsible for the most food waste. Then, to alter practices, train employees and inform customers. Implementing such a method takes time but boasts many advantages. The environmental and societal gains are sufficiently conclusive to ensure the commitment of the personnel and the partners in this project."

## Food waste at the supermarket: a question of shared responsibilities

In North-West Europe, the retail sector estimate the level of waste per store to be 1.5% to 2% of turnover<sup>1</sup>. In the Netherlands, for example, such food waste represents, for supermarkets, lost profits of 400 million euros each year.

In general, food waste in supermarkets is often due to an offer that is larger than the demand, driven by the desire to offer a wide range of choice on the shelves to satisfy customer expectations and to fulfil aesthetic marketing standards. The removal of products from shelves several days before their expiry date or the removal of commercialy improper products (for example, with labelling errors or damaged packaging) are also significant sources of waste. Finally, consumer behaviour in stores, such as perishable products picked up and then left on other shelves, or fresh products that have been damaged through excessive handling, also contributes to food losses in the retail sector. 232,748 meals wasted per year in a single supermarket

A waste characterisation study was conducted in an E.Leclerc supermarket in France with 5,250 m<sup>2</sup> of floor-space. The results show that the bakery and cake section was responsible for the largest share of food waste (in tonnes). After that, fruit and vegetables and groceries were responsible for the most waste, by weight. When the amount wasted was examined in terms of financial value (in euros), poultry came top of the waste league. Converted into an equivalent of meals, the annual waste in this store accounted for 232,748 meals.

 Pertes et gaspillages dans les métiers de la remise directe MAAPRAT,
 2011

## Giving downgraded products a second life

Although damaged fruit and vegetables may be removed from shelves for aesthetic reasons, they still retain their flavour and nutritional value. A survey conducted in-store demonstrated that 62% of customers would be happy to buy products made from fruit and vegetables removed from shelves for aesthetic reasons. So Greentag set up "Tasty Workshops", which every day promoted juices, smoothies soup kits, puddings and bruschetta made on site from fruit and vegetables that would otherwise have gone to waste.

In the Netherlands, the University of Wageningen -FBR carried out a feasibility study on the opportunity of developing approaches of this type on a larger scale. This project was performed in collaboration with two PLUS supermarkets (Klaassen & Akkerhof).

## Jacques Madoux,

EARL d'Alcy, a potato producer in Auchy-Lez-Orchies (France), partner of the E.Leclerc stores as part of the Alliances Locales partnerships, advices how to store and prepare potatoes.

"Potatoes must be stored in a cool and dark place (approximately 7° C). If you do not wash them, then potatoes can be kept for longer. Eating germinated potatoes is not recommended because they can contain considerable quantities of solanine, which is a toxic substance that can cause digestive problems if it is ingested in significant doses. This is why potatoes must be stored away from sources of light."

# 17%

of supermarket's food waste are fruit and vegetable.

## Nadine,

a customer of the Wattrelos E.Leclerc supermarket (France)

"I am very aware of food waste and I do all I can to avoid it. Each day, I do my best to not throw food into the waste bin. Before going shopping, I check what I have in the fridge. This helps me to draw up my list. My purchases therefore depend on what I already have at home. I rarely buy something that I do not need."



## **Rewarding virtuous packaging**

In Belgium, in 2012, Fost Plus launched the "Greener Packaging Award", aimed at rewarding the most environmentally friendly packaging. One of the main criteria for this prize regarded the influence of the packaging on reducing product waste. Examples include better measuring systems, packaging that can be emptied or resealed, packaging split into several sections, and packaging enabling optimum storage thus reducing risk of breakage.

## **Organising food donations**

Currently, more than 60% of the food not sold in the ELeclerc supermarkets in Wattrelos and Templeuve is given to charities. This is a win-win system: the supermarkets save money on waste treatment fees and pay lower taxes, thanks to the policy of tax exemption of food donations (Coluche law); the charities obtain perfectly edible food in good conditions, which they can redistribute to people in need.



However, drawing up healthy and balanced daily menus from food donations is not always easy, and can lead to more food waste. Such losses can be reduced by vacuum cooking and preserving of individual portions, combined with intelligent logistics. In 2011, the University of Wageningen -FBR, in collaboration with the Salvation Army, established a centralised method for reprocessing meals at a canteen providing 2,500 meals per day. In Brussels, a guidance document restaurants serving people in need has been published. It is based on a pilot project backed by Bruxelles Environnement and

conducted by Coduco in cooperation with Delhaize, a restaurant with social purposes run by Atelier Groot Eiland and Seso. Analysis of cost-effectiveness shows that the savings resulting from receiving food free of charge is largely sufficient to cover collection costs.

## Raising consumer awareness at the time of purchase

In the Netherlands, six supermarkets have come together to inspire and motivate consumers to reduce their food waste. In cooperation with Berkel Milieu and Circulus, the University of Wageningen - FBR organised a "Food Battle" in three of the country's towns. On the menu: cooking demonstrations carried out by De Proeftuinen, tastings of products, advice on refrigerating and storing foods for customers. Interested households could go a step further by

filling in, over a three-week period, a diary of their food waste. The aim was to identify the type of food thrown away, the amounts thrown away and the reasons for such behaviour. The results indicated that it is possible to reduce food waste by 20% quite rapidly.



# **AT HOME**

## JORGE ET MONIA

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33 and 28 years old

Brussels (Belgium)

© Roger Job 🔛

This young couple took part in one of the pilot households in the "Sustainable Food" challenge, set up by "Commune ferme à la ville asbl" in Etterbeek, with the financial support of Bruxelles Environnement.

#### The value of food

"When we throw food in the waste bin, we forget that living beings have been killed in order to feed us, that the process has required plenty of water and transport and that people have worked to produce our food. We just do not see any more what is behind the food."

## Taking the time to cook

"We prefer fresh food to ready-prepared dishes. At the end of the day, it is less expensive, the food can be kept longer, it is healthier and it stimulates our creativity. We cook with what we have in the fridge. We are less worried about expiry dates: we place more importance on the product's visual appearance, how it smells and how it tastes. In fact, we take time to prepare our food."

#### How to reduce food waste

"We cook rice, quinoa and potatoes at the beginning of the week without adding salt or spices. We then add these foods to salads, into croquettes and in sauces. Anything is possible; it just depends on what there is in the fridge. This also helps us save time and money."

"For example, you can make croquettes with potatoes and tuna, baked potatoes, chips or mashed potatoes, but also rice croquettes, rice pudding, etc. It is also possible to eat quinoa for breakfast with a very ripe banana. If the fruit is damaged, you can use it to make stewed fruit, which you can eat on its own, or with a spicy dish, in a dessert or with some yoghurt."

"Vegetables that are starting to go stale are used for sauces, soups or grilled in the oven. In general, we keep the bread in the freezer, which means we avoid wasting it considerably. Dry bread can also be used for dishes requiring bread crumbs." **VT HOME** 



Utz Remlinger, Managing Director of AVL - Ludwigsburg (Germany). GreenCook partner.

## The most significant share of food waste takes place in the home

We might not like to admit it, but it is in the home that the most significant share of food waste is produced: almost 20 kilos per year per person. In general, people throw away food products because they have exceeded the expiry date. Yet people also throw away food that is still perfectly edible. Often, we do not have the necessary knowledge and creativity to use leftovers and find it easier simply to throw them away. The most commonly wasted foods in the home are those that are fresh, such as dairy products, bread, vegetables and fruit. Indeed, fruit makes up a third of all foods thrown into the waste bin by households.

As Managing Director of AVL - Ludwigsburg, a public institution responsible for waste management, I am regularly confronted with the issue of food waste. I am extremely preoccupied by the fact that such a large amount of food ends up in waste bins, even here. The people use resources, fertilisers, water and energy... and then throw away the products without even using them. It is a situation that we should not accept.

### Champion households show the way

Based on the model of Opération Foyers Témoins developed in France by the ADEME, AVL -Ludwigsburg set up a 3-month-campaign involving 45 families in Germany with the methodological support of the University of Stuttgart - ISWA. During the first month, the households had to record each time food was wasted, with the name of the product, its weight and the reason it had been thrown away. The following months consisted of a series of activities designed to influence the behaviour of the households involved. Interestingly, the households wasted less and less, up to the point where they reduced their waste by 58%! Simple awareness raising can therefore already lead to a significant decrease in waste.

**Bernd Röder and his family** took part in this pilot project: "I was lucky to be born in 1974, in a society whose economy was in good health. At their time, my parents had been confronted with war and hunger. They taught me to appreciate the value of food. I hope that I will succeed in passing on this respect for food to my children. In our day-to-day life, we avoid purchasing things that we do not need and plan out our meals a week in advance. We always buy seasonal fruit and vegetables and make sure that we store food products correctly."

#### An on-line portal to share the approach

This trial conducted by AVL - Ludwigsburg also made it possible to carry out real-life testing of a series of practical tools, including cooking recipes. All elements (hints, tips and a daily calculator) were compiled into an on-line information portal designed to support the efforts of other families (in German and in English): www.respect-food.eu

## **Banana Bread**

#### **Ingredients** (serves : 6)

- 6 bananas
- 4 eggs
- 400 g flour
- 150 g butter
- 250 g sugar
- 15 g (three teaspoons) bicarbonate of soda
- 60 g chopped nuts

#### Instructions

- 1. Preheat oven to 180 °C (Gas Mark 4).
- 2. Cream the butter and sugar together until fluffy.
- . Add mashed bananas and eggs. Fold in the flour with the bicarbonate of soda.
- 4. Mix the nuts with the remaining ingredients.
- Line a large baking tin (or two standard loaf tins) with baking parchment or grease-proof paper.
  - Bake in the oven for about 1 hour.



© AVL

### Large-scale media campaigns

Raising the awareness of the consumer also needs the use of mass media! The information campaign "Respekt!" (launched by AVL - Ludwigsburg) was inspired by the English campaign "Love Food, Hate Waste". Another one ("Le gaspi, salsifis!") was designed by Bruxelles Environnement. Both are outstanding.

In each case, several types of promotional materials were created so as posters, postcards, inserts in local newspapers and magazines, cartoons, and viral video clips.

## Meeting the needs of disadvantaged people

Artois Comm. conducted a survey, in France, with beneficiaries at food distribution centres (Restos du Cœur and Secours Populaire), to find out more about the food habits of disadvantaged people. This survey showed that these people would like to learn simple recipes that they can use at home and also learn how to cook leftovers without risking their health. They would also like to understand better the meaning of labels: "I see many people wasting food, but I cannot afford to produce any waste. I recover as much as I can, even for two spoons of soup," declared a beneficiary of Restos du Coeur. "There is waste and I see it regularly. I know beneficiaries of Restos du Coeur who take food, such as fish or special breads, and who waste this food because they do not appreciate it." Cross-referenced with the expertise of the Regional Council, which coordinates all local "Ecoles de consommateurs", those findings have informed the publication of communication material and practical tools, produced hand-in-hand with the beneficiaries: cooking lessons, recipe sheets, exhibitions, calendars, board games, food gathering baskets, shopping memos, measuring cups, etc. These tools were presented at the First Forum for Responsible Consumption in the Nord-Pas de Calais.

In France, at the "école de consommateurs" in Armentières, Christian - a volunteer - coordinates an organic farm-to-fork circuit: "It is guite difficult to promote local and organic consumption, but I believe that it is a very important subject. Therefore I share my knowledge. I think that it is especially useful for our target public who, sometimes, do not know how to cook fruit and vegetables."

## Shared meals to regain the pleasure of eating well

"Loften ask for advice from one of my friends. She is an excellent cook and has good ideas for preparing dishes using leftovers," explains Annette Ponton from AVL - Ludwigsburg, in Germany. "It is fun to cook with your friends; you learn plenty of things."

The social advantages of organising shared meals are well known, whether between friends or during public events where food that would otherwise have gone to waste is cooked. . The "Feeding the 5,000" initiative (www.feeding5k.org),

launched by Tristram Stuart, GreenCook ambassador in the United Kingdom, is one of those leading initiatives. The concept is simple: 5,000 people come together in a party atmosphere and receive a free meal prepared from ingredients that were initially destined for the waste bins. Already organised three times in London and supported by Sustain, "Feeding the 5,000" has inspired others on an international scale. In Paris and Amsterdam, for example, similar events have also taken place, in collaboration with GreenCook partners (Greentag and the University of Wageningen - FBR).

"Cooking and tasting" workshop organised by Bruxelles Environnement at the 2012 Environment Fair

n/Bruxelles Environn

AT HOME



# RECIPES

## Cheese

## **Crustless Quiche**

#### Ingredients

#### Serves: 4

- 3 eggs
- 1/2 l of milk
- 100 g of flour
- 1 pinch of salt
- 100 g of grated cheese
- 150 g of bacon, ham, leftover chicken or vegetables ...

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## Instructions

- 1. Pre-heat the oven at 210° C.
- 2. Mix the flour and eggs then add the milk. Stir in the rest of the ingredients.
- 3. Grease a cake tin and then sprinkle with flour.
- 4. Fill the cake tin with the mixture and then cook in the oven for 40 minutes.
- 5. Serve with a green salad.

### Potato

## **Baked Potato Soup**

#### Ingredients

#### Serves : 8

- 60 g butter
- 1 medium onion, chopped
- 40 g flour
- 400 ml vegetable or chicken stock
- 350 ml milk or cream
- 2 large or 3 medium baking potatoes, baked or microwaved

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cooked and chopped leftover bacon, for serving

### Instructions

- Melt the butter in a large saucepan over medium heat. Add the onion and cook until tender.
- 2. Stir in the flour. Heat it gently for 5 minutes.
- 3. Gradually whisk in the stock and the milk.
- Scoop the potato pulp from one of the cooked potatoes and mash it. Add the pulp to the stock mixture.
- 5. Cook over medium heat, stirring occasionally, just until the mixture comes to the boil.
- 6. Dice the remaining potatoes (with skins) and add to the soup.
- 7. Heat through. Season with salt and pepper.
- 8. Top each serving with chopped bacon.

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## **Fruits**

## **Fruity Bread Pudding**

## Ingredients

#### Serves: 12 persons

- 400 g sugar
- 220 g butter, at room temperature
- 2 eggs
- 2 tablespoons cocoa powder
- 300 g plain flour
- 60 g leftover fruit (e.g. apple, pineapple, pear)
- 1 teaspoon salt
- 250 ml buttermilk
- 1 teaspoon vanilla extract or ½ vanilla pod
- 1/2 teaspoon bicarbonate of soda
- 1 tablespoon vinegar

#### For the bread pudding sauce

- 375 ml milk and 375 ml single cream (if in the USA, 750ml of half-and-half)
- 3 large eggs
- 1 large egg yolk
- pinch of salt
- 1 teaspoon vanilla extract
- 225 g cream cheese
- 150 g icing sugar

### Instructions

- 1. Preheat the oven to 180° C (Gas Mark 4).
- 2. Grease a baking dish or baking tray.
- In a mixing bowl, cream together the icing sugar and butter, leaving a little of the icing sugar aside for finishing.
- 4. Add in the eggs one at a time, mixing each one in well before adding the next.
- 5. In a small bowl, mix together the cocoa powder and the fruit.
- 6. Stir the fruit and cocoa powder into the cream and butter mixture.
- 7. Add the flour and salt and mix together.
- 8. Add the buttermilk.
- 9. Stir in the vanilla.
- 10. In a small bowl, mix together the bicarbonate of soda and vinegar. Add to the mixture and mix well.
- 11. Pour the mixture into the prepared baking dish or tray.
- 12. Bake in a preheated oven for 20 to 25 minutes, or until a toothpick inserted in the middle comes out clean. Remove and leave to cool completely.

- 13. Once cool, cut the cake into 2.5 cm (1-inch) squares. Place on a baking sheet and bake for a further 10 to 15 minutes, or until slightly dried out.
- 14. Make the bread pudding sauce: In a medium bowl, mix together the milk, cream (or half-and-half), eggs, egg yolk, salt and vanilla.
- 15. In the bowl of a food processor, or with a hand mixer in a medium bowl, mix together the cream cheese and powdered sugar until smooth.
- 16. Stir in the milk and cream mixture.
- 17. Place the cake cubes in a large baking dish or in individual baking dishes.
- 18. Pour the sauce over the cubes, soaking them with the mixture.
- Bake for about 30 minutes, or until the pudding is set (the time will vary, depending on the size of your baking dish or dishes).

## Meat - charcuterie

## **Enchiladas**

#### Ingredients

#### Serves : 4

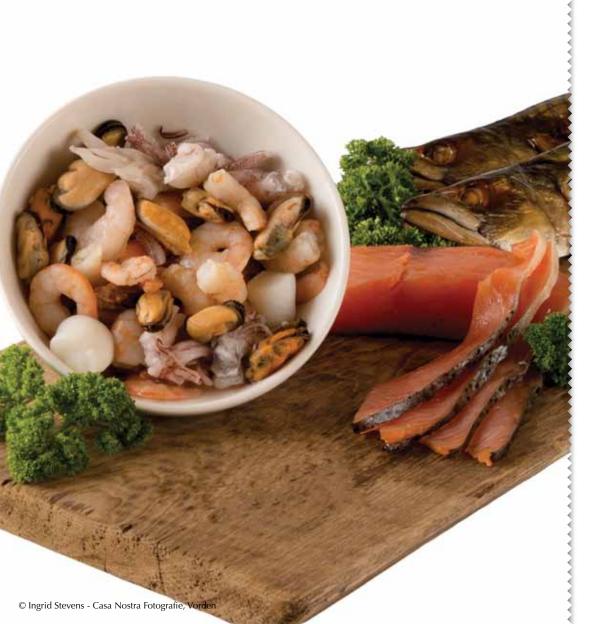
- 8-10 soft taco-size flour tortillas
- 400 g grated leftover cheese
- 400 g shredded leftover meat (e.g. grilled chicken, salami)
- 3 tablespoons butter
- 3 tablespoons flour
- 400 ml vegetable or chicken stock
- 200 250 ml sour cream
- 200 g sliced pickled jalapeňo peppers (or jalapeňo mild chillies)
- coriander for garnish, optional

## Instructions

- 1. Preheat the oven to 170° C (Gas Mark 3 to 4).
- 2. Prepare a small pan with a thin coating of butter or oil.
- Mix half of the cheese with all of the meat. Place an equal amount of the mixture into each tortilla. Roll each tortilla up and place seam side down in the prepared pan.
- 4. Melt the butter in a frying pan. Stir in the flour and cook for 1 minute.

- 5. Whisk in the stock. Cook over a medium heat until thickened.
- 6. Stir in the sour cream and jalapenos.
- 7. Pour the mixture over the enchiladas and sprinkle with the remaining cheese.
- Bake in the preheated oven for 15 to 20 minutes, or until the cheese is melted and bubbly. Sprinkle with coriander if desired.

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## **Fish Pockets**

## Ingredients

#### Serves : 4

- 120 g cream cheese
- 2 teaspoons mustard
- 450 g pack of shortcrust, filo or puff pastry
- 80 to 100 g leftover fish, chopped (e.g. smoked salmon, mackerel, shrimps)

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• 100 g grated mozzarella cheese

#### Instructions

- 1. Preheat the oven to 180° C (Gas Mark 4).
- 2. Prepare a baking sheet with a thin coating of oil or butter.
- 3. In a small bowl, mix together the cream cheese and mustard until smooth.
- Roll out the paste and use a pastry cutter to cut large cirlces, of between 12.5 cm (5 inches) to 15cm (6 inches) in diameter.
- Put a spoonful of cream cheese mixture in the middle of each circle and spread it around a little, but without going too near the edge. Place a little chopped fish in the middle of each circle.

- 6. Add a sprinkle of mozzarella cheese to each pastry.
- Fold each pastry circle in half, enclosing the fish and cheese mixture, forming a half moon shape or triangle.
- 8. Pinch the edges together, or use a fork to seal the edges.
- 9. Transfer to the prepared baking sheet.
- 10. Bake for 10 to 12 minutes, or a little longer until the pastry is golden brown.

© Région Nord-Pas de Calais

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# CANTEEN

## AT SCHOOL

OUPS Aujourithul, Pavals trop & manger



The class of Mr. Godichal (Sainte-Marie Institute, Brussels) was one of the driving forces behind the anti-waste challenge, supported by Bruxelles Environnement

Brussels (Belgium)

© Dieter Telemans

# The anti-waste challenge launched by Bruxelles Environnement in schools has led to inspiring actions by children. The "Anti-Waste" team at the Sainte-Marie Institute in Schaerbeek (Belgium) bears witness.

"To start with, we did not think about the issue and were not aware of the amounts wasted or their environmental consequences. However, after in-depth analysis of the school's waste bins, we saw that we could act against waste. Firstly, we measured how much food was wasted. Most of it is generated at midday. We therefore invented the "smiley" operation to raise awareness among all the pupils and their parents, giving a smiling smiley to the pupils who had eaten everything and a sad smiley with the reason for waste when there were leftovers. It is a simple but efficient system."

"Day after day, with the help of the children and their parents, waste decreased. We also visited each class to present anti-waste options in the form of a small play."

## Common causes of food waste

Food can be wasted "upstream", by the people who make and serve it, or "downstream" by

> consumers. "Upstream", food waste is generated when cooks and canteens over-estimate the amount of food that will be needed. Such problems are rooted in professional habits. When food is served, waste can also be generated when caterers fail to adjust portion sizes to the actual needs of diners, or when food is cooked, stored or presented badly, meaning that the texture or taste suffers.

Caterers that serve fussy diners, such as teenagers in schools, need to pay special attention to such considerations. Adapting food preparation and presentation to the tastes of pupils without losing sight of promoting healthy food habits and reducing food waste is therefore one of the objectives of school canteens and a major challenge, which can be rewarding in the long-term. AT SCHOOL



## The "Anti-Waste" team at Collège Jean Moulin junior high school in Barlin (France) tell of their experience:

"We throw away more food at the canteen than at home because we can't choose the food and the quantity. We often throw away the vegetables because they are not very nice. Bread often finds its way into the waste bins as well. The pupils play with the slices of bread. Also, sometimes people are a bit too greedy. Most of our fellow pupils are not aware of this waste. It would be good if we could serve ourselves. We could also show the pupils the food thrown away by the canteens and show films on food waste. We could also put up posters."

## Weighing food waste prompts action

Weighing food waste is an important first step to help people and businesses to see, appreciate and understand their food waste, and then start thinking about how to take action to reduce it. One of the activities for the GreenCook project has been to develop simple methods for measuring food waste and then to assess its economic value as a motivation for action. This method can be adapted according to the resources available at the restaurant or canteen in question. In addition, calculating the economic value of the cost of the food wasted presents an excellent motivation for combating the problem and identifying where it is possible to avoid lost earnings by estimating annual savings.

The "Anti-Waste" team at Collège Jean Moulin junior high school in Barlin

## Weighing is the vital first step

During 2012, in the Nord-Pas de Calais Region (in 10 pilot high schools), waste dropped from 236 g on average per student, per meal, to 179 g during the weighing campaign, a reduction of nearly a quarter (24%) even before further actions were taken. In Brussels, the caterer TCO Service reduced food waste by one fifth (20%) thanks to very precise monitoring of quantities wasted in primary and nursery schools in the municipality of Boitsfort. These results were then used to raise awareness amongst kitchen and serving staff.

## **Taking effective action**

Catering professionals involved in the GreenCook programme have identified a number of practical and effective ways to reduce food waste: Pre-booking systems, adjusting portions on serving, limiting the variety of choices for main dishes, providing smaller plates in buffet-style foodservice, systematic use of cooling facilities and refrigerated display cabinets, and staff training to use these effectively.

## Mobilising school cooks, teachers and pupils

If pupils are involved in measuring food waste, this helps to raise awareness and mobilise for action. "Projects based on preventing food waste depend on the wholesale participation of all the parties involved. They need to be involved in order to quantify and determine from where the most significant waste is generated" explains Philippe Clément, chief cook at the Louis Pasteur school complex in Somain, in France.

## Demonstrating the virtuous circle of food

At the agricultural college in Tilloy-les-Mofflaines in France, a food sorting and weighing table enables continuous monitoring of food waste reduction. The sorted food is put through a bio-mechanical composter whose output is then used to fertilise the school's crops. This provides the opportunity for raising awareness and conducting demonstrations for food industry professionals, associations and the general public.

## **French** Toast

#### Ingredients

Serves: 4

- 8 slices of dry bread
- 2 eggs
- 1 glass of milk
- A little butter
- 2 soup spoons of caster sugar
  - 1 teaspoon of icing sugar

## Instructions

- 1. Break the eggs in a soup dish and beat them.
- 2. In another dish, mix the milk with the sugar.
- 3 Dip the slices of bread in the sweetened milk, then in the beaten egg.
- Melt a knob of butter in a frying pan and fry the slices of soaked bread on both sides until golden.
- 5. Sprinkle your French toast with icing sugar before devouring it!

Tip: Add a little sugar during the cooking to get delicious caramelised toast.

## Mass catering: that's were food waste occurs!

We eat most of our daily meals away from our homes, for example at school, at work, at hospital or in a restaurant. It is therefore not surprising that food waste is considerable in these places, every day. The amounts wasted in these different types of establishment vary, depending on the type of restaurant, the type of users but also the culture of the country concerned. Despite these differences, the transnational GreenCook project has made it possible to share lessons for reducing food waste in mass catering.

Bruxelles Environnement has helped the team at the Committee of Regions restaurant to implement a plan of action to prevent food waste, by incorporating waste reduction into its environmental management and audit system (EMAS).

The manager of the Sodexo restaurant records statistics relating to the food used, and events that could have an impact on the number of customers: "The food is kept in suitable storage areas and is removed according to the day's orders. For stock management, we use a combination of the "first in, first out" principle and the expiry dates. We carry out

The Cooking Team of the Committee of the Regions and European Economic and Social Committee Bruxelles (Belgique)

a stock inventory at the end of each month and use labels to identify the products that need to be used quickly. The meals are prepared using recipes that allow for a certain amount of flexibility, such as incorporating ingredients that were not consumed or which were exposed during the previous days. Our restaurant is also equipped to prepare some ingredients on demand.

To reduce waste on the plate, we have trained our personnel to adapt the portions to customers' appetites. Posters have been put up to remind them that this is possible. We also organised a week-long awareness raising action: first we weighed the leftover food then we displayed them in transparent

## AT WORK

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BIGGER or smaller

HELP US TO STOP FOOD

containers. The result was 130 kilos of leftovers for a total of 3,380 meals, i.e. 38 g per person. The sandwiches that are not sold are given to the personnel or agency staff free of charge.

To gain a better understanding of the food waste generated by buffets, the statistics were established for the most popular and least popular dishes. This made it possible to adapt the menus and produce fewer leftovers. Twice a year, we organise a campaign involving the weighing of food wasted in the kitchens, left on plates, or remaining on the buffets." Nursing homes and hospitals are especially prone to food waste due to the wide range of diets and dietary constraints that they have to take into consideration. To improve the situation, good communication and raised awareness are necessary. At the Scheutbos geriatric psychiatry centre in Brussels, active participant in the "sustainable canteens" initiative set up by Bruxelles Environnement, better dialogue between the kitchen teams and the nursing personnel who serve the meals made it possible to reduce the amounts of food prepared considerably. The recipes have also been adapted to respond better to the patients' needs. This situation is similar in social restaurants serving people in need.

## **Reorganising the serving of meals**

The University of Wageningen - FBR identified the causes of food waste in hospitals at Eindhoven (the Maxima medical centre), Arnhem (Rijnstate) and Ede (Gelderse Vallei). Issues included: over-sized portions; smaller appetites among patients than at the time the meal was ordered; treatments administered at the same times as meals; the impossibility of eating without assistance; and meals served when the patient had already left the hospital. A distribution concept was therefore drawn up in cooperation with various catering



## IN CARE HOMES AND HOSPITALS

companies, enabling patients to order their meals directly from their bed, using a mobile unit and with the help of a dietician. Thanks to this personalised order system, food waste was considerably reduced.

The Scheutbos seriatric psychiatry centre (in Brussels), which serves 600 meals per day

## Social restaurants in action

In two social restaurants, in Belgium and in France, the fight against food waste also led to new ideas and initiatives:

"We freeze unused parts of meals when there is a risk of food waste. Three times per week, we cook an additional dish with the leftovers that we have kept. For consumers, this provides a wider choice and, since it corresponds better with their tastes, it leads to less waste. When we serve, we take the time to ask people what quantities they want. We do not serve any standard sized portions any more. We have also slightly reduced the size of plates so that they appear full, with a smaller but still sufficient quantity. In the cooking workshops, which are open to all, the aim is to learn to prepare dishes using leftovers and to exchange ideas that can be tried out at home" says Tayyip Tavsi, a volunteer at the Samaritaine social restaurant in Brussels.

## **Pumpkin Soup**

## Ingredients

Serves : 4

- 1kg pumpkin
- 5 tablespoons peanut oil or sunflower oil
- 3 onions, roughly chopped
- 1 teaspoon cinnamon
- 1 teaspoon curry powder
- 300 ml coconut milk
- salt and pepper

### Instructions

- 1. Preheat the oven to 160 ° C (Gas Mark 3).
- 2. Cut the pumpkin into wedges, remove the peel and remove all the seeds with a spoon. Cut the pumpkin into chunks. Put the pieces of pumpkin and onion in a baking dish, drizzle with oil and sprinkle with cinnamon, curry, salt and pepper. Bake for about 25 minutes in the oven.
- Put the pumpkin and coconut milk into a saucepan and purée with a hand blender until smooth. Add salt and pepper to taste, then serve hot.



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# AT THE RESTAURANT

## ALAIN CARON

French Chef Masterchef Holland GreenCook Ambassador

Amsterdam (the Netherlands)

Alain Caron is a creative and inspirational culinary phenomenon. He is a well-known French chef, has published many cookbooks and written cookery columns, worked as a culinary photographer, and appeared as a television chef, including being a member of the jury on the popular cookery show "MasterChef".

Wherever he goes, Alain Caron moves people to enjoy good food with his enthusiasm and skill.

## It's about the message

"People should be more aware about their day-to-day habits with regards to food, when shopping for groceries, cooking and enjoying the food. I see myself confronted with the same issue when preparing catering or dinner at home, especially bread, because I buy too much. The solution I found for myself is to send the bread or other ingredients and left-overs home with my guests. In general, it would be ideal to be able to purchase smaller portion sizes. I remember my mother doing grocery shopping at the market, being able to buy exactly what she needed- one lemon, two leeks, ten potatoes. Even spices you can still buy by the gram in the South of France. We simply buy to much and should adapt to use the leftover ingredients in a different, creative way and do our shopping smarter."

#### **Be creative**

"When it comes to food, we are limited to the knowledge we have with regards to the diversity, the preparation and the consumption of those food products. For example a tomato, you can use the peel for a dressing, the seeds for a jelly-like dish and the meat for brunoise (chopped up small for use in salads or on toast). Chicken can be used to grill, for roti, and the carcass can be used for boullion- as a base for soup, sauce or risotto. It is about creativity! Last season I had a pumpkin growing on our balcony, and every time I went by I thought to make something out of it, but due to lack of time and interest Lleft it there almost to rot almost. I saved it just in time. I cut away the bad pieces and made a delicious soup using all parts of the pumpkin. It makes me feel better to know this beautiful product that was grown with a lot of care and love from mother nature didn't had to go to waste."

More information : www.alain.nu

"It is always better to have vegetables with the leaves still attached as they last longer."

CVPRATA

## What grows together goes together

Chef and GreenCook ambassador Alan Stewart (UK) demonstrates how to get the most from the vegetables that are used in dishes. His motto is: "What grows together goes together." Give yourself options when preparing a dish and allow for changes on your menu - a little bit of thought about the produce goes a long way, like using leftover vegetables for stock. Failing that, at least compost anything you really can't find an edible use for! When ordering vegetables from suppliers, ask to get them in the way they are harvested. It is always better to have vegetables with the leaves still attached as they last longer, and all the different components can be used for something. For instance, when you get beetroot with the stem still attached you can pickle them, which makes a great garnish. You can use the leaves of the beetroot for a salad. A delicious recipe is salad with goat's cheese, beetroot pickle, and baby beetroot leaves.

## The catch of the day

For retailers and kitchen chefs, purchasing local products is an excellent way to stimulate the local economy. Purchasing at local level also enables you to know exactly what products are available and to guarantee their freshness. In short, it is a perfect instrument for sustainable marketing: fewer kilometres of transport and a good price!

This is particularly true for fish. In the framework of the project GreenCook, for example, Dutch restaurant managers visited markets and boarded fishing boats to increase their knowledge and discover the possibilities offered by locally sourced fish and their seasonal availability. They also learned that it was possible to prepare delicious dishes from fish that are usually rejected because they are not the right size or not the right species.

## A wealth of knowledge in the field

In Brussels, food waste was studied in 22 restaurants. The results showed a considerable variation from one restaurant to another. Nevertheless, certain trends could be observed such as greater generation of organic waste in establishments with a buffet, those using fresh products and those serving lots of fruit and vegetables. This information has been compiled as part of an anthology of good practice.

## Sharing is caring

In the Netherlands, sixteen professional chefs -GreenCook Ambassadors - joined forces to reduce food waste in their restaurants. What they found was that the most common source of food waste in restaurants occurred during preparation in the kitchen. They became even more aware and conscious of it when actually measuring their waste. The chefs started to share their thoughts about what to do with the food products in the bin and how best to use every single part of a food product. This led to a creative training process to optimise their purchasing, their menus and the information they gave to their guests.

A network of GreenCook Ambassadors convening around the same principles has also been set up in the United Kingdom, inspired by the work of the Netherlands network.

## Salad of Goat's Cheese, Squash, Roasted Beetroot Purée

## Ingredients

Serves: 4

- 1 bunch whole small beetroot with leaves
- 200g any type of goat's cheese
- half a small squash or pumpkin, peeled and sliced as thinly as possible
- 1 handful of coriander, mint or any herbs you may have
- pinch of fennel seeds
- olive oil, cider vinegar
- handful of nuts such as pine nuts

### Instructions

- 1. Cut off the beetroot leaves, wash and set aside.
- 2. Wrap the beetroots in foil and roast in a hot oven (200 °C Gas Mark 6) for 50 minutes.
- Toss the squash slices in olive oil and season.
   Place in hot oven (200 °C Gas Mark 6) until cooked and just slightly caramelised.
- When the beetroot is cooked, scrape off the skin and reserve one beetroot.
- With the rest, finely dice a handful of coriander and/or mint, 1 tablespoon each of olive oil and cider vinegar. Add pinch of fennel seed and season with salt and pepper to taste.
- 6. Assemble the dish nicely. Drizzle with olive oil and serve.



# WHAT THEY SAY ABOUT GREENCOOK

"For the last ten years, Espace Environnement has been renowned for its expertise in waste reduction, in Belgium and France but also in neighbouring countries.

Thanks to our experience, we saw that subjects related to all forms of waste - and especially food waste - would soon become an absolute priority in North-West Europe. Our intuition has proved true today among citizens but also for food experts and players in waste management.

With experience in conducting European projects, we wanted to deploy cross-border and multi-sector cooperation based around the theme of food waste. We brought together representatives from the main pillars of the food chain, from food production to waste treatment and we encourage their on-going interaction. The results obtained by the partnership have made us particularly proud to be the project leaders of GreenCook."

## SOPHIE MARGULIEW

Head of the GreenCook project Espace Environnement (Belgium)

More information

www.espace-environnement.be





## EVELYNE Huytebroeck

Minister at the Brussels-Capital Region for the Environment, Energy, Water Policy and Urban Renovation (Belgium)

More information

"Prevention of food waste is one of our priorities. The studies have made it clear: food is wasted right along the chain, from production to consumption, inflating the volume of waste to be dealt with.

In the region around Brussels, this waste accounts for 12% of the volume in household waste bins This produces environmental, economic and ethical impacts: some households throw away food which could have been eaten, whilst others, in increasingly large numbers, depend on food aid to get by.

It is therefore paramount to do our utmost to reduce waste at all points of the food chain, in order to reduce its negative impact on the environment and to ensure access to quality food for all of the population." "As a consumer organisation, we must recognise that households are responsible for a large part of the food waste. At home often to much is cooked and therefore discarded. Food which is still good and tasty is often unnecessarily discarded because it is close to, or just after, the expiration date.

Consumers can do a lot to reduce food waste, but our research shows that they also have a large impact on food waste in the supermarket and on the land. It appears that supermarkets - even towards the end of the trading day - want to be able to offer several types of fresh bread to avoid negative reactions of their customers. In addition, many 'ugly' fruit and vegetables are not sold because supermarkets believe that customers only want to buy perfect looking products.

I would like supermarkets to be able to have empty shelves at the end of the day and that the taste of an apple should be more important than the appearance."

## ROB BUURMAN

GreenCook Project Manager CRIOC (Belgium)

More information www.crioc.be



## SYLVIE MEEKERS

Director Quality, Control & Prevention Fost Plus (Belgium)

## More information

www.preventpack.be

"Too much food still ends up in the rubbish bin. Targeted campaigns involving local operators are vital in changing consumer habits to adapt their buying to what they need.

In the challenge to reduce food waste, new types of packaging are being made to protect the food actively and intelligently. Packaging enables companies to extend the shelf life of the product, provides better product dispensing, makes it possible to consume the product in several phases, and gives information about the product's true freshness and advice on efficient storage and preparation. All these aspects help to reduce food waste at the shop and at home. Directly concerned by this issue, companies invest a lot today in creating better packaging. Fost Plus communicates these efforts and encourages its stakeholders in this process."

## "The Dutch Ministry of Infrastructure and the Environment values the prevention and reduction of food waste as high priority.

The world faces increasing challenges to feed the growing world population, while consumption patterns also change towards more meat and dairy products on the menu. The food value chain imposes increasing pressure on land use, biodiversity, water supply, and climate change and nutrient cycles. Preventing food waste can significantly contribute to the relief of this (increasing) pressure.

To address these challenges, the Ministry has supported a number of food waste prevention projects in cooperation with Wageningen UR. For example a project with caterers to develop a food waste measuring methodology, which specifies waste arising and its causes. It also demonstrated implementation of preventative measures. And the "Food Battle", which used a number of activities to create behavioural change by consumers in interaction with municipalities, supermarkets, waste companies and stakeholders in society."

## BERNARD CINO

Senior Policy Maker Sustainable Food Systems Sustainability Department at Directorate-General for the Environment and International Affairs Ministry of Infrastructure and the Environment (the Netherlands)

## **More information**

www.rijksoverheid.nl/ministeries/ienm



## **ALAIN** WACHEUX

## More information

## "Food waste is an aberration, resulting in economic, environmental and social issues.

Throwing away food is a waste of resources, both natural and financial, that we could use in another way. Reducing food waste is a part of sustainable development principles. It is therefore logical that Artois Comm., a sustainable development public authority, through its expertise, commits its policy in this direction.

Values of sustainable development are totally part of the project. Plus, we can add the values of education, as we decided specifically to target public schools; and solidarity, specific to our region, working with charity associations. "Eating Well" should be a universal principle.

We are setting up a number of actions directed at the public we identified, especially during cooking demonstrations, workshops, food and educational activities."

## "This project is a challenge to established habits. Its ambition is to have a lasting effect on the behaviour of consumers.

Fighting food waste also means taking into account societal and environmental aspects to improve products without sacrificing the need to adhere to food safety standards. It also involves avoiding pointless expenditure by reducing the cost of treating food waste.

More than 12 million meals are served annually in the Nord-Pas de Calais Region at more than 160 restaurant sites. The involvement of the regional authorities in GreenCook aims to encourage awareness of the extent of food waste, to test innovative approaches and to provide concrete and sustainable solutions.

This project is part of the regional catering plan, which is a charter defining quality standards in high school canteens. The objective is to develop a responsible and sustainable food model and to make sure that there is the best possible match between the expectations of users and the food offering."

## JEAN-MARIE ALEXANDRE

Vice-president in charge of high schools and the regional training scheme-Conseil Régional Nord-Pas de Calais (France)

> More information www.nordpasdecalais.fr



## CHRISTOPHE BOGAERT

Head of department "Sustainable production and consumption" ADEME - Nord-Pas de Calais (France)

## More information

www.ademe.fr

## "According to a survey conducted by ADEME, 20 kg of food waste (including 7 kg of food still packaged) are discarded per person each year in France.

Nationally, this represents approximately 1.2 million tons of food that are thrown away in the garbage.

Supermarkets are often seen as being in opposition to sustainable food. Retailers are often held responsible for major food scandals. But food waste is a complex issue that affects all levels of the food chain. Finally, we have a subject that allows stakeholders to agree on one point: it is everyone's business!

The Regional Department of ADEME in Nord-Pas de Calais closely follows pilot projects implemented by Greentag in three supermarkets in the region. This work has shown that they could quickly reduce the volume of organic waste by applying simple actions and practices. Awareness of food waste has allowed these shops to question their daily practices but has also raised other issues. What is the impact of stores on the environment? What information must a supermarket transmit to its customers? How can we offer customers healthy and sustainable food products?"

## "I was immediately enthusiastic about GreenCook and the issue of food waste.

The idea of addressing the topic of avoiding waste from a different angle - for me personally and for our work at AVL - aroused my attention. I wonder whether we will manage to move our citizens to adopting a consistent way of handling food and whether we will be able to translate such an approach to other waste sectors.

Have you ever experienced that insufficient food was ordered for an event or meeting? In most cases more is ordered than is in fact required. When organising your next large-scale event, think before you order whether you will really need to order so much from your caterer and what you could do with the leftovers."

## ANNETTE PONTON

Departmental head Resource and Logistics AVL - Ludwigsburg (Germany)

More information



## MARTIN KRANERT

Chairholder of Waste Management and Emissions University of Stuttgart (Germany)

## More information

www.uni-stuttgart.de

## "As a scientist, but also in my private life with my family, I have been interested for some time in the issue of discarding food.

From the ecological, economic and social points of view, it does not make sense to waste edible foodstuffs. This is especially important concerning the background of natural resource protection and the unequal distribution of food worldwide.

Unavoidable disposal of food waste has to be viewed using a recycling approach, where applications involving the utilisation of the energy it contains, and re-incorporation into the natural cycle are considered.

In my position, I am away on business often and therefore I can't eat at home, to be honest. At the restaurant I pay attention to the portion size and order just as much as I think I can probably eat. At home, we buy just the amount of food what we can eat according to the shelf life. Leftovers from meals can be eaten in the evening or in another variation the next day." "Food waste and left-over wastage is currently an important theme in the Netherlands and Europe. The negative consequence of food waste affects the consumer, the economy and the environment. I find it very inspiring to be able to work on this issue on behalf of the Province of Gelderland.

Together with the EU partners in GreenCook, innovative projects have been set up to influence and change the behaviour patterns of home consumers, restaurants and supermarkets with regard to food waste. The Province of Gelderland in conjunction with the supermarkets have organised a consumer contest and one can feel sure that this will have a great impact.

It is outrageous that every year a quarter of our food ends up thrown away while annually millions of people worldwide, a large proportion of whom are children, die of starvation. Therefore I am extremely motivated, on behalf of the Province of Gelderland "EU Working Together" project to address food waste, climate change, the economy and energy issues."

## IRMA KOSTER

Project - process manager EU, project coordinator GreenCook Province of Gelderland (the Netherlands)

> More information www.greencook.nl



## ROSIE BOYCOTT

Chair of the London Food Board that works with the Greater London Authority and Mayor of London Boris Johnson to implement the London Food Strategy (the United Kingdom)

## More information

www.london.gov.uk

"We all want to enjoy healthy and fulfilling lives - and to ensure our children enjoy the same privilege. So we must tackle the truly shocking level of food waste that the GreenCook project addresses. We all have a role to play.

Local policy-makers can set standards for food companies to reduce food waste, and provide collection services. National and European policy-makers can change the rules so that saved food can be used for animal feed. Retailers and food manufacturers can help with better ordering, promotions, product design and stock management. Meanwhile, cooks at home can enjoy a return to traditional skills of making good use of leftovers.

Here in London, we have been working to achieve a more sustainable food system for the best part of a decade. When it comes to food waste, we still have a huge challenge ahead of us, but this work is crucial if we want to secure a good food future for all of our citizens. Here's a simple way to think about food, as a hierarchy of action: First, feed a person, then feed an animal, then feed the soil (composting), then recover the energy from unavoidable food waste. And only as a very last resort put it in the bin!"



# A COMMITTED PARTNERSHIP AT YOUR SERVICE

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Espace Environnement

## **Espace Environnement** Organiser and project leader of GreenCook

Espace Environnement is a non-profit making organisation committed to sustainable development in the living environment, via implementing dialogue processes and encouraging participation of all sections of society: citizens, public authorities, companies and associations.

Espace Environnement is a renowned organiser of cooperative initiatives on an international scale and has been managing Interreg inter-regional projects for more than 10 years.

Within GreenCook, Espace Environnement encourages, through constant interaction with partners, the emergence of innovative joint solutions and long-lasting cross-sector dialogue which will lead to the reduction of food waste in North-West Europe.

#### **Espace Environnement asbl**

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## **Bruxelles Environnement**

Bruxelles Environnement is the Environmental and Energy Agency of the Brussels-Capital region. Amongst its missions are the development and implementation of environmental plans. Prevention of food waste is included in both the region's 4th waste prevention plan and in the "Sustainable Food" action programme.

It is thanks to its involvement in GreenCook that Bruxelles Environnement has been able to give genuine scope to its local food waste prevention actions, by emphasising the development of an approach integrated into a large number of initiatives, focused on both households and local authorities. Bruxelles Environnement develops and supports educational projects in schools, creates practical tools, commissions studies and sets up broad-ranging awareness campaigns.

#### **Bruxelles Environnement**

Gulledelle 100 1200 Bruxelles (Belgium) Tel.: +32 (0)2 775 75 75 www.bruxellesenvironnement.be www.sustainablecity.be

# CRIOC

CRIOC is a foundation that supports 15 Belgian consumer organisations to protect consumers. Additionally CRIOC upholds the interests of consumers in committees and working groups, both at national and European level. The Foundation carries out studies, analysis and information action relating to the issues raised by these committees and working groups, as well as their effects on all levels of public decision making. CRIOC informs consumers through its website and provides answers to requests for information from consumers, consumer organisations and the government. In addition, the documentation Centre of CRIOC is publicly available for consumers.

#### CRIOC

North Gate II Boulevard Albert II 16 1000 Bruxelles (Belgium) Tel.: +32 (0)2 547 06 11 www.crioc.be



## **Fost Plus**

Fost Plus is a not-for-profit organisation, which coordinates the recycling of household packaging waste in an environmentally friendly and economical way. Manufacturers responsible for packaging fund the organisation, enabling them to achieve the tough recycling targets (80%) imposed by the government. Through contracts with all the municipal authorities, everyone can participate in Fost Plus' selective waste collection scheme. 95% of the population declares that they participate actively, leading to the highest recycling rate in Europe. Fost Plus also advises companies on optimising and reducing packaging, through information, lectures, advices, tools and services.

#### Asbl Fost Plus

Olympiadenlaan 2 1140 Bruxelles (Belgium) Tel.: +32 (0)2 775 05 68 www.preventpack.be www.fostplus.be



## **WUR Food & Biobased Research**

Our research institute develops and applies knowledge on sustainable, innovative and market-oriented solutions for healthy food, fresh food chains, biorefinery, biobased chemicals and materials. We are experienced in preventing food waste, by focussing on sustainable supply chain management, post-harvest technology, packaging and integrated valorisation of biomass resources. In cooperation with corporate and non-profit stakeholders from the food chain and government, we develop monitoring methodologies, modelling concepts and pilot projects to implement prevention measures. Supply chain management looks at combinations of transport solutions, packaging, information flow, waste management, quality checks, stock ordering, new technologies and preservation techniques focussing on product quality. For consumers this results in higher quality and fresher products.

#### Wageningen UR Food & Biobased Research

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## Artois Comm.

Artois Comm. is one of the more important French inter-communal structures. It gathers 59 municipalities, almost 210,000 citizens, on a territory of 239 square miles (386 km2). Artois Comm. centres around two main cities. Béthune and Bruay-la-Buissière, in a mainly rural area, in Nord-Pas de Calais, an old coal-mining area. Artois Comm. has the main powers concerning the area's development: Economic development, transport, environmental protection and development, rural development and services to the population. More especially, Artois Comm. environment's direction now has a waste prevention department to decrease waste production and which also works in cooperation with the land development department on producer-to-consumer schemes within the GreenCook context.

#### Communauté d'Agglomération de l'Artois

Avenue de Londres 100 62411 Béthune (France) Tel.: +33 (0)3 62 61 47 64 www.artoiscomm.fr



## **Conseil Regional Nord-Pas de Calais**

With 113 regional councillors, 5,800 agents and a budget of 2 billion euros, the Regional council works with local players to improve the everyday life of the inhabitants in Nord-Pas de Calais and to look to the future.

In educational terms, the Regional council renovates, equips and builds High Quality Environment high schools, adapted to the needs of young people and teaching staff. The Regional council also organises school catering in high schools and is responsible for the production of meals and training of catering teams, so that they are informed of nutritional policies, legislation and directives concerning health and hygiene and food quality. Since 1988, the region has financed and run a network of "Écoles de consommateurs", which are used to exchange and inform. They are open to everyone, enabling underprivileged populations to break free from isolation.

#### Region Nord-Pas de Calais

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## Greentag

Greentag is a consulting firm that has developed an expertise in the retail sector and sustainable consumption. The company has implemented in supermarkets, several ambitious and innovative approaches in the domain of social and environmental responsibility. Its aim is to replicate these actions with other companies that will benefit from projects results tested in pilot stores. Areas of expertise: Waste Management and unsold food, awareness and education of consumers and employees, sustainable communication. Greentag has developed ambitious and innovative strategies in several E. Leclerc supermarkets. They are based on responsible behaviour towards society and the environment. The aim is to re-create these strategies within other companies, so that they may benefit from the results of GreenCook pilot projects.

#### Greentag

Rue du Maresquel 29 59242 Templeuve (France) Tel.: +33 (0)3 20 59 10 10 www.jeconomisemaplanete.fr



## AVL

Waste management is permanently subject to changes and dynamic processes. AVL sees this dynamic development as a chance and incentive to explore new avenues. In particular in the field of waste avoidance the approach we have adopted with our innovative corporate strategy proves we are on the right way to success.

By participating in the Project GreenCook AVL is given the opportunity to draw the issue of avoiding waste into the focus of public relations by the district of Ludwigsburg. The topic of food waste is optimally suitable as it relates to experience from the concrete daily life of all population groups. It is our aim to find out whether and how it is possible to influence the awareness and behavior of people with regard to food waste. iswa

#### **ISWA**

Institute for Sanitary Engineering, Water Quality and Solid Waste Management (ISWA) is a research and training facility of the University of Stuttgart within the faculty of "Civil and Environmental Engineering Sciences". The University's Sewage Treatment Plant for Research and Teaching, which is situated within the institute, is unique throughout Europe.

Experts from various engineering and natural sciences work together at our institute on an interdisciplinary basis. Our principal areas of expertise are the classical engineering tasks in the environmental field of water, wastewater, solid waste, biological waste, soil and exhaust air as well as resources management and industrial waste.

#### Abfallverwertungsgesellschaft des Landkreises

Hindenburgstrasse 30 71638 Ludwigsburg (Germany) Tel.: +49 (0)7141 144 56 24 www.avl-ludwigsburg.de

#### University of Stuttgart

Institut für Siedlungswasserbau, Wassergüte und Abfallwirtschaft (ISWA) Lehrstuhl Abfallwirtschaft & Abluft Bandtäle 2 70569 Stuttgart (Germany) Tel.: +49 (0)711 6856 5407 www.iswa.uni-stuttgart.de



## **De Proeftuinen**

The fundation De Proeftuinen and its subpartner De Vale Ouwe are culinary project management companies focusing on sustainable food in the hospitality sector. The project team is experienced in the development of innovative restaurant concepts and coordination of several projects at national and EU level based on introducing new food products to the market and developing a sustainable food system in urban settings. Often as part of the projects we organise events and thematic catering and cooking demonstrations related to the subject of the project. By putting together our inspiration and recipes earlier into several cook books. De Proeftuinen and De Vale Ouwe have been the lead organisation compiling the transnational cookbook "No opportunity wasted!".

#### De Proeftuinen & De Vale Ouwe Culinair Projectmanagement

Baakseweg 6 7251 RH Vorden (Pays-Bas) Tel.: +31 (0)575 55 17 11 www.greencook.nl - www.devaleouwe.nl



## **Sustain**

Sustain is the UK's alliance for better food and farming. The charity advocates food and agriculture policies and practices that enhance the health and welfare of people and animals, improve the working and living environment, enrich society and culture and promote equity. Sustain represents around 100 national public interest organisations working at international, national, regional and local level. To reduce food waste, Sustain offers advice and practical support to food providers, particularly caterers and local authorities. Sustain also works with its members to campaign for legislation to help embed sustainable food principles - including food waste minimisation – into government, business and institutional policy and practice.

#### Sustain

White Lion Street 94 London N1 9PF (United Kingdom) Tel.: +44 (0)20 7837 1228 www.sustainweb.org sustain@sustainweb.org

## Colofon

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