

# Food Waste in the EU: a study by the European Commission

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[http://ec.europa.eu/environment/eussd/escp\\_en.htm](http://ec.europa.eu/environment/eussd/escp_en.htm)

***Agència de Residus de Catalunya – Workshop on Municipal Waste Prevention***

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## CAVEAT

👉 ***This study addresses food waste at Household, Catering, Retail/wholesale, and Manufacturing/food industry levels, it doesn't address quantities of agricultural waste;***

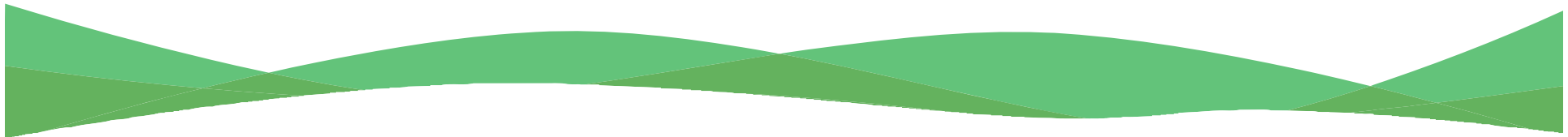
👉 ***But it takes into account the environmental impacts of all sectors, including Agriculture.***

👉 ***Due to the lack of reliable data available (from Eurostat and MSs) many figures mentioned are extrapolations and must be considered very cautiously. However, in the current knowledge context, they give a rough estimate of the situation***

# « Preparatory study on food waste in the EU 27 » (December 2009 - October 2010)

## Agenda

- ✓ How much food we waste
- ✓ Why we waste
- ✓ How many environmental impacts
- ✓ Forecast to 2020
- ✓ Current Initiatives
- ✓ Policy options
- ✓ And now?

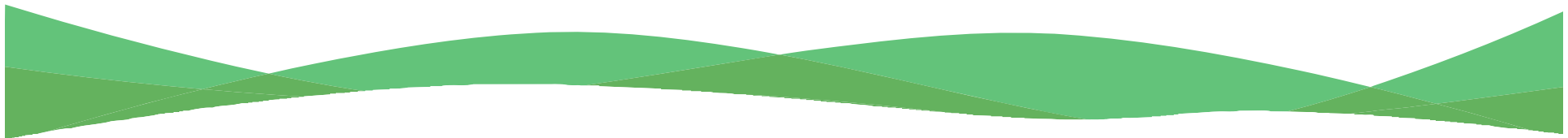


# How much food do we waste?



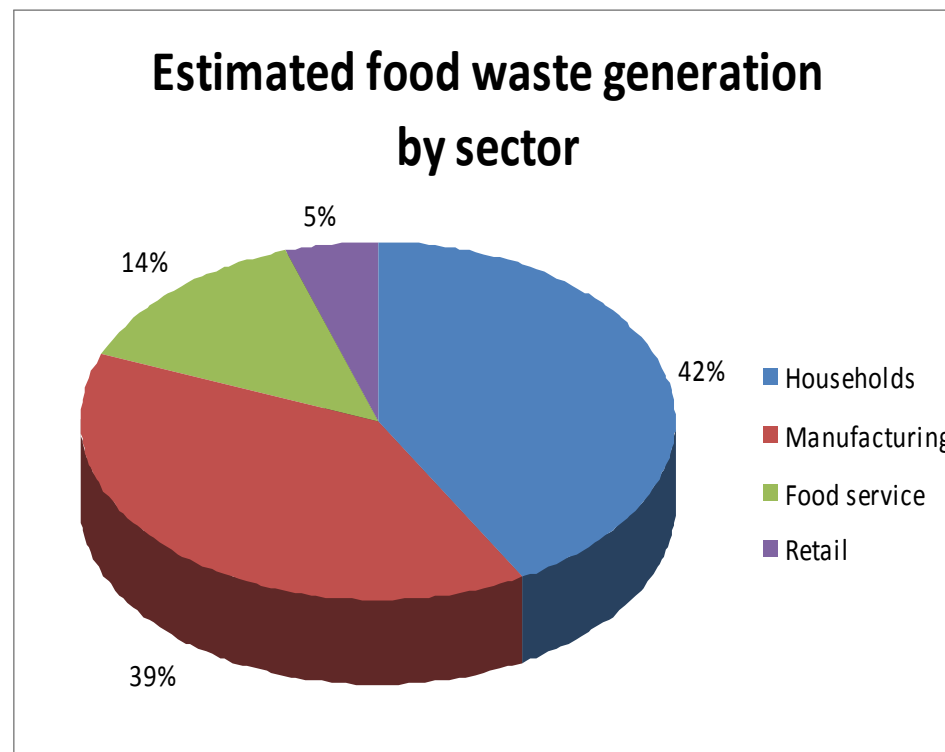
# Impressive, isn't it?

- **89 million tonnes** per year in the whole EU
- **180 kg per capita/year**
- **25%** of household purchases (estimate)



## More details and distribution

- **Households** produce about **42%** of the total (**76kg/capita/year**), of which **60%** would be **avoidable**
- **Manufacturing** sector at **39%**, of which most part is **unavoidable**
- **Catering** sector at **~14%**
- **Retail** at about **5,5%** (possibly more)



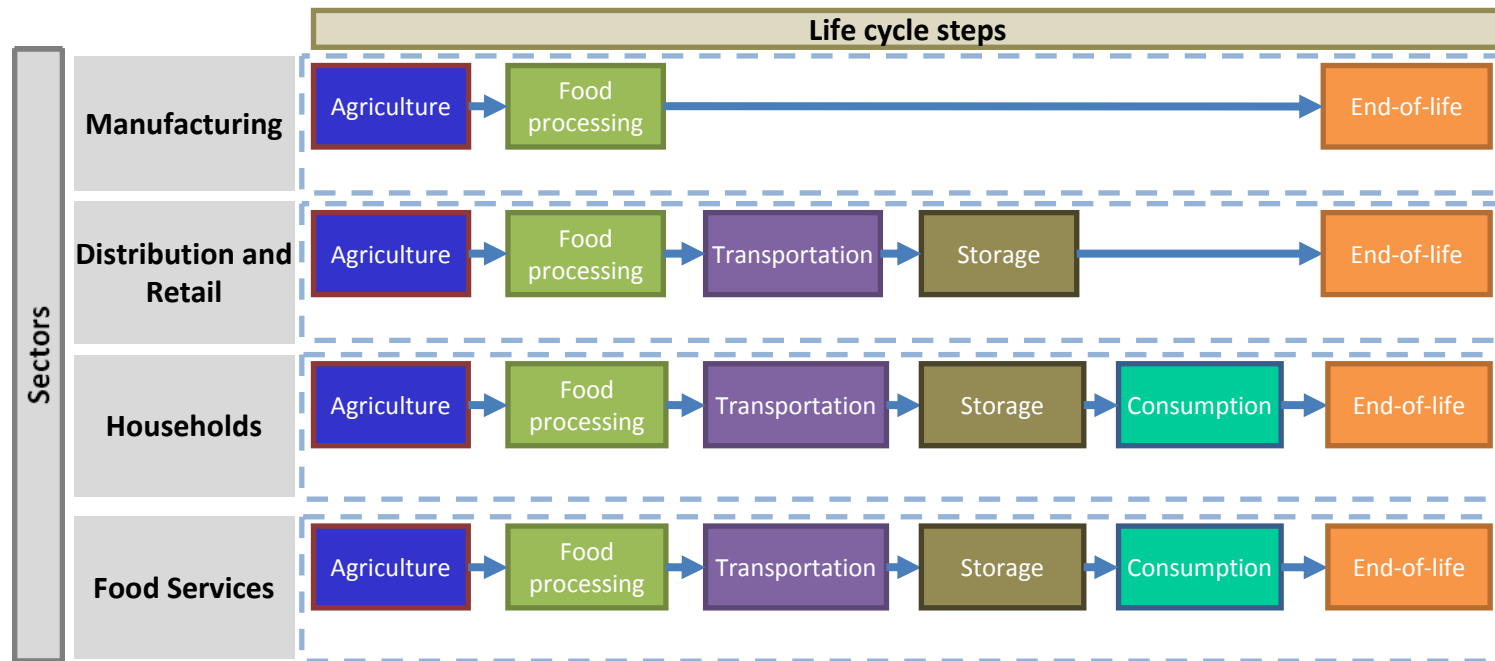
# Why?

- **Households**: lack of **awareness**, or of **knowledge** on efficient food usage (storage), **attitudes** (cultural, undervaluing, etc.), **planning** issues... Poor comprehension of **food date labelling** would be responsible for **20% of the avoidable** food waste at this level.
- **Food service sector**: **portion** sizes, **logistics**, attitudes, **awareness** of food waste as an issue, **preferences** (e.g. children at school canteens)...
- **Wholesale/retail sector**: supply chain **inefficiencies**, **stock** management, **marketing** strategies, temperature sensitivity, etc.
- **Manufacturing sector**: largely **unavoidable**, but technical **malfunctions** exist

# Environmental impacts - structure

To consider the whole Life Cycle of the waste: when avoiding 1T of FW, not only impacts of waste treatment are avoided but also impacts of needless production, transportation, cooking, etc.

**So impacts of food waste are more and more important all as far as we follow the food chain**





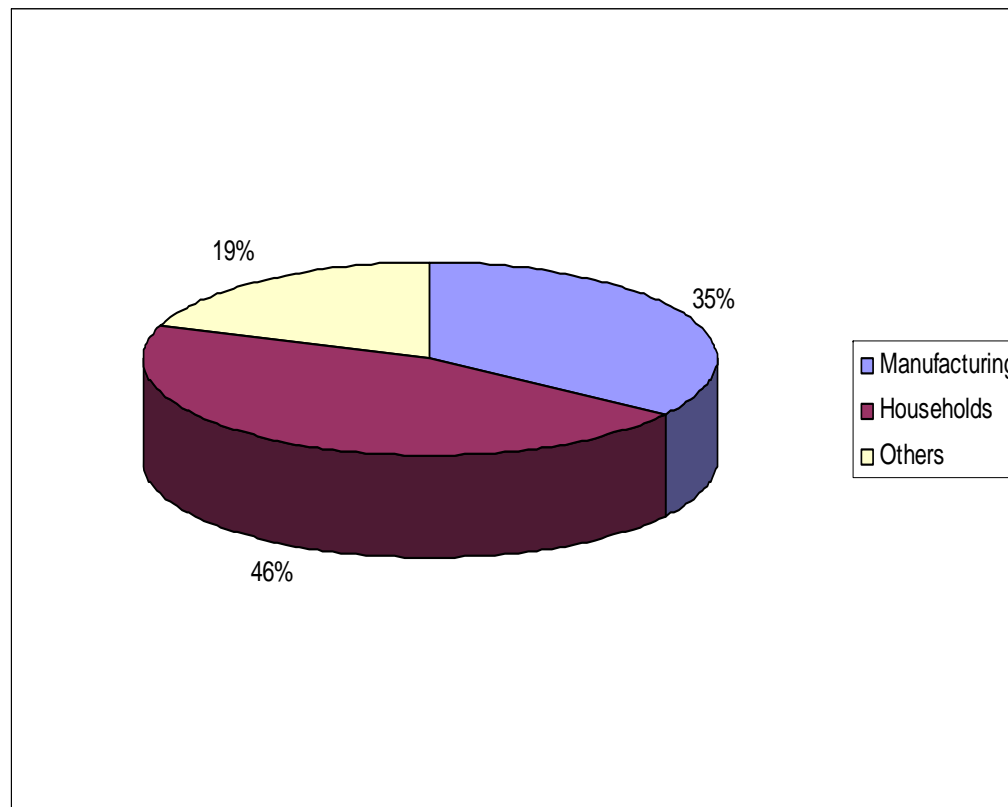
# Environmental impacts

(in terms of GHG emissions)

➤ **1.9t CO<sub>2</sub> eq.** (at least) emitted per tonne of food wasted

➤ **170 Mt of CO<sub>2</sub> eq.** (at least) emitted per year

~ **3%** of total EU27 GHG emissions



# And the future?

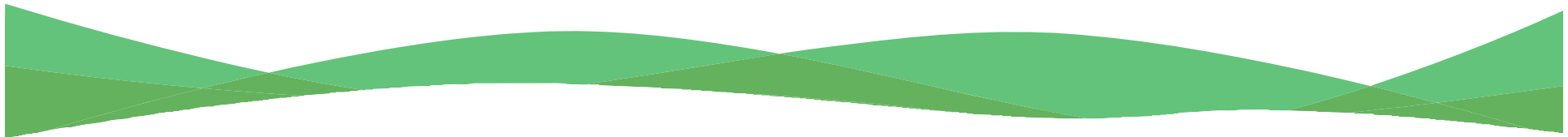
## Forecasts to 2020

### ➤ Quantities

- **2006** →→ ~ **89 million tonnes** in the EU.
- **2020** →→ ~ **126 million tonnes** (based on population and affluence increase)
- **+ 40%**

### ➤ GHG emissions

- **+ 40% (70Mt)** of CO2 equivalent
- **2006** →→ ~ **170 Mt CO2 eq.**
- **2020** →→ ~ **240Mt**

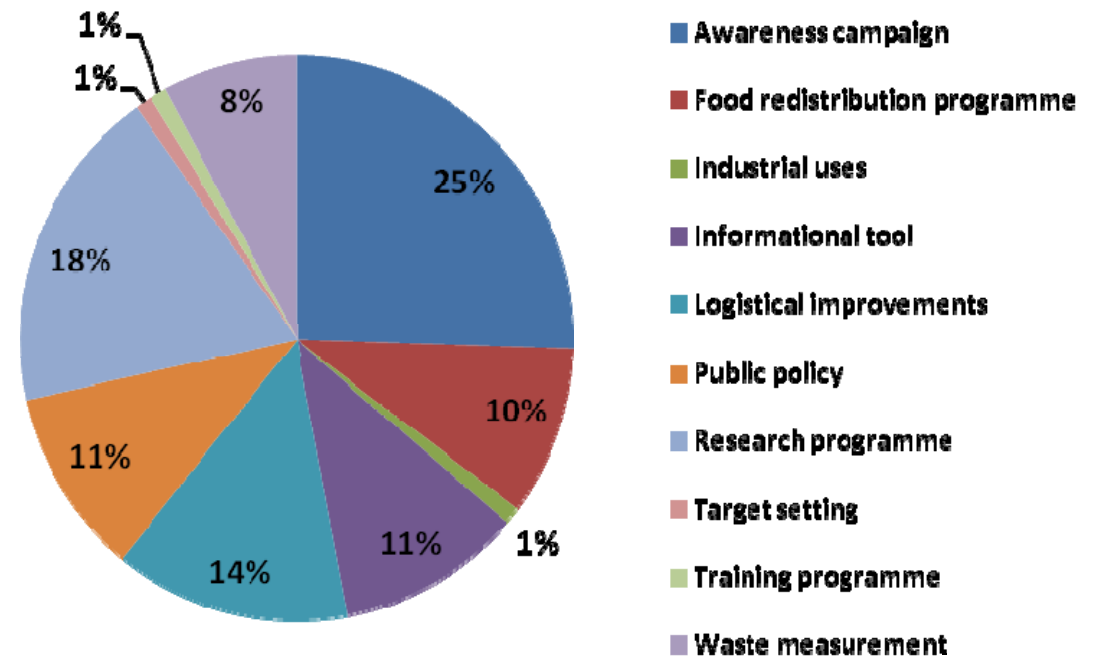


# More than 100 prevention initiatives identified

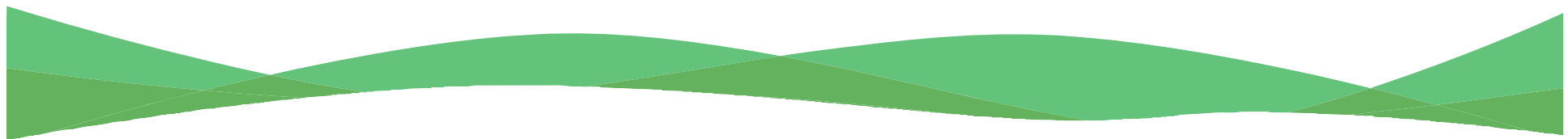
## More than 100 initiatives identified

- 25% to **awareness** campaigns
- 18% on food waste **research**
- Only 10% for **redistribution programmes**, but promising and developing
- **Least common** types of initiatives: **training** programmes, target setting, and industrial uses
- 80% of initiatives started in or **after 2008**
- Results usually **not quantified**

## Types of Initiatives



# 5 policy options identified



# Priority options

- **Improvement of EU food waste reporting requirements by EUROSTAT** standardization of methodologies for calculating quantities, clear exclusion of by-products
  - **Limited** food waste reduction **potential**, but **necessary** to develop targets and strategies which require robust baseline data
  - Not possible before **several years**
- **Date labelling clarification**
  - Confusion due to the current food date labels, such as “**best before**”, “**Use by**” ( “**display until**”),
  - Expected food waste prevention **potential** (up to 20% of avoidable FW),
  - Comparatively **limited cost**, but requires MSs and Parliament agreement (regulation adopted this year)
- **Awareness campaigns**
  - necessary to bring a **behavioural** change for a **long-term** reduction
  - Must be **targeted** and **adapted** to the different populations targeted
  - Stakeholder agreement on its **necessity** and essential role in behaviour change
  - **Potential** to reduce food waste (up to 3% of avoidable FW) linked to budget invested
  - EU role might involve the **sharing of best practices and informational tools** across MS

# Policy options as future possibilities

- **Creation of specific food waste prevention targets**
  - to be integrated in the MSs **Waste Prevention Programmes** as required in the 2008 Waste Framework Directive
  - **Food Waste Prevention Guidelines** in preparation,
- **Requirement on separate collection**
  - **Current** lack of **robust** evidence on the “waste prevention effect”,
  - **Costly** policy option, although potentially economically and environmentally **profitable** in the long term.
  - Prevention is not the primary aim of such a policy, but it offers large avenues for its substantial recycling opportunities

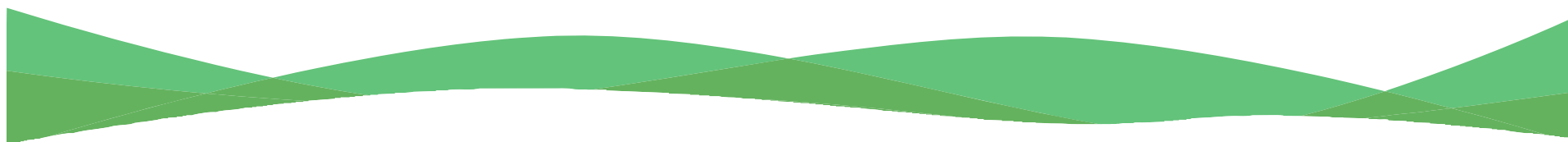
# What is needed furthermore?

## ➤ **More reliable data**

- Definition of waste: avoidable, unavoidable, by-products,
- Real causes for food wasting
- Quantities in Manufacturing and Retail sectors,
- Categorisation and environmental impacts by categories

## ➤ **Targets and prioritisation**

- Where to take action in priority
- Which kind of actions to be efficient (education, information, storage conditions, giving back value to food, food banks, packaging, etc.)
- Reasonable targets in the different sectors



# Who to take action?

## ➤ **Manufacturers**

- Improve packaging (long conservation)
- Inform consumers
- Portion sizing

## ➤ **Retailers**

- Help consumers to avoid food wastage (food labelling, information on conservation, portion sizing, etc.)
- Reduce their own waste (storage, stock management, last minute offers, redistribution programmes (non-profit or profit))

## ➤ **Consumers**

- Awareness of how much they waste
- Better knowledge (food labeling, conservation of food, use of leftovers, purchases planning)
- To give back value to food



# The Resource Efficiency Roadmap (20/09/2011)

## The Commission will:

- **Further assess how best to limit waste throughout the food supply chain, and consider ways to lower the environmental impact of food production and consumption patterns (Communication on sustainable food, by 2013);**

## Member States are invited to:

- **Address food wastage in their National Waste Prevention Programs (2013).**

## More Information on the food waste study:

<http://ec.europa.eu/environment/eussd/reports.htm>



**European Commission  
DG Environment -  
Directorate C - Sustainable  
Resources Management, Industry  
and Air**

**Thank you for your  
attention**

**[http://ec.europa.eu/environment/eussd/escp\\_en.htm](http://ec.europa.eu/environment/eussd/escp_en.htm)**

