

# **The circular economy and the food system: synergies and possible trade-offs**

**The case of Catalonia**



WG Circular Economy  
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TU Main Building

## *Feeding on future. CADS report on the food system*



“People are considered food secure when they have availability and adequate access at all times to sufficient, safe, nutritious food to maintain a healthy and active life”.

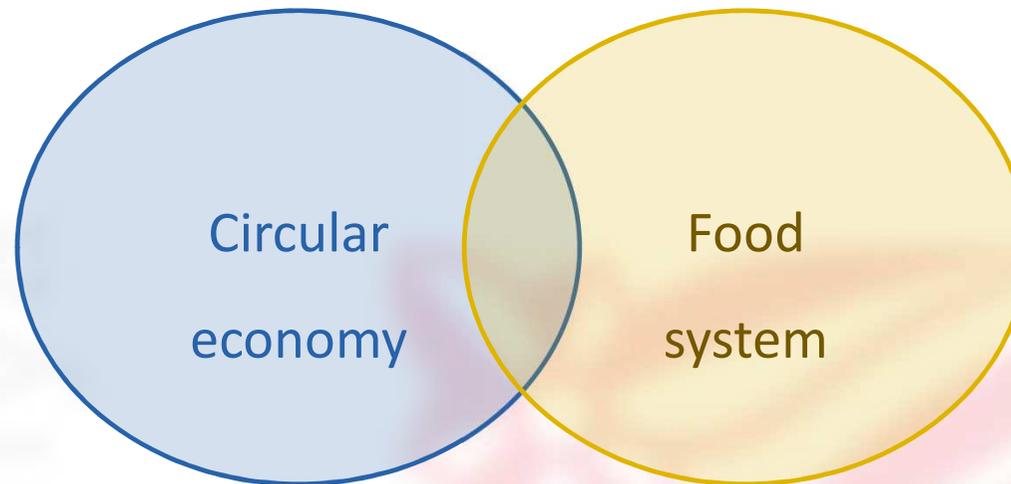
## Main recommendations:

- Food supply:
  - Maintain the production capacity of the food system.
  - Progress towards more sustainable production methods.
  - Strengthen resilience to global change.
  
- Food consumption:
  - Encourage healthier diets consistent with the traditional Mediterranean diet of Catalonia.
  - Reduce food waste.
  - Ensure that everyone can access food in sufficient quantity and quality.

### Cross-cutting recommendations:

- Establish an integrated food strategy.
- Encourage research and innovation practices within the sector.

Synergies between the circular economy and the food system transition:



- Food production: nutrients and water circularity (circular agriculture)
- Food consumption: reducing food waste

## **Food waste**

Synergies between the  
circular economy and the  
food systems transition



- Worldwide a third of all produced food is wasted (1.3 billion tons/year).
- In Europe this percentage is estimated at 20 % (173 kg per person/year).
- In Catalonia the total amount of food that is thrown away (shops, restaurants, catering facilities, and at home) every year reached 262,471 tons in 2010.
  - Equivalent to the consumption of food of the entire Catalan population (7,500,000 inhabitants) for **25 days** or the consumption of **500,000 inhabitants** through a year.
  - Wasted food would have a value of EUR 841 million.

It is necessary to consider not only the waste corresponding to unused food but also:

- The inefficient use of resources (materials, water and energy) during the process of production and transformation of food.
- The environmental footprint associated with these processes, to its transport and distribution.
- The financial loss for consumers and the economy.

## Commitments to reduce food waste:

- 2030 Agenda: halve per capita food waste at the retail and consumer level, and reduce food losses along production and supply chains.
- EU Circular Economy Action Plan: “EU and its Member States are committed to meeting this target”.
- The Catalan Waste Agency has included the goal of reducing by half the food waste per capita in retail sales and end consumption and reduce food losses along the production and supply chain in its new Framework Program for Prevention and Management of Waste and resources (2018).

## Catalan Strategic Committee to reduce food waste

In Catalonia a Strategic Committee to develop an action plan to reduce food waste has been formed in the framework of the Interreg project Ecowaste4food.

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Catalan Strategic Committee to reduce food waste includes the following stakeholders:

- Public administration
- Private business
- Civil society and third sector
- Universities and research institutes

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Main challenges of the Catalan Action Plan to reduce food waste:

- Increase knowledge.
- Raise awareness to reduce food waste.
- Foster prevention.
- Improve recovery of the wasted food.
- Good governance.
- Establish an appropriate legal framework.
- Create economic opportunities and jobs
- Research and innovation.

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**This Action Plan is expected to be approved December 2018.**

Possible trade-offs:  
**plastics in a circular  
economy and food  
waste**

- Packaging represents nearly 60 % of plastic waste generated in the EU
  - 31 % landfilled
  - 39 % incinerated
- Single use-use plastic proposal launched in May 2018 by the European Commission says that Member States have to take the necessary measures to achieve **significant reduction** in the consumption of the **single-use food containers** within six years.

It seems that food packaging can play a key role in food waste avoidance because it enables to extend food shelf-life and allows the market to offer smaller food portions.

- Plastics Europe:

*Plastics save food and resources. One area in which plastics make a major contribution is food packaging.*

- European Commission:

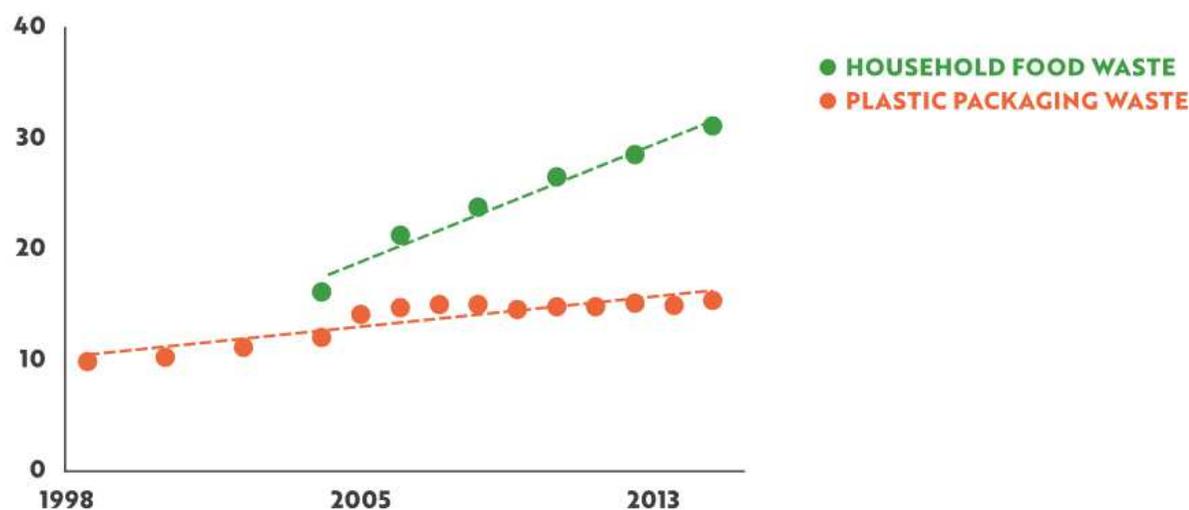
*In packaging, **plastics** help ensure food safety and **reduce food** waste.*



IEEP report *Unwrapped. How to throwaway plastics is failing to solve Europe's food shelf life and allows the market to offer smaller food portions* suggest that plastic packaging has not offered a solution to the food waste problem.

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**FIGURE 1 – HOUSEHOLD FOOD AND PLASTIC PACKAGING WASTE IN THE EU-28 (MILLION TONNES)**



J.-P. Schweitzer, S. Gionfra, M. Pantzar, D. Mottershead, E. Watkins, F. Petsinaris, P. ten Brink, E. Ptak, C. Lacey and C. Janssens (2018) *Unwrapped: How throwaway plastic is failing to solve Europe's food waste problem (and what we need to do instead)*. Institute for European Environmental Policy (IEEP), Brussels. A study by Zero Waste Europe and Friends of the Earth Europe for the Rethink Plastic Alliance

- More information is needed to clarify which circumstances make plastic packaging an ally to reduce food waste and which ones do not.
- The use of single-use plastic packaging underpins convenience, supports on-the-go culture and, in some cases, extends life.
- Reduce single-use plastic packaging and prevent food waste needs a systemic change in our food system.

In conclusion:

- Circular economy and food system transition are partners in reducing food waste.
- Catalonia has created a Strategic Committee in the framework of the Interreg project Ecowaste4food to develop an action plan.
- By contrast, reducing food waste and circularity in plastics pose a dilemma, that has to be tackled not just as a technological issue, but also regarding the whole food system and our lifestyle.

## Possible trade-offs: plastics and food waste

And a question:

- Do you think that this Strategic Committee would be appropriate to tackle this potential conflict between food waste and plastic circular economy? What would be the difference, if any, in the Governance of synergic transitions and the ones that present trade-off?

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Thank you