



Sustainable paper and board packaging against food waste

Eliana Farotto

Head of Research & Development

Bologna , May 22, 2015



comieco

Consorzio Nazionale Recupero e Riciclo
degli Imballaggi a base Cellulosica

3 very simple points and a question

1. Packaging in Europe is already part of the Circular Economy
2. We need to talk and work together to improve the great job that packaging is doing to preserve food
3. But working together is very hard due to the different targets of the supply chain.

Is it possible to find a “sustainable goal” for all the stakeholders and work together?

about COMIECO and why packaging is already part of the Circular economy

Comieco is the **National Consortium for recovery and recycling of paper and board packaging** and is part of **Conai, National Packaging Consortium: more than one million member companies and 6 material-specific consortia**. The management system is based on the **shared responsibility** of economic operators

Comieco represents the paper and board packaging production chain: its members include approximately **3,300 companies**.

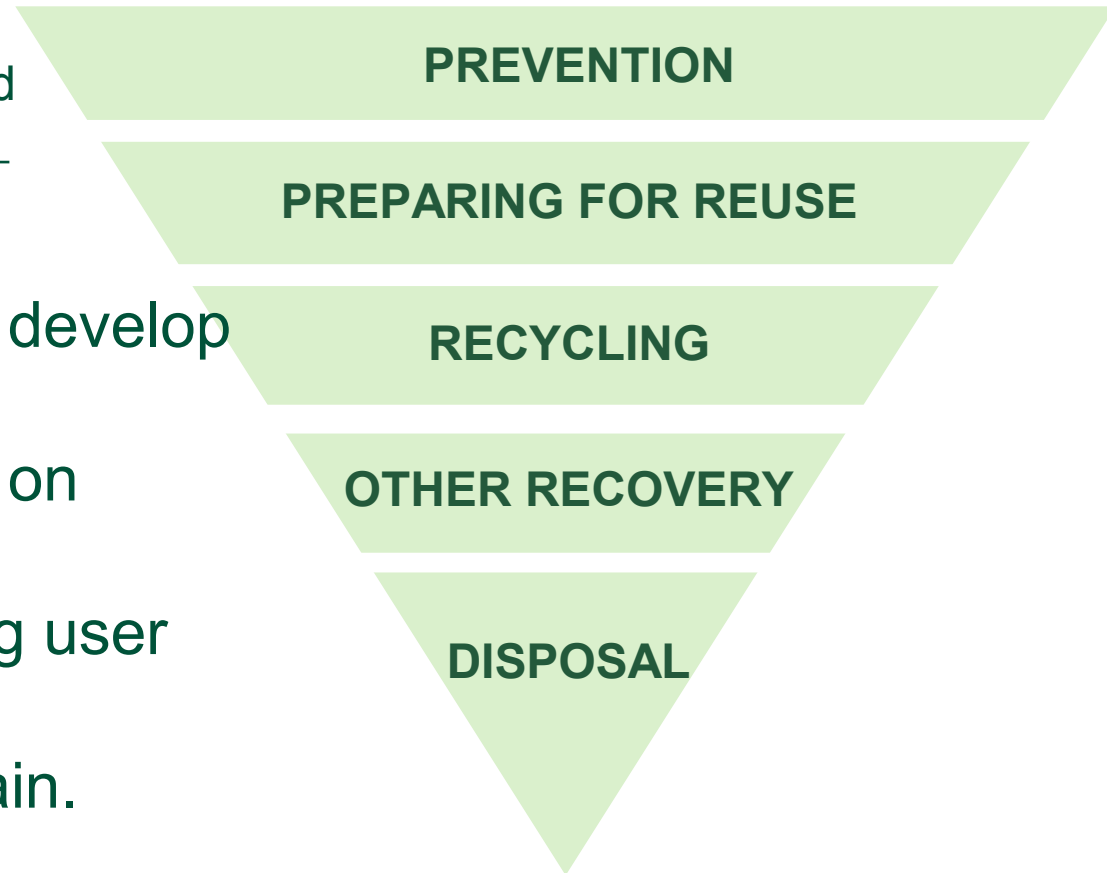
Paper and board account for the largest share of apparent packaging consumption in Italy: 36% of about 11.3 million tons of packaging made of all materials (in urban and industrial waste)

80% recycling rate,
90% recovery rate of paper and board packaging in Italy

commitment towards companies

According to the hierarchy defined by the European law, **prevention** is the key issue.

Comieco is committed to develop a common culture based on sustainability among manufacturers, packaging user companies, and the whole supply chain.



prevention: when is packaging sustainable? Do we need new packaging?

- The **environmental sustainability** of a packaging unit should be referred to the primary function designed for it and is closely connected with the product it is going to contain.
- **Food packaging** allows to preserve, transport, and consume otherwise inaccessible food and beverages every day.



Food packaging: what is it for?

- Food packaging :
 - extends the product's life,
 - protects the product from physical damage and keeps out bacteria,
 - provides information on storage.
- As such, packaging is part of the solution to combating food waste because it prevents food from being damaged or spoiled, both along the supply chain and at home.
- **BUT...do the consumers know about the ongoing technological implementation connected with food availability and preservation?**

from ecodesign to ecotechnodesign for

sustainable protection

Active packaging actively interacts with the product within through the release or absorption of certain substances

- Intelligent Packaging: designed to monitor and communicate properties and information on the quality of the products it contains
- Smart Packaging: interacts, somehow responds to external conditions

Examples of functional developments of paper and board packaging

- Phase-change materials PCM (Milan Polytechnic, projects of the Ministry of agricultural policies and of the Lombardy Region) capable to collect and release huge amounts of latent heat
- Nanocellulose for the barrier effect (Bologna University, DeFENS Milan University) and for paper coating (European project SUNPAP)
- Barriers for fats based on natural substances (Milan Polytechnic)
- Controlled release anti-microbial coating (CIPACK - Centro interdipartimentale packaging, Parma) and coating based on Italian propolis to extend food product shelf life (project Packprolife of the Ministry for Economic Development)
- Active cellulose-based materials (absorbing Pad) for packaging of fresh meat in modified atmosphere conditions (Innovhub, Project Nactivepack of the Lombardy Region)

Multiple Comieco initiatives throughout the year to promote sustainability

- ❖ Workshops and co-op projects with **Italian Universities** to design innovative paper and board packaging units
- ❖ **Lifestyle analysis** (how and when packaging affects everyday life)
- ❖ Monitoring of national and international achievements in view of sustainable packaging and the promotion of **best practices**
- ❖ **International studies and research** on how to improve both recyclability (Italian Aticelca Method) and the eco-design of paper and board products in view of easier recycling (EcoPaperLoop, Central Europe Project)
- ❖ Sustainable packaging **promotion** in general
- ❖ All **voluntary** initiatives (no legislative or financial instruments on “prevention”)

sustainability as a new decision-making principle for consumers

Informed and “advanced” **consumers** are developing an environmental awareness that can turn into a decision-making principle for companies:

Quality of packaging

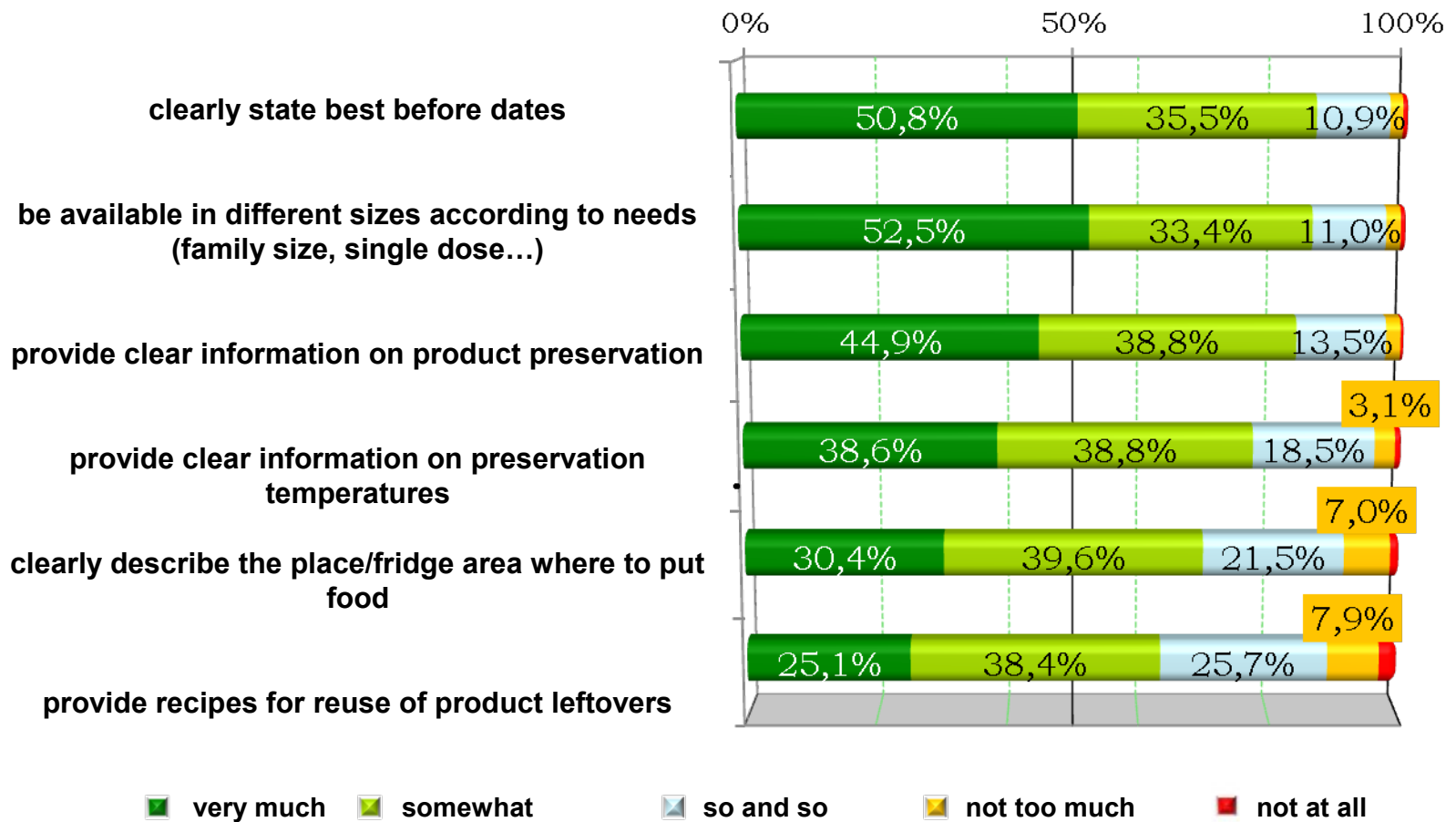
Reuse or multiple use of packaging

Easy recycling (focus on complex packaging)

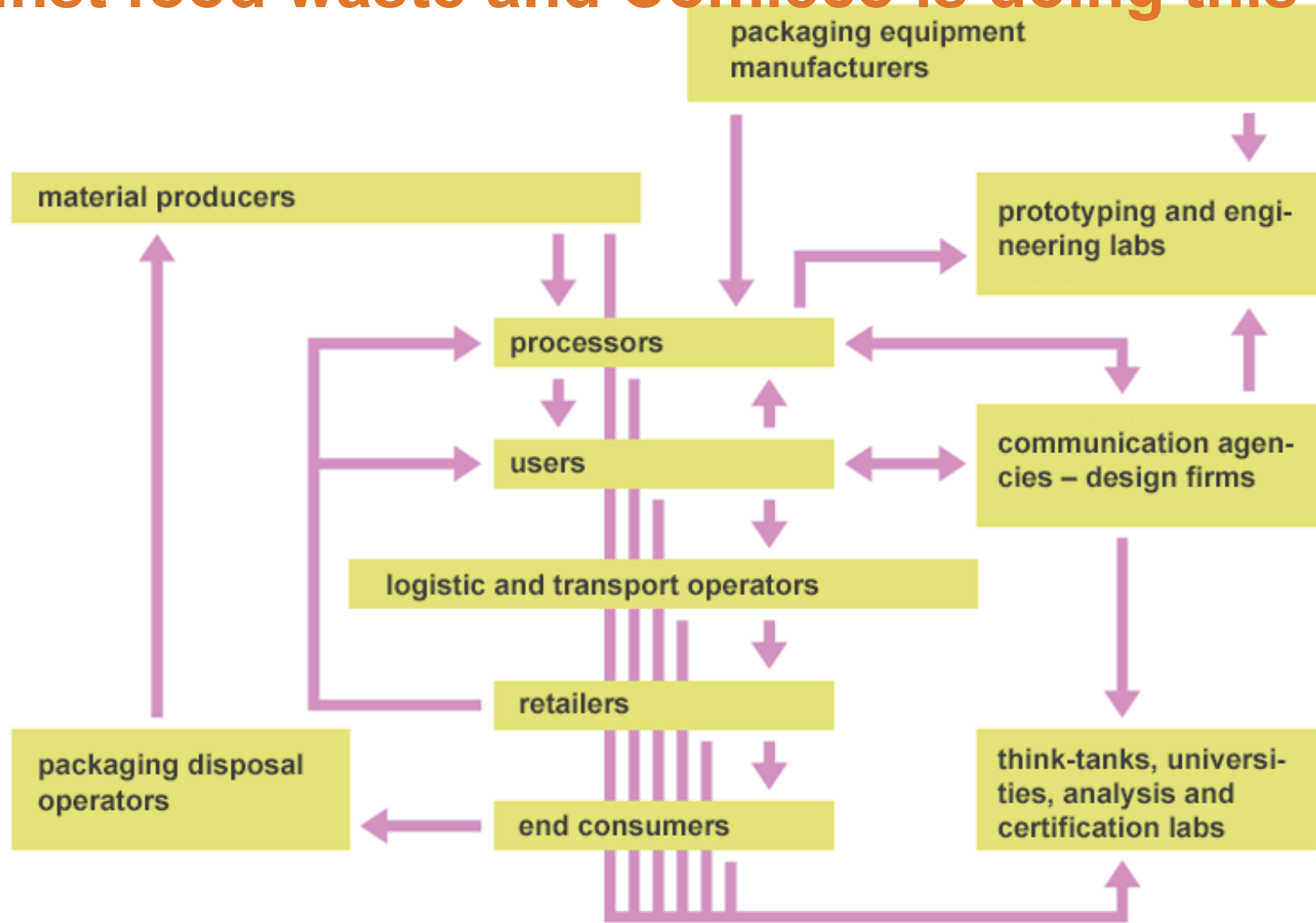
With the same performance and price (also in the light of the economic downturn), a “more sustainable” packaging unit can shift consumer buys.

The main challenge is for companies to understand WHAT consumers mean by sustainable.

Citizen survey: packaging features useful to reduce waste



It's necessary to work together for innovation against food waste and Comieco is doing this



Example: Comieco stakeholders' forum "Club Carta e Cartoni"

Comieco partners with packaging user companies (Paper and Board Club) to help them find and conceive new and better solutions for their packaging needs in terms of sustainability

The Club works to:

- provide useful tools and initiatives to support their activity and ongoing updating (dedicated portal with reserved area and access to exclusive document downloading; newsletter; white paper; etc.)
- draft theme-specific reports and share new developments across the pipeline (training workshops for companies; co-operation agreements; studies; etc.)
- ensure that users know how the whole paper and board recycling process works (guided training visits to plants to show how the “cycle of recycling” is organized)

Voluntary agreements between stakeholders:



Guidelines for “Good” Shipments That Avoid Food Waste: From Packaging to Transport

An initiative by Slow Food

In collaboration with DHL Express and Comieco

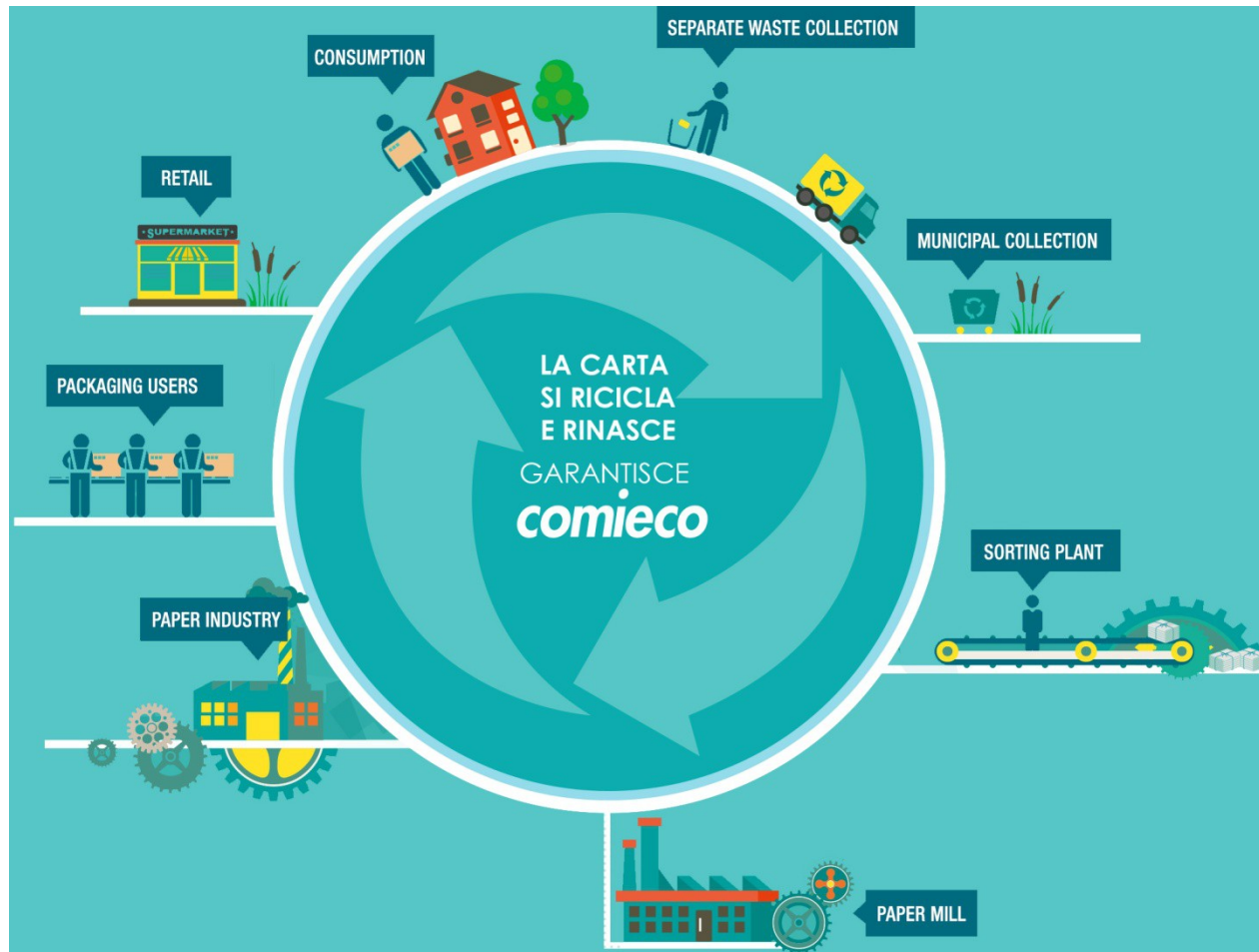
The factors to consider to ensure that a shipment is successful primarily concern the necessary shipping documents, the packaging material and size and the transport. Making sure that the **packaging, shipment and transport of food products conform to these guidelines can help to minimize losses and food waste, reducing environmental impact.**

conclusion

- ❑ The packaging supply chain contributes to food waste avoidance and promotes continuous improvement in packaging
- ❑ citizens have to be actively involved in using “old” and “new” packaging considering not only the environmental impact of packaging becoming waste.
- ❑ **Huge improvements are possible!**



thank-you for your attention



farotto@comieco.org