

The leading role of paper and board packaging in the circular economy

Summary of Comieco 2019 results

Within more than two decades, leveraging on the implemented synergies, Comieco successfully achieved the targets set by regulations ahead of time with economic, social, and environmental benefits for the entire community, thus demonstrating the cost-effectiveness of paper and board packaging recycling.

Preliminary final data for 2019 points out to a year characterized by stable results of recycling, settled on 80%, despite the challenges faced particularly in the second half of the year; the current targets, as well as those set for 2025 (75% for paper and board packaging waste) are thus exceeded.

Recycling and recovery rate calculation (values in tons)	Year 2018	Year 2019	2019/2018 % variation
Apparent paper and board packaging consumption	4.992.056	4.938.994	-1,06%
Paper and board packaging waste in paper and board for recycling of the 1.01 and 1.02 type, recycled in Italy	380.642	470.686	23,66%
Paper and board packaging waste in paper and board for recycling of the 1.04 and 1.05 type, recycled in Italy	2.289.336	2.187.694	-4,44%
Paper and board packaging waste recycled abroad	1.321.864	1.330.489	0,65%
Total paper and board packaging waste conferred for recycling	3.991.842	3.988.869	-0,07%
Paper and board packaging waste recovered as energy	373.822	377.011	0,85%
Recovered paper and board packaging	4.365.664	4.365.880	0,00%
Recycling %	79,96%	80,76%	0,80%
Energy recovery %	7,49%	7,63%	0,15%
Recovery %	87,45%	88,40%	0,94%

Table: Summary of 2019 data

Following years of steady growth, a 1% decline of apparent packaging consumption is recorded for 2019, in line with European and Italian data for the sector.

With consumptions close to 5 million tons, approximately 4 million tons of packaging waste are recycled. As to the origin of such waste, a high rate of packaging is found in household collection. It should be noted that the economic and management commitment of Comieco is aimed at ensuring packaging recycling and sorting in urban waste collection at all times. Thus Comieco does not produce, process, or distribute paper

or board, nor does it perform packaging waste collection directly: yet, with few dozens of co-workers, the Consortium is at the heart of this economic and manufacturing cycle, and ensures its operation.

A local approach to communication was favoured also in 2019 to implement separate household collection in specific parts of the country. These activities were combined with nation-wide initiatives in order to ensure the geographic consistency of the messages conveyed by Comieco.

The share of municipal separate paper and board collection managed by the Consortium resumed its growth after years of gradual decline. The amounts managed by Comieco accounted for 59% of total municipal collection, vs. 42.4% in 2018. Continuing uncertainty on the market of materials for recycling and weak prices resulted into the Municipal authorities, or the operators in charge, asking the Consortium to take charge of materials for recycling. This was the case, in particular, in the north of the country, where the increase of the amounts entrusted to Comieco (almost 440 thousand tons) brings back the coverage rate far above 50%, vs. 30% in 2018.

The number of cities involved in agreements is thus growing (+14.35%), with a total of 54.3 million people (+9.26% vs. 2018) served under such agreements. The Consortium's investment is also growing, with just more than 160 million EUR invested in 2019.

2019 is the only year showing a significant change in the decisions of the parties under the agreements with respect to similar product fractions (graphic paper or other non-packaging paper products) due to the collapse of market values.

Year	No. of agreements	Served Cities		Covered population	
		Number	% vs. total Italy	Number (million)	% vs. total Italy
2018	914	5,506	67.5	49.7	81.2
2019	1,012	6,296	77.4	54.3	88.9

The volumes entrusted to Comieco exceed 2 million tons again, a threshold that was only surpassed in 2009/2010. In the years that followed, the amendments of the Technical Annex and the conditions of the market of recovered raw materials brought the amounts managed on an ongoing basis to 1.4-1.5 million tons per year, with packaging accounting for the largest share (approximately 1 million tons/year).

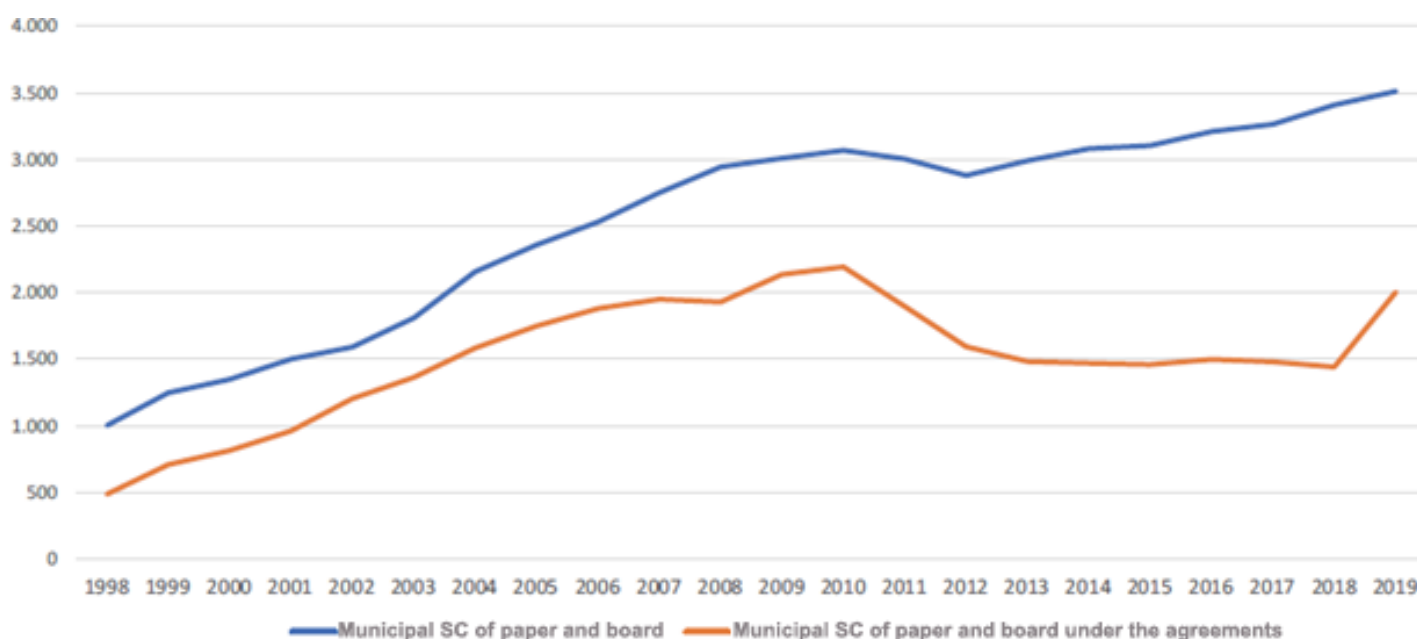


Figure 1 – Historical data set of municipal separate collection and of collection managed by Comieco

With an overall urban separate collection expected to reach 3.5 million tons in 2019, based on preliminary data, 2.03 million tons of paper and board were managed and recycled under the agreements.

Italian paper mills are located across the national territory (see the attached map) and have a recycling capacity of about 6 million tons (source: Assocarta).

Paper mills in Lombardy, Veneto, and Piedmont ensure that approximately 40% of the paper-based materials from national separate collection (other than returned newspapers or processing scraps) are recycled. Such paper mills ensure the recycling of the materials collected in the three Regions and beyond: in fact they receive 26% of the amounts entrusted to Comieco by southern Cities every month.

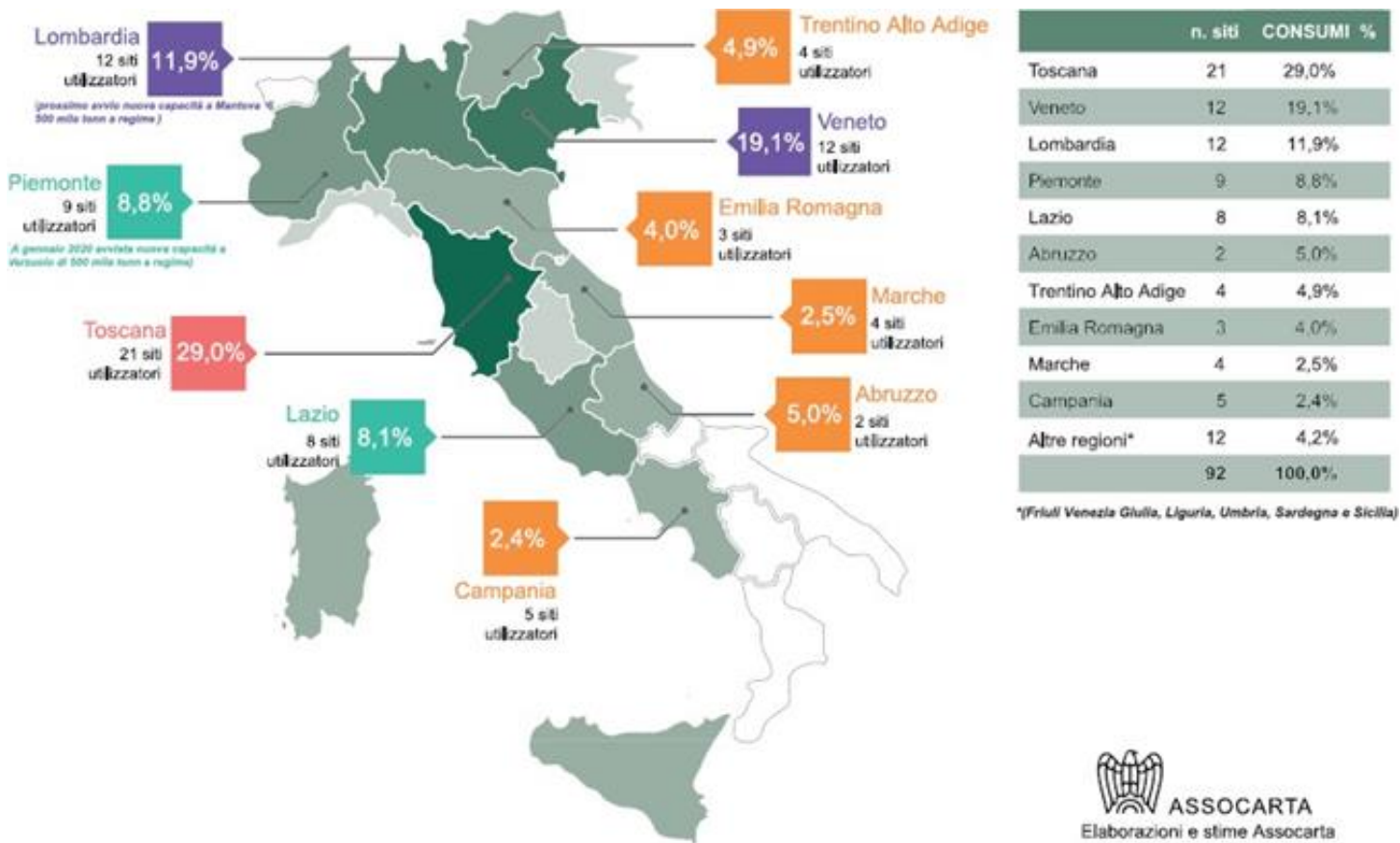


Figure 2 – Recycling capacity in Italy in 2019 – Local distribution of consumption of paper for recycling.
The Italian paper mills reintroduced almost 5,06 million tons of paper for recycling into the production cycle in 2019.

Prevention

Packaging eco-design was enhanced in 2019, with increasing awareness of the recyclability of paper-based composite packaging. Companies use analytical methods to assess recyclability, whose results allow the manufacturers and users of pulp-based materials or products to ascertain, and then disclose to their customers, the recyclability level of their goods, thus enhancing their environment-friendly properties.

Comieco, in close coordination with CONAI, strives to achieve the targets set by the European and national rules on paper and board packaging recycling and recovery, in accordance with the management hierarchy that sees “prevention” at the top.

Packaging prevention itself is the main focus of the Prevention Call for Tenders of CONAI, which provides 500,000.00 EUR every year to enhance the environmental sustainability of apparent packaging consumption and promote and disseminate a culture of environmental sustainability among companies.

Sustainable packaging also takes the lion’s share of Best Pack, the Consortium’s data base that contains examples of paper and board eco-packaging acknowledged with high-prestige Awards all over the world, including those awarded by the CONAI Prevention Call for Tenders.

Such data base currently contains about one thousand cases of paper and board eco-packaging that offer the best examples of sustainable solutions available on the market and were acknowledged for interventions made on the product or process, including design, consumption, and disposal. Best Pack is an eco-design tool available to companies, designers, and retailers, which allows to keep track of national and international paper and board eco-packaging trends – from Italy to Singapore, from the Czech Republic to Spain – through a collection of examples of innovative and sustainable packaging in various fields, including e-commerce.

Packaging for e-commerce plays a leading role in the activities carried out by Comieco in co-operation with Netcomm, the Italian Consortium for Electronic Commerce. At the 2019 Netcomm Forum, the “Guidelines and checklist for the appropriate use of packaging for e-commerce in view of environmental sustainability” were introduced to provide practical tools for an optimal management of the environmental impact of packaging to e-commerce companies and operators in the logistics pipeline.

The packaging business is thus moving in a cross-disciplinary context that explains the focus of Comieco’s activities on research in view of impacting on waste prevention and on packaging design, production, distribution, consumption, and use.

The initiatives implemented over time include multiple interventions, such as co-operation with Universities on paper and board packaging design, creation of tools for the Consortium’s member companies that manufacture and use packaging, enhancement of sustainable packaging, analyses to respond to lifestyle changes, monitoring of packaging innovation on the domestic and international market.

In the past few years, Comieco strengthened its support to its member companies and is now allocating new resources to support their shift from a linear to the circular economy. Comieco sees research and development as key to improve the recycling performance towards more efficient processes and the continuing increase of the amounts of recycled packaging.

With 90% of paper and board packaging recovered in Italy every year through the citizens’ separate collection, packaging design becomes strategically important both for product preservation, particularly food, and to ensure appropriate recycling and the possible development of the circular economy.

While the UNI 11743:2019 norm defines the lab procedure, Aticelca is in charge of defining the criteria to assess the recyclability level. With the “Aticelca 501 Assessment System”, Aticelca introduced the labelling RICICLABILE CON LA CARTA (RECYCLABLE WITH PAPER) – Aticelca® 501. The number of companies granted the use of the RICICLABILE CON LA CARTA – Aticelca® 501 labelling was tripled in 2019 to a total of 271.