2024

Sustainability Report

ENVIRONMENTAL STATEMENT REG. EC 1221/09 EMAS AS AMENDED

CONAI

Contents

Letter from the President

CONAI's commitment to sustainability is not just a choice of responsibility: it is of course an institutional mandate, but it is also a vision of a future in which the planet's resources are used more efficiently while protecting the environment.
The new edition of our Sustainability Report aims to demonstrate this commitment, which the CONAI EPR Organisation has been pursuing for twenty-seven years, and its effects on the ecosystem.

For the first time, we have adopted a new calculation method to report the value generated by correct packaging management, which produces both economic and strictly environmental benefits.
The choice – and I emphasise that it is a choice, not just a possibility – of using second-use material instead of virgin raw material has a direct impact, also in terms of employment, with significant repercussions on our economic system. Every euro of EPR Fee that Italian businesses invest through CONAI and Packaging Material Consortia in the careful management of end-of-life packaging has a multiplier of 4.6 in terms of value generated for the Italian economy.

The environmental indicators are new evidence of how reuse and recycling can have a very positive impact on the ecosystem:

- *saving raw materials continues to be essential, especially in a country like ours, which does not have an abundance of them;*
- *recycling is proven to be a major stakeholder in the fight against decarbonisation: the CO_2 not emitted thanks to the primary material not produced, net of that generated to prepare packaging materials for recycling, was equal to 8,000 flights around the world in 2023;*
- *the primary energy savings achieved through recycling are equivalent to the domestic consumption of half of all Italian households in one year. For the first time, this calculation introduces the primary energy consumption associated with preparing end-of-life packaging for recycling and transport throughout the supply chain.*

I hope that these numbers will encourage analysis and evaluation that can stimulate the adoption of extended producer responsibility management models that truly contribute to the circular economy. The Italian packaging management model, which in Italy accounts for only about 8% of the waste produced, can set an example for other supply chains, so that an increasing number of materials enter a truly circular and sustainable flow.

Ignazio Capuano
CONAI President

Greeting from the General Manager

At the last edition of the Festival of Cultural Journalism, held every year in Urbino in the first week of October, I was discussing environmental information with several industry professionals. We were at the Festival to award the two winners of the CONAI Phoenix award for Young Environmental Journalism 2024: before presenting the statuettes, there was much talk not only about the role of women in promoting a culture of sustainability (the theme of the 2024 Festival was "The female gaze in cultural journalism"), but also about the value of correct and documented information, based on scientific foundations and not on perspectives of principle. These were highly interesting discussions, in which issues emerged on clarity, completeness of data, and accessibility.

For years, our Sustainability Report has been an important vehicle for a documented approach to the issue of environmental protection, based on numbers and results as well as on concrete prospects for improving the sustainable performance of the national system and the CONAI EPR Organisation. Sharing it, then, represents a moment of transparency that once again proves how much CONAI's work can and, above all, desires to be measured and measurable, with a view to synergic sharing among all stakeholders in the supply chain.

Yet here we are not just talking about measuring results. I believe this is a deeper commitment: disseminating an environmental culture that permeates the CONAI EPR Organisation and its stakeholders, as well as the social fabric. This remains an essential component of the tasks assigned to us. Sustainability, after all, is made of goals to be achieved, but also of awareness and sensitivity. The 2024 Report recounts this aspect too.

In some ways, this is testified by the revision of certain calculation methods, the progressive broadening towards a perspective that is increasingly national and less tied to consortium activities; the space given to prevention actions that remind us that the management of packaging does not only mean intercepting it and separating it at the end of its life, but also making it less impactful throughout its life cycle.

It is a question (once more) of approach and language. Environmental culture must be promoted with the clarity that figures and their traceability make possible, but also with expressive codes that are precise without becoming incomprehensible. That is why every year the Report also speaks through equivalences and comparisons, such as the one comparing the material saved through recycling to the weight of several Towers of Pisa.

And this is why CONAI continues in its pursuit of speaking different languages and influencing them: the message of the need to protect the planet must reach more and more people.

The language used by journalism, which today bears great responsibility, is an example of this. But I also have in mind the language of art: for three years we have been promoting the Circular Art exhibition, inviting young artists to tell the story of sustainability through painting, sculpture and photography, and then awarding one of them the CONAI Prize.

These are languages and opportunities that I believe allow everyone to both observe and participate consciously in this path towards a more sustainable future, which should be a shared objective to strive for and not a subject of ideological opposition.

Simona Fontana
CONAI General Manager

A message from...

"The matter that surrounds us – all matter, even that which appears most mundane to us – is a minor miracle of sorts. The mechanisms that allow elementary particles to organise themselves to form the stable structures we call atoms and molecules are the result of a delicate balance between fundamental forces of nature.

Taking care of matter, protecting it and preventing its misuse also means protecting us, the living forms, who are closely dependent on this balance."

Guido Tonelli

CERN physicist

"The circular economy is part of culture. CONAI contributes to this culture. The different recycling rates in the different areas of the country say a lot about their hopes, trust, expectations and cohesion – in other words, their history."

Carlo Bellavite Pellegrini

Professor of Corporate Finance
Director of the Centre for Applied Economics Studies (CSEA)

"The culture of circularity encapsulates one of the many distinctive qualities of Italian expertise, because it means giving new life to what exists in the light of present needs: innovation within tradition. However, it requires a change in the consumption model that recognises that what is recycled has a greater value than what is new. The greater value is not in the processes or in the design, but in being the bearer of a future that is (still) possible, because it is sustainable."

Lara Ponti

Confindustria Deputy President for Environmental Transition and ESG Goals

"CONAI's dedication to the Sustainability Report, which is particularly evident in its involvement of stakeholders and focus on future challenges, will be an important prerequisite to be maintained when reporting on commitments and targets that will result from implementing the new European Packaging Regulation."

Edo Ronchi

President of the Sustainable Development Foundation

Introduction

Reporting on environmental, social and governance performance is of paramount importance for CONAI, acting not only as a transparency device for its stakeholders, but also as a strategic lever in order to continuously improve its activities and the overall impact on the environment.

In the new *Sustainability Report 2024*, which complements the Environmental Statement for the second year running – validated in accordance with Regulation (EC) 1221/2009 (EMAS) – CONAI provides a detailed analysis of its performance for the year 2023[1]. In keeping with previous reporting, performance is examined on three distinct levels – National System, CONAI System and Organisation – highlighting how strategies and actions contribute to achieving the objectives defined by the Consortium's Governance.

The document has been drafted in accordance with the Global Reporting Initiative (GRI) standards, following the "GRI – with reference to" option. In addition to the GRI-ESRS Interoperability Matrix, the GRI-ESRS conducts an initial exercise in approaching the new ESRS standards, laying the foundations for the new 2025 reporting to replace Legislative Decree 254/2016 that is being repealed.

Further adding to the value of the new Report are two in-depth studies produced in cooperation with The European House – Ambrosetti and Italy for Climate. The first presents a new methodology for assessing the social and economic impact of the System, expressed in terms of generated economy, contribution to GDP and employment; the second – in line with the previous report – analyses the "Strategies and prospects for decarbonisation of the seven material supply chains".

The report provides for the documented involvement of the Governing Bodies and Management in several stages, and is also the subject of technical assurance by RINA Services SpA[2] through a verification process covering the whole of 2024 and validation of the Environmental Statement by DNV Business Assurance SpA[3].

1
This document provides numerical data that may be subject to rounding, even compared to previous institutional publications, in order to simplify consultation and understanding.

2
The verification statement is available at www.conai.org in the "Document downloads" section.

3
https://www.conai.org/wp-content/uploads/2023/05/3_EMAS_IT_001784.pdf

The System that is good for Italy

TOTAL WASTE GENERATED *
190,000,000 tonnes

of which

< 8%
PACKAGING WASTE *
13,900,000 tonnes

MUNICIPAL WASTE AND RELATED WASTE *
29,000,000 tonnes

SPECIAL WASTE *
161,000,000 tonnes

managed by

CONAI System

CONAI
RICREA
CiAI Consorzio Imballaggi Alluminio
comieco
Rilegno
COREPLA
biorepack
CoReVe

managed by

Market

managed by

Self-compliant EPR Organisations

contribute to

THE CONAI SYSTEM HAS A MULTIPLIER EFFECT ON THE ITALIAN SOCIAL AND ECONOMIC FABRIC.

GENERATED ECONOMY x4.6
€3.3 billion
Entire passenger air transport sector in Italy

CONTRIBUTION TO GDP x4.4
€1.924 billion
Total turnover of the national vending sector

EMPLOYMENT x3.7
23,199
Population of a city the size of Sanremo

DISTRIBUTES ECONOMIC VALUE TO:

MUNICIPALITIES/MANAGERS OF PUBLIC SERVICES (ANCI-CONAI PAYMENTS)
€676 million

OPERATORS FOR C&I PACKAGING COLLECTION
€20 million

OPERATORS FOR SORTING, TRANSPORTATION AND RECYCLING
€494 million

CONAI **System**

contributes to

NATIONAL **System**

THE NATIONAL SYSTEM BENEFITS FROM:

EFFECTIVE RECYCLING
10.4 million t
75.3% **effective recycling rate**

RAW MATERIAL SAVED
11.7 million t
800 Towers of Pisa

PRIMARY ENERGY SAVED
50 TWh
50% of the consumption of all Italian households

CO_2 EMISSIONS AVOIDED
10 million tCO_2
8,000 flights around the world

REUSABLE PACKAGING
1.2 million **tonnes**

* Source: Eurostat 2022 data. The figure for packaging waste has been updated according to CONAI's 2023 reporting.

1

The packaging circular economy: value for the country

The analysis of CONAI's **social and economic impact** is organised with a multidimensional approach that aims to quantify and highlight the positive effects generated by the activities of the CONAI System, both **directly** and through the **economic chains activated and enabled** at the national level.

Dimensions of the analysis

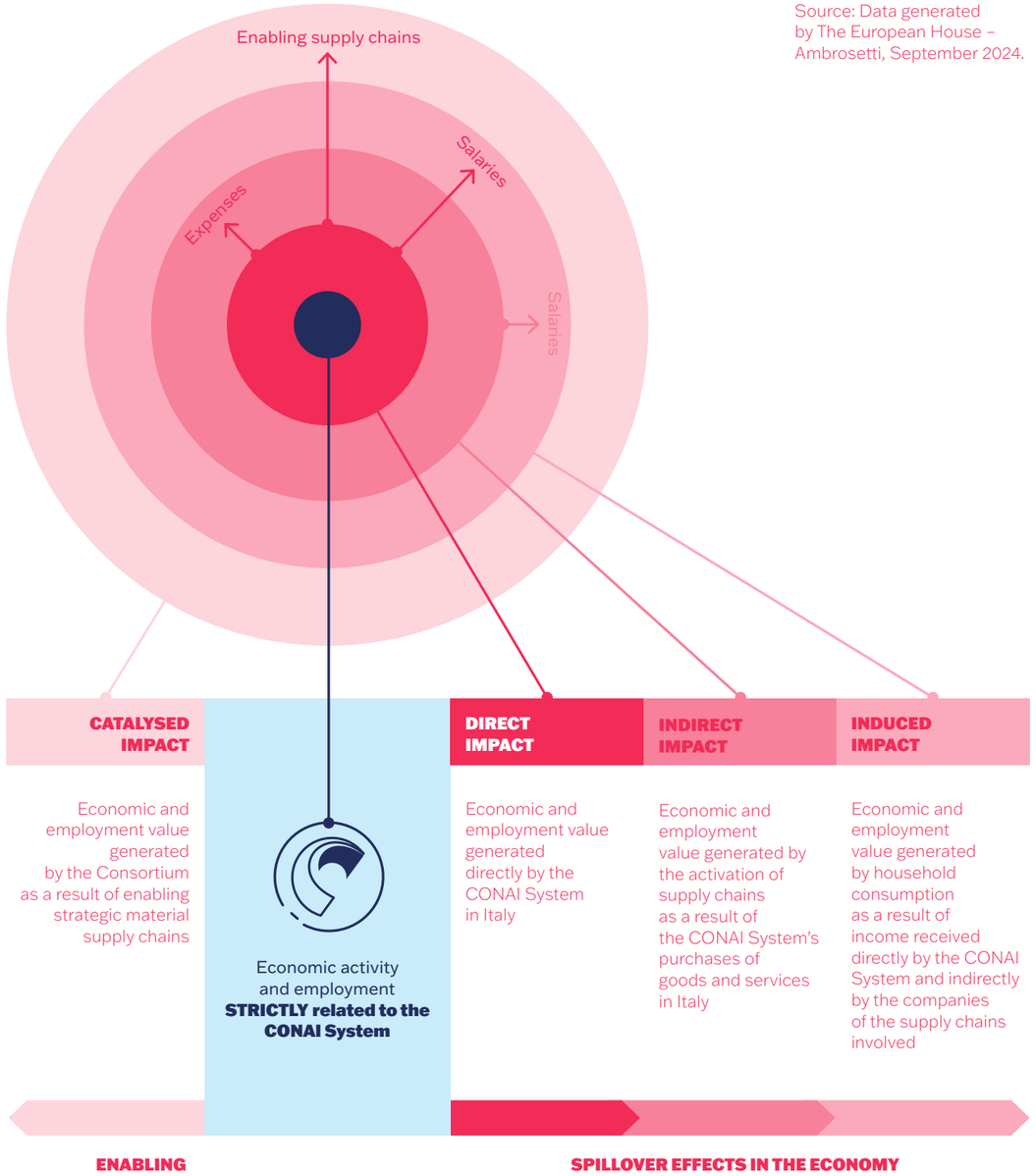
The social and economic impact is measured through the following types of effects:

- **Direct impact**, relating to the activity carried out directly by the CONAI System;
- **Indirect impact**, created by the economic chains activated through the purchase of goods and services;
- **Induced impact**, referring to consumption expenditure by workers paid through direct and indirect economic activity;
- **Catalysed impact**, economic and employment value created as a result of enabling strategic material supply chains.

The methodological approach for calculating the direct, indirect and induced impacts involves the use of input-output models, based on ISTAT data, adjusted to measure sectoral interdependencies and calculate the economic value created by the Consortium's various activities. This methodological framework makes it possible to calculate and measure the contribution of the CONAI System to the national social and economic fabric, in terms of generated economy, GDP and employment, by reconstructing the various economic components created both upstream and downstream.

THE SOCIAL AND ECONOMIC IMPACT OF THE CONAI SYSTEM IN ITALY MEASURED IN TERMS OF DIRECT, INDIRECT, INDUCED AND CATALYSED IMPACTS

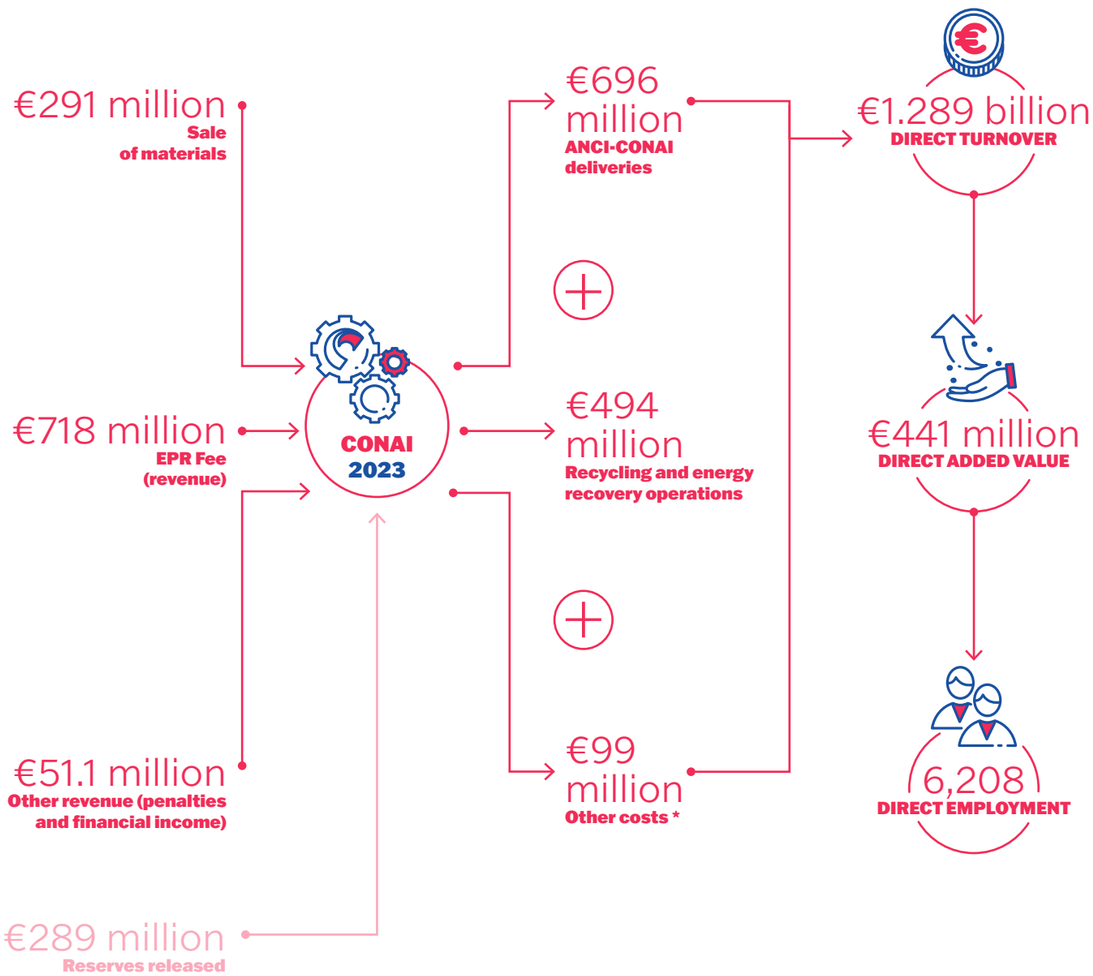
Source: Data generated by The European House – Ambrosetti, September 2024.



Indicators of the analysis

In order to measure the direct generated economy, direct contribution to GDP and direct employment generated by the CONAI System in 2023, the monetary input and output flows of the Consortium in the Italian economy were used – as already examined in detail in the "CONAI System balance sheet" section.

THE SOCIAL AND ECONOMIC IMPACT OF THE CONAI SYSTEM IN ITALY MEASURED IN TERMS OF DIRECT, INDIRECT, INDUCED AND CATALYSED IMPACTS



* Other costs include: personnel costs, overheads, research and development costs, depreciation and amortisation, local project costs and communication costs.

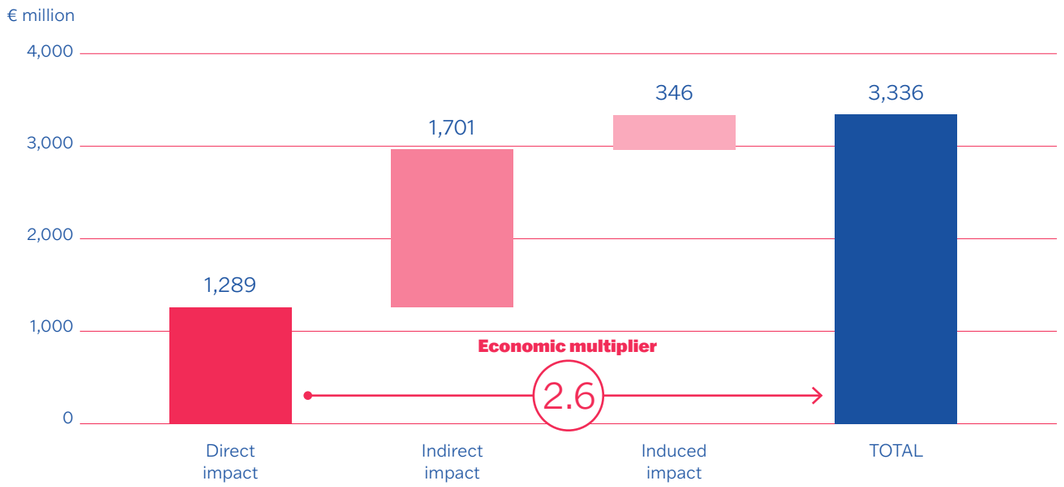
Source: Data generated by The European House – Ambrosetti, 2024.

The European House Ambrosetti

1.1 Economic impact: generated economy

In 2023, the CONAI System recorded a **direct turnover** of **€1,289 million** from: CONAI EPR Fee, Sales and Other revenues. The indirect impact, linked to the activation of supply chains, generated €1.701 billion. Furthermore, the induced impact (turnover from consumption by workers' families and supplier companies) reached €346 million.

DIRECT, INDIRECT AND INDUCED TURNOVER OF CONAI IN ITALY IN 2023



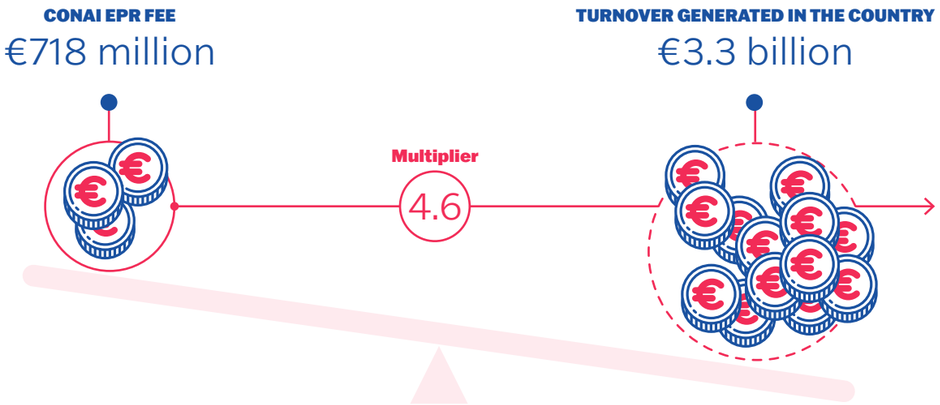
Source: Data generated by The European House – Ambrosetti from CONAI data and tables of sectoral interdependencies (input-output) from ISTAT, 2024.

Through the activation of **supply and sub-supply chains**, CONAI has therefore generated a total turnover in Italy of over **€3.3 billion**.

€1 of EPR Fee generates **€4.6** in Italy's economy.

Furthermore, if we isolate the impact of CONAI's EPR Fee alone, the multiplier effect on the Italian social and economic fabric was even more significant. Through the Consortium's activities and the management of packaging waste, the EPR Fee brought in a total turnover of €3.3 billion.

DIRECT, INDIRECT AND INDUCED IMPACTS GENERATED BY THE CONAI SYSTEM, 2023.



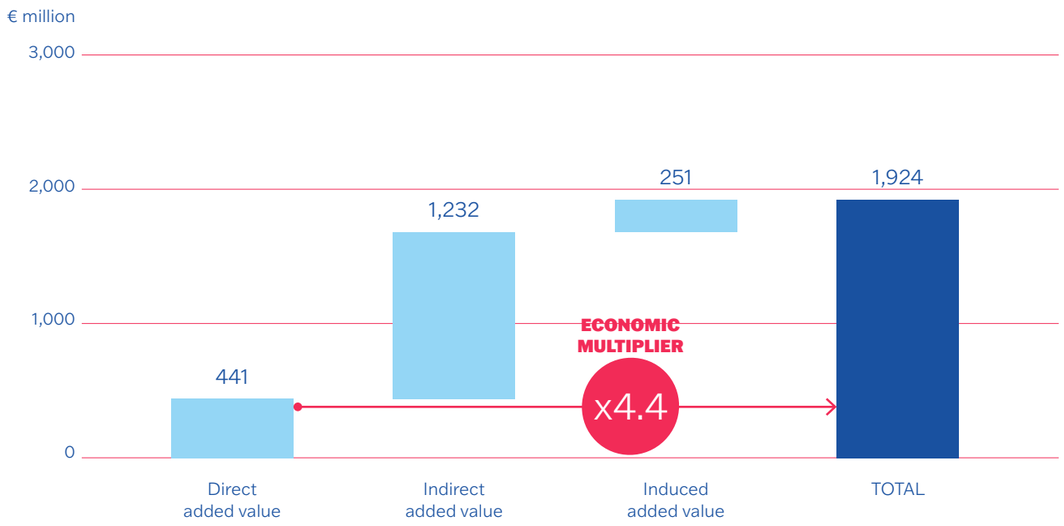
Source: Data generated by The European House – Ambrosetti from CONAI data and tables of sectoral interdependencies (input-output) from ISTAT, 2024.

For every €1 of turnover generated by the CONAI System in 2023, **an additional €1.6** was activated in the economy as a whole. The total turnover is over **€3.3 billion**, comparable to the entire passenger air transport sector in Italy.

1.2 Economic impact: contribution to GDP

Added value is the key measure of the contribution of the CONAI System to the Italian economy, returning the actual generated contribution to the national GDP.
In 2023, the **direct added value** generated by the CONAI System reached **€441 million**. This is a direct and tangible contribution that reflects CONAI's role as an engine of economic growth through its operations.

DIRECT, INDIRECT AND INDUCED ADDED VALUE OF THE CONAI SYSTEM IN ITALY IN 2023



Source: Data generated by The European House – Ambrosetti from CONAI data and tables of sectoral interdependencies (input-output) from ISTAT, 2024.

Every €1 of direct added value generated by the CONAI System in 2023 generated an additional €3.4 in the entire economic system, equal to the entire turnover of the national vending sector.

In addition to the direct impact, the CONAI System also generated a significant **indirect impact** amounting to **€1.232 billion**.
The firms that supply goods and services to the CONAI System, in turn, generate additional contributions. Sectors such as logistics, industrial production and waste management services benefit directly from the System's operations, thus amplifying its contribution to the national GDP. Finally, the **induced impact**, the economic value generated by the expenses of workers involved in the direct and indirect activities of the CONAI System, generated additional added value of **€251 million**.

1.3 Employment impact

Employment is one of the most significant aspects of **social impact** of the CONAI System, as it expresses the number of jobs created or supported throughout the supply chain, both directly and indirectly, and induced.

In 2023, the CONAI System supported **6,208 direct jobs**[4].
These are workers employed on a continuous basis within the structures and processes managed directly by the Consortium.

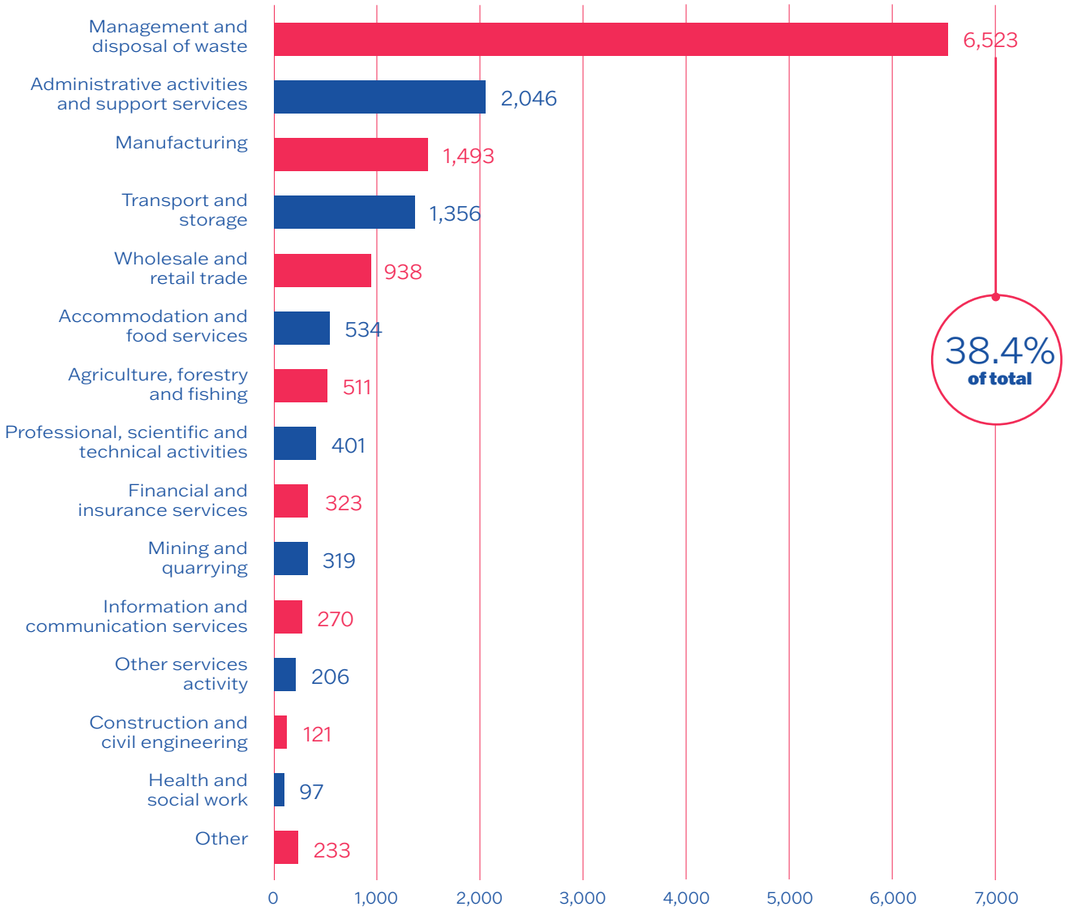
In addition to direct employment, the CONAI System also had an important effect on **indirect employment** through the activation of related supply chains. In 2023, the indirect impact supported **15,383 jobs**. Finally, the **induced impact on employment** resulted in **1,608 additional jobs**. These jobs are mainly in the waste management, industrial manufacturing, and logistics/transport sectors.

4
This includes all persons directly involved in waste management and treatment operations, in the coordination of the CONAI EPR Organisation and in services related to these activities.

The European House
Ambrosetti

The CONAI System has an employment multiplier of 3.7: for every employee directly related to the System's activities, an additional 2.7 jobs are supported along the activated supply chains, comparable to the population of a city the size of Sanremo.

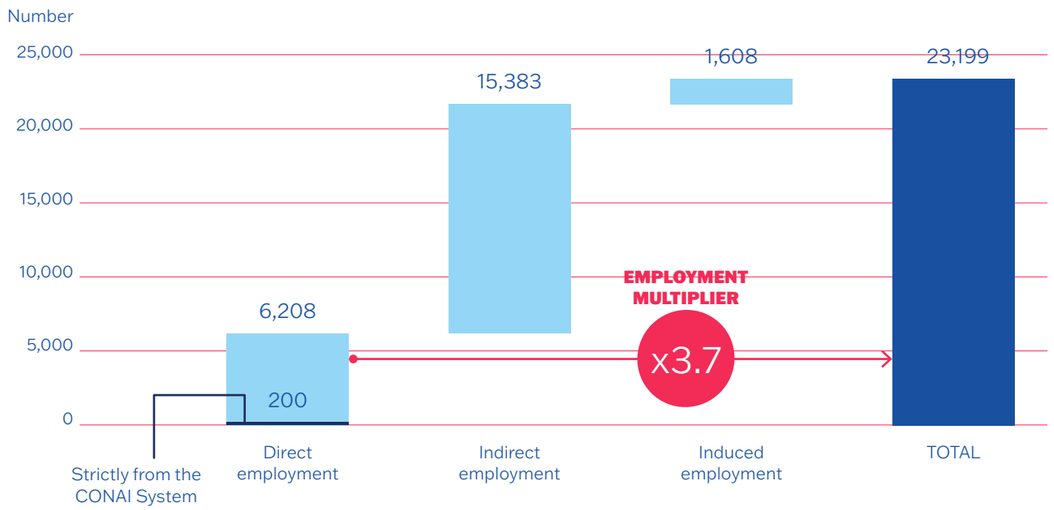
INDIRECT AND INDUCED EMPLOYMENT ACTIVATED BY THE CONAI SYSTEM BY SECTOR IN 2023



Source: Data generated by The European House – Ambrosetti from CONAI data and tables of sectoral interdependencies (input-output) from ISTAT, 2024.

Overall in 2023, the CONAI System supported a total of **23,199 jobs**, including direct, indirect and induced employment.

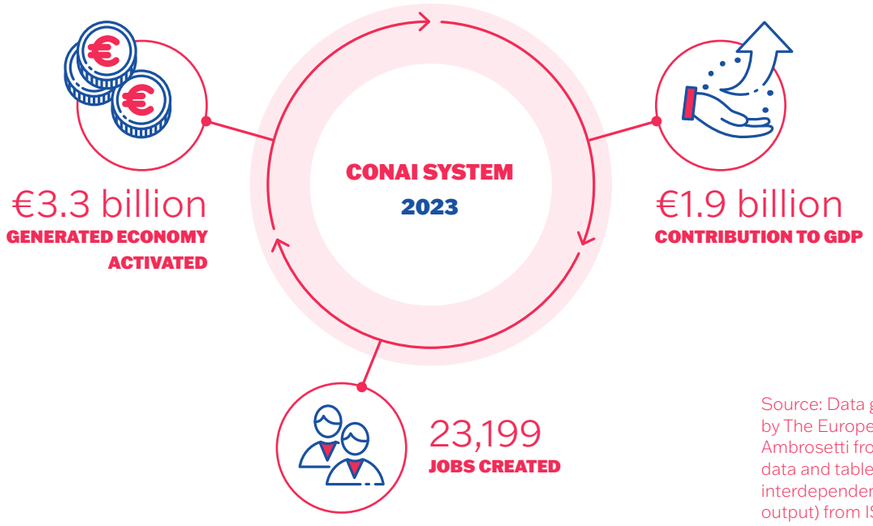
DIRECT, INDIRECT AND INDUCED EMPLOYMENT OF THE CONAI SYSTEM IN ITALY IN 2023



Source: Data generated by The European House – Ambrosetti from CONAI data and tables of sectoral interdependencies (input-output) from ISTAT, 2024.

This means that in 2023, the activities of the CONAI System had a significant impact on the Italian economy, with measurable direct, indirect and induced effects in terms of generated economy, contribution to GDP and employment.

OVERVIEW OF DIRECT, INDIRECT AND INDUCED IMPACTS GENERATED BY THE CONAI SYSTEM IN 2023.



Source: Data generated by The European House – Ambrosetti from CONAI data and tables of sectoral interdependencies (input-output) from ISTAT, 2024.

1.4 Catalysed impact on enabled supply chains

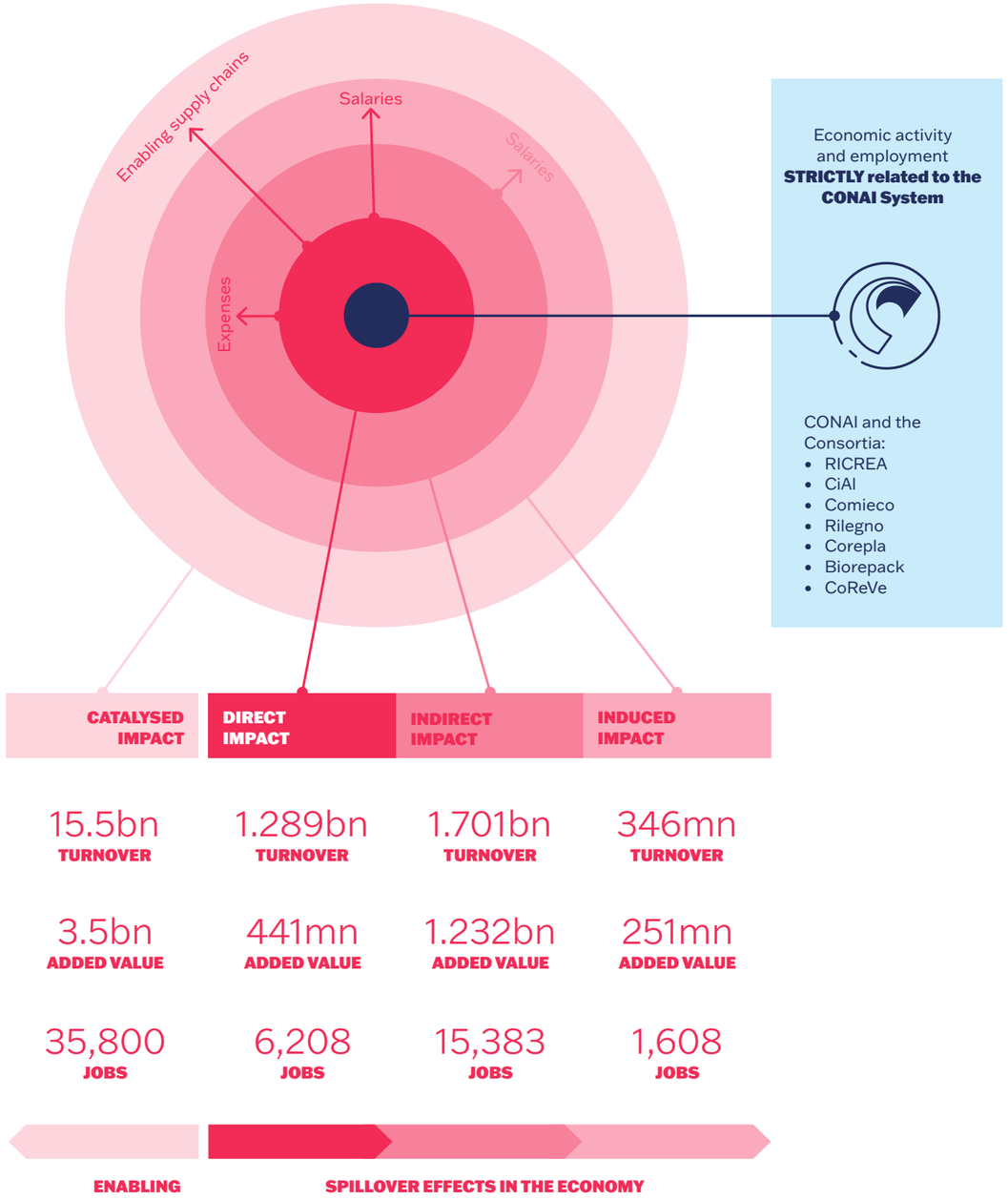
The enabling effect of the CONAI System manifests itself through the creation of economic and technical conditions that enable industrial supply chains to operate more sustainably, efficiently and competitively. This effect can be seen in the following results:

- **Supply of secondary raw materials:** One of the CONAI System's main enabling effects is its own role in the generation of secondary raw materials, obtained by recycling materials such as steel, aluminium, paper, wood, biodegradable and compostable plastics and glass. These recycled materials are crucial inputs for many industrial supply chains, such as packaging, construction, textiles, consumer goods production and automotive. In other words, the CONAI System provides companies with raw materials that are essential for their production cycle, reducing the need to use other sources;
- **Reducing dependence on virgin raw materials:** The System enables entire industrial supply chains to use fewer virgin natural resources, contributing to a more circular economy that is less vulnerable to price fluctuations and the availability of these resources. For example, packaging or construction industries can benefit from a stable and more sustainable supply of recycled materials, thus improving their efficiency and reducing operating costs;
- **Job creation:** The CONAI System's enabling effect is not only relevant at the economic level, but also has a strong impact on employment. Companies that use recycled materials or process these materials to create new products create jobs all along the supply chain, from collection and recycling processes to the final production of goods. By enabling these supply chains, CONAI therefore supports the creation and preservation of thousands of jobs;

- **Spillover effects:** The enabling effect also translates into indirect benefits or "spillover" into other sectors of the economy. For example, the availability of recycled materials can foster the development of new products or services that would not have been economically or technically feasible before. This creates new business opportunities and increases the resilience of industrial supply chains enabled by the System.

In 2023, the CONAI System generated **€15.5 billion** in the economy. This constitutes the activation of resources and economic opportunities for a wide range of production sectors, starting with the supply of recycled raw materials.
In terms of **added value**, the CONAI System has enabled an impact of **€3.5 billion**, contributing substantially to the growth of Italy's GDP. This value represents the result of enabling production activities based on the recycled materials managed by the CONAI EPR Organisation.
Finally, the **employment impact** catalysed by the System has supported **35,800 jobs** throughout the industrial and service chain. These jobs reflect the employment created and maintained due to the availability of secondary raw materials and the activation of new production cycles enabled by consortium activity.

THE SOCIAL AND ECONOMIC IMPACT OF THE CONAI SYSTEM IN ITALY MEASURED IN TERMS OF DIRECT, INDIRECT, INDUCED AND CATALYSED IMPACTS, 2023



Source: Data generated by The European House – Ambrosetti, September 2024.

1.5 Earth Overshoot Day: acting today for the sake of future generations

Italy is in ecological debt to the planet, consuming resources at a much faster rate than the global average.

In 2023, our country reached Overshoot Day on 15 May, the date from which Italians' demand for natural resources exceeded the regenerative capacity of ecosystems.

This day, established by the Global Footprint Network, marks the point at which humanity has used all the resources the Earth can regenerate in a year. The calculation is based on the ratio of the planet's biocapacity[5] to humanity's ecological footprint[6].

In 2023, this global threshold was reached on 2 August[7], a date that highlights how our current lifestyle and economic model demand more than the Planet can provide.

Our Sustainability Report is not intended to be understood only in absolute terms of environmental benefits and value generated, but to emphasise opportunities that we are already in danger of missing.

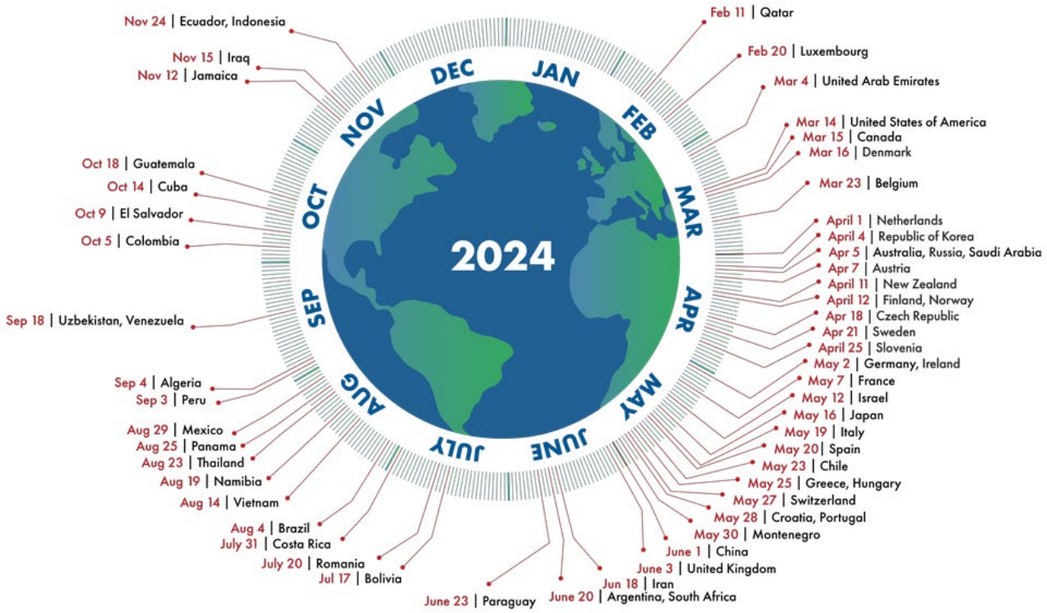
It is essential to cultivate a collective culture that will help create a positive and concrete impact for new generations.

5
Biocapacity is the capacity of an ecosystem to produce natural resources useful to humans and to absorb the waste generated, particularly carbon dioxide, through natural processes. It is expressed in global hectares (gha) and represents the availability of resources such as food, water, timber and the planet's ability to regenerate. Biocapacity varies depending on environmental conditions and resource management.

6
The ecological footprint measures humanity's demand on the Earth's natural resources. It quantifies how much land and water is needed to produce the resources a population consumes and to absorb the waste it generates, also expressed in global hectares (gha). When the ecological footprint exceeds the biocapacity of an area, an "overshoot", or ecological deficit, occurs.

7
Country Overshoot Days 2024 – Earth Overshoot Day.

COUNTRY OVERSHOOT DAYS 2024



Source: National Footprint and Biocapacity Accounts, 2023 Edition, data.footprintnetwork.org

EARTH OVERSHOOT DAY

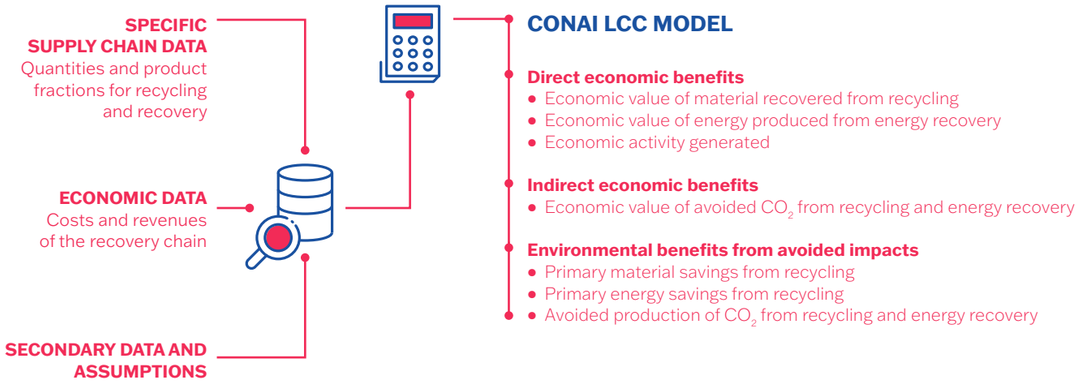
Global Footprint Network
Advancing the Science of Sustainability

1.6 The environmental benefits of managing packaging and packaging waste

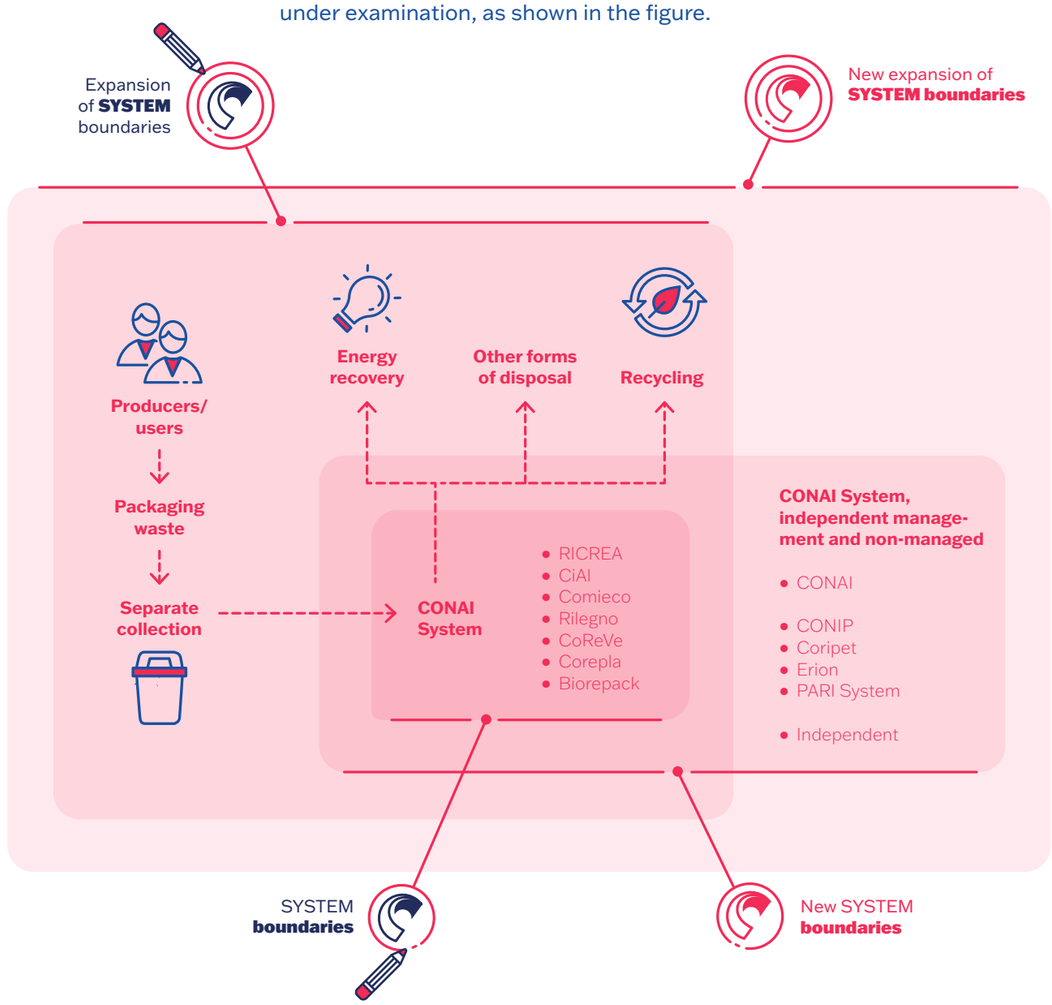
The Life Cycle Costing Tool (LCC) is a methodology based on life cycle analysis (LCA), regulated by the ISO 14040 and 14044 series of standards, and developed with the technical support of Studio Fieschi Srl. The declared unit of the LCC tool is the amount of packaging waste – managed by the CONAI System, Self-compliant EPR Organisations and market operators – in the reference time period (yearly). Each product system – understood as the set of individual processes that define one or more functions – is delimited by appropriate physical boundaries with respect to the entire perimeter analysed and against which there are a series of exchange relationships with inputs and outputs.

The physical boundaries analysed refer to the perimeter of activity of the CONAI System (i.e. waste collected and sent to recycling through specific agreements with Packaging Material Consortia) and the market (i.e. waste collected and sent to operators on the free market and to recognised Self-compliant EPR Organisations) based on the relevant flows.

The LCC model is maintained on an annual basis, with three-year rolling reporting: in addition to the current year, the two previous years are updated, reflecting the specific nature of the CONAI EPR Organisation's data reporting. The LCC model is based on the acquisition of primary and secondary data. The former – modelled in the second and fourth quarters of the year, in a period coinciding with the institutional reporting – mainly refer to the quantities treated (divided by CONAI System, market management and Self-compliant EPR Organisations) and the costs and revenues of the recovery chain. The latter are obtained from literature through the use of specific databases such as Ecoinvent or institutional sources (e.g. ISPRA). The outputs of the model are environmental and economic indicators, which express direct and indirect costs and benefits of CONAI management, of management through Self-compliant EPR Organisations, and of market management of packaging waste nationwide.

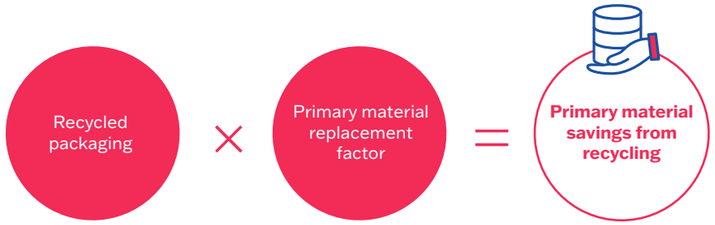


The environmental benefits from recycling and energy recovery are outside the physical boundaries of the analysed system. To calculate the benefits from the system, it is therefore necessary to expand the system boundaries under examination, as shown in the figure.



1.6.1 The contribution of firms to protecting material

Primary material savings[8] from recycling are the amount of primary material that is not used in packaging or other products due to the use of recycled packaging.
The calculation takes into account a substitution factor specific to each chain, which expresses the ability of the recycled material to replace an equal mass of primary material.



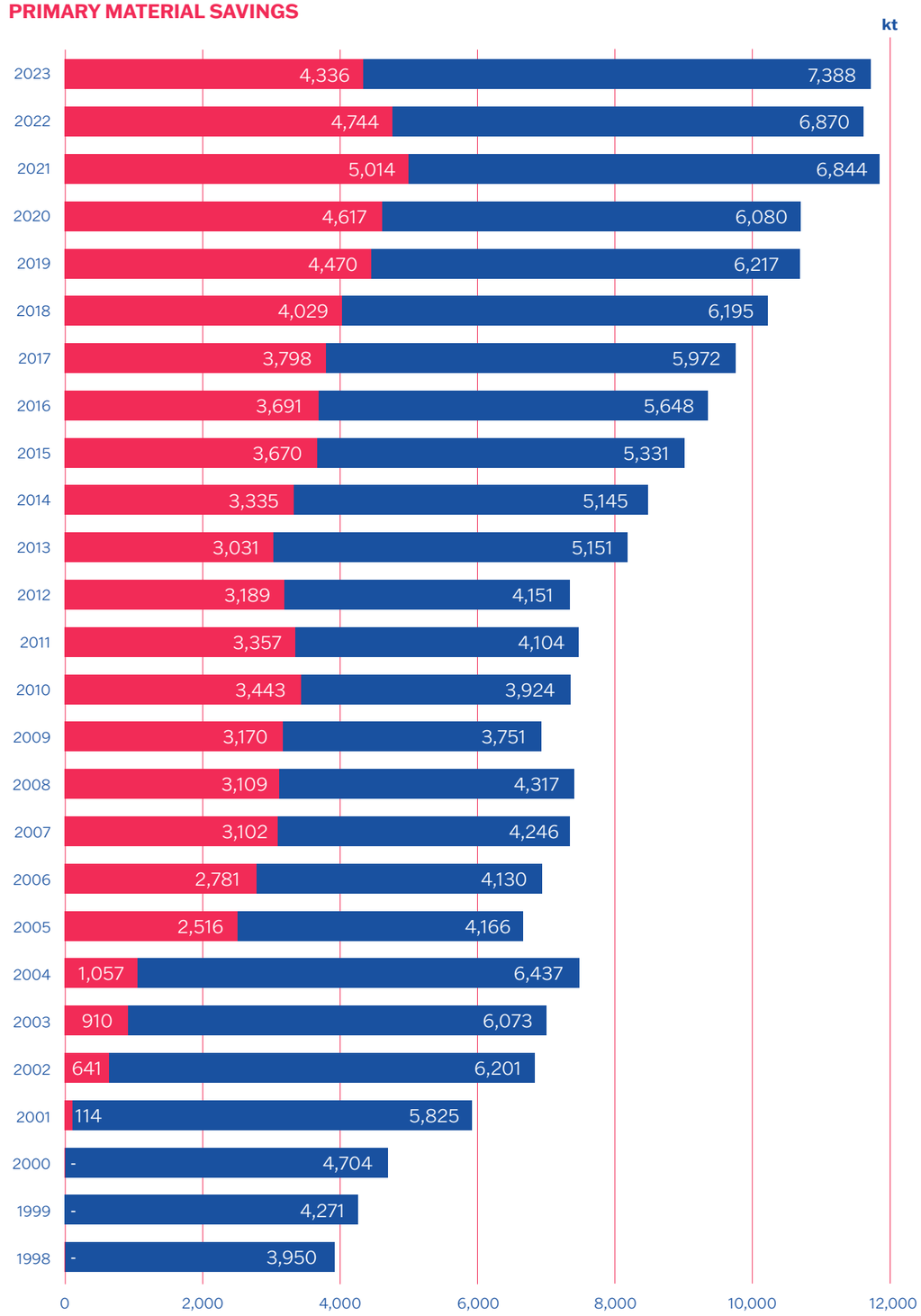
CONAI has estimated the amount of material saved through the use of secondary raw materials obtained from waste from the various supply chains over 26 years of activity to be around **210 million tonnes**.

In 2023 alone, this equates to more than 11.7 million tonnes, equivalent to the weight of **800 Towers of Pisa**.[9]

8
Primary material is defined as a raw and/or unprocessed substance that is extracted or produced directly from nature.

9
Estimated weight of the Tower of Pisa: 14,700 t

PRIMARY MATERIAL SAVINGS



Source: Data generated by CONAI Research Centre from LCC Tool data in partnership with Studio Fieschi.

RAW MATERIAL SAVED IN THE DIFFERENT SUPPLY CHAINS

STEEL
300,000 tonnes
778 Frecciarossa high-speed trains

ALUMINIUM
15,900 tonnes
1.5 billion cans

PAPER
1,277,000 tonnes
512 million reams of A4 paper

WOOD
757,000 tonnes
34 million pallets

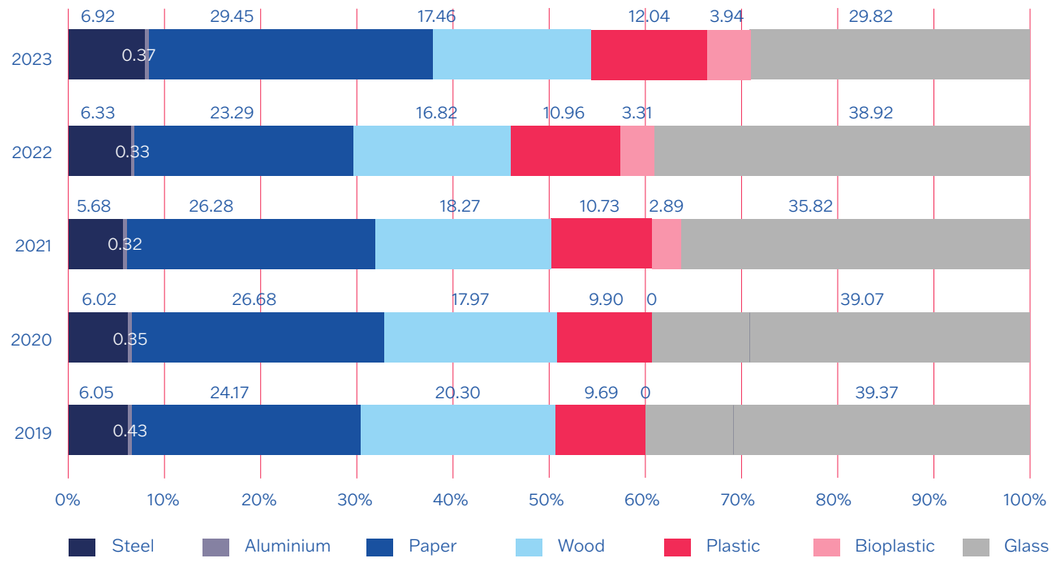
PALLETS
522,000 tonnes
11 billion PET detergent bottles (1 litre)

COMPOSTABLE BIOPLASTIC
36,180 tonnes*
34 million bags of soil

GLASS
1,293,000 tonnes
4 billion bottles of wine (750 ml)

* which contribute to generating 171,000 tonnes of mixed composted soil improver.
Source: Data generated by CONAI Research Centre from LCC Tool data in partnership with Studio Fieschi.

BREAKDOWN OF RAW MATERIAL SAVINGS GENERATED BY CONSORTIUM-MANAGED RECYCLING FROM 2019 TO 2023



1.6.2 The contribution of firms to managing energy resources

Primary energy savings[10] from recycling are the amount of energy generated from fossil sources that would be required to produce all the primary material saved. As of 2023, the figure has been further refined by introducing into the calculation the primary energy consumption related to the preparation for recycling and transport of packaging waste along the supply chain.

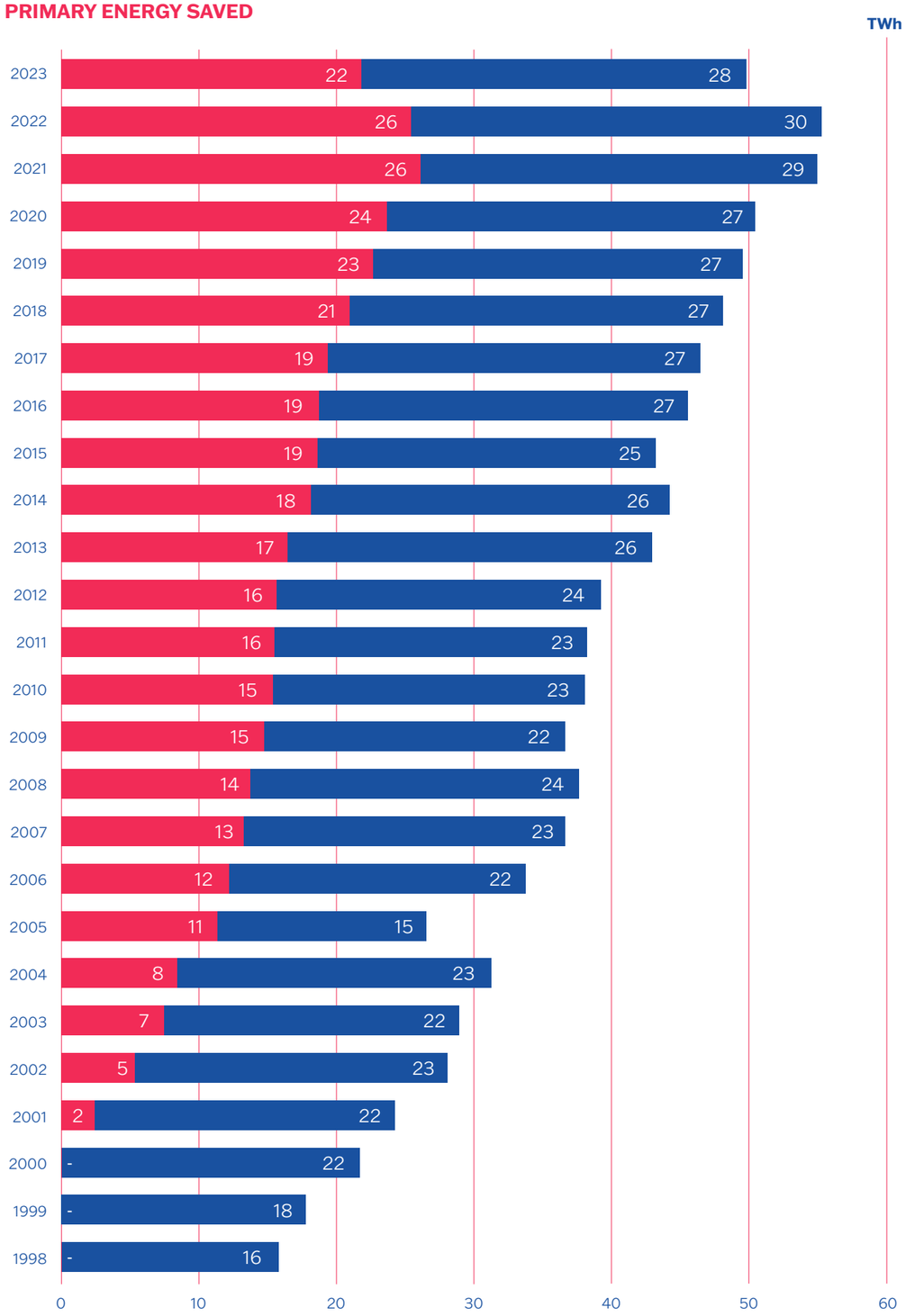
Primary energy savings from recycling (gross) — Primary energy consumption for preparatory operations — Primary energy consumption for transport = **Primary energy savings from recycling (net)**

In 2023 alone, and with the application of the new method of calculating the indicator, an estimated 50 TWh of savings were generated – a reduction of about 10% compared to previous reporting – equal to the domestic consumption of half of all Italian households[11].

10
Primary energy is defined as the energy from fossil sources consumed for the production of primary material, which is used for the production of packaging.

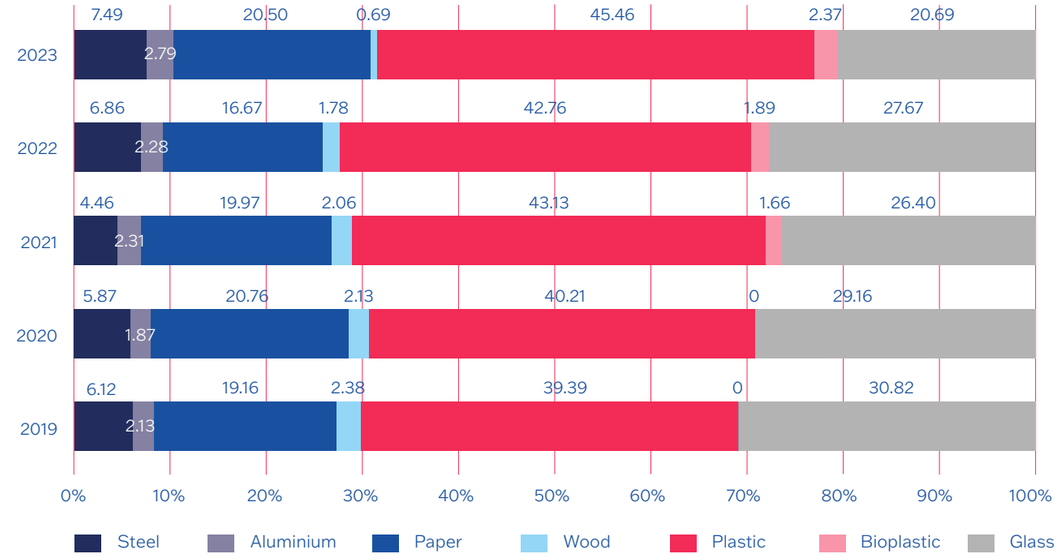
11
The estimated consumption deriving from fossil fuels per household is 3.78 MWh/family*year.

PRIMARY ENERGY SAVED



Source: Data generated by CONAI Research Centre from LCC Tool data in partnership with Studio Fieschi.

BREAKDOWN OF PRIMARY ENERGY SAVINGS GENERATED BY CONSORTIUM-MANAGED RECYCLING FROM 2019 TO 2023



1.6.3 The sector's contribution to combating climate change

The avoided production of CO_2 from recycling is the difference between the saved production of greenhouse gases due to the avoided production of primary material and the greenhouse gas emissions from preparation operations for recycling used packaging (transport and processing to convert packaging waste into new raw material). Specifically, the calculation considers the lost production of primary material, net of emissions related to the preparation for recycling and transport of packaging waste along the supply chain.

Greenhouse gases include all compounds, such as carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) – which contribute to global warming. Their emissions are expressed in terms of (CO_2 equivalent (CO_2eq) to quantify their overall impact and standardise measurement.

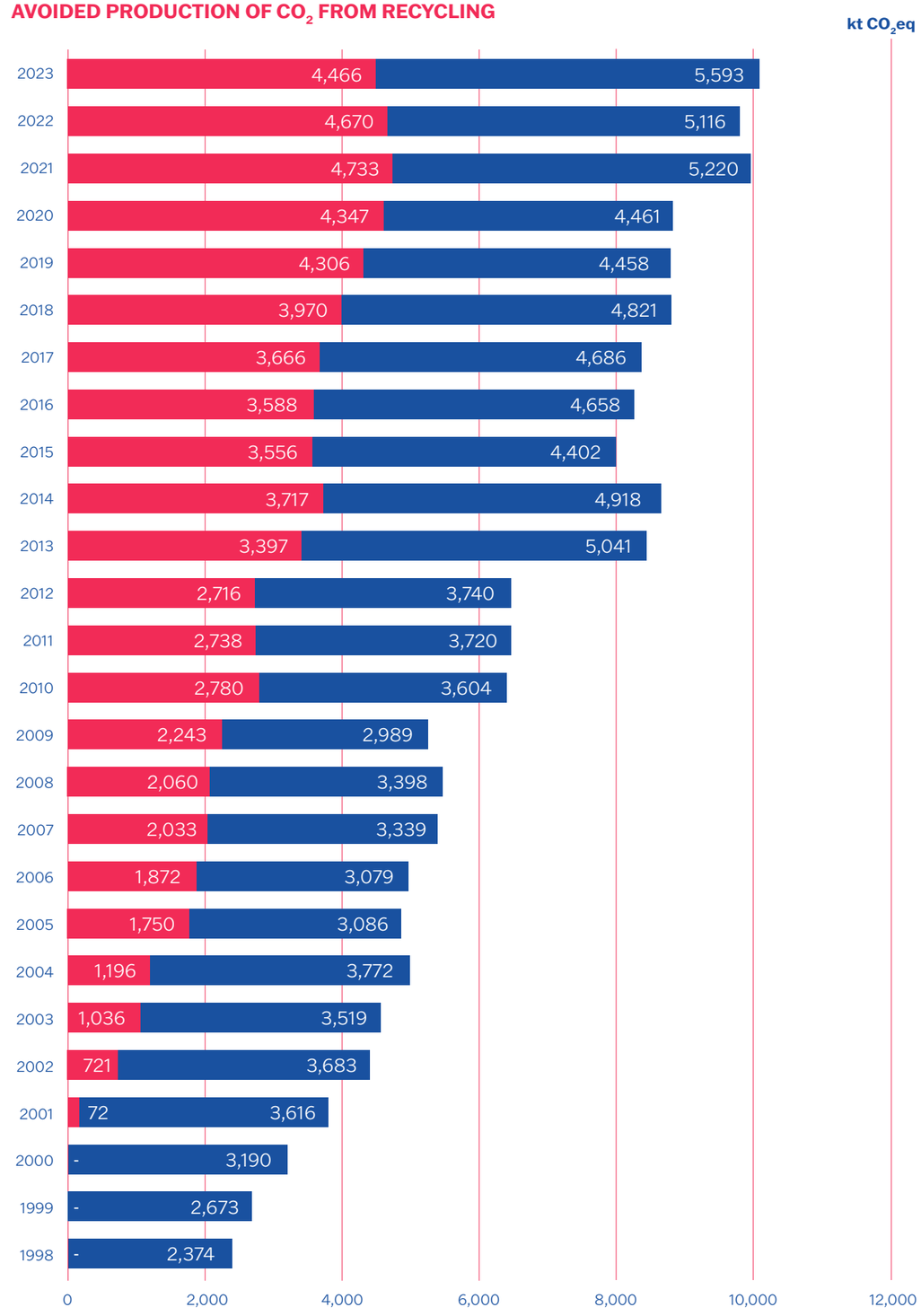
Avoided production of CO_2eq (gross) — CO_2eq emissions for preparatory operations — CO_2eq emissions for transport = **Avoided production of CO_2eq (gross)**

It is estimated that recycling of packaging has allowed almost **170 million tonnes of CO_2eq** to be avoided in Italy over 26 years.

In 2023, this is equivalent to more than 10 million tonnes, equal to the **emissions generated by more than 8,000 flights around the world.**[12]

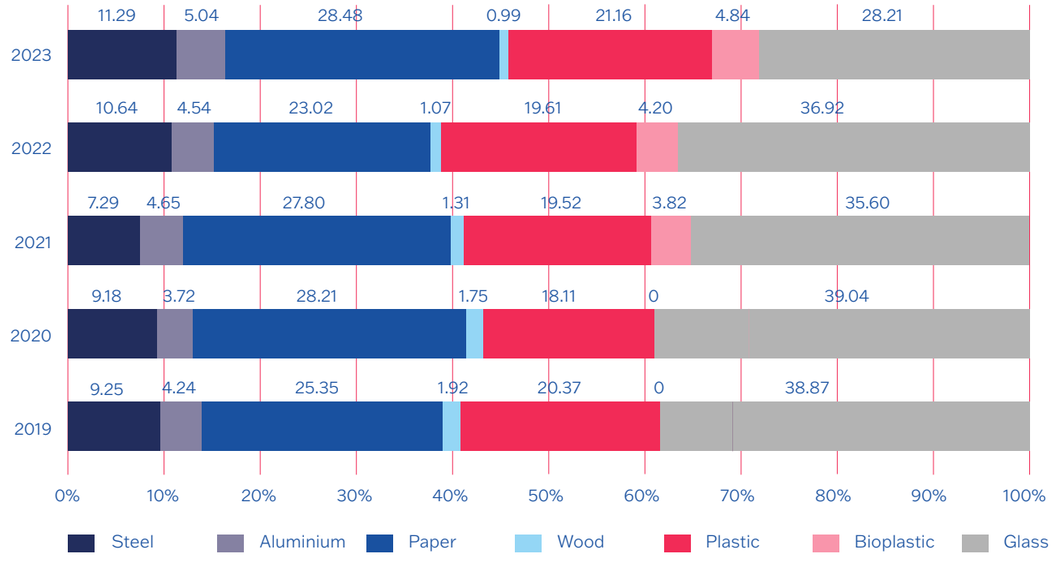
12
Estimated trip emissions for a flight of 40,075 km and an emission of 1,256 tCO_2eq*flight

AVOIDED PRODUCTION OF CO_2 FROM RECYCLING



Source: Data generated by CONAI Research Centre from LCC Tool data in partnership with Studio Fieschi.

BREAKDOWN OF AVOIDED CO_2eq EMISSIONS DUE TO CONSORTIUM MANAGEMENT FROM 2018 TO 2022



1.6.4 Strategic levers for decarbonising supply chains[13]

1.6.1.1 Steel

Worldwide

- **1.85 billion tonnes** produced in 2023[14]
- **€3.6 billion tonnes of CO_2,** 10% of the world's carbon dioxide emissions
- **Third largest emitter in the world**, after China and the United States, if the steel sector were a country

In Europe

- **126 million tonnes** of steel produced in 2023[15]
- **6.8%** of global production, in decline
- **5% of the European Union's CO_2** emissions[16]

In Italy

- **21 million tonnes** of steel produced in 2023[17]
- **Second largest producer in Europe**, after Germany[18]
- **85% of steel produced** from recycling[19]

The steel industry is one of the industrial sectors with the greatest impact in terms of climate-changing emissions, and it is estimated to be responsible for 10% of the world's carbon dioxide (CO_2) emissions, the main greenhouse gas. However, it is also a sector where for several years now, more and more effective decarbonisation solutions have been researched – and also deployed. This important material can also be produced either from raw material or by recycling ferrous scrap. The first process, which makes use of blast furnaces (BF/BOF), is, as things stand at present, decidedly more impactful than the second: **on average, around 2 tonnes of CO_2 are emitted from virgin raw material to produce one tonne of steel**. A large proportion of these emissions are produced by the use of coal, which meets as much as 75% of the sector's energy demand, but is also used as a chemical agent within the production process itself to enrich the raw material (cast iron) with carbon. There are several technologies at varying degrees of maturity – including

13 Additional information from Italy for Climate.

14 Eurofer, *European Steel in figures 2024*.

15 Eurofer, *European Steel in figures 2024*.

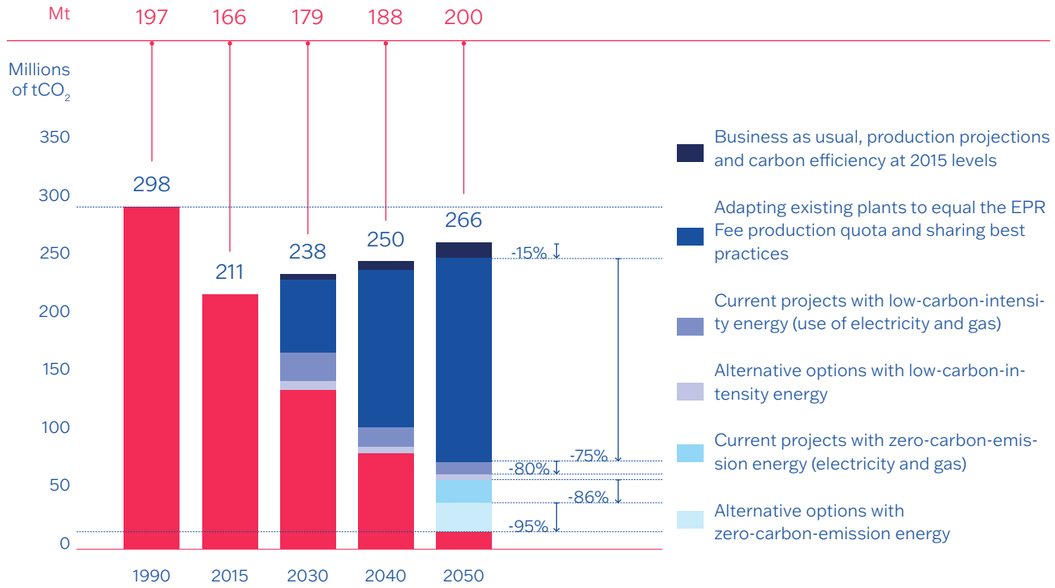
16 EU Publications, *Technologies to decarbonise the EU steel industry*, 2022.

17 https://worldsteel.org/data/annual-production-steel-data/?ind=P1_crude_steel_total_pub/CHN/IND

18 https://worldsteel.org/data/annual-production-steel-data/?ind=P1_crude_steel_total_pub/CHN/IND

19 EU Publications, *Technologies to decarbonise the EU steel industry*, 2022.

DECARBONISATION SCENARIOS FOR THE STEEL SECTOR IN EUROPE BY 2050



Source: Eurofer, 2019.

commercial ones – that could enable coal to be reduced or even eliminated from the entire production process and drastically cut emissions. For example, for steel production from virgin raw material, the decarbonisation strategy of Eurofer (European association for the sector) proposes substituting cast iron with pre-burnt material, and using gas at first and then, at a later stage when technology and the market will allow it, hydrogen or methane produced from renewable sources.

However, as mentioned at the start, the transition to secondary steel produced from scrap using electric arc furnaces already enables substantial emissions savings: between 0.1 and 0.7 tonnes of CO_2 per tonne of steel. This high variability depends to a large extent on the fact that the production process is predominantly powered by electricity and, therefore, the way this is produced greatly influences the final emissions balance. For secondary steel, therefore, the association with zero-emission electricity generation systems, starting with renewable sources, is crucial. Italy, whose production is 85% secondary steel and with a fairly clean electricity generation mix, already has some of the lowest specific steel industry emissions in Europe. To make further improvements, in addition to developing renewables for electricity, the focus should be placed on increasingly higher standards of metal waste collection and recycling in order to produce increasingly better quality steel for different uses. As for other sectors, however, it would also be necessary to stimulate demand on the market for recycled steel and to stop the drain of ferrous scrap, which at the EU level currently results in a net flow abroad of as much as 15 million tonnes in 2023 alone.

1.6.1.2 | Aluminium

Worldwide

- **70 million tonnes** of primary and **30 million tonnes** of secondary aluminium produced in 2023[20]
- **-10%** reduction in carbon intensity between 2019 and 2022[21]
- **71% recycled aluminium cans**, the most recycled beverage packaging in the world[22]

In Europe

- **24 million tonnes of CO_2** emitted in 2021[23]
- **-50%** reduction in carbon intensity since 1990[24]
- **-55%** reduction in primary aluminium between 2002 and 2022[25]

In Italy

- **980 kt** of secondary aluminium produced in 2023[26]
- **59.3 kt** of aluminium packaging waste sent to recycling in 2023
- **70.3%** of packaging placed on the market recycled in 2023[27]

20 https://international-aluminium.org/statistics/primary-aluminium-production/

21 https://international-aluminium.org/statistics/greenhouse-gas-emissions-intensity-primary-aluminium/

22 https://international-aluminium.org/resource/aluminium-beverage-can-study/

23 https://european-aluminium.eu/about-aluminium/aluminium-industry/

24 https://european-aluminium.eu/about-aluminium/aluminium-industry/

25 https://european-aluminium.eu/about-aluminium/aluminium-industry/

26 CiAI, Management Report and Financial Statements 2023.

27 CiAI, Management Report and Financial Statements 2023.

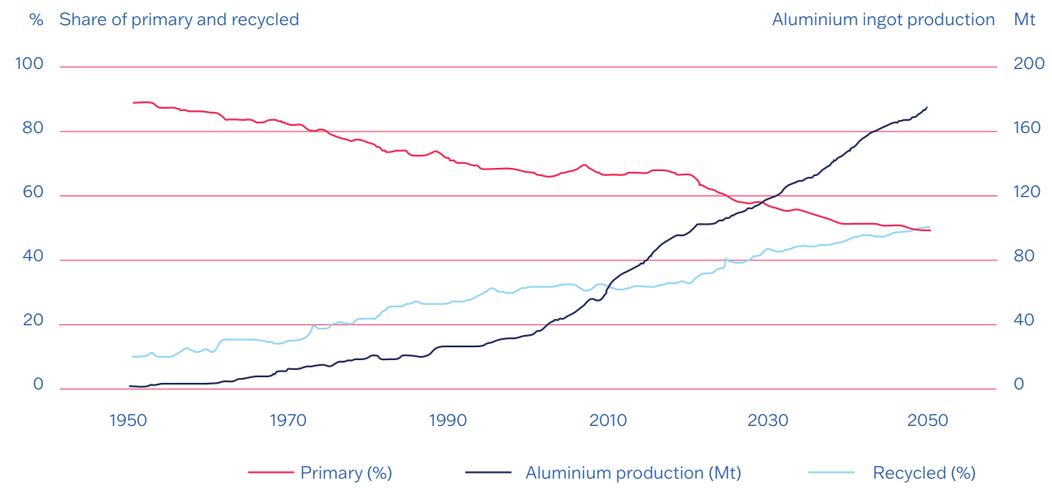
28 European Aluminium, Net-zero by 2050: *Science-based decarbonisation pathways for the European Aluminium Industry*.

In November 2023, European Aluminium published a study describing the path that the European aluminium industry will have to follow to reach the goal of (near) zero emissions by 2050[28]. According to the study, the 24 million tCO_2eq emitted at the European level in 2021 (which becomes more than 50 million if import emissions are also taken into account) should be reduced by 37% by 2030 and 78% by 2040 to reach a 93% cut in 2050, against a cumulative investment of more than €33 billion between now and 2050. Four areas of action were prioritised by the study:

1. decarbonisation of electricity supplies (responsible for 60% of emissions);
2. technological innovation to install electric furnaces and develop inert anodes in order to eliminate direct emissions produced in the highest emission phase;
3. increase recycling and the use of scrap;
4. develop low-carbon and circular production capacity.

Two out of the four points refer to the potential of circularity and recycling. **Recycling is indeed an extremely powerful lever, because it makes it possible to reduce energy consumption compared to primary production by 15-20 times, with enormous climatic advantages: in Europe, 5.1 tCO_2eq are emitted to produce one tonne of primary aluminium; but this value**

WORLD ALUMINIUM PRODUCTION TRENDS, AND EXPECTED SHARES OF PRIMARY AND RECYCLED MATERIAL



Source: International Aluminium.

drops to 0.3 tCO_2eq to produce the same amount of secondary aluminium. This is another reason why it is necessary to protect and promote the recycling chain to ensure adequate scrap quality and availability. It is estimated that around 1 million tonnes of scrap is exported outside the EU borders each year, a phenomenon which is also linked to insufficient demand for recycled aluminium by consumers and businesses.

However, switching to producing aluminium solely from scrap at the European level is not feasible or, in any case, it would expose the region to structural foreign dependence. The longevity of aluminium products (it is estimated that 74.5% of aluminium produced worldwide since 1888 is still in use in 2021[29]) makes it necessary to maintain a primary aluminium production chain in Europe. On the positive side, as primary production is highly electrified, the growth of renewable sources and the progressive reduction of the carbon intensity of electricity can make a decisive contribution.

29 https://international-aluminium.org/portfolio/still-in-use/

1.6.1.3 | Paper

Worldwide
- **425.3 million tonnes** of paper produced in 2022[30]
- **13-15%** of wood consumption worldwide[31]
- **6%** of energy consumption in the industrial sector[32]

In Europe
- **73.9 million tonnes** of paper produced in 2023[33]
- **60% of production** for packaging purposes[34]
- **-37% of CO_2 emissions** since 2000 for every kg of paper produced[35]

In Italy
- **7.5 million tonnes** of paper produced in 2023[36]
- **Over 60%** of fibre from recycling
- **-26% CO_2** emissions from 2000 to 2020

30 CEPI, *Key Statistics 2023.*

31 https://www.worldwildlife.org/industries/pulp-and-paper

32 www.sciencedirect.com/science/article/pii/S1364032122005950

33 CEPI, *Key Statistics 2023.*

34 CEPI, *Key Statistics 2022.*

35 www.eea.europa.eu/dataand-maps/data/data-viewers/greenhouse-gases-viewer

36 https://www.assocarta.it/it/dati-di-settore/lindustria-cartaria-in-cifre.html

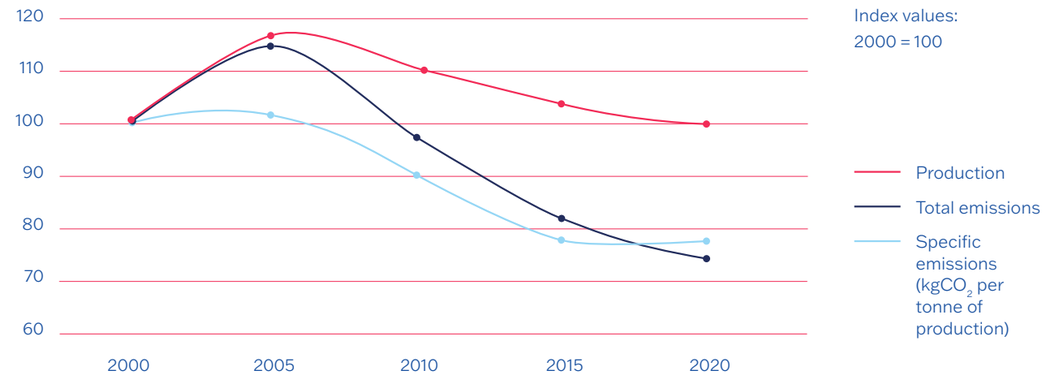
37 https://www.comieco.org/downloads/9123/5148/Roadmap2050_Italiano.pdf

38 CEPI, *Key Statistics 2022.*

At present, the reference for decarbonisation strategies for the sector at European level is the roadmap updated by CEPI in 2017[37], which envisages a cut in CO_2 emissions from the paper sector by 80% compared to 1990 values. The roadmap is divided into three macro-areas of intervention: direct emissions (-22 Mt -4 Mt CO_2), purchased electricity (-11 Mt CO_2), and transport (-4 Mt CO_2). For the reduction of direct process emissions, which today account for 60% of total emissions, energy efficiency will be crucial, through a further spread of combined heat and power (CHP) and the use of fuels with low or zero CO_2 emissions, such as biomass. In CEPI member countries, co-generation systems covered more than 95% of electricity production in 2021, and biomass accounted for 60% of the fuel consumed[38]. The progressive decarbonisation of the average power generation mix will bring a significant benefit on the share of purchased electricity. Finally, transport, responsible for about 10% of the sector's emissions, will benefit from efficiency improvements, electrification, cleaner fuels and lower emission modes.

In recent decades in Italy, the sector has decisively focused on the use of natural gas, the fossil fuel with the lowest CO_2 emissions, and on **co-generation systems**, thanks to which the sector now meets over 81% of its energy needs, achieving high energy performance. In the Italian paper industry, energy consumption has been reduced by 30% since 1995. Nevertheless, energy efficiency (largely through digitisation) remains a priority for the sector. However, zero-emission fuels, in particular biomass, are still uncommon

CHANGES IN PRODUCTION, TOTAL CO_2 EMISSIONS AND SPECIFIC EMISSIONS OF THE PAPER INDUSTRY IN ITALY



Source: Data generated from Eurostat-Assocarta data.

compared to the average of other major European producers, and this represents a major constraint on progress towards ambitious decarbonisation targets. In recent years, Italy has been focusing on increasing the production of biomethane, which could be used directly in existing co-generation plants, with great potential economic benefits as well as environmental benefits. **The use of pulper waste for internal energy production**, which is less widespread in Italy than in the rest of Europe, could also make an **important contribution to achieving decarbonisation targets, but this is currently held back by the impossibility of installing energy recovery plants for this material at production sites**. Investments in emerging technologies, such as electrified plants, hydrogen and CO_2 storage, could bring further benefits but more in the medium to long term.

Alongside energy measures, **further growth in secondary raw materials is central to decarbonisation plans**. According to an analysis by RSE, producing one tonne of pulp from waste paper requires about one third of the energy needed to produce it from virgin wood. Paper is the most recycled packaging material: in 2023 the recycling rate of this material in Italy far exceeded the EU target of 85% for 2030[39]. However, this area also offers room for improvement, starting with the quality levels of separate collection, through single-material collections, door-to-door collections, collection centres, etc. In 2022, 6.6 million tonnes of waste paper were produced, of which 22% exported and recycled abroad[40].

39 https://www.comieco.org/29deg-rapporto-annuale-su-raccolta-differenziata-e-riciclo-di-carta-e-cartone-in-italia/

40 https://www.unirima.it/wp-content/uploads/2023/10/Unirima-Report-2023_FORMATO-WEB.pdf

1.6.1.4 | Wood

Worldwide

- **Around 1 tonne of CO_2** stored per m^3 of wood on average[41]
- **Land-use change** (primarily deforestation) responsible for 15% of global emissions[42]
- **Projected increase** in timber harvesting of 54% in 2050 compared to 2010[43]

In Italy

- **Growing forest cover**: forests now cover 37% of the country[44]
- **Forest absorption** of 30/40 million tonnes of CO_2[45] (and 2 million tonnes of CO_2 stored in wood products[46])
- **1.6 million tonnes** of wood sent to recycling in 2023, and more than 70 million pallets regenerated for reuse, saving 1.8 Mt CO_2[47]

41 National Forest Inventory INFC2015.

42 https://www.globalcarbonproject.org/carbonbudget/

43 https://www.nature.com/articles/s41586-023-06187-1

44 National Forest Inventory INFC2015.

45 https://www.isprambiente.gov.it/it/pubblicazioni/rapporti/inventario-nazionale-delle-emissioni-in-atmosfera-1990-2021-informative-inventory-report-2023

46 APAT, *Carbon absorption and fixation in forests and wood products in Italy*, 21/2002.

47 https://www.rilegno.org/rapporto-2024-rilegno/

48 https://www.mase.gov.it/pagina/nlts-national-long-term-strategy

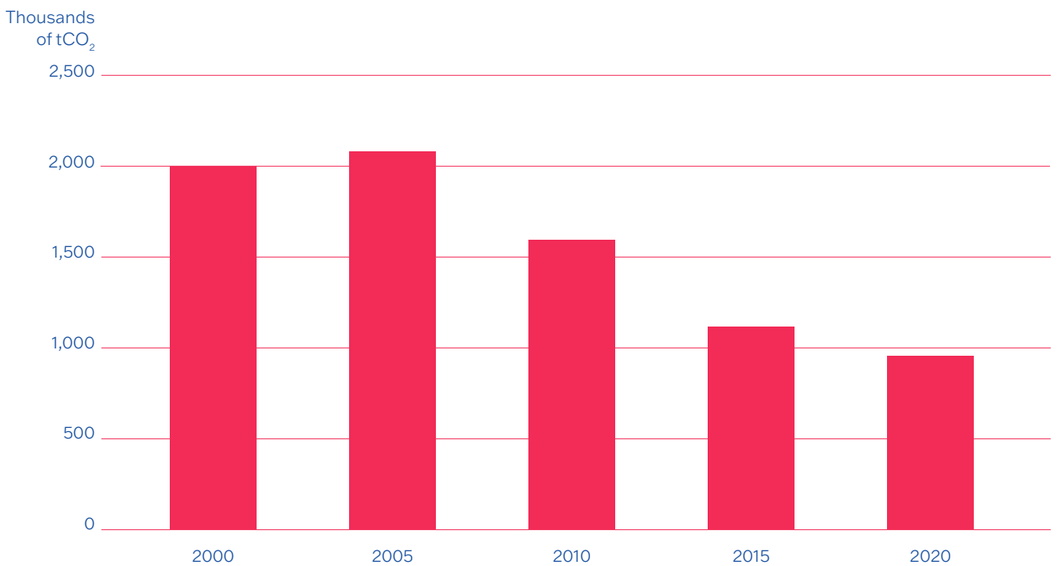
49 https://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/17813

Given the multitude of ecosystem services provided by forest systems, the role of wood products in decarbonisation scenarios must be assessed within the broader framework of European and national sustainable forest management strategies.

The EU Directive on land use and forestry (LULUCF) defines CO_2 absorption targets from forest systems and soil for each country. Italy is required to ensure a minimum level of annual average removals of 35.8 million tonnes of CO_2 in 2030. According to the long-term strategy for decarbonisation drawn up in 2021 by the Ministry of the Environment and Energy Security[48], by 2050 the average annual absorption of Italy's forestry systems should reach 45 $MtCO_2$. These absorption levels will be necessary to compensate for those emissions, particularly linked to agricultural and industrial activities, that we will not be able to eliminate between now and the middle of this century. According to the National Forestry Strategy[49], in order to meet the 2030 target on CO_2 removals, forest removals will be able to increase, but without reaching the levels recorded by other European countries: the estimate is that we will be able to go from the current 33% of annually available renewable biomass removals to 40-45%, but no further.

Forest management policies remain the main tool for making the most of forest harvest products. The use of firewood for domestic use has increased in Italy and Europe in recent years, partly as a result of rising energy prices. To date, the final destination of forest biomass harvested in Italy is strongly

EMISSIONS FROM ENERGY USE IN THE WOOD AND WOOD PRODUCTS INDUSTRIAL SECTOR IN ITALY



Source: Generated by the Foundation for Sustainable Development using MASE-Eurostat and ISPRA data.

skewed towards energy uses: 70% goes to firewood, compared to an average of 30% in the rest of Europe. According to various analyses, it would be possible to reverse this trend by focusing on more efficient heat production systems, and by allocating more raw material to the production of durable wood goods, which contribute positively to the storage of the carbon within it. On this front, the Carbon Removal Certification Framework proposed by the European Commission envisages the creation of a register of carbon credits associated with products with an expected life of at least 35 years[50]. In this context, the wood industry can play an important role in decarbonising the construction sector, for example, by monitoring the CO_2 in the wood used for the construction of buildings, but also packaging, if designed and managed according to appropriate criteria.

Finally, recycling, as always, offers considerable help on the road to decarbonisation. Italy recycles 64% of its wood packaging, and has already far exceeded the European Union's target of 30% by 2030[51]. This recovery and recycling capacity shifts the focus to the need to better connect the recovery sites with the secondary raw material processing sites (mainly in Northern Italy). Pallets are the most widely used wood packaging, and the consolidated system of pallet regeneration allows the reconditioned pallets to be put back on the market, extending their life cycle.

50 https://ec.europa.eu/commission/presscorner/detail/en/ip_24_885

51 https://www.rilegno.org/rapporto-2024-rilegno/

I4C Italy for Climate

1.6.1.5 | Plastic

Worldwide
- **400.3 million tonnes** of plastic produced in 2022[52]
- **Around 90% from fossil fuels** and almost **10% from recycled or renewable material**[53]
- **44%** of plastic is used for packaging[54]

In Europe
- **58.7 million tonnes** of plastic produced in 2022[55]
- **Around 180 Mt CO_2eq** emitted by the plastics supply chain
- **Around 5%** of the European Union's greenhouse gas emissions[56]

In Italy
- **5.8 million tonnes** of plastic consumed in 2022[57]
- **30%** of all plastic waste goes to recycling and **45%** to energy recovery
- **49%** recycling rate of plastic packaging, well above the European average

In 2023, Plastics Europe, the European plastics manufacturers' association, published a roadmap to make the plastics supply chain compatible with the goal of zero emissions by 2050[58]. To achieve zero emissions from the supply chain, the Plastics Europe study identifies five key aspects:

1. **Promotion of reuse**, with the consequent reduction of single-use products, which could contribute to cutting the supply chain's emissions by 15% by 2050;
2. **Improvements in production processes** could lead to a cut in direct and indirect (Scope 1 and Scope 2) emissions of 24%, through energy efficiency, electrification of processes, transition to renewable and low-carbon fuels, and use of carbon capture systems;
3. Shift towards **renewable and circular raw materials**, and subsequent progress in recycling, could lead to the largest cut in emissions: as much as 38% compared to today;
4. **More effective end-of-life plastics management**, also through recycling, and less use of landfill and incineration, could result in substantial cuts in climate-changing emissions, estimated by Plastics Europe at 17%;
5. Finally, **improvements to processing technologies for plastic raw materials** contribute to the roadmap strategy, enabling a further emissions cut of -6%.

52 https://plasticseurope.org/knowledge-hub/plastics-the-fast-facts-2023/

53 https://plasticseurope.org/knowledge-hub/plastics-the-fast-facts-2023/

54 https://materialeconomics.com/publications/industrial-transformation

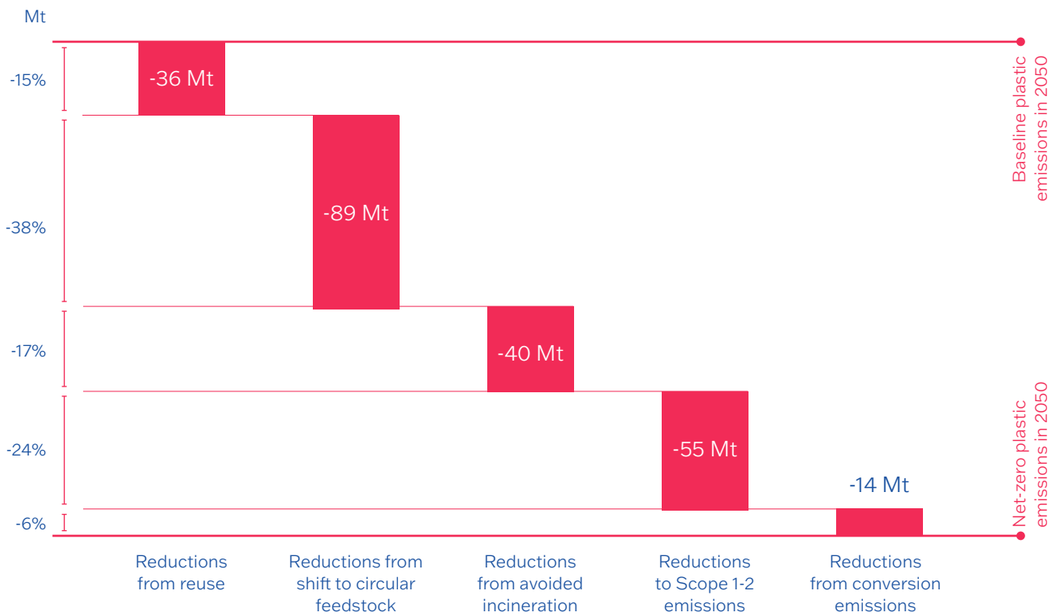
55 https://plasticseurope.org/knowledge-hub/plastics-the-fast-facts-2023/

56 Plastics Europe, *Report 2024*.

57 https://plasticseurope.org/knowledge-hub/national-infographics-circular-economy-for-plastics-2024/

58 Plastics Europe, *Report 2024*.

REDUCTION OF EMISSIONS REQUIRED FOR DECARBONISATION STRATEGY TO REACH THE NET-ZERO TARGET IN 2050 (COMPARED TO 2021)



Source: Plastics Europe, *Report 2024.*

Circularity, and especially **the lever of recycling, is therefore among the essential preconditions for decarbonising the plastics supply chain**: the combined effects of circular strategies and recycling could result in a 75% cut in supply chain emissions by 2050. In Italy, the share of recycled materials used by plastic manufacturers is about 43%, compared to a European average of just over 10%. Packaging also accounts for a very significant share of all plastic products used in Italy, but Italy can cite its collection and recycling rates for plastic packaging that are among the highest in Europe.
Alongside mechanical recycling, industries are experimenting with **new chemical and physical recycling processes** that could make it possible to recycle the fractions of plastic packaging waste that are currently not manageable with traditional mechanical recycling processes, and also make it possible to obtain secondary raw materials with similar characteristics to virgin materials. If implemented on a large scale, these processes could help to further improve recycling performance for packaging and beyond. However, especially if these new technologies allow for very high recycling rates, it will be necessary to promote an internal market capable of receiving all secondary raw materials while protecting national and European recycling firms.

1.6.1.6 | Biodegradable and compostable plastic

Worldwide
- **2.18 million tonnes** of production capacity in 2023[59]
- **43%** of production capacity for packaging purposes[60]
- **52%** of bioplastics produced are biodegradable

In Italy
- **121,000 tonnes** produced in 2023[61]
- **61%** of production for packaging purposes
- **56.9% recycling rate** for bioplastic packaging in 2023[62]
- **-4.3 Mt CO_2eq per year** due to separate collection of the organic fraction[63]

With over 2 million tonnes estimated in 2023, plastic produced from biomass accounts for about 0.5% of global plastic production. This figure rises to 1% at European level and 2.7% if we look at Italy, the second largest producer after Germany. The use of this material can bring important benefits in terms of energy consumption and, above all, greenhouse gas emissions, provided that careful consideration is given to the raw materials from which it is made, and its end-of-life is carefully managed. Regarding the first aspect, currently, bioplastics are mainly produced from biomass cultivated specifically for this purpose, with non-negligible impacts during the cultivation phase and potential conflicts with the food chain (although, according to European Bioplastics, the area now dedicated to the production of plant precursors of bioplastics is 0.021% of the world's agricultural surface area)[64]. To improve the climate performance of this product, it is necessary to progressively move towards second- and, above all, third-generation products generated from recycling. To this end, it would be necessary to recognise the climate benefits by distinguishing between fossil and biogenic products, as was done with the introduction of the obligation for minimum biogenic carbon content in fruit and vegetable bags. These kinds of measures be increasingly complemented with control mechanisms that target non-compliant products.
However, the production of compostable bioplastic is an innovation that was created to address the need to improve the management of municipal organic waste, and it is therefore inextricably linked to managing its end-of-life in composting plants. To this end, a specific standard was adopted to certify the compostability of end-of-life bioplastic packaging. The introduction of the EN 13432 Standard has enabled the development of applications such as biodegradable and compostable plastic bags – made of polylactic acid

59 https://www.european-bioplastics.org/market/

60 https://www.european-bioplastics.org/market/applications-sectors/

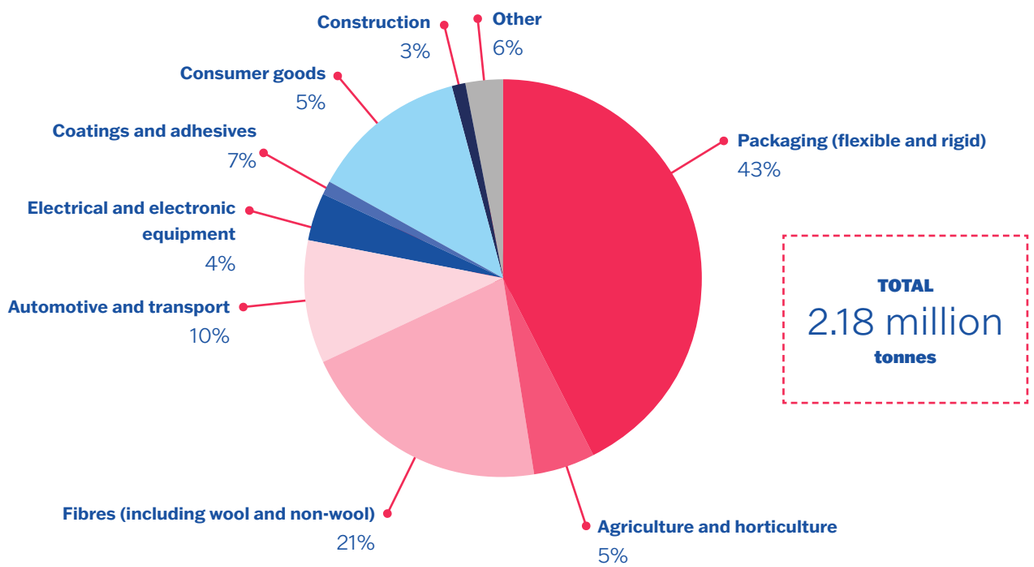
61 Paolo Arcelli, *The compostable polymer supply chain*, 2024.

62 Biorepack, *Management Report 2023*.

63 https://biorepack.org/raccolta/raccolta-umido.kl

64 https://www.european-bioplastics.org/bioplastics/Feedstock/

WORLDWIDE PRODUCTION OF BIOPLASTIC BY MARKET SEGMENT – 2023 (PROVISIONARY)



Source: European Bioplastics, Nova-Institute 2023.

(PLA), starch-blend biopolymers, etc. – that have contributed to an increase in the collection of the organic fraction of municipal waste, and furthermore, help to improve the quality of compost by becoming quality soil improvers. In composting plants, the main problems arise due to the presence of non-compostable materials such as conventional plastics, glass and metals. The issue of the quality of organic waste collection is therefore crucial, especially for a country like Italy which, as one of the leaders in the organic recycling sector and in the production of compostable bioplastic products, is already able to organically recycle municipal organic waste together with certified compostable bioplastic packaging. In 2023, approximately 57% of compostable bioplastic packaging placed on the market was recycled in composting plants.

1.6.1.7 | Glass

Worldwide

- **39.5 million tonnes** of glass produced in 2022
- **Around 60%** of production for packaging purposes[65]
- **22 million tonnes of CO_2 emissions** per year

In Italy

- **5.9 million tonnes** of glass produced in 2022, of which around **70%** for packaging purposes[66]
- **Over 2 million tCO_2** emitted by the glass chain[67]
- **77% of glass bottles and jars** sent to recycling in 2023[68]

The main use of glass produced in Europe and Italy is for packaging. The European hollow glass packaging industry has significantly improved its environmental performance over the last 50 years, reducing the unit weight of its products by 30%, the energy intensity of production by 70% and CO_2 emissions by 50%[69]. However, in order to meet the challenging goals of the Paris Agreement and the European Green Deal, further steps must be taken by focusing on solutions and technologies that can drastically cut greenhouse gas emissions and bring the industry to climate neutrality by the middle of the century. In 2020 Glass for Europe presented a roadmap to achieve total decarbonisation of the flat glass industry by 2050[70]. The study shows that in order to cut emissions from melting raw materials (which today accounts for 75% of total emissions), **fossil fuels must be replaced by new, alternative energy sources** (renewable, although not exclusively) which are economically viable and technologically compatible with the furnaces. The sources considered to date exhibit severe limitations. Biogas has limited availability, hydrogen requires technological adaptation to the furnaces, and an all-electric furnace would not be suitable for increased use of glass cullet.

65 https://feve.org/glass-industry/data/glass-industry-production-year-2022/

66 Assovetro, *Sustainability Report 2023*.

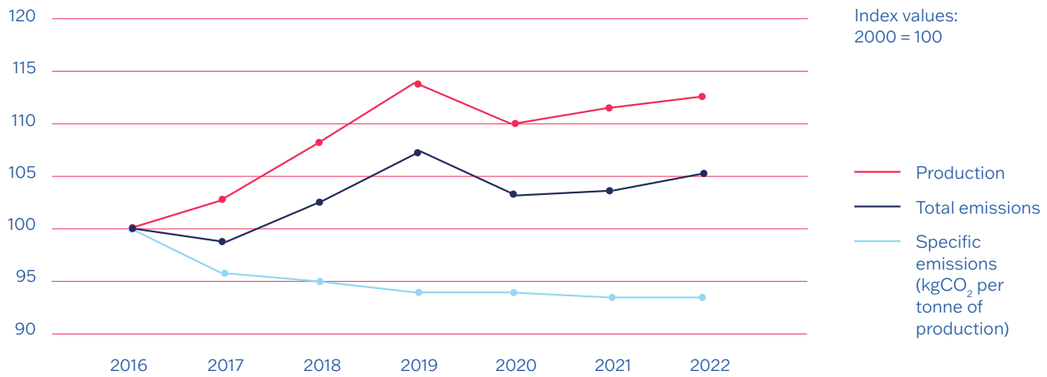
67 Assovetro, *Sustainability Report 2023*.

68 https://closetheglassloop.eu/press-release-2022-glass-packaging-collection-rate/

69 https://feve.org/glass-industry-positions/sustainability-climate-neutral/

70 Glass for Europe, *Flat glass in zero-emission Europe*.

CHANGES IN PRODUCTION, TOTAL (CO_2 EMISSIONS AND SPECIFIC EMISSIONS (CO_2 EMITTED PER UNIT OF PRODUCT) OF THE GLASS INDUSTRY IN ITALY[71]



Source: Assovetro.

According to the analysis carried out by Assovetro, most of the member firms have already established a decarbonisation roadmap and targets and, in parallel, have put in place strategies and solutions to reduce climate-changing emissions. The main focus of firms in the sector has been **energy efficiency**, by monitoring consumption and cutting waste, and by **recovering heat from furnaces** (to produce electricity or to heat buildings via district heating networks, for example). Using **renewable sources** is also often a viable option, although more so for addressing electricity consumption than thermal consumption. The latter, which also represents the most significant portion in terms of emissions, is also more difficult to tackle, especially with traditional biofuels. This is also why the European research project H2Glass has been financed within the PNRR framework, with the aim of assessing the prospects and potential of using hydrogen in the melting process of the glass industry. Particular attention has also been focused on **eco-design** with measures to reduce the carbon footprint of the end products themselves, such as by **making them lighter**. Clearly, the **growth of recycling is an important driver for the decarbonisation of the supply chain, starting with packaging, which is where most of the glass sector's production is destined, as illustrated above**.

71
Estimated data based on emissions reported under the EU ETS by a representative sample of firms in the sector.

2020

Sustainability Culture according to CONAI

CONAI intends to strengthen its all-round commitment to spreading an environmental culture that permeates both the CONAI EPR Organisation and its stakeholders as well as the social fabric, as the new objectives will only become achievable if all stakeholders are more aware and receptive.

To this end, CONAI intends to speak different languages and influence them, acting on **three levels**:

1. Promoting research and scientific studies;

2. Training in the key skills of the circular economy, with structured training courses at all levels;

3. Promoting awareness and the value of the circular economy, using the languages of art and environmental journalism.

2.1 Promotion of innovation and research

CONAI considers collaboration with scientific institutes, universities and national centres for the evaluation of new research horizons to be fundamental. With a view to the adoption of the new objectives envisaged by the Circular Economy, CONAI intends to continue to play a proactive role in guiding and stimulating Packaging Material Consortia and various stakeholders in order to implement research and technological innovation projects, especially to promote the recycling of post-consumer packaging flows that cannot currently be recycled.

It also intends to intervene upstream to research and promote innovative solutions in terms of packaging eco-design. To this end, CONAI intends to expand and strengthen its network with leading universities, research centres and organisations active in these fields, promoting new studies and research and also evaluating possible international collaborations for the scouting of innovative technologies and solutions.

STUDIES AND RESEARCH

Regulation and market

CSEA – Catholic University of the Sacred Heart
Relationship between EPR management models and performance

Prevention

Sant'Anna School of Advanced Studies SCELTA Project ("CHOICE")

Observatory on prevention initiatives at the social level

MEC/GPP

Local authorities

SUSDEF
Green City Network

SUSDEF
Italia del Riciclo ("Italy of Recycling")

Reporting

PROMETEIA
Analysis and forecasts of goods placed on the market and secondary raw materials

Italian Packaging Institute
Monitoring goods placed on the market and imports

Plastic Consultant
Monitoring specific flows

End of waste status

Strategy & PwC
Overseeing applicable requirements

IPLA
Monitoring packaging to be sent to energy recovery from unseparated flow

International

PPWR regulation
- Study to assess the proposal's subsidiarity and proportionality
- Focus on DRS (Deloitte, EGEN/PNO, Bocconi University SDA)

EXPRA
Comparison, studies and collaborations between EPR Systems

Packaging EPR Fee in Europe
Wuppertal Institute

Deposit systems for recycling of disposable beverage packaging – drafting of position paper (CHR Morris Srl)

2.1.1 | Secondary raw materials, EoW and circular economy

2.1.1.1 | ReMade

In 2023, in cooperation with ReMade® and following the revision of the Minimum Environmental Criteria on indoor furniture, municipal waste and street sweeping, an update was launched for the guidelines on *Green Public Procurement and Minimum Environmental Criteria – Packaging*. The document provides the necessary guidance for participating in public tenders for the supply of products and/or services requiring Minimum Environmental Criteria (MEC), with particular reference to packaging. It summarises the existing MEC in force, the criteria set out for packaging and the relevant evidence that public administrations must provide to support verification of those criteria. The updated document will be available soon in the "Document downloads / Studies and research" section of the conai.org website.

2.1.1.2 | End of waste status, vademecum for businesses

Published in 2023, this document presents an in-depth look at end of waste status. Infographics are presented to assist firms with practical information

on how to apply the regulations to the different types of packaging materials – not only through a survey of all the relevant decrees and voluntary standardisation currently in force, but also in relation to critical issues in application and control. The analysis, carried out in cooperation with Tuttoambiente, will be monitored and updated as the regulations evolve.

2.1.1.3 | Green City Network

During 2023, three studies on Green Cities were also presented, with the technical/scientific support of the Foundation for Sustainable Development, to take stock of the current state of waste management in cities of the three main areas of the country (North, Centre, South). This research represents an important starting point for understanding the main action areas for improving waste management at the local level, promoting the urban circular economy. New for 2023, a document was published entitled *Green cities and green tenders – guidelines on Green Public Procurement and Minimum Environmental Criteria for public administrations*, which provides the operational information needed to prepare a tender for the supply of goods or services within public administrations. The document was presented during the Green Cities webinar on 19 December 2023. In 2024, an in-depth study was produced in cooperation with REF Ricerche entitled *Regulating the quality of municipal waste management services: challenges for local authorities*, available online[72].

2.1.1.4 | Primary and Secondary Raw Materials Index

Since 2023, together with Prometeia, CONAI has produced an index of trends in secondary raw materials from packaging, updated every two months. The indicator is calculated according to the weight of secondary raw materials out of the total packaging sent to recycling in Italy. The total index (calculated in relation to the 2015 baseline of 100, for the prices in euros of relevant secondary raw materials) is made up of two sub-indices: one for the share of packaging managed by the CONAI System and the other for the share of non-managed packaging. Extracts from the updates are periodically published in the CONAI Community.

72
Green City Network and CONAI Webinar Series 2024: Update for Local Governments – Green City Network.

2.2 Skills development: training, education and awareness-raising of organisations, associations and citizens

Throughout the year, CONAI continued to intensively engage in training and further education on topics related to the circular economy, targeting companies, universities and training institutions. CONAI has developed several environmental training and education projects, starting with primary schools and including courses for secondary school and university students, as well as for recent graduates and professionals – including journalists. The aim is to further expand these initiatives in the near future to reach an even wider audience, including municipal technicians and plant licensing officers, for example. CONAI aims to be not only a witness to, but also a promoter of recycling culture, so that it becomes a source of skills (green skills) and job opportunities (green jobs), as well as a key element of continuing education.

PCTO Project for secondary schools

To complete the educational offer, in 2023 CONAI launched a new project for secondary schools, focusing on the circular economy and recycling professions (green jobs). This project, aimed at students in high schools and technical institutes, takes place through the Pathways for Cross-Curricular Skills and Orientation (PCTO). The training course “Green Future? Green Jobs!” is available on the Scuola.net platform and offers a 40-hour course for students between the ages of 16 and 19, with modules on packaging, green jobs and communication to raise awareness.

Collaboration with University of Tuscia

A two-year cooperation agreement was signed with the University of Tuscia for educational activities on eco-design and recycling issues, and to highlight students’ dissertations and co-finance research of common interest. The seminars involved representatives of CONAI and the seven Packaging Material Consortia together with recycling companies for five weeks (1 training cycle from 1.5 months, with 40 students participating and the university issuing credits. In addition, the first edition of the Unitus–CONAI degree award on packaging eco-design and circular economy was announced for two dissertations in the three-year and five-year degree cycles.

Partnership with ENEA for degree prizes

February 2023 saw the conclusion of the first edition of the call for prizes for master’s degree dissertations, in cooperation with ENEA, with 79 dissertations submitted from all over Italy. The prize aims to highlight dissertations dedicated to waste management and the circular economy and to promote internships to foster the growth of skills in these sectors.

Academic manual: *Circular economy. The packaging challenge*

CONAI’s handbook *Economia circolare. La sfida del packaging*, published by Franco Angeli in the *Business Management* series, is designed to bring together knowledge on the circular economy applied to packaging. The book was promoted through a roadshow in Italian universities and is a valuable tool for students as well as for business professionals and managers, public administrations and environmental consultants.

Green Jobs Higher Education Project

CONAI continues its “Green Jobs” project, aimed at transferring technical and regulatory skills in the circular economy to young recent graduates, particularly in Southern-Central regions. In 2023, a training course was launched in Sicily, in collaboration with the University of Catania and Reteambiente Formazione, involving 75 recent graduates. A second course, the first in Northern Italy, was organised in partnership with the Universities of Bergamo and Brescia and ASA – High Institute for the Environment of the Catholic University of Brescia, involving about 80 young people under 35 from Lombardy and Veneto.

CONAI seminar for members of the Order of Journalists

Following Palermo and Milan, the seminar *Recycling and Circular Economy: the Italian model setting the standard in Europe* was held once again, and eligible for obtaining credits for compulsory training. This time it was presented in the cities of Trento (March 2023, for members of the Order of Trentino-Alto Adige) and Florence (April 2024, for members of the Order of Tuscany). Lecturers included CONAI experts, journalists and personalities from the institutional and academic world.

2.3 Promotion of culture

CONAI values the role of culture and cross-disciplinary languages to reach citizens and involve them emotively as fundamental stakeholders in the circular economy. For this reason, it promotes initiatives such as Circular Art and the Cultural Journalism Festival.

Circular Art

On 12 January, the Circular Art exhibition was inaugurated at the MAXXI in Rome, organised by CONAI and curated by Spazio Taverna. The choice was made to use contemporary art to communicate the values of sustainability and tell the story of the challenges linked to the sustainable transition and the world of the circular economy, also using new visions, such as those suggested by the works of the twenty Italian artists of the latest generations in the exhibition. The exhibition was also staged at the Chamber of Deputies and later brought to the Ministry of Enterprises and Made in Italy.

Award for Young Environmental Journalism

2023 saw the second edition of the CONAI “Phoenix” Award for Young Environmental Journalism, the journalism award that CONAI dedicates to young journalists who have spoken about sustainability and environmental protection, with prizes once again going to a radio/television report and a written article. Patronages were received from the Order of Journalists and the Ministry of the Environment and Energy Security. The main partner of the prize is the Urbino Festival of Cultural Journalism, held every year in early October, where the Phoenix awards were presented to the two winners. The 2024 edition of the competition was launched at the end of 2023.

The National Packaging Consortium

3.1 The CONAI bodies

CONAI is a private, non-profit consortium, representing the equal expression of producers and users of packaging, and the lynchpin of the national packaging and packaging waste management system. With 681,392 EPR Organisation members[73], it guarantees the achievement of recycling and recovery targets nationwide.

The law assigns tasks to CONAI in the environmental field of importance to the national system as a whole, involving the various stakeholders in packaging waste management.

CONAI's duties to the environment

- Ensuring the achievement of the packaging waste recovery and recycling objectives currently in force, overseeing the cooperation of Consortia and other economic actors.
- Reducing the amount of packaging waste going to landfill by promoting recovery alternatives.
- Organising information, training and awareness-raising campaigns aimed at packaging users and consumers in particular.
- Acquiring data relating to packaging flows into and out of the country and from the economic operators involved and supplying the data and information requested by the Ministry of Environment and Energy Security (MASE).
- Promoting and coordinating the separate collection of packaging waste in accordance with efficiency, effectiveness and affordability criteria.
- Promoting environmental packaging and packaging waste impact prevention, through study and research into the production of environmentally friendly, reusable and recyclable packaging.
- Ensuring compliance with the "polluter pays" principle as regards producers and users by means of EPR environmental contribution fee calculation.
- Incentivising recycling and recovery of secondary raw materials by promoting the market for them.
- Working in accordance with the principle of subsidiarity, taking over from separate collection service managers in the event of the inadequacy of the separate collection systems set up by local governments, in order to achieve recovery and recycling objectives.
- Entering into a national framework programme agreement with ANCI, the Union of Italian Provinces (UPI) or the sector authorities, with a view to guaranteeing implementation of the principle of management co-responsibility between producers, users and local governments (authorities).

73 Members' Book 31 December 2023.

CONAI promotes a development model whereby innovation and environmental protection become a lasting and tangible legacy for new generations.

The governance of the Consortium is dictated by the Statute and Rules of CONAI[74]. The established bodies and offices are as follows:

- The **Members' Assembly** is governed by articles 17 to 21 of the Statute. Its functioning is governed by specific Regulations. Article 9 of the Rules of CONAI governs the procedures for the election of directors. To summarise, the election takes place according to lists of nominations presented by the trade associations pursuant to article 21, paragraph 2 of the Statute, or by one or more EPR Organisation members representing at least 3% of the votes attributed pursuant to article 18, paragraph 1 of the Statute. Nominations may be submitted up to the number of directors to be elected for the relevant component/sub-component as well as, only in the case of Producers, the directors for the entire category. To guarantee the independence and competence of the candidates, a declaration of acceptance of the candidature and certification of no causes for ineligibility and incompatibility must be submitted together with each candidature, under penalty of ineligibility. A professional profile of the candidate is also required. CONAI gathers the nominations received according to the terms and procedures set forth in the Statute into 12 special Lists, bearing in mind that each candidate may only run for one category or component/sub-component. If the nominations received are not sufficient to reach the minimum number of candidates for each component as provided in the Rules, the Board of Directors will arrange for them to be supplemented. The nominations and lists are submitted to the Consortium at least five days prior to the Assembly, so that all EPR Organisation members and other persons entitled to propose candidates are able to examine them. At the Assembly, the candidates with the highest number of votes in each list are elected until the reserved seats in the Board of Directors for the category/component/sub-component are filled.

74
www.conai.org/chi-siamo/governance/

- The **Board of Directors** consists of 19 members. Nine directors are in the Producers category, nine in the Users category, while the nineteenth director is designated by the Minister of the Environment and Energy Security and the Minister of Enterprises and Made in Italy, representing consumers. To guarantee representation of the plurality of subjects forming the CONAI EPR Organisation, in the composition of the CONAI Board of Directors each of the two categories is divided into components. The Producers category is made up of one representative for each of the packaging materials indicated in annex E, part 4 of Legislative Decree 152 of 3 April 2006 (steel, aluminium, paper, wood, plastic and glass), plus one representative for biodegradable and compostable plastic and two representatives for the entire Producers category. The User category consists of four representatives for Traders/Distributors, two representatives for Food Users, one representative for Chemical Users and one representative for Other Users; the ninth component is rotated between the Traders/Distributors component and the Miscellaneous Users component. The Board of Directors remains in office for three years and elects from among its members the President of the Consortium, who is responsible for ensuring that the Consortium's interests are served.

- The **Board of Auditors** verifies the regularity of the Consortium's accounting management, expressing itself collectively with specific reports to the Assembly on the budget and the final balance. It consists of seven full members and two alternates. Three of the regular members are appointed by the Ministry of the Environment and Energy Security, the Ministry of Enterprises and Made in Italy, and the Ministry of Economy and Finance, respectively.

- **Supervisory Board:** The Board of Directors has entrusted a collegial Supervisory and Control Board with the task of supervising the operation of and compliance with the Organisation, Management and Control Model pursuant to Legislative Decree No. 231/2001 and to ensure that it is updated. The Supervisory Board consists of three persons, one of whom acts as coordinator. The board is endowed with autonomous powers and reports to the Board of Directors. The Supervisory and Control Board remains in office for three financial years, expiring on the date of the Assembly called to approve the financial statements for the last financial year of the office, similarly to the Board of Directors and the Board of Auditors.

- The **President** holds office for three financial years and is responsible for representing the Consortium before third parties and in court. The office is held alternately by the categories of Producers and Users in the forms provided for by the Statute (article 25, paragraph 4). The President of the Consortium is Ignazio Capuano.

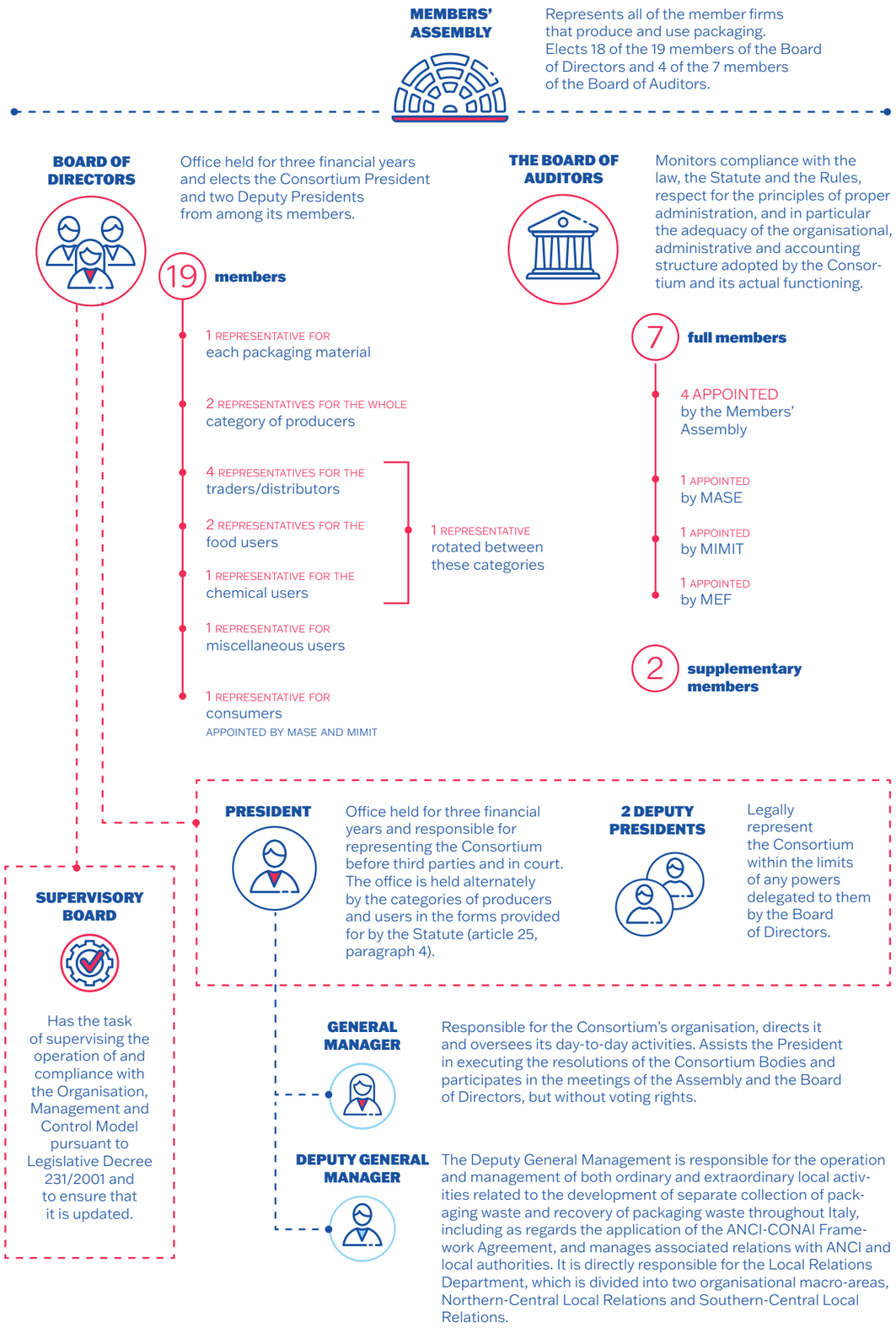
- The two **Deputy Presidents** legally represent the Consortium within the limits of any powers delegated to them by the Board of Directors. The Consortium Deputy Presidents are Angelo Tortelli, representing the Trader and Distributor Users component, and Antonio Feola, representing the Other Users.

- The **General Manager**, provided for by the Statute, is responsible for the Consortium's organisation, directs it and oversees its day-to-day activities. The General Manager assists the President in executing the resolutions of the Consortium Bodies and participates in the meetings of the Assembly and the Board of Directors, but without voting rights. As of 1 April 2024, the new General Manager of the Consortium is Simona Fontana.

In view of the strategic and operational objectives that CONAI is called upon to guarantee, the Board of Directors has also deemed it opportune to proceed with an organisational reorganisation of the Consortium, in order to guarantee a more efficient and effective functioning of the structure and one that is more in line with growing needs. It has therefore arranged for a new configuration of the Consortium's organisation chart that brings under the Presidency the Institutional Relations function, the Press and Media Relations function, and the Legal and General Affairs function, to which the Company Secretary is also assigned. The Presidency also reports to the General Management Office. All other functions are attached to the General Management: Research Centre for the Circular Economy, International Activities, EPR Organisation Members, Administration, Human Resources, Information Technology and Communication[75].

There is then a **Deputy Manager**, Fabio Costarella, who reports directly to the General Manager and supports and assists them in managing activities related to the development of separate waste collection and relations with ANCI and local authorities. The current functions of "Relations with Local Areas" and "Development Plans for Separate Collection in Southern-Central Italy" have been transferred to this role. The position of Deputy Manager also took effect on 1 April 2024.

75
More information in the chapter "Training, welfare and employee management policies".



3.2 Consortium management of packaging and packaging waste

With reference to its operations in the management of packaging waste, CONAI, in addition to determining the value of the EPR Fee, directs the activities of the seven Packaging Material Consortia representing the materials used for the production of packaging and acting as second-tier stakeholders:

Steel
RICREA

Paper and cardboard
Comieco

Glass
CoReVe

Aluminium
CiAl

Wood
Rilegno

Bioplastic
Biorepack

Plastic
Corepla

The Packaging Material Consortia, both private and non-profit and acting in a market support role, work to collect packaging waste of various materials and send it to recycling/recovery across the whole of Italy.

The law also provides packaging producers with alternatives to joining the Packaging Material Consortia. They can either “independently organise the management of their own packaging waste throughout the country” (article 221, paragraph 3, letter a) or implement “a return system for their own packaging” (article 221, paragraph 3, letter c). There are currently four Self-compliant EPR Organisations.

PARI System, a Self-compliant EPR Organisation developed by Aliplast SpA for the management of its flexible PE packaging waste, ascribable to the Commercial and Industrial circuit.

CONIP, an organisation that manages, guarantees and promotes the collection and recycling of the plastic crates and pallets of its EPR Organisation members at the end of the life cycle.

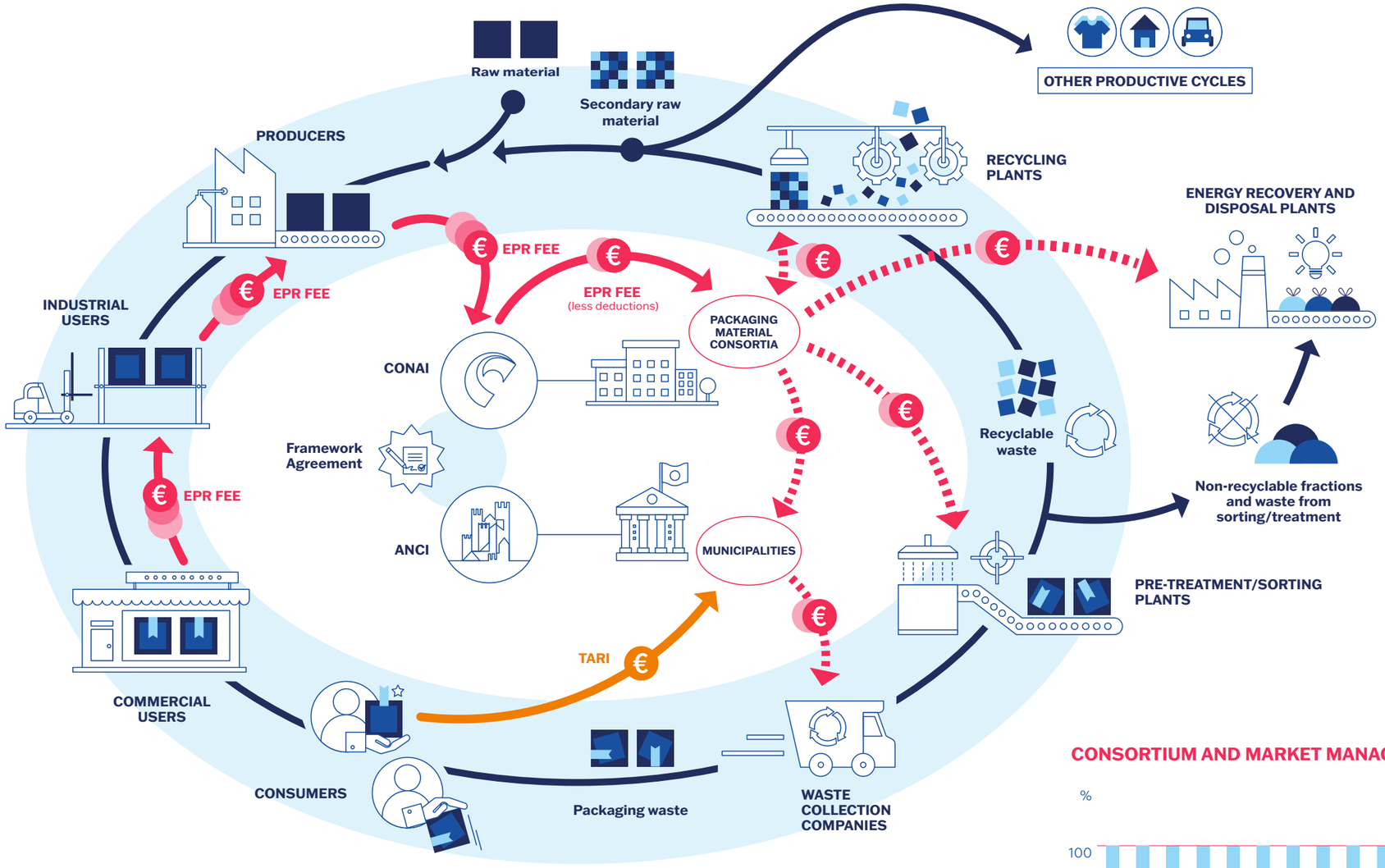
Coripet, an organisation for the management of PET packaging for food and non-food liquids.

Erion Packaging, an organisation working to enable member firms to fulfil their extended producer responsibility obligations for paper, plastic and wood packaging and packaging waste originating from EEE (Electrical and Electronic Equipment).

In accordance with current legislation, upon the expiry of the current ANCI-CONAI Framework Agreement scheduled for 31 December 2024, CONAI and the Self-compliant EPR Organisations will promote a Framework Programme Agreement on a National basis (APQN) with the National Association of Italian Municipalities (ANCI), the Union of Italian Provinces (UPI) or the Optimal Local Area Management Bodies, to ensure the coverage of the costs arising from separate collection, transport, sorting and other preliminary operations for packaging waste, as well as the methods for collecting this waste for recycling and recovery.

The Programme Agreement consists of a general part and technical annexes for each packaging material, and it is also signed by the Packaging Material Consortia.

THE NATIONAL SYSTEM OF PACKAGING WASTE MANAGEMENT



THE CONAI SYSTEM

The market-support role of the CONAI EPR Organisation

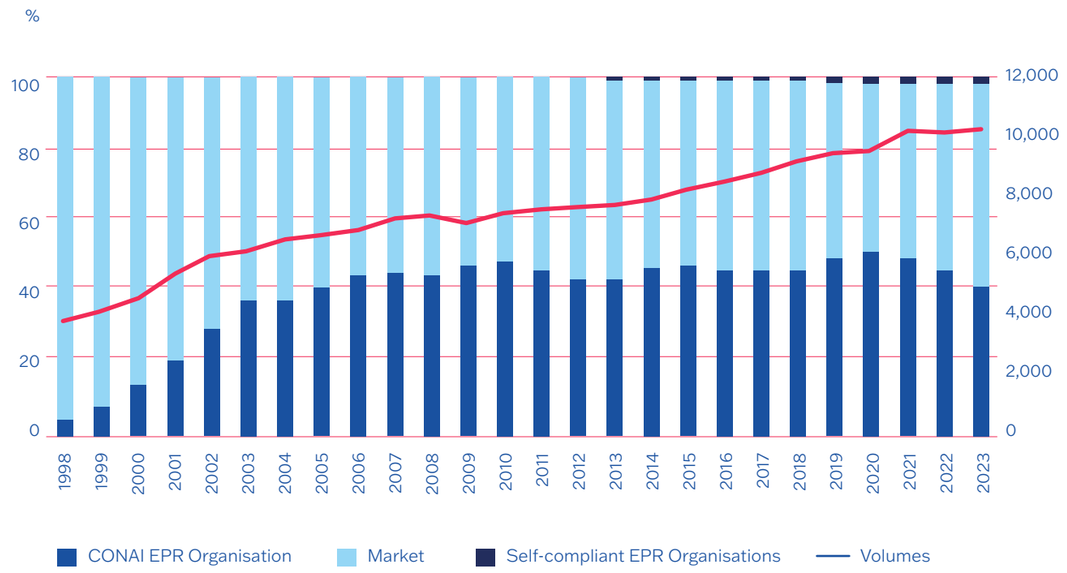
The legal nature of CONAI, a private law body with a public mandate, underlines its crucial role in coordinating and supporting the proper functioning of the market. This market-supporting function is an expression of a broad concept of "market sociality", where autonomous and interdependent economic stakeholders work together to achieve common objectives that would be unattainable by individual actors.

CONAI plays a key role in these System-related activities such as the Framework Agreement, technical/operational support to local authorities, regulators and firms, promotion of research, and raising awareness among citizens about good separate collection practices. In this context, CONAI expresses its role by ensuring that environmental protection and competition are not opposing variables, but complementary ones.

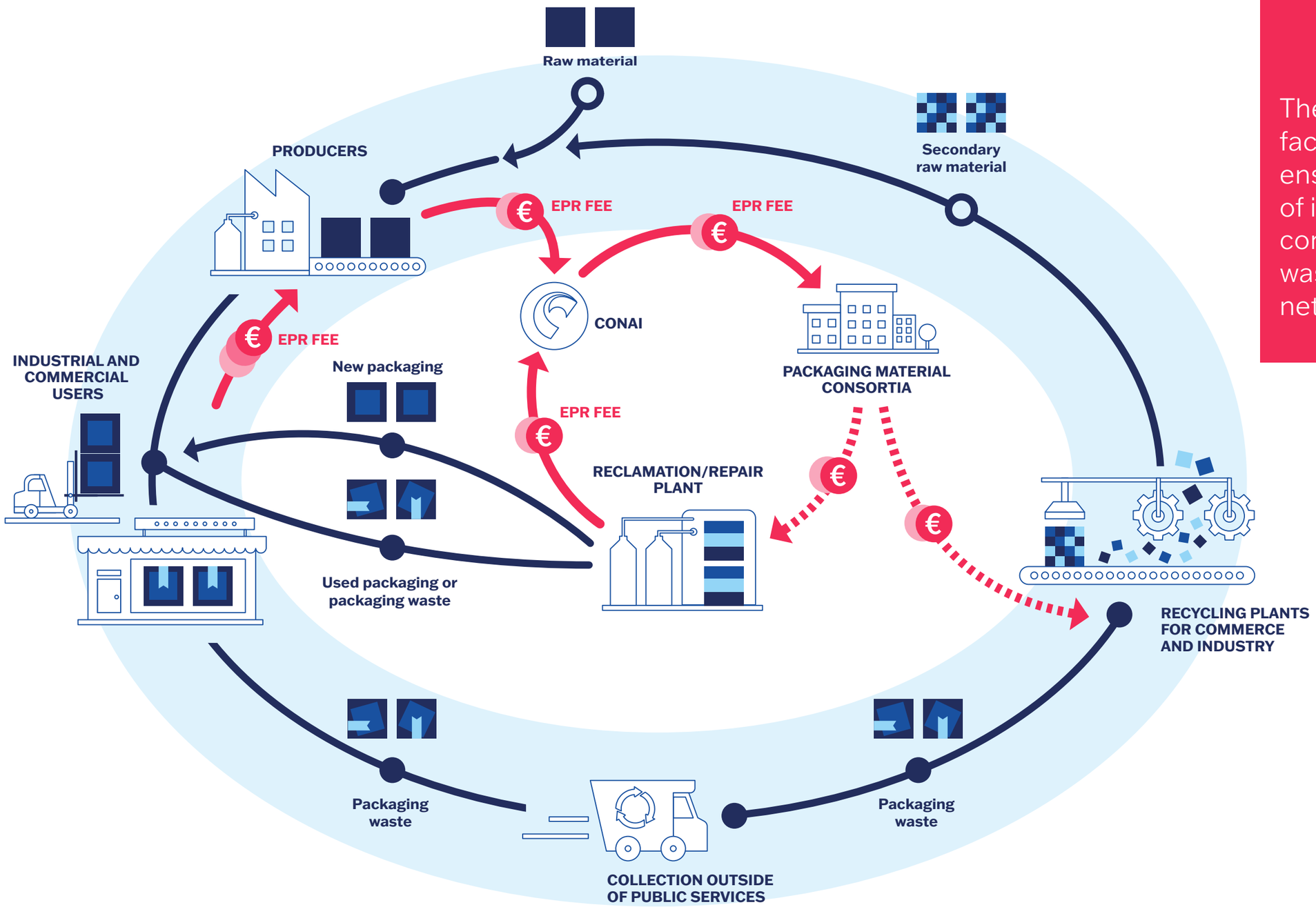
The CONAI EPR Organisation supports the growth of all operators and recycling.

This is evident from the numbers and results of packaging waste recycling that have been achieved thanks to consortium and market-driven management, which will be explored in more detail in the following sections. In fact, in the 26 years that the CONAI System has been in operation, there has never been a reduction of volumes between the two dimensions. Instead, there has been constant growth that has led the country to reach objectives set by the legislator ahead of time.

CONSORTIUM AND MARKET MANAGEMENT OVER THE LAST 26 YEARS



THE INDUSTRIAL AND COMMERCIAL PACKAGING WASTE MANAGEMENT SYSTEM



The CONAI System facilitates the reuse and ensures the recycling of industrial and commercial packaging waste through dedicated networks.

4

CONAI and its stakeholders

4.1 Context analysis

CONAI has updated its materiality matrix to align the organisation's strategic priorities with stakeholder expectations and regulatory developments, ensuring sustainable and proactive management of risks and opportunities.

In the current context, CONAI's operations are affected by a number of significant changes, whether internal or external. On the one hand, regulatory developments and growing stakeholder expectations require consortium strategies and practices to be continuously adapted; on the other, internal dynamics such as implementing new management tools and strengthening operational skills are leading to optimised performance.

The process of updating the material topics began with a renewed analysis of the context. By conducting an in-depth internal analysis – divided into several sessions with the Management – CONAI initiated an assessment process to determine activities, business relations, stakeholders and their interactions at all levels of reporting: National System, CONAI System, Organisation. This process was carried out in a comprehensive manner, updating the Environmental Analysis and Risk Matrix to determine the significant environmental aspects of ISO 14001 and EMAS Regulation.

"CAUSE"

CALCULATION AND REPORTING METHODOLOGIES

Reporting own resource plastic
Second year of regular reporting to the European Commission in accordance with Regulation 2021/770 on calculating the own resource based on non-recycled plastic packaging waste[76].

Reporting under Directive 2019/904 (SUP)
Reporting under the SUP Directive officially started with the first communications concerning:

- Interception rate for beverage bottles (article 9);
- Beverage cups and food containers placed on the market (article 4).

"LINKED TO"

PROPOSED PACKAGING AND PACKAGING WASTE REGULATION (PPWR) – REVISION OF THE PACKAGING DIRECTIVE 94/62/EC

Main objectives

- Prevent the generation of packaging waste, reduce its quantity, impose restrictions on single-use packaging and promote reusable and refillable packaging solutions;
- Promote high-quality recycling ("closed-loop recycling"), making all packaging on the EU market recyclable in an economically sustainable way by 2030;
- Reduce the need for primary natural resources and create a well-functioning market for secondary raw materials by increasing the use of recycled plastics in packaging through binding targets.

Throughout 2023, the proposal has been the subject of intense negotiations within the EU.

GREEN CLAIMS DIRECTIVE (GCD)

Approved in first reading by the European Parliament on 12 March 2024 and awaiting final approval.

Main objectives

- Accelerate the uptake of green products;
- Provide consumers with reliable information on the sustainability of products;
- Put an end to misleading commercial practices.

76 https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/revenue/own-resources/plastics-own-resource_en

SUP (SINGLE-USE PLASTIC) DIRECTIVE 2019/904

- The implementing act on the methodology for calculating the share of mechanically recycled plastic in bottles under the SUP Directive published in Implementing Decision 2023/2683 is currently being revised.
- The draft under discussion includes chemical recycling and the respective calculation method based on the mass balance.

TUA CONSOLIDATED ENVIRONMENTAL ACT REORGANISATION – MASE COMMISSION

- The Decree to establish an Inter-ministerial Commission for the revision of the TUA Consolidated Environmental Act (Legislative Decree No. 152 of 2006) was signed.
- Professionals with qualified experience and expertise on specific subjects may be invited to attend the Commission's meetings and hearings may be held.

CORRECTIVE MEASURE LEGISLATIVE DECREE 116/2020 PUBLISHED IN OFFICIAL GAZETTE NO. 127 ON 1 JUNE 2023.

Addresses:

- Extended producer responsibility
- Traceability of waste
- Self-compliance EPR schemes for packaging management
- Packaging material consortia
- CONAI
- Institutional documentation

DDL LEGISLATION ON COMPETITION

- Expansion of the supervisory scope of the Ministry of Environment and Energy Security (MASE) with respect to extended producer responsibility schemes.
- Oversight of the EPR systems' minimum requirements extended to all legal criteria related to supply chains.

"RELATED TO"

CORPORATE SUSTAINABILITY REPORTING DIRECTIVE

The new CSRD – transposed by Legislative Decree 125 of 6 September 2024 – has extended the sustainability reporting requirement to include SMEs other than micro enterprises. Primarily, it requires companies within its scope to report using a double materiality perspective, in accordance with the European Sustainability Reporting Standards (ESRS) adopted by the European Commission as delegated acts.

CORPORATE SUSTAINABILITY DUE DILIGENCE DIRECTIVE

The Directive defines due diligence requirements – applicable for companies with 1,000 employees and worldwide annual net sales of more than €450 million in a financial year – aimed at preventing and mitigating negative impacts on human rights and the environment. It extends ESG transparency requirements to the entire value chain and introduces mandatory climate compatibility plans for firms.

INTERNAL CHANGES AT CONAI

NEW CONSORTIUM MANAGEMENT POSITIONS

CONAI has announced a significant change at the top of the organisation, marking a moment of renewal in its leadership. Simona Fontana is the new General Manager, taking over from Valter Facciotto who is leaving the leadership after fourteen years. Fabio Costarella is appointed as Deputy General Manager.

INITIATION OF EQUAL OPPORTUNITY CERTIFICATION

The certification process has begun in accordance with UNI/PDR 125:2022 on gender equality, demonstrating a growing commitment to corporate management that values inclusion and equity. This initiative is part of a strategy aimed at improving the internal work environment and promoting equal opportunity policies for all employees, regardless of gender, age, origin or other personal characteristics.

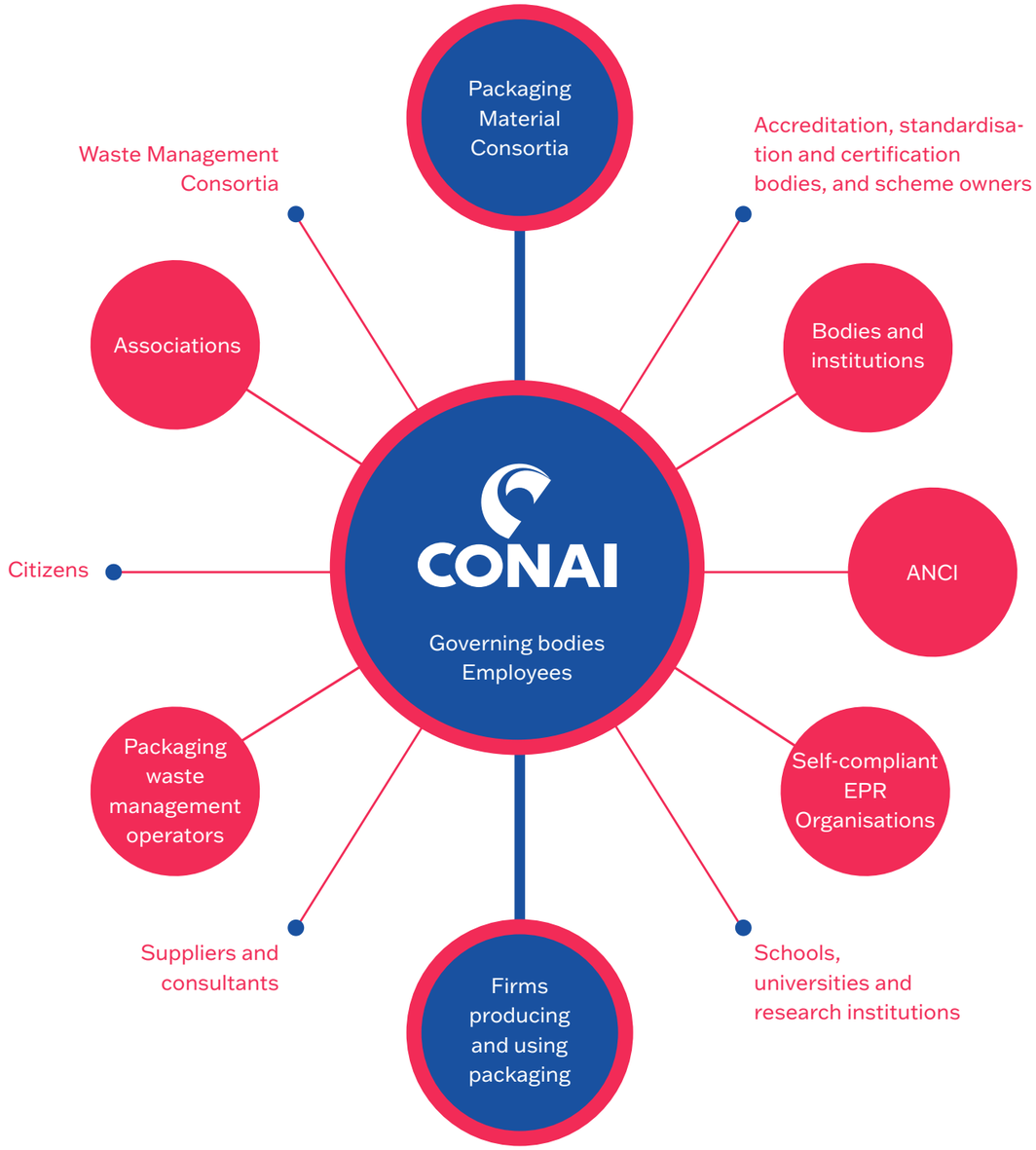
4.2 Stakeholders

The stakeholder matrix is the main tool for identifying and understanding the priorities and expectations of the different stakeholders with whom CONAI interacts, ensuring constructive dialogue and responsible management of strategic relations.
The matrix, shown on the following page, has been modified based on the activities carried out in 2024, reflecting the Consortium's ongoing commitment to meet the needs of its stakeholders.

4.2.1 Firms producing and using packaging

In accordance with current legislation, producers and users are required to ensure proper environmental management of packaging and waste resulting from consumption of their products. CONAI, as part of its governance function, also provides a clear classification of the categories involved, precisely distinguishing the obligations and operating procedures of each type of company.
Producers are defined as: "producers and importers of raw materials intended for packaging, producers/processors and importers of semi-finished products intended for packaging, producers of empty packaging, importers/retailers of empty packaging".
Users include: "purchasers/fillers of empty packaging, importers of "full packaging" (i.e. of packaged goods), self-producers (who produce packaging to package their own goods), traders of full packaging (purchasers/retailers of packaged goods), traders of empty packaging (who buy in Italy and resell this packaging without further processing)".

CONAI STAKEHOLDER STRUCTURE 2024



These entities, in some specific cases through trade associations, join CONAI by applying for membership. The membership fee, paid on a one-off basis, results in the acquisition of shares in the Consortium, thus strengthening their role within the governance of the Consortium itself.

4.2.2 | Packaging Material Consortia

CONAI directs the activities of the seven Packaging Material Consortia, both private and non-profit and acting in a market support role, who work to collect packaging waste of various materials and send it to recycling/recovery across the whole of Italy. CONAI stipulates an agreement, pursuant to article 24, paragraph 3 of the Statute, aimed at regulating not only the management of the EPR Fee as provided for by the regulations in force, but also certain reciprocal commitments and collaboration between the Parties. Specifically, this agreement regulates data reporting obligations and communications relating to correct management of packaging in order to ensure the proper functioning and maintenance of the entire national packaging management system, for the achievement of national environmental objectives.

4.2.3 | Self-compliant EPR Organisations

As described above, there are four current Self-compliant EPR Organisations: PARI System, CONIP, Coripet and Erion Packaging. In accordance with current legislation, CONAI and the Self-compliant EPR Organisations promote a Framework Programme Agreement on a National basis (APQN) with the National Association of Italian Municipalities (ANCI), with the Union of Italian Provinces (UPI) or with the Optimal Local Area Management Bodies, to ensure the coverage of the costs arising from separate collection, transport, sorting and other preliminary operations for packaging waste, as well as the methods for collecting this waste for recycling and recovery.
The Self-compliant EPR Organisations are also called upon to send their institutional documentation, which is preliminary to the definition of CONAI's Plans and Programmes and also to verify the actual achievement of the national objectives to which all operators contribute. In addition, the Self-compliant EPR Organisations are periodically involved in specific detailed discussions on issues of interest to the different sectors.

4.2.4 | Bodies and Institutions

In line with its mandate, CONAI maintains constant relations with multiple offices and offices at different levels of competence. These range from ministries such as the Ministry of the Environment and Energy Security (MASE) and the Ministry of Enterprises and Made in Italy (MIMIT), to Regulatory Authorities (ARERA), local government bodies, and even individual municipal administrations. Relations with national technical structures (such as ISPRA) and European institutions are also particularly intensive. At the international level, CONAI is a member of EXPRA (Extended Producer Responsibility Alliance), a European reference organisation representing non-profit packaging and packaging waste management systems. Through EXPRA, CONAI engages in dialogue with the various European institutions and reference consultants of the European Commission, to share know-how and experience gained though over 20 years of operational experience of the EPR systems adhering to EXPRA. CONAI cooperates with the different Institutions by participating in Working Groups mainly on technical and policy documents as well as with technical support at local level[77].

77
In this document, under the section *Supporting the qualitative and quantitative growth of separate collections*, more details can be found on the local activities promoted by CONAI.

4.2.5 | National Association of Italian Municipalities (ANCI)

Within the framework of stakeholder relations, the collaboration between CONAI and ANCI represents a fundamental pillar in the multi-level system of packaging waste management in Italy. Established in the very first years of the Consortium's foundation and consolidated over the years, it is based on strategic agreements that facilitate interaction between the CONAI EPR Organisation and local authorities, encouraging a shared approach to the separate collection and recycling of packaging materials. Through this synergy, CONAI and its EPR Organisation channel resources to municipalities, promoting efficient and widespread management of packaging waste and contributing to the achievement of national and European objectives for the circular economy, as well as acting as a driving force for correct management of municipal waste – of which packaging accounts for less than half. This collaboration is a concrete example of how synergies between public and private stakeholders can generate environmental and social benefits for the entire National System.

4.2.6 Associations

Relations between CONAI and the business associations are based on close partnership at different levels of operation. The associations represent, for example, firms in specific packaging-related sectors and are actively involved in the definition of sectoral policies, tools and initiatives. The associations provide valuable input on the context and needs of firms in their sectors, and contribute to defining strategies and policies for the benefit of the environment and the industry.
Their interaction with CONAI occurs on an ongoing basis through participation in the decision-making bodies, including the Board of Directors, the Members' Assembly and the Working Groups. The participation of representatives of trade associations allows the needs and perspectives of the firms from the specific packaging sectors to be taken into account in the decisions made by CONAI.

Activities of interest include:

- Sustainability and innovation, with ongoing collaboration on sustainable packaging guidelines such as eco-design, reuse, recyclability and recycling;
- Communication and information, disseminating information on sustainable packaging management practices to firms and the public. This may include awareness-raising campaigns and training programmes and projects to gather and disseminate good practices;
- Representation in institutional gatherings with participation, meetings and consultations with public institutions to discuss packaging and waste management issues. This involvement is crucial for understanding different points of view and arriving at shared and applicable solutions.

4.2.7 Packaging waste management operators

Collaboration between CONAI and waste management companies, such as utilities, private management companies, sorting and recycling plants, is crucial in order to guarantee environmental results. These companies operate along the separate collection chain for the treatment, recycling and recovery of packaging. CONAI plays a significant role in the context in which they operate for direct and indirect activities:

- Financing, through the Packaging Material Consortia, of separate collection and return of packaging waste (ANCI-CONAI payments and agreements on secondary and tertiary waste). This financial support is crucial for waste management companies (often delegated by the Authorities) and takes place in accordance with criteria for effectiveness, efficiency, cost-effectiveness and transparency;
- Sharing data and information on quantities of packaging managed;
- Coordinating regeneration and recycling, including sorting, separation and recovery of materials, again through the work of Packaging Material Consortia;
- Cooperation in environmental emergencies or exceptional situations: CONAI and waste management companies can work together to promptly address the situation and mitigate environmental impacts.

4.2.8 Waste Management Consortia

CONAI and the Waste Management Consortia share common environmental objectives, such as reducing waste to landfill and promoting environmental sustainability. Relations between CONAI and the Waste Management Consortia, while remaining within their respective areas of competence, are oriented towards cooperation in order to ensure sustainable packaging management and proper collection and recycling of materials.

4.2.9 Accreditation, standardisation and certification bodies, and Scheme Owners

Relations between CONAI, national and international accreditation bodies, standardisation, certification and Scheme Owners are complex and interconnected, as all these entities are involved in managing and ensuring quality and compliance of packaging in Italy:

- Accreditation bodies, such as ACCREDIA, play a key role in verifying the reliability of certification bodies and companies operating in the packaging sector. These bodies accredit certification bodies that in turn certify the compliance of packaging with established standards (particularly with regard to recycled content);
- Standardisation bodies, such as UNI, develop and maintain technical and quality standards for packaging. These standards provide guidelines for the design, production and use of packaging that conforms to safety and sustainability standards;

- Certification bodies, accredited by accreditation bodies, assess and certify the compliance of packaging with technical and quality standards. These bodies carry out audits and inspections to ensure that companies comply with the established standards;
- Scheme Owners are organisations or entities responsible for managing specific certification systems or quality schemes, such as ReMade®. These schemes may focus on specific sustainability or compliance criteria and work with certification bodies to ensure that products, including packaging, meet these criteria.

The ReMade® Foundation

In 2024, CONAI promoted and supported the transformation of ReMade® in Italy from an association to the ReMade® Foundation, marking a significant step towards protecting the value generated over the years by the recycling sector in Italy. The establishment of the Foundation constitutes a strategic evolution and stands as a hub for dialogue between companies engaged in promoting and producing goods from recycled materials, making its contribution towards the promotion and application of institutional tools such as the Minimum Environmental Criteria (MEC) and Green Public Procurement (GPP).

4.2.10 Citizens

CONAI's relations with citizens are aimed at creating broader environmental awareness, encouraging sustainable behaviour and ensuring proper packaging waste management at the household level. These activities help reduce the environmental impact of packaging and promote a more sustainable lifestyle. The main modes of engagement include:

- Awareness-raising and information on proper handling of packaging. This may include advertising campaigns, information material on recycling and promotion of best practices for separate collection of packaging.
- Support for separate collection with local authorities and communities to ensure that citizens have access to appropriate separate collection systems, as part of their assistance to local authorities. This includes supporting design of effective collection methods or promoting more efficient, effective, cost-effective and transparent collections.

4.2.11 Schools, universities and research institutions

CONAI's relationships with schools, universities and research centres are mainly focused on promoting education, research and innovation in packaging management and promoting environmental sustainability, including through:

- Educational and teaching programmes with partnerships at all levels of education, from primary school to postgraduate study, in order to develop educational programmes related to packaging and recycling;
- Partnerships with universities and research centres to support scientific research in the field of packaging management and sustainability. These partnerships may include funding for research projects, scholarships or internship opportunities for students interested in working on packaging-related issues;
- Sharing data and information related to packaging management, market trends and recycling initiatives;
- Participating in conferences and seminars in cooperation with academic institutions;
- Promoting innovation and development of new technologies, including through prizes and support for start-ups.

4.2.12 Suppliers and consultants

CONAI establishes relationships based on mutual trust, transparency and cooperation in order to ensure effective achievement of its objectives and optimisation of processes. CONAI negotiates and manages contracts with its suppliers. These contracts define the terms and conditions of procurement, including prices, deadlines and the responsibilities of both parties.

4.2.13 | Governing bodies

CONAI's governing bodies are defined in its Statute and Rules, and include the Members' Assembly, the Board of Directors, the President, the Deputy Presidents and the Board of Auditors.[78]. They are responsible for guiding, supervising and approving policies and initiatives that are fundamental for the management and continuous improvement of consortium activities. Their involvement ensures that the Consortium operates in a coordinated and coherent manner, responding effectively to market and stakeholder needs, while fulfilling its legally established competences.

78
See the "The CONAI bodies" section.

4.2.14 | Employees

The relationship between CONAI and its employees is fundamental to the success and functioning of the organisation. A positive working environment, effective communication and attention to the needs and well-being of employees are key elements in maintaining a motivated and committed team. CONAI steadfastly advocates a culture based on values of transparency, integrity and respect, helping to build a positive working environment. During 2024, following the change of management, a process was also undertaken to draw up a real Charter of Corporate Values.

THE INVOLVEMENT OF THE GOVERNING BODIES AND MANAGEMENT IN THE DRAFTING OF THE SUSTAINABILITY REPORT

Sharing processes and results with **Board of Directors**

Sharing processes and results with **Management**

Pre-assessment Certification body

APRIL 2024

Materiality assessment

- Interviews with stakeholders NEW

AUGUST 2024

Definition of structure and drafting of the report

- Identifying GRI reference indicators with the option "*with reference to the GRI standards*"
- Identifying any applicable ESRS criteria [1]
- Checking data communicated by the Consortia [2]
- Drafting the content

SEPTEMBER 2024

Review and page-setting

- Checking texts
- Drafting the abstract and brochure
- Page-setting

OCTOBER 2024

Verification

- Validation of EMAS Environmental Statement and 14001 (integrated in the Report)
- GRI standard assessment

NOVEMBRE 2024

- Equal opportunities certification

1
GRI-ESRS Interoperability Matrix

2
Specific Activity Certification Body

4.3 Materiality matrix

4.3.1 Determining impacts

CONAI has identified its actual and potential impacts on the economy, the environment and people within the organisation's activities and relationships. The impacts are largely derived from the Environmental Management System (ISO 14001 and the EMAS Regulation)[79] and then updated according to the new updated context.

They were then classified and analysed based on various attributes, which are specific to consortium reporting and necessary for determining material topics according to a "risk-based" approach:

Perimeter	Scope	Type	Relationship
National System	Environmental	Positive	*Cause*
CONAI System	Social and economic	Negative	*Linked to*
Organisations	Governance		*Related to*

Trigger	Action	Reversibility	Duration
Direct	Intentional	Reversible	Short term
Indirect	Voluntary	Irreversible	Long term

Continuing with the methodological approach, several impacts are related to the same environmental theme/aspect, which in turn can be traced back to several different perimeters (National System, CONAI System, Organisation) and to several levels of influence (direct and indirect).

79
See chapter "Determination of significant direct and indirect environmental aspects".

Working groups: shared tools for stakeholder participation.

4.3.2 Stakeholder involvement

CONAI's Working Groups are an essential tool for active participation and continuous, constructive dialogue between all stakeholders in the recycling sector. The groups offer a real opportunity to share different skills, experiences and perspectives, fostering an inclusive and transparent decision-making process. These coordination mechanisms highlight CONAI's proactive governance role, which manifests itself not only in the ordinary management of consortium activities, but also in the strategic contribution of consortium working groups.

The Working Group for Simplification, chaired by Barbara Gatto (CNA), plays a key role within CONAI, dedicating itself to analysing and proposing simplified and incentivised procedures for declaring the EPR Fee. This working group assesses the operational needs of member firms and develops solutions that make the declaration process more efficient and accessible, without compromising transparency and regulatory compliance. The working group's recommendations are then submitted to the Board of Directors, which evaluates their implementation to improve the EPR Fee management system. Representatives of the associations which the member companies belong to also participate in the groups.

The Fee Modulation Working Group, chaired by Domenico Rinaldini (Producer Steel Sector), plays a crucial role in ensuring that CONAI's EPR Fee reflects the modulation principles set out in current legislation. This group examines and proposes the fee modulation to the Board of Directors based on criteria such as the recyclability of packaging, encouraging virtuous behaviour among member firms. Through in-depth analysis, the Working Group helps to develop a contribution system that is fairer and in line with circular economy objectives, encouraging the adoption of more sustainable packaging. The group is formed of representatives of the Board of Directors and the technical structure of the Packaging Material Consortia.

The Working Group for Prevention, chaired by Roberta Rossi (Assolatte-Italian Food Union), plays a strategic role in CONAI's sustainability, focusing on promoting eco-design and reducing the environmental impact of packaging placed on the market. The group evaluates and proposes innovative measures to the Board of Directors that incentivise firms to design more sustainable packaging, thereby reducing its impact throughout its entire life cycle. Numerous companies, associations and experts participate in the group.

The International Working Group, coordinated by the President of CONAI, dedicated to defining guidelines, the international activities of the CONAI EPR Organisation, and particularly work leading up to the adoption of EU regulations on matters of interest. Board members and the technical structure of the Packaging Material Consortia participate in the group.

The Working Group for Communication, coordinated by the President of CONAI, aimed at identifying and defining the measures and objectives of the Consortium's institutional communication and information activities at national level considered useful for the implementation of the General Programme for the Prevention and Management of Packaging and Packaging Waste.

The Governance Committees of the ANCI-CONAI Framework Agreement, namely the Coordination Committee and the Verification Committee, are the coordination and control bodies of the Agreement. Specifically, the Coordination Committee is the political body, set up jointly by ANCI and CONAI, which has the task of ensuring coordinated implementation, identifying any necessary amendments and additions to the Agreement, monitoring its implementation, and promoting activities and initiatives deemed appropriate. The Verification Committee, on the other hand, also set up on an equal footing between ANCI and CONAI, has the task of dealing with more strictly technical issues and questions, and particularly of resolving any disputes and reports from local areas.

Within the CONAI-UNI Framework Agreement (Italian Standardisation Body), CONAI plays a leading role as Representative Partner, actively participating in the "Circular Economy" Steering Committee and chairing the Packaging Technical Commission. At the European level, CONAI contributes to the work of CEN by participating in the working groups (WGs) on labelling, reuse and recovery/recycling of packaging, and is involved in the drafting of technical standards to support proposed EU Regulation.

4.3.3 | Update to the materiality matrix

In 2024 CONAI adopted a new approach to refine the non-financial reporting process, involving a select group of experts with in-depth knowledge of the Consortium and the context in which it operates.
Representatives from government bodies (Council), institutions (ISPRA), associations (ANCI, CNA) and universities (Milan Cattolica) provided valuable technical and scientific perspectives on governance issues, strategic priorities and citizens' needs, making a valuable contribution to the drafting of this report.

Establishment of the first Scientific Steering Committee for CONAI's Sustainability Report

In recent years, CONAI has dedicated a great deal of effort to the drafting of its Sustainability Report, with the aim of fully reflecting its commitment to responsible and transparent management. To make this reporting model more robust and to promote a structured dialogue with relevant stakeholders, it was decided to set up the first Scientific Steering Committee (CSI). This body is composed of four professionals with proven experience and expertise, carefully selected for their strategic contribution in the field of sustainability. Carlo Bellavite Pellegrini, Edo Ronchi, Guido Tonelli and Lara Ponti will have the dual task of offering a critical and constructive perspective on the Sustainability Report, fostering a process of continuous improvement, and strengthening dialogue with institutions and stakeholders.

This new consultation process has therefore been fundamental in gathering qualified contributions on how to interpret and improve the report. Several relevant insights emerged from the discussion:

A strong reference to the concepts of trust and responsibility, which were considered as key to ensuring an interconnected system between citizens and the CONAI System. It was emphasised how important it is to portray CONAI and the System not only in terms of recycling results and economic activity, but also with the aim of conveying trust in citizens in terms of the value of their responsibility. This responsibility goes beyond separate collection, embracing a broader "environmental ethic" that includes proper consumption habits and conscious choices, which must be reflected in the System's work.

Reporting as a testimony of the commitment to a common path for all stakeholders, strengthening the link between the Consortium's various councils and particularly enhancing the work carried out by the council's working groups.

The importance of highlighting the value generated by the System not only in relation to the mechanisms for managing and transferring the EPR Fee, but also on economic issues related to externalities and distributed value, including direct, indirect and induced impacts.

These recommendations have been carefully integrated into the risk model and have guided the revision of the materiality matrix, ensuring that it reflects the most relevant and current priorities for CONAI and its stakeholders.

4.3.4 Determination of significance

Analysing the results of the 2023 survey thus made it possible to define the degree of significance of the topics that were preliminarily identified.
The complexity of the interactions and the different reporting perimeters made it necessary to develop a risk-based analysis methodology in order to determine the real degree of significance.
Each individual topic was then assessed based on the related impacts, the degree of relevance as raised by the stakeholders, and the actual consistency with the planning and policy lines of Management, and in accordance with the new expert recommendations. This allowed us to develop a calculation matrix that took into account the relationships between all the variables involved. Specifically, each significance value (S) obtained in this way, specific to each individual impact, is related and averaged within the material topic (to which several different impacts are linked).

CALCULATION FOR DETERMINING THE SIGNIFICANCE FACTORS OF MATERIAL TOPICS

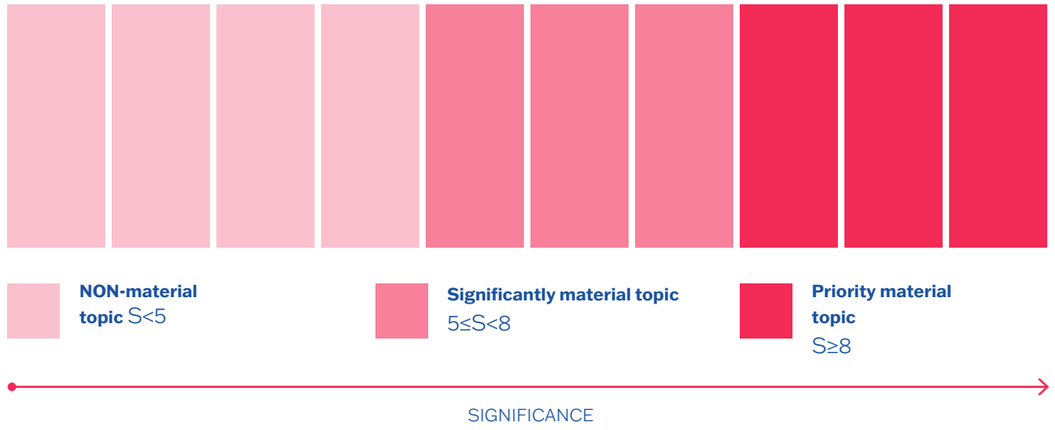
$$(R + G + B + I) \times D \times P = S$$

R	G	B	I	D	P
Relevance ascertained from SE Average value to 2 decimal places derived from CONAI survey	**Management bonus** Allocated according to the priorities of Management	**Bonus/ malus** Allocated according to the priorities identified by stakeholders	**Interviews** Allocated according to the priorities identified by experts	**Dissemination** Assigned according to the perimeter	**Probability** Related to mitigation measures and only applied to potential impacts
(1 to 4)	**(1)**	**(1;-1)**	**(1)**	**(1;2;3)**	**(0.5)**

NEW

The values derived in this way and associated with each topic are arranged on a scale to establish thresholds where materiality is defined. **For CONAI, materiality is a matrix of opportunity. It follows that high S values should be matched by commitments, as well as positive support and communication to stakeholders.**

RISK MATRIX FOR DETERMINING MATERIAL TOPICS



The identified material topics reflect impacts, activities and interactions at all levels of the Consortium's reporting. These topics are classified as priority material, significantly material or non-material based on the risk assessment process described above. The three topics "anti-corruption", "respect for human rights" and "health and safety of workers" are exceptions to this standard classification, and are placed at an "overarching" level. Although the assessment of the significance of the material topics did not identify them as significantly material to stakeholders, the Management deemed it appropriate to outline them as priority areas of direction and protection, considering them appropriate to the current context.

Compared to the materiality assessment carried out in 2023, no new topics were added, but some changes emerged in the significance of certain individual topics.

CONAI MATERIALITY MATRIX 2024

Topics whose importance has increased compared to 2023

Topics which have become priority

SIGNIFICANCE

Priority material

- Direct and indirect economic benefits of packaging recovery
- Prevention of waste generation
- Support for qualitative and quantitative growth of separate collection
- Coordination and role in multi-level governance and stakeholder relations
- Secondary raw materials, EoW and circular economy
- Achievement of national recycling targets
- Accountability: traceability, reliability and robustness of data
- Support for disadvantaged areas

1 Proactive support for the circular economy
2 Services and tools to support local authorities with quality separate collection
3 Linking businesses and institutions for the circular economy
5 Compliance with requirements
6 Accountability

Significantly material

- Skills development: training, education, awareness-raising of organisations, associations and citizens
- Promotion of innovation and research
- Financial support to ensure effective functioning of the system
- Consumption of raw materials
- Antitrust compliance
- Greenhouse gas emissions and climate change
- Energy consumption

1 Proactive support for the circular economy
2 Services and tools to support local authorities with quality separate collection
3 Linking businesses and institutions for the circular economy
4 Promotion of circular economy culture
5 Compliance with requirements
6 Accountability

Non-material

- Employee training and management
- Managing material and waste in offices
- Managing energy consumption and emissions in offices
- Consumption of water in offices

4 Promotion of circular economy culture
5 Compliance with requirements
7 Improvements to organisational processes
8 Commitment to gender equality

Overarching themes

Fight against corruption · Respect for human rights · Health and safety of workers

All topics resulting from the assessment will be reported in this document regardless of their degree of relevance.

4.4 An approach to double materiality

"Double materiality" is a central principle introduced by the Corporate Sustainability Reporting Directive (CSRD) 2022/2464 of 14 December 2022 and incorporated in the new European Sustainability Reporting Standards (ESRS). This concept requires companies to assess and report information on two fronts: on the one hand, the financial dimension, which analyses the influence of environmental, social and governance (ESG) issues on the company's economic and financial performance; on the other hand, the impact dimension, which assesses the effects of the company's activities on the environment, society and stakeholders.

In the CONAI context, the double materiality approach, which is in the process of being defined, takes the form of two interconnected dimensions:

Environmental and social (or external) materiality:

This aspect examines how CONAI's activities affect the wider context of the National System, including environmental impact through the promotion of recycling and sustainable packaging management. Key indicators in this area include the amount of waste produced[80], the percentage of packaging recycled[81], and the positive impact in terms of reducing carbon emissions[82]. In addition, social effects such as job creation[83] and support for social inclusion through recycling and waste management activities are considered[84].

80 See "Packaging waste streams in Italy: Placement on the market".

81 See "Packaging waste streams in Italy: Recycling".

82 See "Greenhouse gas emissions and climate change".

83 See "Social and economic impacts of CONAI".

84 See "Support for qualitative and quantitative growth of separate collection".

Financial (or internal) materiality

This aspect concerns how sustainability issues directly influence the economic and financial performance of the Consortium and its member firms. For example, through the CONAI EPR Fee[85], resources are collected from member firms to finance packaging management in Italy. Effective management of these funds is crucial not only to ensure efficient recycling, but also to positively influence the operating costs and economic benefits of member firms.
In addition, it is crucial to take into account the use of secondary raw materials (MPS), as this is closely linked to the economic competitiveness of the country in a global market, where supply and demand intersect between different countries.

85
See "The role of the EPR Fee".

The transposition of the CSRD Directive into Italian law gives the Consortium the impetus to further adapt the reporting system, providing detailed information on both aspects of double materiality. This partial alignment, which is still at the exploration stage, reinforces CONAI's commitment to greater transparency and accountability. By applying the concept of double materiality, CONAI aims to provide a more complete view of its impacts, allowing stakeholders to more accurately assess the consequences of consortium activities in both economic and social/environmental terms.

5

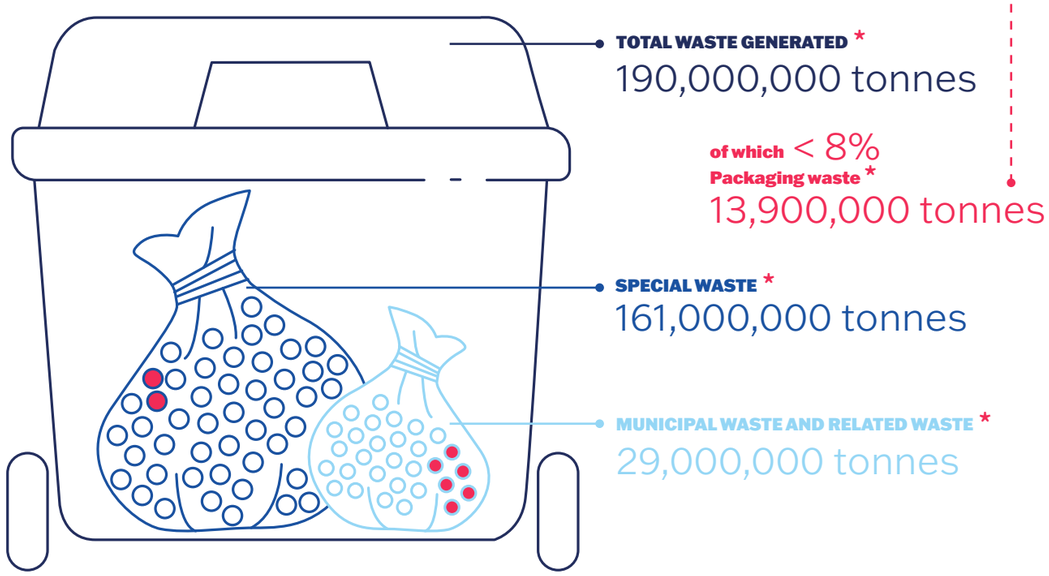
The System in figures

5.1 Packaging waste streams in Italy

The packaging waste management sector stands out as one of the few sectors able to achieve the planned regulatory targets ahead of time.

However, it accounts for a limited share – less than 8% of the total waste produced annually at the national level.

WASTE IN ITALY



* Source: Eurostat 2022 data. The figure for packaging waste has been updated according to CONAI's 2023 reporting.

5.1.1 Packaging waste streams in Italy: Placement on the market

The data for placement on the market is the first useful information for determining the prevention, reuse, recycling and recovery performance achieved for packaging and packaging waste, since, pursuant to Decision 2005/270/EC article 2, "the packaging waste generated in a Member State may be deemed to be equal to the amount of packaging placed on the market in the same year within that Member State".

The data for placement on the market for the two-year period 2022-2023, for the part attributable to the volumes pertaining to the CONAI System, are reported supplemented with the corrections identified at European level.
In defining the figure, specific corrective measures were taken into account, defined as "de minimis" (exempt from the EPR Fee because they refer to small flows) and "free riding" (not yet subject to the EPR Fee even though they fall within the scope of application). These corrective measures were introduced following the regulatory innovations provided by the revision of European Commission Decision 2005/270/EC – Commission Decision of 22 March 2005 establishing the formats relating to the database system pursuant to Directive 94/62/EC of the European Parliament on packaging and packaging waste. The changes were introduced by Decision (EU) 2019/655 and the calculation methods updated to the Interpretative Guidelines of May 2024. The aim of the changes/corrections introduced is to harmonise, at European level, the calculation methods and reporting of waste generation and the various management phases from recycling to reuse, introducing common rules relating to the reliability of estimates in order to avoid significant over- or underestimates.
These corrections have an average impact of 1.2% on the total placement on the market.

An analysis of the 2023 data over the 2022 data shows a substantial reduction in placement on the market (-4.9%). The total placement on the market therefore remains just under 13.90 million tonnes of packaging, with differentiated trends for the supply chains.

PACKAGING PLACED ON THE MARKET (2022-2023)[86]

Material	2022 consolidated	2023	Annual change
	KTONNES	KTONNES	%
Steel	531.70	487.55	-8.3
Aluminium	81.80	84.30	3.1
Paper	5,413.92	5,062.20	-6.5
Wood	3,421.70	3,332.67	-2.6
Plastic and bioplastic	2,327.88	2,289.95	-1.6
of which conventional plastic	*2,251.08*	*2,212.03*	*-1.7*
of which compostable plastic	*76.80*	*77.92*	*1.5*
Glass	2,838.42	2,642.43	-6.9
Total	**14,615.43**	**13,899.10**	**-4.9**

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

Reduction of overall placement on the market (-4.9%) with differentiated trends for individual sectors.

DATA AT A GLANCE

Steel
Decline in almost all types of packaging, primarily open top and steel drums.

Aluminium
Growth mainly driven by beverage cans.

Paper
Decline due to accumulated inventories in 2022.

Wood
Decline after strong rebound in 2022.

Glass
Decline due to the contrasting trend in consumption of glass products for domestic use.

Plastic
Slight decrease due to strong rebound in 2022.

Biodegradable and compostable plastic
Slight growth driven by flexible packaging

Final results 2023	Placed on the market
	KTONNES
Total conventional plastic	**2,212.03**
Corepla[87]	1,872.67
PARI System	13.08
CONIP	73.13
Coripet	249.37
Erion Packaging	3.78
Total compostable bioplastic	**77.92**
Biorepack[88]	77.92
Total plastic and compostable bioplastic	**2,289.95**

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

86
The 2022 figures have been adjusted to take into account the corrections mentioned above and following the usual verification and remediation activities carried out by CONAI.

87
The figure includes the corrections calculated by CONAI on flows for Corepla.

88
The figure includes the corrections calculated by CONAI on flows for Biorepack.

The evaluations provided within the official documents received by CONAI from the Self-compliant EPR Organisations contribute to the overall placement on the market of the chain.

PLACEMENT ON THE MARKET BY SELF-COMPLIANT EPR ORGANISATIONS

	2022 consolidated	2023
PAPER	KTONNES	KTONNES
Comieco	5,413.92	5,055.00
Erion Packaging	-	7.20
Total paper	**5,413.92**	**5,062.20**
WOOD	KTONNES	KTONNES
Rilegno	3,421.70	3,330.78
Erion Packaging	-	1.89
Total wood	**3,421.70**	**3,332.67**
CONVENTIONAL PLASTIC	KTONNES	KTONNES
Corepla	1,907.37	1,872.67
CONIP boxes	78.31	73.06
CONIP pallets	4.80	0.06
PARI System	13.84	13.08
Coripet	246.77	249.37
Erion Packaging	-	3.78
COMPOSTABLE BIOPLASTIC	KTONNES	KTONNES
Biorepack	76.80	77.92
Total plastic and compostable bioplastic	**2,327.88**	**2,289.95**

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

The upward trend in reusable packaging continues:
+1.2 million tonnes declared to CONAI.

5.1.2 Packaging waste streams in Italy: Reuse

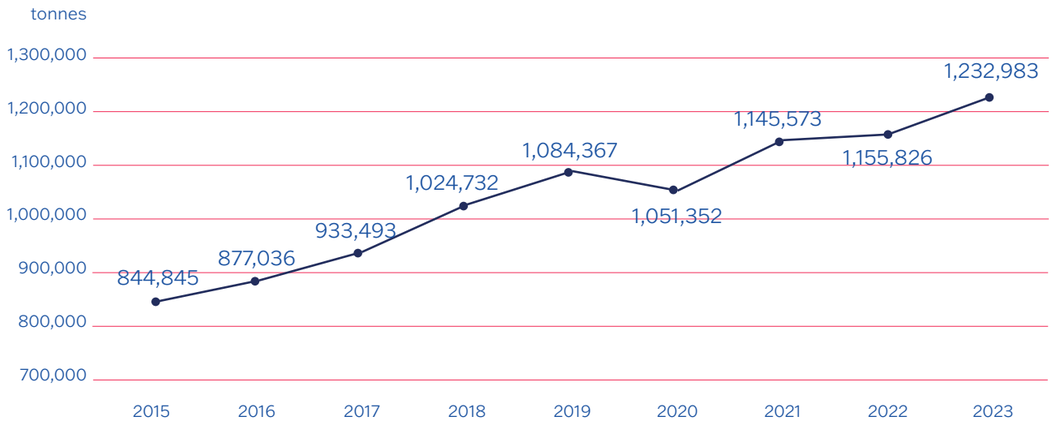
CONAI communicates reuse data annually through the periodical report to the European Commission on the implementation of Directive 94/62/EC as amended on packaging and packaging waste and through the Single Declaration Model (Modello Unico di Dichiarazione, MUD).

Reporting reuse data is in itself a complex task. The main reason for this lies in the multi-purpose nature of packaging, which is often not accompanied by official documentation proving the actual reuse. For this reason, especially thanks to the work of the Rilegno Consortium, the most involved in the management of reusable packaging, various discussions are underway with the main stakeholders in the pooling sector, with the aim of identifying more accurate reporting methods and tools.

The table below shows the trend in the quantities by weight of reusable packaging declared to CONAI through the specifically developed incentive procedures[89], which only capture part of the pool. Comparing 2023 with the 2022 figure, we see a continuation of growth in the use of this type of packaging.

89 Fee modulation for reusable packaging.

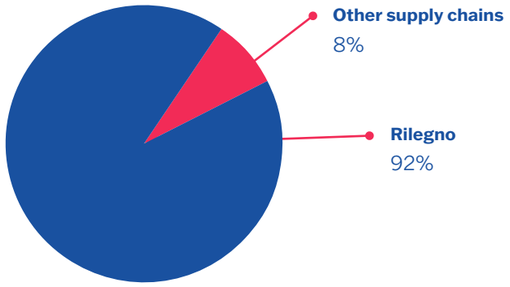
REUSABLE PACKAGING BENEFITING FROM CONAI INCENTIVE PROCEDURES



Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

Effect of packaging chains with incentive procedures in 2023

92% of the reusable packaging declared to CONAI with incentive procedures are reused and/or repaired wooden pallets.



Source: Data generated by CONAI.

In addition to the quantities reported from the incentivised declarations, Packaging Material Consortia and Self-compliant EPR Organisations make further specific estimates on particular types of packaging for which they are responsible.

Specifically:

- **RICREA** invests significant resources in the reconditioning and regeneration of used steel packaging. In particular, drums and tanks[90] with steel cages, due to their solid and resistant properties, can undergo various regeneration processes that allow them to be used again as safe and renewable packaging. In Italy there are more than 30 plants which are suitably authorised and equipped to carry out this type of operation[91]. The plants are mainly located in Northern Italy, near the areas with the most industrial activity. The total amount of packaging (including drums and tanks) regenerated by these firms in 2023 is 33,092[92] tonnes, marking a further decrease compared to previous years.

90
For this particular type of packaging, there is a signed agreement between CONAI, RICREA, Rilegno and Corepla with the Italian Federation of Packaging Regenerators (FIRI) aimed at supporting the activities carried out by this sector, devoting particular attention and greater resources to promoting the sector.

91
RICREA, Management Report 2023 and Financial Statements and Specific Prevention Plan.

92
The reported figure also includes the quantities of drums exported and used to contain other waste.

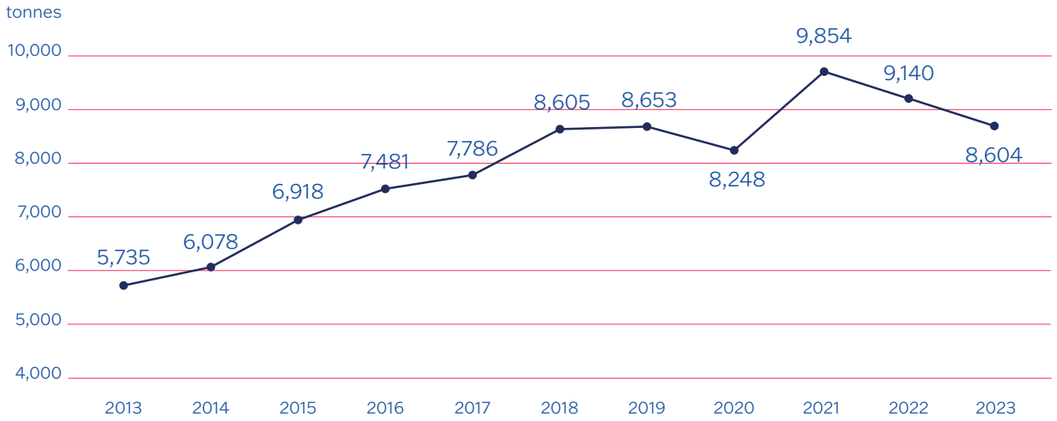
REGENERATED PACKAGING 2020-2023

Stream	2020	2021	2022	2023
	TONNES	TONNES	TONNES	TONNES
Regenerated tank cages	22,758	26,416	25,481	25,345
Regenerated drums	7,920	8,932	8,729	7,747
Total	**30,678**	**35,348**	**34,210**	**33,092**

Source: RICREA, Specific Prevention Plan 2024, May 2024.

- **Rilegno** is the most active supply chain in promoting reuse practices. For wooden tank bases, the total quantity in reference tonnes paid to support the activity of regenerators decreased slightly by about 5%.

REGENERATED PACKAGING – RILEGNO



Source: Rilegno, Specific Prevention Plan 2024, May 2024.

On the other hand, for wooden pallets, attention should be given to the "Reprocessing of wooden packaging" project launched by the Rilegno Consortium in 2002 which, through payment of a fee, only involves pallet waste taken back by member firms participating in the project itself, which is returned to the market after repair. In 2023, there was a slight decrease of 2.61% in waste taken back compared to 2022, which resulted in 4.84% fewer regenerated pallets making a total of 127,387 tonnes[93]. The quantities of packaging waste taken back, regenerated and returned to the utilisation circuit (net of offcuts) are shown below.

93
Rilegno, Specific Plan for Prevention 2024.

REPROCESSING OF WOOD PACKAGING

Region	Number of member parties	Tonnes regenerated	% tonnes regenerated
	No.	TONNES	%
Basilicata	2	13,767.59	10.81
Calabria	2	2,226.75	1.75
Emilia-Romagna	7	10,346.23	8.12
Friuli-Venezia Giulia	1	3,034.73	2.38
Lazio	1	1,601.61	1.26
Lombardy	24	44,757.65	35.14
Marche	4	3,860.26	3.03
Piedmont	10	23,850.85	18.72
Tuscany	3	13,829.42	10.86
Umbria	1	106.94	0.08
Veneto	9	10,004.99	7.85
Total	**64**	**127,387**	**100%**

Source: Rilegno, Specific Prevention Plan 2024, May 2024.

- **Corepla**: In the world of reusable packaging for trade and industry (the main application area for reusable plastic packaging), there are two distinct business models which coexist. The first is the formal circuits; specialist companies that manage a circuit made up of pools of packaging and recover, recondition and perhaps reclaim packaging that has been used, before putting it back into the circuit for reuse or sending it to recycling if it can no longer be used. Alongside these well-defined circuits, there are companies that buy used packaging from end users and resell it after reconditioning. Unlike the companies in the formal circuits, these unstructured reuse circuits are difficult to quantify, due to the different types of companies involved, which vary from small local businesses to multinationals. There were estimated to be 107,000 tonnes from these circuits in 2022[94].

- **CONIP**: Of the plastic crates placed on the domestic market by member producers of the CONIP system, 98% are “Use & Recover” crates made of PP (polypropylene) and 2% are “returnable” crates made of HDPE (high-density polyethylene)[95].

- **CoReVe** monitors quantities for the “returnable” glass packaging circuit, i.e. glass containers intended for industrial “reuse”. The survey on “returnable” packaging for 2023 shows there was a consistent quantity of this packaging, especially in the hospitality sector, for water and beer segments. Volumes recovered compared to the previous year, which had seen the forced closure of public establishments serving food and beverages for much of the year, especially bars and restaurants[96].

94
Corepla, Specific Prevention Plan 2024, May 2024.

95
CONIP, Specific Prevention Plan 2024, May 2024.

RETAIL SALES THROUGH WHOLESALE* – VALUATION OF RETURNABLES IN 2023

Market segment	Total	Returnable	For disposal
	TONNES	TONNES	TONNES
Mineral water	264,861		26,486
of which returnable	*90%*	*238,376*	-
Beer	201,576		152,391
of which returnable	*24.4%*	*49,184*	-
Total sales through wholesale channel	**466,437**	**287,560**	**178,877**
RETURNABLES CIRCULATING POOL Mineral water: 3 rotations/year Beer: 5 rotations/year		89,295	-
REPLACEMENTS OF RETURNABLES CIRCULATING POOL Mineral water: 5 years Beer: 3 years		19,171	-
RETURNABLE BOTTLES (wholesale)		268,389	
BOTTLES FOR DISPOSAL + BREAKAGE/REPLACEMENTS (wholesale)			198,048

Source: CoReVe, Specific Prevention Plan 2024, May 2024.

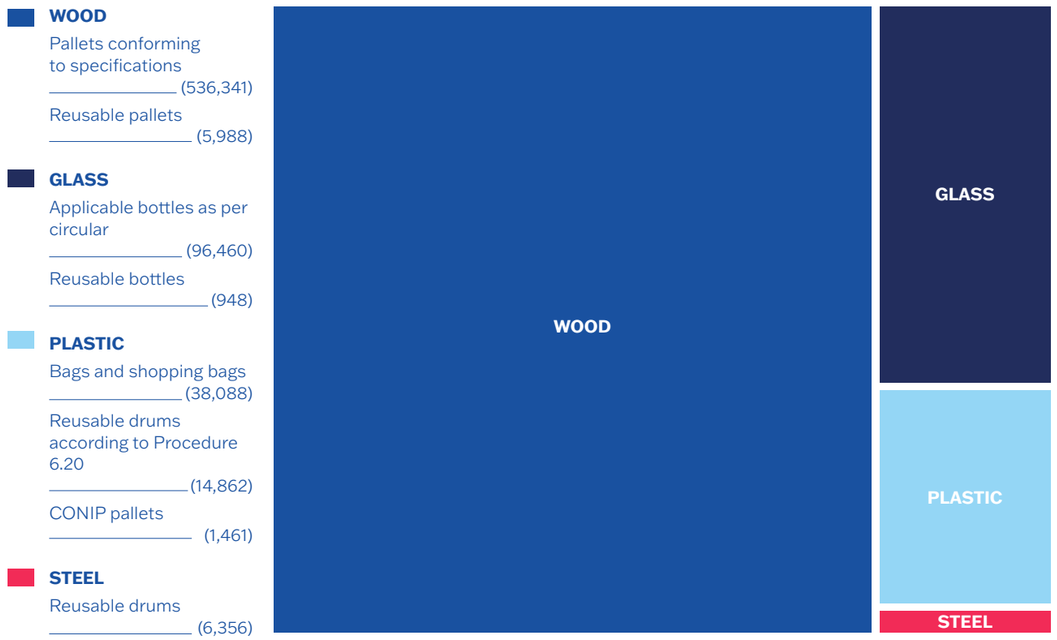
*GfK estimate based on Circana survey.

As stated above, the CONAI System supports the value of reuse by applying incentive criteria for calculation of the EPR Fee for reusable packaging.
The data sent to the Institutions for reusable packaging includes information on the quantity released for consumption and the number of rotations within a **reuse system conforming to codified specifications, used in controlled circuits**. This information is crucial to determine the share of reusable packaging out of the total that can be traced by the system. The following table shows the reusable packaging subject to reporting that is **used in controlled and verifiable circuits**.

96
CoReVe, Specific Prevention Plan 2024, May 2024.

The CONAI System is the main promoter of packaging reuse at the national level.

REUSABLE PACKAGING USED IN CONTROLLED AND VERIFIED CIRCUITS 2023



Source: Data generated by CONAI.

5.1.3 Packaging waste streams in Italy: Recycling

The 2023 effective recycling rate, calculated in line with the Eurostat guidelines for the verification of the 2025 and 2030 recycling targets, shows a strong increase compared to 2022, mainly due to the decrease in placement on the market. In absolute value, this meant that 10.47 million tonnes of packaging waste were effectively recycled.

EFFECTIVE RECYCLING

Material	2022 consolidated	2023	Annual change
	KTONNES	KTONNES	%
Steel	418.09	428.04	2.4%
Aluminium	60.20	59.30	-1.5%
Paper	4,332.50	4,673.54	7.9%
Wood	2,146.61	2,164.25	0.8%
Conventional plastic - mechanical and chemical recycling	1,039.46	1,054.67	1.5%
Compostable bioplastic - organic recycling	44.77	44.34	-1.0%
Total plastic and compostable bioplastic[97]	*1,084.23*	*1,099.01*	*1.4%*
Glass	2,293.36	2,045.77	-10.8%
Total effective recycling	**10,334.99**	**10,469.91**	**1.3%**

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

PERCENTAGE OF EFFECTIVE RECYCLING OUT OF MATERIAL PLACED ON THE MARKET

Material	2022 consolidated	2023	Annual change
	%	%	%
Steel	78.6	87.8	9.16
Aluminium	73.6	70.3	-3.25
Paper	80.0	92.3	12.30
Wood	62.7	64.9	2.21
Conventional plastic - mechanical and chemical recycling	*46.2*	*47.7*	-
Compostable bioplastic - organic recycling	*58.3*	*56.9*	-
Total plastic and compostable bioplastic	*46.6*	*48.0*	*1.42*
Glass	80.8	77.4	-3.38
Total effective recycling	**70.7**	**75.3**	**4.62**

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

97 The figure for packaging made of plastic and biodegradable and compostable plastic has been changed from the one in the Annual General Report 2023 as a result of a further data clean-up.

Below is a breakdown of the contribution of Self-compliant EPR Organisations to the quantities of packaging recycled.

RECYCLING OF SELF-COMPLIANT EPR ORGANISATIONS

	2022 consolidated	2023
PAPER	KTONNES	KTONNES
Comieco	4,332.50	4,667.26
Erion Packaging	-	6.27
Total paper	**4,332.50**	**4,673.54**
WOOD	KTONNES	KTONNES
Rilegno	2,146.61	2,162.36
Erion Packaging	-	1.89
Total wood	**2,146.61**	**2,164.25**
CONVENTIONAL PLASTIC	KTONNES	KTONNES
Corepla	844.80	858.95
CONIP boxes	56.98	54.71
CONIP pallets	1.33	0.31
PARI System	13.84	13.07
Coripet	119.44	121.78
Coripet from Digital Recycling stations	3.07	4.28
Erion Packaging	-	1.55
COMPOSTABLE BIOPLASTIC	KTONNES	KTONNES
Biorepack	44.77	44.34
Total plastic and compostable bioplastic	**1,084.23**	**1,099.00**

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

PLASTIC SUPPLY CHAIN

Specific reporting

The legislator pays a great deal of attention to the supply chain for plastic and biodegradable/compostable plastic packaging.
Linking recycling performance to a specific financial levy measure requires great consideration from the entire National System. Further complexity in reporting is required due to the specific calculation point defined by Decision 655/2019, which is basically placed in the middle of the industrial recycling phase, forcing Packaging Material Consortia and Self-compliant EPR Organisations to devise complex measurement procedures.
With its European dimension, the reporting of the biodegradable and compostable plastic supply chain applies a calculation method that can take into account the waste generated during the composting process.

Below the supply chain's recycling is shown in detail:

RECYCLING OF THE PLASTIC SUPPLY CHAIN

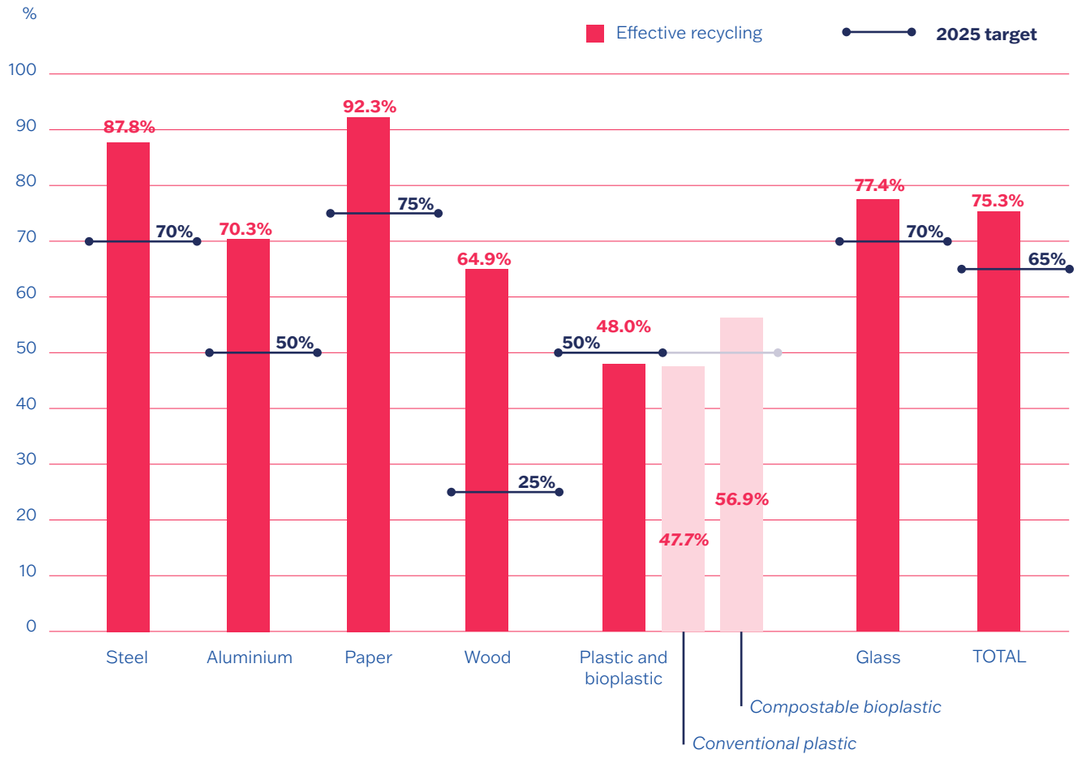
			2022	2023	*Change*
			TONNES	TONNES	%
COREPLA	Sent to mechanical recycling	PET	148,066	140,105	*-5.38*
		HDPE	73,931	74,953	*1.38*
		FILM	151,226	168,129	*11.18*
		FILS	13,508	2,971	*-78.01*
		IPP	49,067	54,685	*11.45*
		Mixed packaging	234,141	223,720	*-4.45*
		EPS	10,300	10,300	*0.00*
		Total	**680,239**	**674,863**	***-0.79***
	Sent to recycling – SRA		21,026	38,456	*82.90*
	Sent to chemical recycling		1,719	4,209	*144.85*
	Regeneration and recycling (PIFU)		24,500	22,200	*-9.39*
	Total sent to recycling		**727,484**	**739,728**	***1.68***
	Corepla effective recycling		**570,586**	**579,627**	***1.58***
CORIPET	Sent to mechanical recycling	PET from separate ollection	149,303	152,220	*1.95*
		PET from selective collection	3,843	5,356	*39.37*
	Total sent to recycling		**153,146**	**157,576**	***2.89***
	Coripet effective recycling		**122,517**	**126,061**	***2.89***
PARI SYSTEM	Mechanical recycling	PE FILM	13,836	13,075	*-5.50*
	Sent to recycling = effective recycling		**13,836**	**13,075**	***-5.50***

			2022	2023	*Change*
			TONNES	TONNES	%
CONIP	Mechanical recycling	Boxes	56,983	54,711	*-3.99*
		Pallets	1,329	310	*-76.68*
	Sent to recycling = effective recycling		**58,312**	**55,021**	***-5.64***
Erion	Mechanical recycling	PE film, EPS		1,603.00	
	Total sent to recycling			**1,603.00**	
	Erion Packaging effective recycling			**1,554.91**	
CONVENTIONAL PLASTIC – Sent to recycling			**952,778**	**967,003**	***1.49***
CONVENTIONAL PLASTIC – Effective recycling			**765,251**	**775,339**	***1.32***
Biorepack	Organic recycling	Plastic biodegradable and compostable	44,769	44,338	*-0.96*
	Organic recycling		**44,769**	**44,338**	***-0.96***
EFFECTIVE RECYCLING FROM EPR			**810,020**	**819,677**	***1.19***
EFFECTIVE RECYCLING FROM MARKET			**274,210**	**279,330**	***1.87***
TOTAL EFFECTIVE RECYCLING			**1,084,230**	**1,099,007**	***1.36***

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

2030 recycling target for all waste already exceeded, and sector-specific targets well within reach.

ACHIEVED RESULTS (EFFECTIVE RECYCLING) COMPARED WITH 2025 TARGETS



Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

Current projections estimate that 2025 targets will be achieved for all packaging supply chains, as set out in Annex E Part IV of Legislative Decree 152/06 as amended, placing Italy in a positive position for the 2030 targets.

INTERCEPTION TARGET

Legislative Decree 196/2021 on the reduction of the impact of certain plastic products on the environment.

The European and national regulatory framework on plastic packaging, with particular reference to PET beverage bottles, aims to reduce their dispersion in the environment, to ensure a certain degree of collection for recycling and to ensure the use of a certain share of recycled plastic in the production of new bottles. In particular, Directive (EU) 2019/904 on the reduction of the impact of certain plastic products on the environment lays down several specific measures to be taken by Member States. The legislator, which provides for specific consumption reduction measures (article 4) and marketing restrictions (article 5) for certain types of single-use plastic products, has set specific recycled content requirements (article 6) and separate collection targets (article 9) for beverage bottles with a capacity of up to 3 litres and their caps and lids. The same directive also provided for timely annual reporting of data (article 13, letter c, e) with respect to these products.

CONAI, as guarantor of the achievement of national targets and as the entity responsible for supplying MASE with information and data on national supply chains, particularly with reference to Directive (EU) 2019/904, promotes a series of in-depth discussions with the main actors – ANCI, ANEA, Corepla, Coripet and FederDistribuzione. Various ideas emerged from these meetings, shared by the different stakeholders, to reach the beverage bottle interception targets under the SUP perimeter. The actions to be taken, as well as the methodologies and analyses to be promoted, were presented at a joint meeting called by MASE on 20 February 2024.

Specifically, the strategies shared among all stakeholders were:

STRATEGIES	SPECIFIC ACTIONS
1. Work in synergy with respect to each party's competences	**1.** Implement communication campaigns at the local level
2. Realise implementation projects for the development of traditional and selective waste collection	**1.** Invest in the areas lagging furthest behind in separate collection **2.** Provide specific tools to optimise the interception flow of bottles consumed "on the go" (those with a higher risk of dispersion) **3.** The need to address the traceability of certain streams

REPORTING

Status in 2024

Below are the details of the volumes reported in 2024 on a 2022 basis. The calculation methodology has been shared on several occasions by the Institutions and is the result of the joint work of a working table in which CONAI took part alongside Corepla, Coripet, ANCI, ANEA and FederDistribuzione.
In summary, this approach results in a calculation process that considers:

- **Separate collection flow**, with several measurement points at the sorting plant, determining the gross and net intercepted quantities of beverage bottles in the SUP target. This data is derived from an analysis campaign conducted by Corepla and Coripet for all national sorting plants in May 2023 (around 1,000 analyses were conducted in total);
- **Correction factor for loss of weight and moisture**. This 3% yield is determined from the multi-year mass balances of all national sorting plants. This is important for reflecting any loss of material or residues that arise during sorting and processing;
- **Selective collection flow**: These volumes are already in accordance with the calculation point;
- **Placement on the market**, which takes two additional correction factors into account:
  - Weight and percentage of off-target CPL PET: estimated at around 10%;
  - Weight and percentage of CPL PET caps and lids: estimated at around 8%.

INTERCEPTION RATE FOR BEVERAGE BOTTLES*

ARITHMETIC FORMULA

$$\frac{\text{RS CPL PET (Corepla, Coripet, Municipalities)} + \text{RD CPL PET Corepla, Coripet} * \%\text{ CPL target} * \text{Weight loss and error coeff.}}{\text{Total CPL PET placement on the market} + \text{CPL PET caps and labels}}$$

(Selective collection (RS); Traditional separate collection (RD))

CALCULATION

$$\frac{3{,}845 + (335{,}238) * 89.98\% * 97\%}{409{,}499 + 32{,}760} = 67.03\%$$

(Selective collection; Separate collection)

Data reported pursuant to article 13 paragraph 1 letter c) of Directive (EU) 2019/904

Source: Data generated by CONAI.

5.1.3.1 The CONAI System's autonomous and market-based management of packaging waste

The results are achieved by the coordinated action of several stakeholders towards a common goal. In this section, we will briefly analyse the management by each of the stakeholders responsible for recovering and recycling packaging waste of the seven materials.

The recycling managed is packaging waste that has been taken on by the Packaging Material Consortia of the CONAI System and sent for recovery operations. Typically, these flows come from separate collection managed within the framework of the ANCI-CONAI agreements signed with municipalities/collection managers at the local level. Then there are quantities from the recovery of packaging waste from the private sector – typically commercial and industrial waste. These flows arise from specific agreements/conventions entered into by Packaging Material Consortia with operators in the sector, especially for wood packaging.

Recycling not managed by Packaging Material Consortia includes:

- Recycling by the market, i.e. packaging waste for recovery by independent for-profit operators. It therefore typically consists of commercial and industrial packaging waste streams that are recovered on the market for recycling, and a portion of packaging waste present in municipal waste where the municipality/manager has chosen not to adhere to the ANCI-CONAI Framework Agreement or to withdraw from it;
- Recycling operated by Self-compliant EPR Organisations, i.e. the share of packaging waste managed by PARI System, CONIP and Erion Packaging mainly for commercial and industrial streams, and by Coripet for the relevant share of packaging waste present in municipal waste (since 2019).

In the 26 years that the CONAI System has been in operation, there has been a steady growth of self-compliant and market-based management.
This is the result of the market-support role of the System, including in years of crisis when the system has borne the recycling of a large proportion of packaging waste.

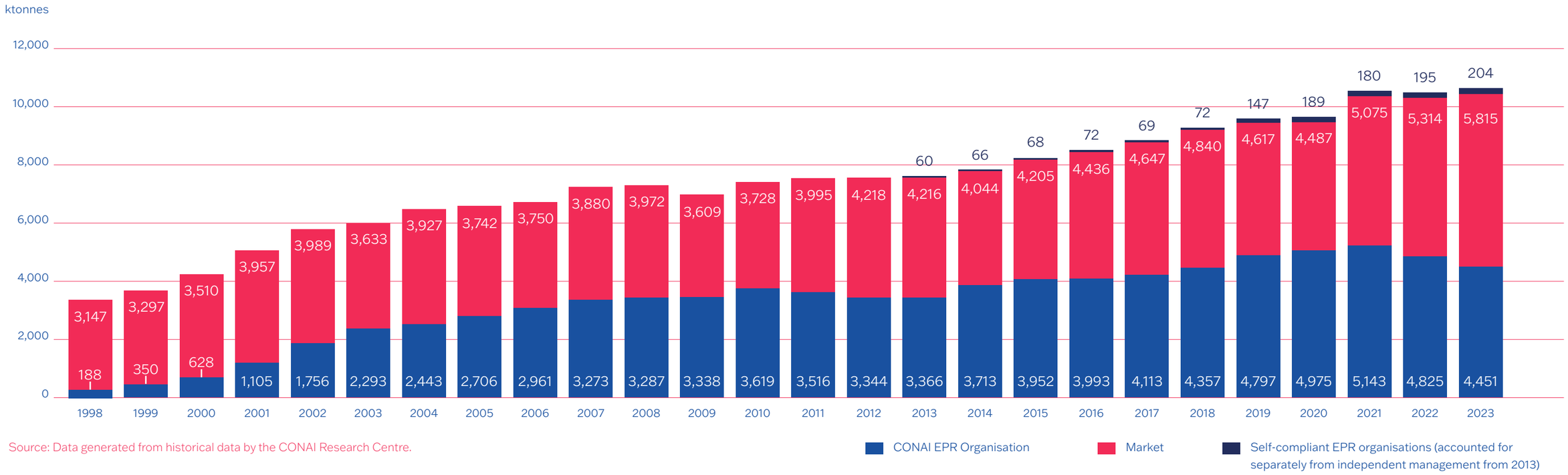
In 2023, packaging waste was recycled in the following ways:

- 42.51% attributable to the Packaging Material Consortia of the CONAI System;
- 55.54% managed by the market by market operators;
- 1.95% attributable to management by Self-compliant EPR Organisations active in the plastic packaging chain (CONIP, Coripet, PARI System).

98 Percentage values rounded from the quantities presented in institutional documentation.

The next page shows the breakdown by type of recycling management in 2023[98].

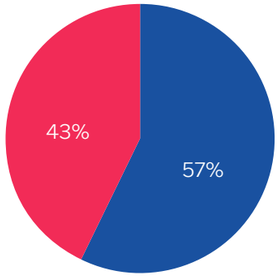
QUANTITIES OF PACKAGING WASTE SENT FOR RECYCLING BY THE MANAGEMENT SYSTEM



Source: Data generated from historical data by the CONAI Research Centre.

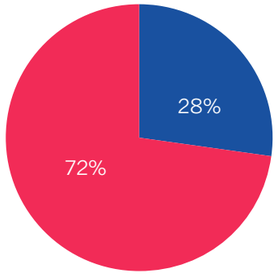
PACKAGING MATERIAL CONSORTIA CONTRIBUTION TO RECYCLING BY MATERIAL

STEEL
Total: 428.04 ktonnes



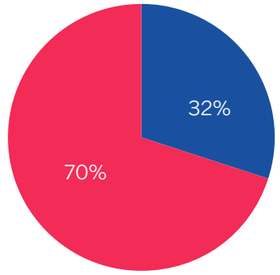
- CONAI EPR Organisation
- Market

ALUMINIUM
Total: 59.30 ktonnes



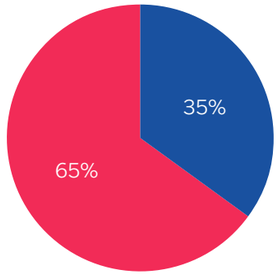
- CONAI EPR Organisation
- Market

PAPER*
Total: 4,673.54 ktonnes



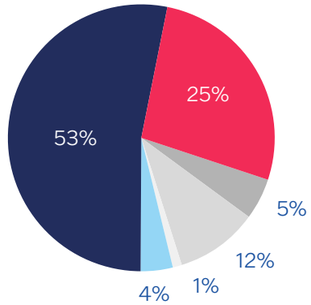
- CONAI EPR Organisation
- Market

WOOD*
Total: 2,164.25 ktonnes



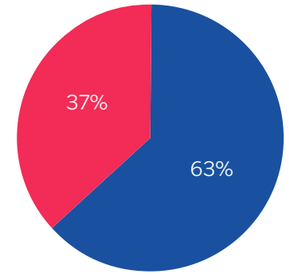
- CONAI EPR Organisation
- Market

PLASTIC AND BIOPLASTIC*
Total: 1,099.00 ktonnes



- CONAI EPR Organisation – Corepla
- CONAI EPR Organisation Biorepack
- Market
- Self-compliant EPR Organisations – CONIP
- Self-compliant EPR Organisations – Coripet
- Self-compliant EPR organisations – PARI System

GLASS
Total: 2,045.77 ktonnes



- CONAI EPR Organisation
- Market

***** The recycling contribution for the paper, wood and plastic supply chains also includes the volumes handled by Erion Packaging, which are less than 1% and therefore not visible in the graphs above.

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

RECYCLING DATA AT A GLANCE

Steel ↑ 87.8%
Regeneration and IBA are also increasing[99].
Management by the RICREA Consortium accounts for 57% of total recycling.

Aluminium ↓ 70.3%
Increasing quantity managed by market operators and inclusion of IBA flows[99].
Management by the CiAI Consortium accounts for 28%.

Paper ↑ 92.3%
Increase mainly due to the sharp drop in placement on the market.
Management by the Comieco Consortium accounts for 32%.

Wood ↑ 64.9%
Primary role performed by the network of consortium platforms and regeneration.
Management by the Rilegno Consortium accounts for 35%.

Plastic ↑ 48%
New recycling streams for mixed plastics and film.
Management by the Corepla Consortium accounts for 53%.

Biodegradable and compostable plastic ↑ 61%
Biorepack's work has expanded in scale.
They contribute to 4% of Italy's total recycling of plastic packaging.

Glass ↓ 80.8%
Strong influence of the secondary raw material market, which boosted imports of scrap.
Management by the CoReVe Consortium accounts for 63%.

99
"Incinerator bottom ash", packaging recycled from post-combustion incineration ash recovery.

5.1.3.2 | Secondary and tertiary packaging management

A further tool for achieving recycling and recovery targets is the network of platforms made available to companies as a guarantee to send industrial and commercial packaging waste to recycling.

For these packaging waste streams, the CONAI–Packaging Material Consortia system has a purely guarantee function: exclusively in cases where the market is not able to absorb packaging waste for recycling, a second-stage service is offered, including for commercial and industrial packaging waste – especially when market conditions are not favourable.

There are four Packaging Material Consortia directly involved in managing industrial and commercial packaging: RICREA, Comieco, Rilegno and Corepla, whose main intervention models are:

- economic support for reusable solutions and/or reclamation and reprocessing;
- agreements with delivery platforms for commercial and industrial activities and subsequent recycling;
- agreements with recycling management facilities for specific special waste streams;
- economic support and separate collection management from conventions for the significant (and growing) presence in urban separate collection.

INDUSTRIAL AND COMMERCIAL PACKAGING

Consortium	Reuse	Regeneration II and III	Recycling II and III	Assimilation
RICREA		• **Drums and tanks:** 33 ktonnes	• **Non-hazardous non-reusable:** 132 ktonnes • **Strapping:** 28 ktonnes	
Comieco			• **Collection at business premises and other small and medium-sized businesses (UND)** • **Network of 117 platforms**	• **Cardboard boxes** from households in combined separate collection and non-domestic-use in selective separate collection
Rilegno	**Weight abatement on EPR Fee for reusable packaging:** 1100 ktonnes benefited from EPR Fee reduction	• **Recovered cistern bases:** 9 ktonnes per 28 plants • **Pallet retreatment project:** 127 ktonnes of regenerated pallets from 64 consortia	• **Network of 384 platforms:** 1,646 ktonnes	
Corepla		• **Drums and tanks (PIFU):** 22 ktonnes per 32 plants	• **PEPS – expanded polystyrene packaging recycling platform:** 10 ktonnes per 31 plants • **Network of 57 platforms in partnership with CARPI Consortium-affiliated plants:** 230.5 ktonnes	• **Film:** 142 ktonnes

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

5.1.5 Packaging waste streams in Italy: energy recovery

Reference legislation today no longer provides for a recovery target, but CONAI nevertheless intends to continue monitoring these flows in order to ensure greater traceability of information on the supply chains and simultaneously verify the contribution to reducing landfill waste to 10% as required by legislation.

The energy recovery figure is determined by the packaging waste streams (processing waste from wood/cellulosic waste) managed directly by Packaging Material Consortia or Self-compliant EPR Organisations, as well as packaging waste present in municipal waste sent for energy recovery through waste-to-energy and secondary solid fuel production plants. For the latter municipal waste flow, CONAI stipulates an agreement with the firms that own the plants, so that specialised third-party companies can carry out the necessary product analyses to determine the amount of packaging waste sent for energy recovery.

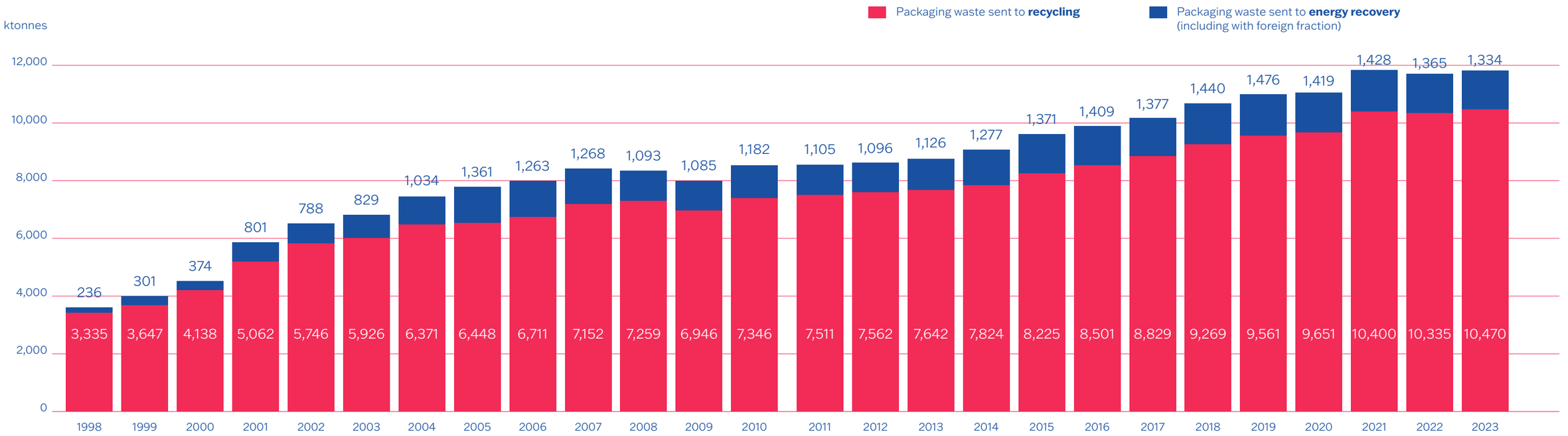
In 2023 there was an increase in the number of product analysis sessions at plants party to these agreements: 55 plants located mainly in Northern Italy (36), and to a lesser extent in Central Italy (10) and Southern Italy (9).

PACKAGING WASTE SENT TO ENERGY RECOVERY AND PERCENTAGE

Material	2022 consolidated	2023	Annual change
	KTONNES	KTONNES	%
Steel	0.00	0.00	
Aluminium	3.40	3.20	-5.88%
Paper	305.55	292.14	-4.39%
Wood	59.01	58.20	-1.36%
Plastic	997.50	979.96	-1.76%
Glass	0.00	0.00	
Total	**1,365.45**	**1,333.50**	**-2.34%**

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

TREND OF RECYCLING AND RECOVERY FLOWS



Source: Data generated by CONAI Research Centre from historical data.

PACKAGING WASTE SENT TO TOTAL RECOVERY AND PERCENTAGE

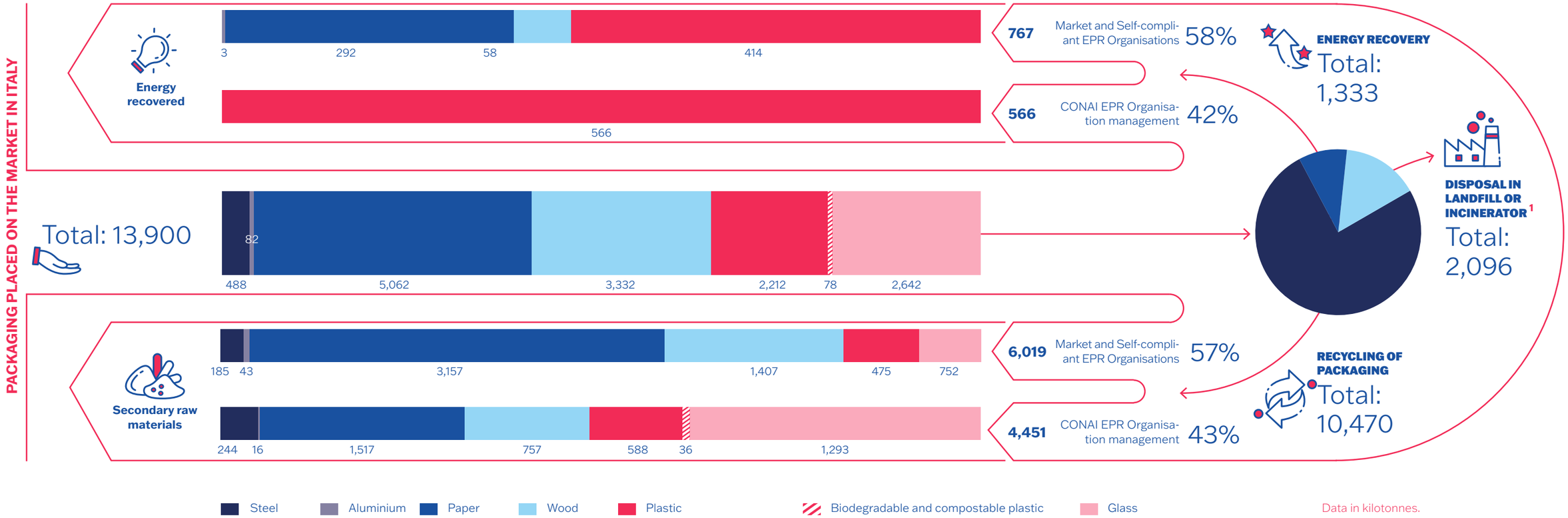
Material		2022 consolidated	2023	Annual change
		KTONNES	KTONNES	%
Packaging waste sent to total energy recovery	KTONNES	11,700.44	11,803.41	0.9%
Total recovery out of material placed on the market	%	80.1%	84.9%	-4.9%

Source: Data generated by CONAI Research Centre based on institutional documents by Packaging Material Consortia and Self-compliant EPR Organisations (Management Report and Strategic Prevention Plans, May 2024).

As a percentage of material placed on the market, 84.9% was sent to total recovery (+4.9 percentage points over 2022).

11.80 million tonnes of packaging waste were sent to total recovery (+0.9% over 2022).

PERFORMANCE OF THE CONAI EPR ORGANISATION IN ITALY IN 2024



Data in kilotonnes.

1 The value of disposal in landfill or incinerator is obtained as the difference between the value of placement on the market, recycling and recovery.

Source: CONAI Research Centre from institutional data.

5.2 Accountability: traceability, reliability and robustness of data

5.2.1 Transparent reporting

CONAI makes its unique wealth of data and information increasingly available to the Institutions and various stakeholders: from the packaging placed on the market to the data referring to waste management at a local level, including the calculation methods and the related results in terms of environmental benefits of the packaging waste recovery chain at the national level. It ensures transparency and streamlining of the information flow for packaging supply chains, enabling timely reporting of recycling and recovery performance at the national level. All data reporting methods of the CONAI System are continuously updated to the highest quality standards and verified annually by an accredited third party.

REPORTING TIMELINE

MARCH
- Management Report and Financial Statements

APRIL

MAY
- Packaging communication via MUD sent to ISPRA

JUNE
- Communication of data to ISPRA for the European Commission
- Annual General Report

NOVEMBER
- PGP – Specific Plan for the Prevention and Management of Packaging and Packaging Waste
- PGP – General Programme for the Prevention and Management of Packaging and Packaging Waste
- Sustainability Report

Voluntary document

CONAI's institutional tasks include preparation of legally required documentation, necessary liaison and coordination functions between public administrations, Packaging Material Consortia and other economic operators, as well as implementing information campaigns and collecting and transmitting recycling and recovery data to the competent authorities.

5.2.2 EPR Packaging System National Programme for Data Validation

As part of achieving the recycling and recovery targets set by legislation, CONAI, the Packaging Material Consortia and the CONIP Self-compliant EPR Organisation have voluntarily set up a management system as a further guarantee for the institutions to achieve the set targets. This management system was set up in 2006 under the name "Obiettivo riciclo" and comprises a series of activities to which CONAI, the Packaging Material Consortia and the CONIP Self-compliant EPR Organisation submit themselves. The whole validation process – including the procedures used to determine the data on material placed on the market, recycling and recovery – is audited by an independent third party.

Participation in the project requires a strong commitment both in operational and economic terms, and involves all actors in the recycling chain at different levels.

In addition to the purely documentary "on-site" audits at the Consortia premises, "witness" audits were conducted in the field at several treatment and recycling plants, representing all packaging materials. The activities conducted in 2023 and 2024 for 2022-2023 data were successfully concluded, revealing some points for improvement. The outcome of these activities is summarised in the assessment issued to CONAI during the audit carried out by the certifying body[100].

100 National Programme for Data Validation – CONAI.

WITNESS ACTIVITIES

Member	2023	2024
RICREA	Ecoacciai S.p.A., Bandinelli rottami S.p.A.	GARM S.r.l.
CiAI	Intals S.p.A., Caris VRD	Profilglass S.p.A., Seruso S.p.A.
Comieco	Lucart S.p.A., Gargiulo S.r.l.	Cartiere SACI-PM3, G.A.I.A S.p.A.
Rilegno	Ecosan S.r.l.	Focacity Pallets
Corepla	Seruso S.p.A.	IBLU S.r.l. San Giorgio
Biorepack	Biociclo S.r.l.	Compostaggio Cremonese S.r.l.
CoReVe	Zignago Vetro S.p.A., REA S.r.l.	Vetreria Etrusca S.p.A. Altare
CONAI	Mantova Ambiente – TEA S.p.A.	A2A S.p.A. Corteolona
CONIP	Braghieri Plastic S.r.l.	Agricola imballaggi

As of 2023, the National Programme for Data Validation has been expanded with the introduction of an additional, optional activity for members: the "Focus Area". This specific assessment focuses on a regulatory change or a topic of particular relevance, which will be monitored regularly with the aim of fostering continuous improvement. Participation in the Focus Area was almost total, and the table below summarises the topics covered by the specific assessment.

FOCUS AREA 2023

Member	Date	Topic
RICREA	12/2023	"Combustion monitoring" procedure to determine recycled packaging from waste-to-energy ash as per Annex III of EU Decision 665/19.
CiAI	03/2024	Validation of interception rate and recycling of beverage cans.
Comieco		Definition in progress.
Rilegno	02/2024	Evaluation of the appropriateness of redefining the number and frequency of product analyses for determining the moisture content of packaging.
Corepla	05/2024	Determination of recycling at the calculation point as defined by EU Decision 665/19, Chemical Recycling and "Secondary Reducing Agent" (SRA).
	10/2024	Monitoring procedure for packaging recycled through market management by MUD (Single Declaration Model).
Biorepack	02/2024	Evaluation of the appropriateness of redefining the number and frequency of product analyses for determining the moisture content of packaging.
CoReVe	02/2024	Monitoring and developments of "glass sand" product.
CONAI	*Definition in progress*	Update to the procedure for determining and transmitting national market placement, recycling and recovery data to the Institutions.
CONIP	01/2024	Monitoring systems for quotas intercepted in urban areas based on the new selection agreement.

Although the National Programme for Data Validation demonstrates a high degree of maturity and completeness, CONAI intends to outline new opportunities for improvement in parallel with the Consortium's increasingly inclusive role in packaging waste EPR systems. Specifically, this is represented not only by the involvement of all EPR systems relating to packaging waste but above all by the definition of a standardisation project that clearly shares and defines the principles of the Programme and that cultivates the development of skills that are increasingly necessary in this context. The new UNI 11914 standard aims to define a standard process for validating the procedures for determining placement on the market, recycling and recovery data for packaging waste from EPR systems, and it has been used as the project's regulatory reference for activity in 2024.

THE NEW UNI 11914 STANDARD

Management system for determining the quantities of packaging waste generated, recycled and recovered with energy production

On 20 June 2023, the **UNI 11914 standard** was published, entitled ***Management System for Determining the Quantities of Packaging Waste Produced, Recycled and Recovered with Energy Production***. It defines a standard process for verifying the procedures for determining market placement, recycling and recovery data for packaging waste from EPR systems, and thus guarantees the highest quality of the data provided in conformity with current legislation.
The standard therefore defines the requirements that an organisation must meet to guarantee an adequate level of quality of the data communicated to the institutions.
This is an excellent opportunity for the application of a new Management System that takes into consideration all relevant factors, to guarantee not only suitable safeguards for legislative requirements, but also adequate references to the methodologies and procedures applicable to the determination, transmission and evaluation of data.
The new standard encourages Organisations to continuously improve the quality level of the data transmitted in pursuit of the objectives in force, and represents the reference standard for data compliance for EPR (Extended Producer Responsibility) schemes and their respective Organisations.
This goal was the result of a project coordinated by UNI's "packaging and environment" working group, on a project put forward by CONAI based on the experience of the "Obiettivo Riciclo" project.

5.2.3 Cooperation with ISPRA on reporting

As part of the revenue sources for the 2021-2027 EU budget, a levy calculated based on non-recycled plastic packaging waste has been introduced as of 1 January 2021. Essentially, a uniform levy rate of €0.80 per kg will be applied to the weight of non-recycled plastic packaging waste, including specific equalisation mechanisms to avoid excessive contributions from less wealthy Member States[101].

In order to increase understanding of the methodologies and processes involved in generating the data, Eurostat is conducting voluntary informal audits, prior to those provided for in Regulation (EU, Euratom) 2021/768, to verify the data reported by Member States.

The informal visits aim to acquire information on the application of the calculation methods provided by the regulations, thus bringing the reporting into line with the level of detail that will be used for the final data.
For Italy, the informal visit took place on 20 June and 7 September 2023, and saw, in addition to the participation of CONAI and ISPRA, the presence of representatives of the Commission (DG Budget and DG Environment), Eurostat and two observer countries (France and Malta), as well as the relevant Ministries (Ministry of the Environment and Energy Security, Ministry of Economy and Finance) and ISTAT. The visit was structured in three parts: the first concerning the financial aspect; the second concerning national legislative aspects; the third (much more substantial) concerning the data source and calculation methods.

In addition, in order to verify correct EU reporting of the information reported by Member States, CONAI supported ISPRA in a new informal audit conducted by the European Court of Auditors in November 2023. The audit, which involved the collaboration of Corepla and Montello SpA in addition to the participation of the various competent institutional bodies (MEF, MASE), did not produce any findings of any kind, underlining once again the robustness of the multi-level processes underlying the reporting of information.

The aggregated results of this analysis across Member States have been made available by the European Commission in a report available online[102]. Italy, one of the three countries audited together with the Netherlands and Romania, was one of the countries with the smallest differences between the forecast quantities and the final quantities presented in the annual statements (Figure 11 of the report[103]), testifying to the robustness of the reporting system.

101
commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/revenue/own-resources/plastics-own-resource_en

102
European Court of Auditors, *EU revenue based on non-recycled plastic packaging waste.*

103
European Court of Auditors, *EU revenue based on non-recycled plastic packaging waste.*

6

The System of firms for the good of the environment

6.1 The role of the EPR Fee

The CONAI EPR Fee is the way in which CONAI distributes the cost of separate collection, recycling and recovery of packaging waste between producers and users. These costs, based on the provisions of Legislative Decree 152/06, are allocated “in proportion to the total quantity, weight and type of packaging material placed on the national market”.

The EPR Fee functions as a feeder for the entire system: funds collected on behalf of Packaging Material Consortia are redistributed to public bodies and operators in the waste collection and processing chain to fulfil the principle of extended responsibility defined by the legislator.

The value of the CONAI EPR Fee and its modulations is determined by the need for the fee to be adjusted to the economic and operating conditions present in a given time period. The EPR Fee is determined by CONAI for each packaging material, aiming to keep it as low as possible, without jeopardising the continuity of collection and recycling of packaging waste and the stability of the relevant financial flows, while taking the Packaging Material Consortia’s asset reserves into account. Where possible, the value of the EPR Fee is modulated for individual products or groups of similar products of the same material, considering particular elements such as: reusability, ease of sorting, recyclability, prevalent destination circuit and chain deficit.

The CONAI EPR Fee is the initial factor that determines the value creation of the System.

Through the EPR Fee, CONAI member firms reinforce their commitment to protect the environment and promote a circular economy.

ECONOMIC DIAGRAM

EPR FEE VALUES IN 2023 AND 2024

Period	Steel	Aluminium	Paper	Wood	Plastic	Biodegradable and compostable plastic	Glass
2023	**5.00**	7.00	*Band 1:* **5.00/35.00** *Band 2:* **25.00/55.00** *Band 3:* **115.00/145.00** *Band 4:* **245.00/275.00** [1]	**8.00**	*Band A1.1:* **20.00** *Band A1.2:* **60.00/90.00**[2] *Band A2:* **150.00/220.00**[2] *Band B1.1:* 20.00 *Band B1.2:* 20.00 *Band B2.1:* **350.00** *Band B2.2:* **410.00/477.00**[2] *Band B2.3:* **555.00** *Band C:* 560.00	**170.00**	**23.00/15.00**[3]
2024	5.00	**7.00/12.00**[4]	*Band 1:* **35.00/65.00** *Band 2:* **55.00/85.00** *Band 3:* **145.00/175.00** *Band 4:* **275.00/305.00** [5]	**7.00**	*Band A1.1:* **20.00/24.00** *Band A1.2:* 90.00 *Band A2:* 220.00 *Band B1.1:* **20.00/224.00** *Band B1.2:* **20.00/233.00** *Band B2.1:* **350.00/441.00** *Band B2.2:* **477.00/589.00** *Band B2.3:* **555.00/650.00** *Band C:* **560.00/655.00** [6]	**170.00/130.00**[7]	15.00

1
As of 1 October 2023, the **Paper** Fee increased from €5.00/t to €35.00/t for Band 1, from €25.00/t to €55.00/t for Band 2, from €115.00/t to €145.00/t for Band 3, and from €245.00/t to €275.00/t for Band 4.

2
As of 1 July 2023, the **Plastic** Fee increased from €60.00/t to €90.00/t for Band A1.2, from €150.00/t to €220.00/t for Band A2, and from €410.00/t to €477.00/t for Band B2.2.

3
As of 1 October 2023, the **Glass** Fee increased from €23.00/t to €15.00/t.

4
As of 1 April 2024, the **Aluminium** Fee will increase from €7.00/t to €12.00/t.

5
As of 1 April 2024, the **Paper** Fee will increase from €35.00/t to €65.00/t for Band 1, from €55.00/t to €85.00/t for Band 2, from €145.00/t to €175.00/t for Band 3, and from €275.00/t to €305.00/t for Band 4.

6
As of 1 April 2024, the **Plastic** Fee will increase from €20.00/t to €24.00/t for Band A1.2, from €20.00/t to €224.00/t for Band B1.1, from €20.00/t to €233.00/t for Band B1.2, from €350.00/t to €441.00/t for Band B2.1, from €477.00/t to €589.00/t for Band B2.2, from €555.00/t to €650.00/t for Band B2.3, and from €560.00/t to €655.00/t for Band C.

7
As of 1 April 2024, the **Biodegradable and Compostable Plastic** Fee will increase from €170.00/t to €130.00/t.

Source: CONAI, Fee Guide 2024.

Changes shown in bold.

6.2 The CONAI System balance sheet

The year 2023 closed with an operating deficit, bringing the CONAI EPR Organisation's reserves at the end of the year to €468 million, amounting to 36% of the year's total costs. [104]

TOTAL REVENUES consisted of EPR Fee, sale of materials and other revenues, making for a total of €1,059,849,000, down 24% from the previous year.

- Fee revenues (€718,447,000) decreased by €127,481,000 and accounted for 8% of total revenues.
- Revenues from sale of materials (€290,745,000) decreased by €199,824,000 and accounted for 27% of total revenues.
- Other revenues (€50,657,000) include penalties, miscellaneous and financial income. [105]

TOTAL COSTS include delivery, recycling, energy recovery and facility operation, adding up to a total of €1,289,531,000, down about 4% compared to the previous year.

- Delivery costs (€695,850,000) accounted for 54% of total costs and decreased by €8,663,000 due to lower quantities delivered (-9%) as unit costs increased (+8%).

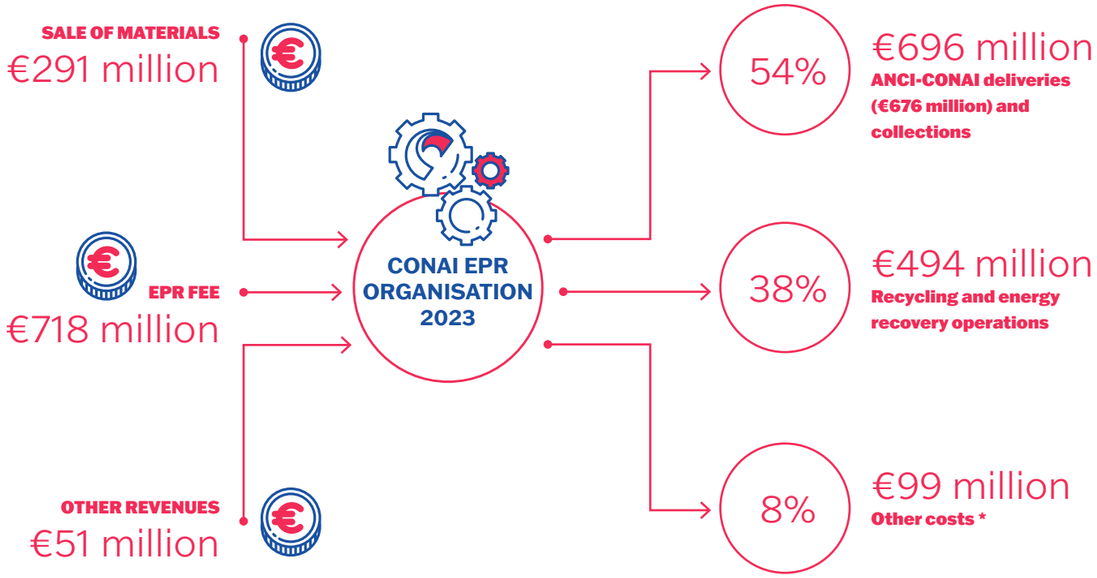
104
Management Report and Financial Statements 2023 (approved by the Board of Directors on 21 March 2023).

105
General Programme for the Prevention and Management of Packaging and Packaging Waste 2023.

- Recycling costs (€406,276,000) include:
  - sorting costs (+€31,495,000)
  - recycling fees (+€20,757,000)
  - logistics (+€3,897,000)
  - product analyses (+€3,639,000)
  - lower costs for disposal of foreign fractions (-€14,962,000)
- Energy recovery costs (€88,182,000) increased by 13% mainly due to volumes (+4%) and unit costs (+9%).
- Structural operating costs (€99,223,000) include personnel costs, overhead costs, research and development costs, depreciation and amortisation, local project costs, communication costs, + €13,637,000 due to higher communication costs, staff costs and general costs, and lower bad debt write-downs.

ECONOMIC RESULTS OF THE SYSTEM

Due to the negative trend in the sales prices of secondary raw materials and the reduction in average annual contributions, total revenues were not sufficient to cover costs, resulting in an operating deficit with a consequent decrease in the equity reserve.



* Other costs include: personnel costs, overheads, research and development costs, depreciation and amortisation, local project costs and communication costs.

Source: CONAI, Final General Report 2023.

6.3 Prevention of waste generation

6.3.1 Structural measures: Fee modulation for plastic and paper packaging

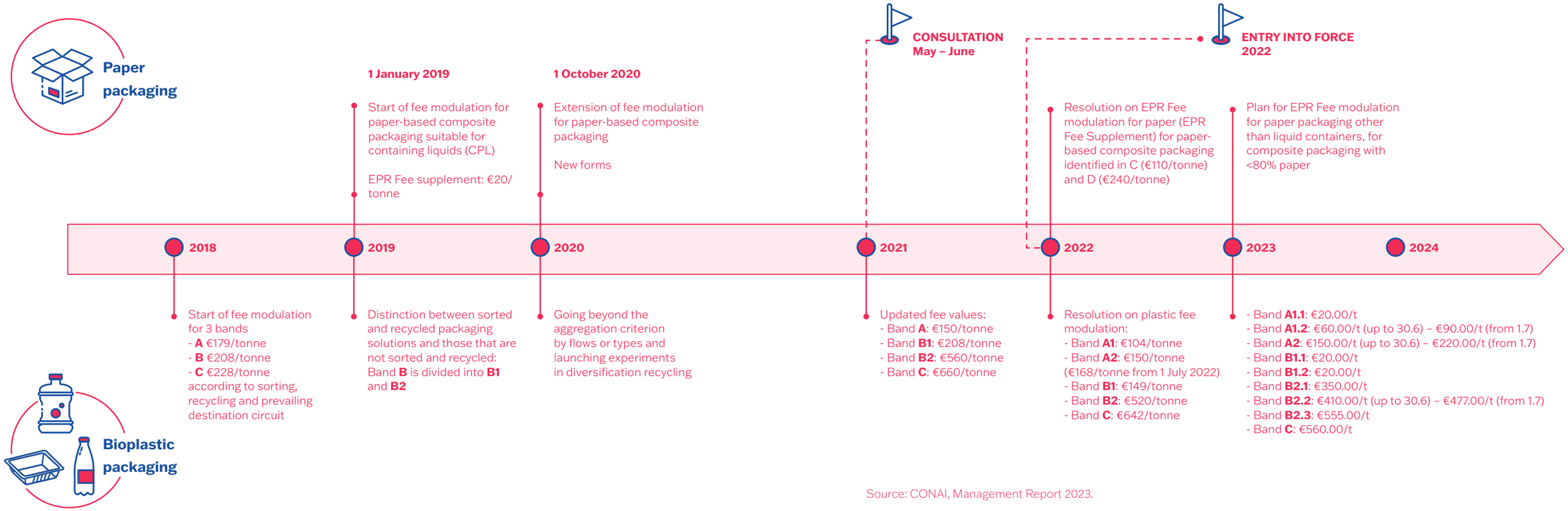
Among the structural prevention measures is the definition of the CONAI EPR Fee, which is based on the “inverted pyramid” hierarchy. This lever is only applied to firms that are members of the CONAI System.

As of 2018, a modulation logic for the CONAI EPR Fee was introduced according to how easy the packaging is to sort and recycle; a logic that anticipated the provisions of the Circular Economy Package of Directives on “extended producer responsibility”.

The fee modulation has been:

- first introduced in the plastic packaging chain, on a path that saw the full extent of the fee modulation come into effect in 2019, the year that the lists of packaging and the relevant fee brackets were also made more robust and refined to make the fee even more meaningful and precise;
- extended to the paper packaging chain for an initial application from 2019, which covered “cellulosic packaging suitable for containing liquids” and then extended to other types of cellulosic-based composite packaging other than beverage cartons.

EPR FEE MODULATION



Source: CONAI, Management Report 2023.

6.3.2 Structural measures: Fee modulation for reusable packaging

With the aim of achieving a more eco-sustainable management of packaging waste, CONAI has paid particular attention to packaging that is structurally designed for multi-year use. For this, it reserves incentivised or simplified formulas for the application of the EPR Fee, with the constant involvement of entrepreneurial associations and companies representing the industrial or commercial sectors concerned in each case.

Since the start of the CONAI-Packaging Material Consortia system, the following cases have been completely exempt from the EPR Fee:

- for reusable packaging used for the movement of goods within a production cycle, within an **industrial plant or logistics hub**. This exemption was then extended from 2012 to the handling of goods between several local units (production sites, logistic poles, points of sale) belonging to the same legal entity or industrial or commercial group/network;
- for **gas containers** of various types, if refillable.

Since 2011, **reusable bags** and "trolley bags" for supermarkets, which have the same substantial functions, benefit from the same full exemption from the fee.

For the following types of packaging, there are also considerable contribution discounts through a mechanism for reducing the weight to be subjected to the CONAI EPR Fee:

- **wooden pallets returned to the market** (used, repaired or simply sorted) by sector operators carrying out repair activities, albeit secondary (40% abatement from 2013);
- **wooden pallets** (new or returned to the market) if produced in accordance with codified specifications within "controlled" production circuits (60% abatement from 2013 to 2018). With the aim of further incentivising the reuse circuit for these pallets, the abatement percentage is increased from 60% to 80% from 2019 and further increased to 90% from 2022. Also

from 2022, a new simplified procedure (as an alternative to the ordinary procedure) has been introduced for repairers of wooden pallets conforming to codified specifications, owned by third parties (CONAI circular of 31 March 2022);

- reusable packaging (used in particular controlled and monitored return circuits or systems) such as **glass bottles** (85% abatement), **plastic crates** and **baskets** (93% abatement) from 2012.

For all reusable packaging used in strictly controlled return systems (such as rental or through commercial forms with non-transfer of ownership), since 2012 another form of incentive (as an alternative to the others) has been envisaged through the possibility of suspending payment of the EPR Fee until the packaging completes its reuse cycle or is otherwise dispersed or out of the circuit.

A different incentive is reserved for industrial packaging, such as **multi-material (steel-plastic-wood)**, **plastic or steel tanks**, if they are regenerated and returned to the market within Italy.

In this case, the incentive represents both a considerable simplification of the formulas for applying and declaring the EPR Fee (on the number of pieces sold rather than on the weight of the individual components and relevant accessories) and through the simultaneous recognition of periodic fees by the Packaging Material Consortia concerned to regenerators/recyclers for the activity that they perform on the same packaging sent to recycling/recovery.

Lastly, it should be noted that the Working Group for Simplification is constantly engaged in analysing the types or flows of packaging worthy of incentives or simplifications, devoting particular attention to reusable packaging for which new incentive formulas should be reserved or existing ones extended.

The circulars relating to the main procedures mentioned above can be found in the Appendix and are available at www.conai.org.

6.3.3 | Pensare Futuro ("Thinking the Future"): Services for firms

Among CONAI's duties, established by the current Legislative Decree 152/06 as amended, is to encourage companies to promote a culture oriented towards packaging eco-design and the prevention of environmental impact, with attention to all phases of the life cycle. CONAI supports firms on this path by providing them with practical tools that consider all elements of packaging sustainability.

The "Pensare Futuro" project includes the packaging eco-design tools made available by CONAI for its member firms.

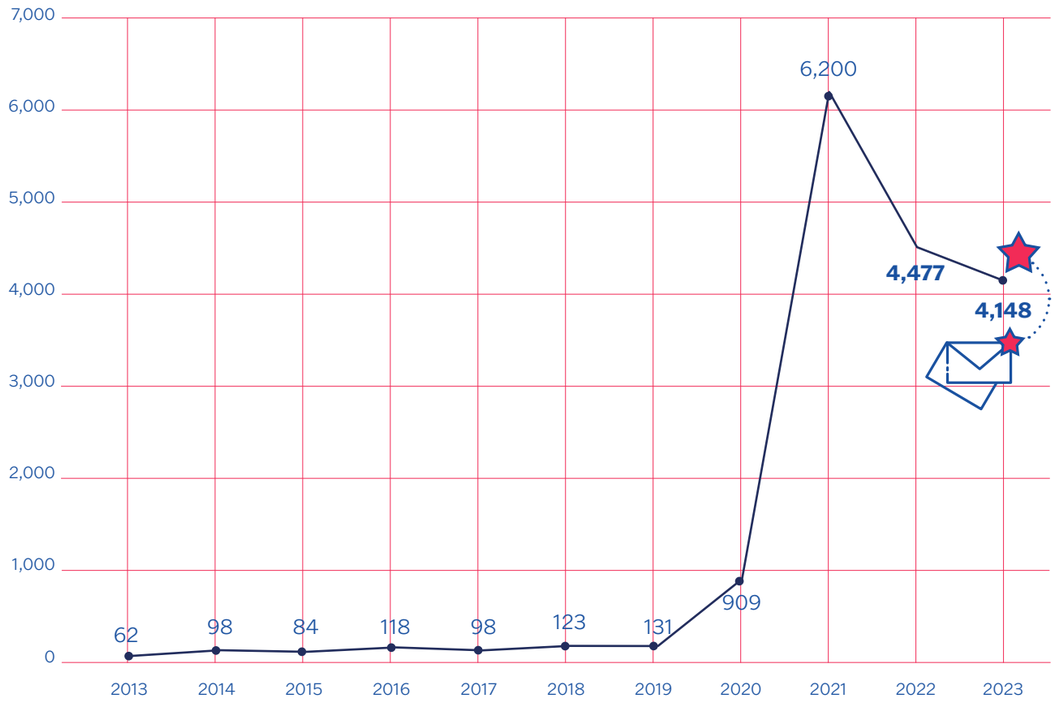
PENSARE FUTURO
INSIEME A CONAI PER LA PROGETTAZIONE SOSTENIBILE

- **E-PACK**
- **ECOPACK**
- **CONAI EcoD Tool**
- **Design for Recycling ("Progettare riciclo")**
- **E-label Tool (E-tichetta)**
- **DifferENTI**

6.3.3.1 | E-PACK

During the year 2023, there was a decrease in the number of requests handled by the email address. The decrease in requests received and processed can be interpreted as an initial result of the many activities promoted by CONAI aimed at increasing the awareness of companies on this issue, the dissemination of information, and a clearer regulatory framework in general on the subject of labelling.

NUMBER OF E-PACK REQUESTS HANDLED BY THE EPACK@CONAI.ORG INBOX



Source: CONAI, Management Report 2023.

6.3.3.2 | Call for Eco-design Projects – ECOPACK

The CONAI Call for Eco-design Projects – ECOPACK is an important observatory of how companies promote the eco-design of packaging. It identifies best practices and is sponsored by the Ministry of the Environment and Energy Security.
In 2023, 219 projects submitted by 108 companies were supported.

CONAI CALL FOR ECO-DESIGN PROJECTS
CONAI REWARDS THE MOST SUSTAINABLE PACKAGING SOLUTIONS

ecoPACK 2023
BANDO CONAI PER L'ECODESIGN

2023 EDITION

373 cases presented

108 prize-winning firms

Firms attentive to the efficient use of resources with measures that act on prevention at source:

- use of recycled material
- saving raw material

There is a growing focus on the recyclability of packaging placed on the market.

219 projects incentivised

Source: CONAI, Management Report 2023.

The potential of prevention

The main evaluation tool of the CONAI Call for Proposals is the "Eco-Tool" calculation tool, which uses the two different packaging solutions (before and after) to develop three specific indicators to quantify the environmental benefits of the new solution. The indicators are:

- GER (Gross Energy Requirement – total energy consumption): indicator, expressed in MJ (megajoules), of the total energy used throughout the life cycle of a functional unit of the product/service;
- GWP (Global Warming Potential): indicator, expressed in mass of CO_2 equivalent, assessing the emission of all gases contributing to the greenhouse effect together with CO_2 according to IPCC characterisation factors;
- Water consumption: indicator, expressed in litres (l) or kilograms (kg), assessing the amount of process water used in the production and marketing of consumer goods, which does not return, downstream of the process, to the source from which it came. This is known as the "blue water" share, a component of the "water footprint" indicator, which is calculated according to www.waterfootprint.org.

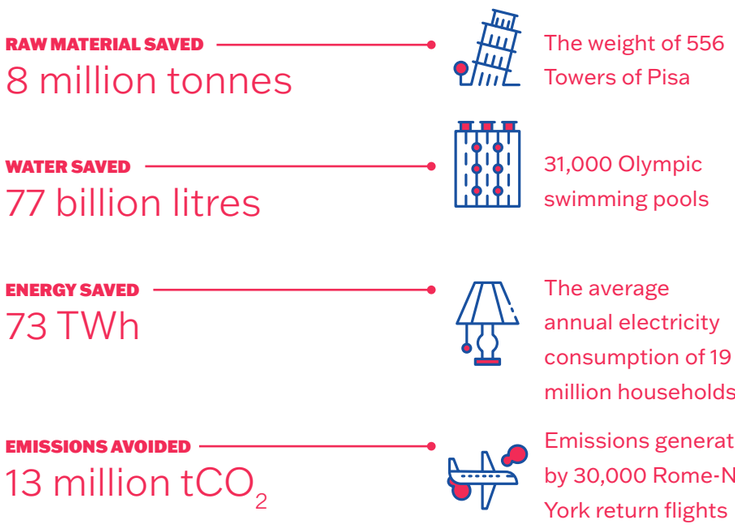
106
Due to the purely simulative nature of the study, however, it is not possible to draw a time series due to the high variability of the solutions presented from year to year. For completeness, although not significant, the percentage changes compared to the 2022 simulation are reported:
- Raw material saved: + 5%
- Water saved: – 67%
- Primary energy saved: – 20%
- Emissions avoided: – 30%

It is therefore possible to process data from CONAI's Eco-Tool in an aggregated manner in order to estimate the potential environmental benefits of the dissemination of best practices implemented by producers and users of packaging in Italy of these types.

For each type of packaging, the average potential environmental benefits that could be generated through "amplification" of eco-design levers were calculated for all packaging in the typical basket placed on the market in Italy. These improvements were then multiplied by the number of units sold, based on an analysis of packaging placed on the market by material and product category for the year 2023[106].

The analysis was based on a sample of 331 eco-design actions.

ENVIRONMENTAL BENEFITS OF PREVENTION ACTIVITIES ESTIMATED BY ANALYSIS



Source: Data generated by Life Cycle Engineering from CONAI data.

6.3.3.3 | CONAI EcoD Tool

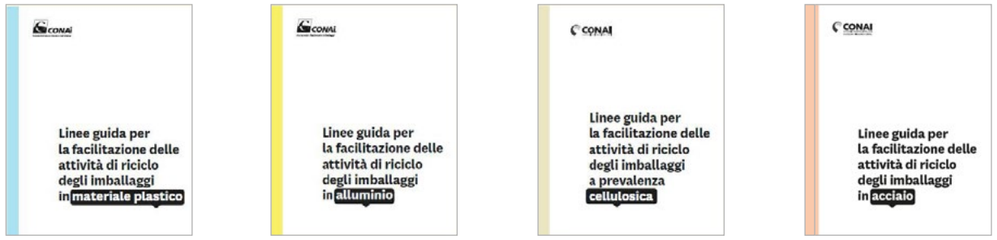
The EcoD Tool was made available **from February 2020** as a free packaging eco-design tool for member firms. Through this channel, it is possible to receive suggestions for improvement actions at the design stage, allowing packaging manufacturers and users to assess the environmental impacts, related to the different life cycle phases of different packaging solutions. The EcoD Tool is updated in a timely manner, particularly in terms of information on packaging end-of-life, keeping in step with the development of the recycling industry. In the coming years, the intention is to make the best use of the tool and the indicators, so that the EcoD Tool becomes an effective tool for working with, evaluating and measuring the circularity and recyclability of packaging, both for firms and other stakeholders.

6.3.3.4 | Design for Recycling: Design for Recycling Guidelines

107
www.progettarericiclo.com

To support companies that intend to take action on the recyclability of packaging in the design phase, in 2016 the web platform "Design for Recycling"[107] was created and made available in Italian and English. It collates the CONAI guidelines on design for recycling of packaging, created with the collaboration of the Packaging Material Consortia and the main Italian Universities active in design matters.
The project envisages the development of guidelines for each of the packaging materials. The guidelines currently available are for packaging made of:
- plastic, with the collaboration of Corepla and the IUAV University of Venice;
- aluminium, with the participation of CiAl and the Department of Architecture and Design of the Polytechnic University of Turin;
- paper, developed with Comieco and the "Giulio Natta" Department of Chemistry, Materials and Chemical Engineering of the Polytechnic University of Milan;
- steel, with the collaboration of RICREA and the University of Bologna.

DESIGN FOR RECYCLING



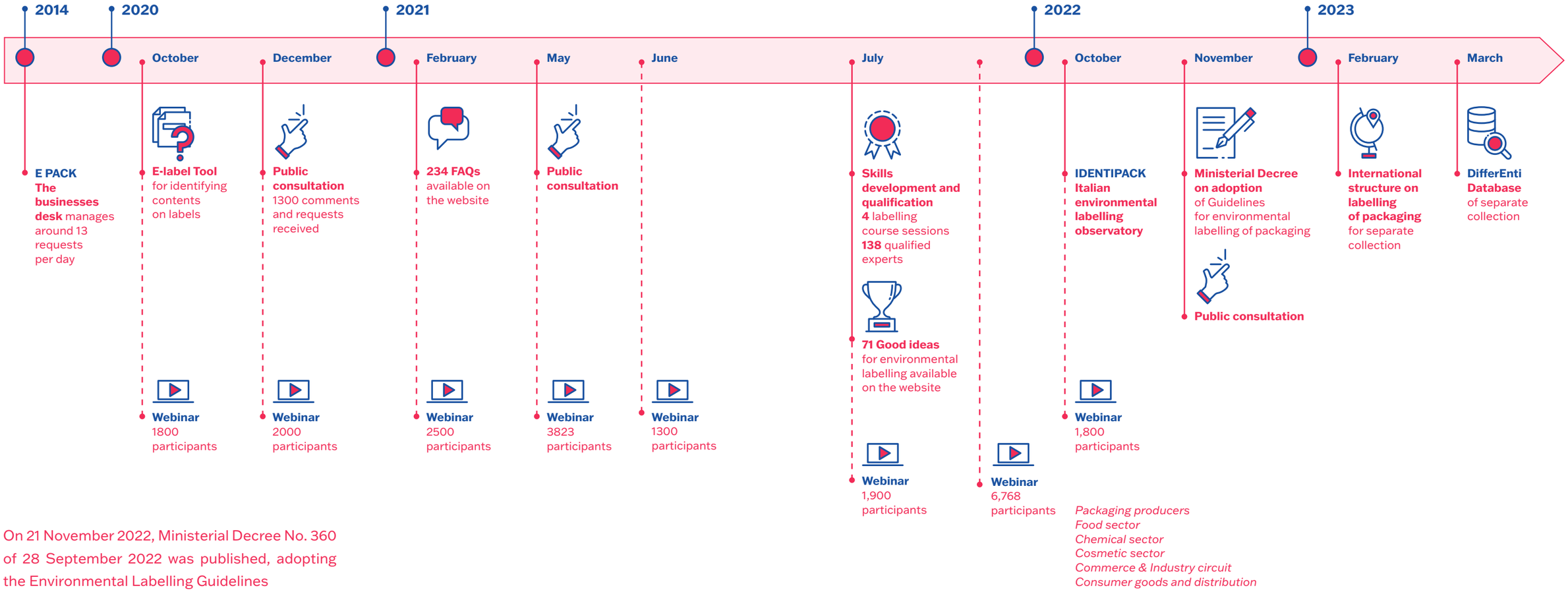
Published in 2016
IUAV University of Venice

Published in 2018
Polytechnic University of Turin

Published in 2020
Polytechnic University of Milan

Published in 2024
University of Bologna

CONAI INITIATIVES ON ENVIRONMENTAL LABELLING



On 21 November 2022, Ministerial Decree No. 360 of 28 September 2022 was published, adopting the Environmental Labelling Guidelines for the correct implementation of packaging labelling obligations by responsible parties.

Source: CONAI, Management Report 2023.

6.3.3.5 | www.etichetta-conai.com website

In order to make the information on the labelling more accessible and complete, CONAI has continued to constantly update the multilingual website dedicated to environmental labelling[108] with the following publications:

- Useful documents, including Guidelines on Mandatory and Voluntary Environmental Labelling and application of the main product sectors;
- E-label tool[109], useful for identifying content for mandatory and voluntary environmental labelling. In 2023, the site was viewed by 49,859 users from different parts of the world, including 47,350 first-time users (new users);
- Checklists to support firms in identifying responsibilities and tasks for each stakeholder in the supply chain;
- 80 Good Ideas for environmental labelling;
- All the CONAI Academy webinars – during 2023, 11 webinars were held for firms, associations and public bodies on various topics;
- Identipack Observatory, with the aim of monitoring the adoption of environmental labelling on consumer packaging;
- More than 260 FAQs;
- List of environmental labelling experts who have completed the "Packaging Environmental Labelling Expert" course, who companies can refer to for direct advice.

108 www.etichetta-conai.com

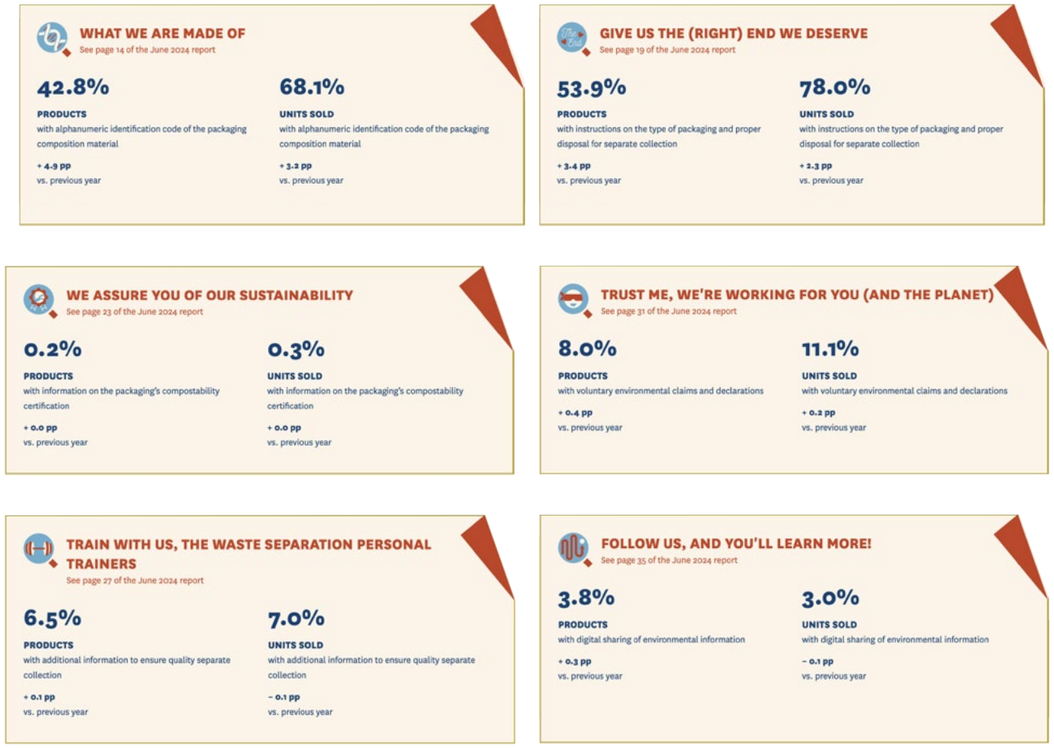
109 http://e-tichetta.conai.org

IDENTIPACK
www.osservatorioidentipack.it

October 2022 saw the launch of IdentiPack, the Packaging Environmental Labelling Observatory of CONAI and GS1 Italy. The aim of the study is to monitor environmental information shown on packaging, which is inherent to the packaging itself. Some of this is compulsory by law, while some is voluntary, such as marks and certifications, or suggestions for quality separate collection.

Every six months, the Observatory takes a snapshot of the situation of products available on the shelves of hypermarkets and supermarkets in Italy and purchased by consumers, and provides an in-depth analysis on various aspects.

KEY FIGURES FOR IDENTIPACK IN THE SECOND HALF OF 2023



Source: CONAI, Management Report 2023.

GUIDELINES FOR IMPLEMENTATION
in the main product sectors

Over the course of 2022, CONAI drew up and published a series of application guidelines, each dedicated to a specific product sector, which collect practical and application examples of environmental labelling of packaging.

One year after CONAI Academy Week, application guidelines on packaging labelling were published on www.etichetta-conai.org for the following sectors:

- Packaging production (in cooperation with RICREA, CiAI, Biorepack, Comieco, Rilegno, Federlegno, Corepla, CoReVe)
- Food products
- Products from the chemical sector (in cooperation with Federchimica)
- Products from the cosmetic sector (in cooperation with Cosmetica Italia)
- Retail products and consumer goods (in cooperation with Federdistribuzione, CNA, Confartigianato, Confcommercio)
- Tobacco products (in cooperation with Unindustria)
- Self-adhesive tapes (in cooperation with Assogomma)
- Electrical and electronic products (in cooperation with Erion Packaging)

DifferENTI
Separate collection in Italian municipalities online

On May 4, 2023, the DifferENTI web platform (www.differenti-conai.com) was presented at the "Green Med Symposium" in Naples, Italy, providing information on the separate collection methods and systems of Italian municipalities. The database can be used by companies or service providers who wish to develop digital systems to convey location-based information about separate collection of packaging.

The website also provides information on prevention actions initated by those local authorities.

In the first quarter of 2024, new information was added regarding the colours used for separate collection bins in various Italian cities. By the end of 2024, the platform will also publish information on the different selective collection methods in Italy (e.g. "Mangiaplastica" Digital Recycling stations).

6.4 Support for qualitative and quantitative growth of separate collection

In order to achieve the recycling and recovery targets, CONAI operates on several fronts by carrying out activities related to the development of quality separate collection under the ANCI-CONAI Framework Agreement, by supporting research and development projects to start recycling even the most complex packaging waste fractions and by organising events and communication campaigns in local areas dedicated to the importance of separate collection for recycling. These activities are accompanied by development by the Packaging Material Consortia of a network that includes treatment, repair, regeneration and recycling plants for commercial and industrial packaging.

SEPARATE COLLECTION AGREEMENTS BY TYPE

The ANCI-CONAI Framework Agreement is the instrument through which the CONAI EPR Organisation guarantees that Italian municipalities collect packaging waste separately and send it to recycling and/or recovery. Through this Agreement, municipalities that collect steel, aluminium, paper, plastic, biodegradable and compostable plastic and glass packaging waste in a separated manner have the possibility to sign option of signing ANCI-CONAI agreements with the individual Packaging Material Consortia, directly or through a third party delegated by them. The agreements commit the municipalities to deliver the collected packaging waste the Consortia, which take it and send it to recycling, paying fees to the municipalities to cover the costs incurred in carrying out the separate collection.

6.4.1 Dissemination of the ANCI-CONAI Framework Agreement and results of the Agreement

Dissemination of the agreements remained at a high level of local coverage at the national level in 2023, confirming that the Framework Agreement is an effective tool to support and sustain municipalities.

DISSEMINATION FRAMEWORK AGREEMENT AT THE NATIONAL LEVEL

Packaging Material Consortia	Inhabitants reached	Population covered	Municipalities served	Municipalities served
	MILLIONS	%	No.	%
RICREA	50.2	85	5,968	76
CiAI	44.8	76	5,481	69
Comieco	56.1	95.3	7,095	89.8
Rilegno	n/a	n/a	n/a	n/a
Biorepack	43.6	74.1	4,624	58.5
Corepla	56.3	96	7,242	92
CoReVe	44.8	76.1	5,736	72.6

Source: Packaging Material Consortia.

In 2023, Italian municipalities delivered over 4.6 million tonnes of packaging waste to Packaging Material Consortia, a decrease of 4.72% compared to 2022, largely due to the glass sector's exit from the Framework Agreement conventions. Net of those, deliveries are increasing, confirming the contribution of the CONAI EPR Organisation to the proliferation of separate collection[110]. These decreases are generally not due to a decrease in collection

110 The Technical Annex on Wood in the last five-year ANCI-CONAI five-year remains in a status of non-renewal, and so for 2023 too, agreements have not been formalised with the Municipal Administrations or service managers for urban hygiene delegated by them.

volumes, which are on the rise, but rather to the increase in the market quotations of materials, which has led many managers to prefer the destination of material towards the market, confirming the market-support role of the CONAI system in guaranteeing the achievement of national objectives.

PACKAGING WASTE DELIVERED UNDER THE ANCI-CONAI AGREEMENT

Packaging Material Consortia	Final results 2022		Municipalities served		Delta
	KTONNES	KG/PERSON	KTONNES	KG/PERSON	%
RICREA	131.4	2.57	144.4	2.88	9.9
CiAI	16.50	0.35	16.94	0.38	2.6
Comieco	1,307	23.76	1,517	27.04	16.1
Rilegno	n/a	n/a	n/a	n/a	n/a
Biorepack	42.9	1.13	43.86	0.78	2.2
Corepla[1]	1,281.6	21.95	1,284.0[2]	22.81	0.2
CoReVe	2,118	37.06	1,660	37.05	-21.62
Total	**4,897**		**4,666**[3]		**-4.72**

Source: Packaging Material Consortia.

PACKAGING WASTE DELIVERED UNDER THE ANCI-CONAI AGREEMENT PER MACRO AREA

Packaging Material Consortia	North			Centre			South		
	2022	2023	Delta	2022	2023	Delta	2022	2023	Delta
	KTONNES	KTONNES	%	KTONNES	KTONNES	%	KTONNES	KTONNES	%
RICREA	65.84	74.97	13.88	22.93	23.59	2.9	42.65	45.82	7.42
CiAI	9.03	10.05	11.28	1.52	1.38	-9.21	5.95	5.51	-7.43
Comieco	553.60	721.67	30.36	296.1	314.44	6.19	457.7	480.90	5.1
Rilegno	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Biorepack	610.31	614.00	0.60	258.08	243.53	-5.6	423.46	426.48	0.71
Corepla	21.76	22.25	2.23	9.61	9.56	-0.51	11.57	12.05	4.17
CoReVe	1,191	933	-21.66	371	296	-20.22	557	431	-22.62
Total	**2,452**	**2,376**	**-3.08**	**959**	**888**	**-7.38**	**1,498**	**1,402**	**-6.45**

Source: Packaging Material Consortia.

1
Corepla's figures for separate collection and packaging in 2022 were updated following the adjustment of the actual CPL PET volumes placed on the market by Corepla and Coripet.

2
The quantities also include 4,315 tonnes of collection pertaining to the CONIP Consortium.

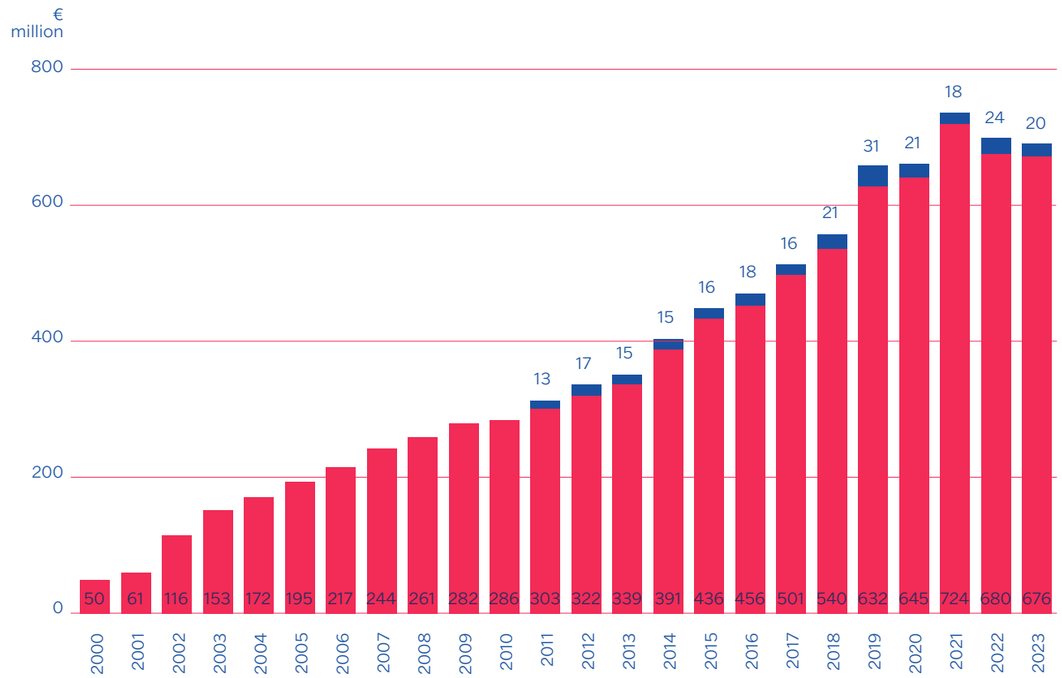
3
Net of the glass supply chain, deliveries to the CONAI EPR Organisation have risen.

Between 2001 and 2023, the CONAI System paid out more than €8.6 billion to municipalities/service managers to support separate collection.

6.4.2 | Payments made to municipalities

The payment to municipalities – through the Packaging Material Consortia – is the most important instrument through which CONAI promotes the growth of separate collection of packaging waste. The amount of the payments made to municipalities party to the agreement, in return for the packaging waste delivered, increased considerably between 2000 and 2023.

PAYMENTS SUPPORTING SEPARATE COLLECTION



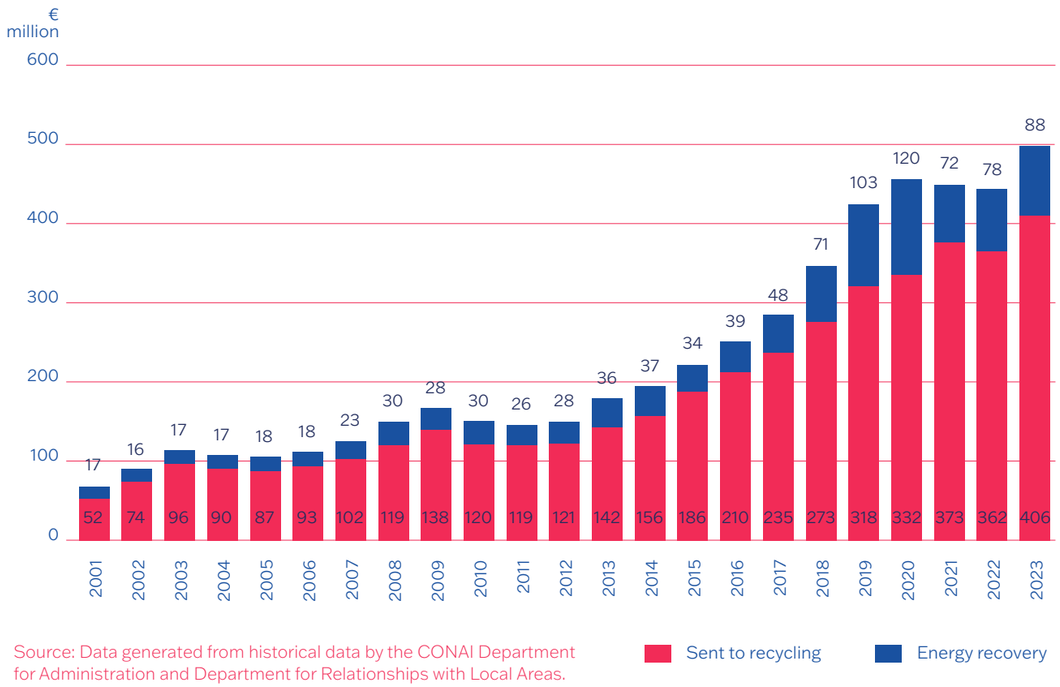
Source: Data generated from historical data by the CONAI Department for Administration and Department for Relationships with Local Areas.

Between 2001 and 2023, the CONAI System paid out more than €5 billion to preparation plants for recycling and recovery.

6.4.3 The contribution paid to recycling and recovery operators

The contribution made to sector operators – through the Packaging Material Consortia – is the instrument through which CONAI promotes the development of the sector for recycling and recovery of packaging waste. The amount of recycling and energy recovery costs paid to operators increased significantly between 2001 and 2023. This item also includes costs incurred for the creation of new recycling streams and for experimental activities promoted by Packaging Material Consortia.

COSTS OF RECYCLING AND RECOVERY



Source: Data generated from historical data by the CONAI Department for Administration and Department for Relationships with Local Areas.

6.4.3.1 ANCI-CONAI Call for Local Communication Projects

Through the Call for Local Communication Projects, individual or associated municipalities, government bodies and/or waste service managers appointed by them can obtain a co-financing contribution in order to implement local communication projects that they have developed. This Call for Proposals, published each year, collects applications from all over the country, dividing them into the three macro-areas of Northern, Central and Southern Italy, each of which is assigned a different budget, generally higher for the Southern-Central regions in order to prioritise the areas that need more support.
In the two-year period 2022/2023, the measure made it possible to co-finance 42 projects aimed at promoting local information on the separate collection of packaging waste. More than €1,350,000 was awarded for the activities carried out and reported on last year by government bodies, individual or associated municipalities, or waste service managers appointed by them, with a total catchment area of more than 8 million inhabitants.
The 2023/2024 edition of the ANCI-CONAI Call for Proposals was then published in 2023, with 134 projects competing, mostly from the regions of Southern Italy (72 projects) and to a lesser extent from Central Italy (32 projects) and Northern Italy (30 projects).

ANCI-CONAI CALL FOR LOCAL COMMUNICATION PROJECTS

2022-2023 EDITION

FUNDING ALLOCATED
Over €1,350,000

ELIGIBLE FOR CO-FINANCING
42 projects

INHABITANTS INVOLVED
over 8 million

PROJECTS PRESENTED
105 projects

34 NORTH
23 CENTRE
48 SOUTH

2023-2024 EDITION

Reporting of co-financing contributions is ongoing.

PROJECTS PRESENTED
134 projects

30 NORTH
32 CENTRE
72 SOUTH

6.5 Support for disadvantaged areas

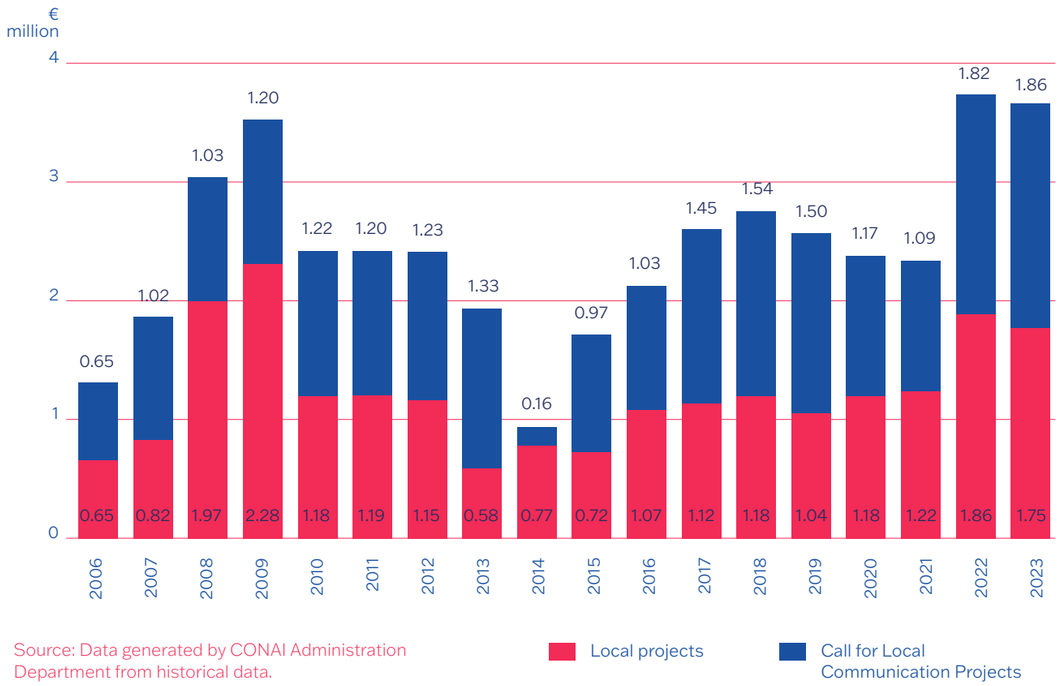
Between 2006 and 2023, CONAI supported local projects and local communication with more than €40 million.

ANCI and CONAI have agreed, within the Framework Agreement and with specific reference to the management of packaging waste, to support the local development of the most effective and efficient municipal waste management methods, with a particular focus on the areas of the country that are lagging furthest behind.

The available resources are allocated to individual projects according to the requests for support coming from the local area, which are duly verified before acceptance.

CONAI's actions, including through the instruments of the ANCI-CONAI Framework Agreement, are proving to be increasingly decisive in achieving separate collection targets and particularly in bridging the gap in our country between the best performing regions and those lagging most behind.

FUNDS TO SUPPORT THE DEVELOPMENT OF SEPARATE COLLECTION



Source: Data generated by CONAI Administration Department from historical data.

SUMMARY OF CONAI SUPPORT ACTIVITIES 2023

Entity involved	CONAI support activities 2023	Objectives
CAMPANIA REGION Support activities focused mainly on Local Entities that, in implementation of Regional Law 14/2016, were required to draw up a Local Plan in order to attain the associated management of services. Within the framework of the National Recovery and Resilience Plan (PNRR), eight projects were financed to improve separate collection.		
Municipality of Benevento 60,000 inhabitants	Update of the municipal waste collection plan with particular reference to: • large users (hospitals, nursing homes, prisons, schools, universities); • glass collection; • local collections in neighbourhoods.	Exceed the level of separate collection achieved (66% in 2022).
Municipality of Salerno 130,000 inhabitants	Support activities to achieve and consolidate positive results for separate collection (almost 73% in 2023).	Preparation of a feasibility study aimed at switching to a point tariff.
Municipality of Naples 922,094 inhabitants	Planning, start-up and communication phase to citizens and non-domestic users.	Implement a new separate collection model in the VI Municipality of Naples (120,000 inhabitants).
Caserta Local Entity 104 municipalities 924,000 inhabitants	Update of the 2022 Local Plan for the associated management of the urban hygiene service.	Drafting of the plan for the services of the entire province to be put out to tender.

Entity involved	CONAI support activities 2023	Objectives
Salerno Local Entity 161 municipalities 1,108,314 inhabitants	Preparation of the Local Plan for the entire provincial area.	Exceed 75% separate collection.
Benevento Local Entity 79 municipalities 278,000 inhabitants	Support for the integration and updating of the Local Plan.	Achieving and consistently maintaining 75% separate collection.

Other projects within the framework of local initiatives with the following entities:

Municipality of Battipaglia – 49,644 inhabitants
Pontecagnano Faiano – 25,939 inhabitants
Municipality of Fisciano – 14,000 inhabitants
Municipality of Santa Maria Capua Vetere, Avellino Local Entity– 114 Municipalities – 415,018 inhabitants
Napoli 1 Local Entity – 9 Municipalities including the Municipality of Naples – 1,238,975 inhabitants
Napoli 2 Local Entity – 24 municipalities – 688,919 inhabitants

CALABRIA REGION

Activities begun in 2020 to improve separate collection in the region were completed in all municipalities concerned (training for municipal administrations, technical support for designing separate collection systems and information campaigns, development of the My Sir system for waste traceability). Within the framework of the National Recovery and Resilience Plan (PNRR), five projects were financed to improve separate collection.

• **ATO Vibo Valentia** • 50 municipalities 160,000 inhabitants • **ATO Cosenza** • 150 municipalities 708,702 inhabitants • **ATO Crotone** • 27 municipalities – 170,000 inhabitants	• Executive planning of individual Local Plans. • Transmission of the Central Area Unitary Plan.	Implementation of the Central Area Local Plan to achieve 65% separate collection.
ATO 5 Reggio Calabria 97 municipalities 553,861 inhabitants	Drafting and execution of the Local Plan.	Identification of the single manager.
ATO Cosenza 150 municipalities 708,702 inhabitants	Preparation of the Executive Plan.	Drafting of the Northern Area Executive Plan.
Municipality of Crotone	Transmission of the Executive Industrial Plan.	Implementation of an information campaign in the start-up phase of the new door-to-door service to increase the level of separate collection (21% in 2021).
Municipality of Catanzaro 90,000 inhabitants	New Services Plan.	Consistently maintain the current level of separate collection (69%).

Entity involved	CONAI support activities 2023	Objectives
PUGLIA REGION Launch of the STR Ager Puglia system, Waste Traceability System. Within the framework of the National Recovery and Resilience Plan (PNRR), 39 projects were financed to improve separate collection.		
Municipality of Bari and AMIU Puglia	Continuation of the extension of the door-to-door separate collection system in the city districts.	Improve the quantity and quality of materials to be delivered to the various collection systems in the area.
Municipality of Foggia	Startup and communication activities.	Exceed 26% separate collection.
Municipality of Lecce 95,000 inhabitants	Preparation of the new Management Plan for integrated separate collection services.	Consistently maintain the current level of separate collection (70%).

Other projects within the framework of local initiatives with the following entities:

Municipality of Crispiano – 13,700 inhabitants
Municipality of Laterza – 15,000 inhabitants
ARO Taranto 2 Collection Area – 6 municipalities – 114,200 inhabitants
ARO Bari 4 Collection Area – 7 municipalities – 175,000 inhabitants

SICILY REGION

The Coordination Working Group set up in preparation for the implementation of the activities envisaged in the Agreement between CONAI, the Sicily Region and MASE. Within the framework of the National Recovery and Resilience Plan (PNRR), 13 projects were financed to improve separate collection.

Municipality of Noto 24,000 inhabitants	Preparation and transmission of the Plan.	• Planning of the new separate collection service. • Increase the quality and quantity of packaging waste collected.
Municipality of Catania 314,000 inhabitants Agreement of the CONAI Extraordinary Plan for the Metropolitan Cities of Southern-Central Italy.	Support in the implementation phase of the new separate collection service.	Improve the quality of separate collection (22% in 2022).
SRR PALERMO	"Optimising Separate Collection in Tourism Municipalities" Project	Improve the quality of separate collection.

Other projects within the framework of local initiatives with the following entities:

Municipality of Misterbianco – around 50,000 inhabitants
Municipality of Ragusa – 73,000 inhabitants
ARO Vigata Optimal Collection Area – Scala dei Turchi, ARO Municipality of Sciacca – 40,000 inhabitants
Municipality of Syracuse – 116,244 inhabitants
Municipality of Ribera 17,757 inhabitants
SRR ATO 4 Agrigento Est – 130,000 inhabitants

"Sicilia Munnizza Free"
The partnership with Legambiente Sicilia continues with great success, supporting municipalities through initiatives focused on disseminating good practices and exploiting virtuous experiences in Sicily and beyond. The activities include provincial Ecoforums (9), Ecofocus sessions in the three metropolitan cities, and regional workshops (3), with the aim of training and informing municipalities on the issues pertaining to the correct management of municipal waste and packaging waste in particular, involving urban hygiene service management companies and Packaging Material Consortia.

Entity involved	CONAI support activities 2023	Objectives
LAZIO REGION		
Rome Capital The complexity of a city with almost 3 million residents plus the flows of waste that circulate daily makes it complicated to plan timely and stable intervention measures.	Sharing a new model for separate collection: the citizens' local area municipality model.	• Select the municipality which will be involved in the intervention. • Quantitatively and qualitatively increase separate collection of packaging.

Other projects within the framework of local initiatives with the following entities:

Municipality of Ciampino – 38,500 inhabitants
Orte – around 9,000 inhabitants

Ardea – 49,000 inhabitants
Viterbo – 67,488 inhabitants

Source: Municipalities' separate collection percentages are, in some cases, declared by the municipalities or taken from the ISPRA 2023 Report based on 2022 data.

7

CONAI and its organisation

7.1 Organisation, management and control model

In accordance with the regulations on the administrative liability of legal persons set out in Legislative Decree 231/2001 as amended and consistent with its own ethical and social principles of fairness and transparency in the conduct of institutional activities, the CONAI Board of Directors has adopted an *Organisation, Management and Control Model*[111] and a *Code of Ethics*[112].

CONAI's adoption of an *Organisation, Management and Control Model* for its activities is aimed at preventing the occurrence of violations and avoiding its own administrative liability them, by preparing and adopting specific rules of conduct.

Meanwhile, CONAI's *Code of Ethics* constitutes a general instrument aimed at promoting a tangible "consortium code of practice" and institutionalising values, rules and principles that inform the character and operations of the Consortium and of individuals.

CONAI aims to achieve a close integration between the *Model* and the *Code of Ethics*, so as to form a body of internal rules that achieve the objective of fostering a culture of ethics and transparency.

Employees, Members of Consortium Bodies, Consultants and Partners of the Consortium must comply with the general and specific rules of conduct set out in the *Model* and in CONAI's *Code of Ethics*.

111
Organisation, Management and Control Model.

112
CONAI, Code of Ethics.

7.2 Respect for human rights

There are no relevant activities within the CONAI organisation that could violate human rights. The *Code of Ethics*, in addition to highlighting the conduct relevant for the purposes of Legislative Decree 231/2001 as amended, places attention on the principle of moral integrity and the basic ethical values promoted by CONAI. Among the principles and values set forth in the *Code of Ethics*, CONAI is committed to avoiding any discrimination on the basis of age, sex and sexual orientation, state of health, race, nationality, political opinions and religious beliefs, in all decisions affecting relations with all those who, directly or indirectly, permanently or temporarily, work with and for the Consortium. The task of supervising the effectiveness and efficacy of the *Code of Ethics* is assigned to the Supervisory Board.

7.3 Fight against corruption

CONAI's activities are carried out through a series of general organisational rules and procedures (Statute and Rules), which constitute the preliminary safeguard for preventing offences and controlling "sensitive processes". In addition, the Consortium provides for an articulated governance system which is also aimed at guaranteeing transparent decision-making and strict compliance with current regulations. In addition, CONAI's operations are governed by a series of "procedures" that identify and describe the competencies and responsibilities of the various subjects that are part of the consortium organisation. Specifically, in relation to corruption offences, in the Special Part of the *Organisation, Management and Control Model*, in the sections "Offences committed in relations with the Public Administration" and "Corporate Offences": the presence of potential critical issues for CONAI is indicated for the types of offences indicated by Legislative Decree 231/2001, and the presence, or not, of processes within which an offence may be committed (qualifying them as sensitive processes if present) and whether management procedures (defining principles and general rules to be followed in managing the process) and/or operational procedures (defining activities, functions and tasks of specific activities) are in place to guarantee systematic and continuous control. CONAI has also adopted *Guidelines on the protection of the authors of reports of crimes or irregularities ("whistleblowing")*, attached to the *Organisation, Management and Control Model*, by which it intends to ensure full protection and maximum confidentiality for whistleblowers and to remove any factor that may hinder or otherwise discourage reports of crimes or irregularities.

7.4 Antitrust compliance

The culture of antitrust compliance works to make the dynamics generated in the market competitive, to protect interests that would be damaged if anti-competitive conduct were to be implemented.
For some time now, CONAI has been the subject of particular vigilance and attention by the AGCM, in relation to the activities carried out by the Consortium and in particular for the coordination of the activities of the individual Consortia operating in the various Packaging Material Consortia, as well as for the connection between these and the Public Administration. The path that led CONAI to draw up its *Antitrust Compliance Programme* can be divided into macro-phases:

PHASE 1 — Interviews and mapping of Consortium Department risks

PHASE 2 — Documentary analysis

PHASE 3 — Training sessions on antitrust compliance

PHASE 4 — Drafting of Guidelines and Vademecum

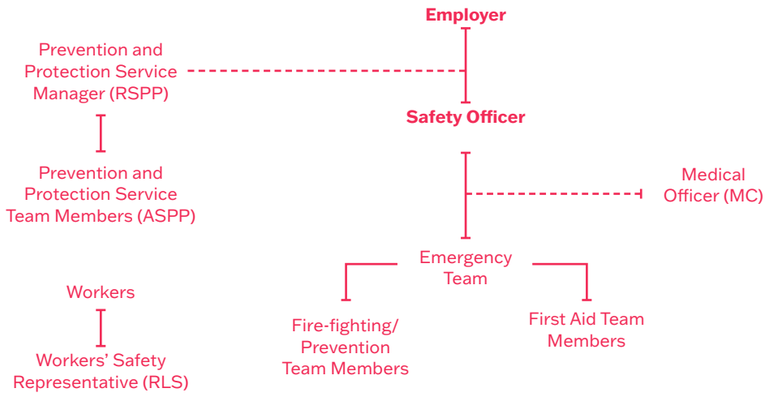
In February 2022 the CONAI Board of Directors approved the *CONAI Anti-Trust Compliance Programme*, which represents the Consortium's clear expression of promoting and implementing the prevention of antitrust violations at every level of its structure. The *Programme* adopted by CONAI, in particular, fosters the development of a corporate culture in the field of competition protection and reinforces the Consortium's commitment, from top management to executives, employees and external partners, to compliance with antitrust rules through their thorough awareness of the antitrust risks associated with their business. The *Programme* also provides for the addressees to be constantly and regularly updated in line with the continuous evolution of the specific regulations. There were no proceedings and/or further action taken by the Authority against CONAI during the reporting period with regard to anti-competitive behaviour and violations of antitrust regulations.

7.5 Health and safety of workers

CONAI has organised its prevention and protection service by:

- identifying and appointing the Prevention and Protection Service Manager (RSPP);
- identifying and appointing the Medical Officer;
- identifying and formally appointing the fire-fighting and evacuation team and the first aid team;
- organising health and safety training for personnel;
- carrying out the risk assessment and drawing up the document pursuant to article 28 of Legislative Decree 81/2008 (*Risk Assessment Document*);
- informing staff of the need to elect a Workers' Safety Representative (RLS);
- identifying the Workers' Safety Representative through appropriate election and communicating the elected person's name to the INAIL;
- drawing up an Emergency Plan and organising periodic emergency and evacuation tests.

Organisation chart

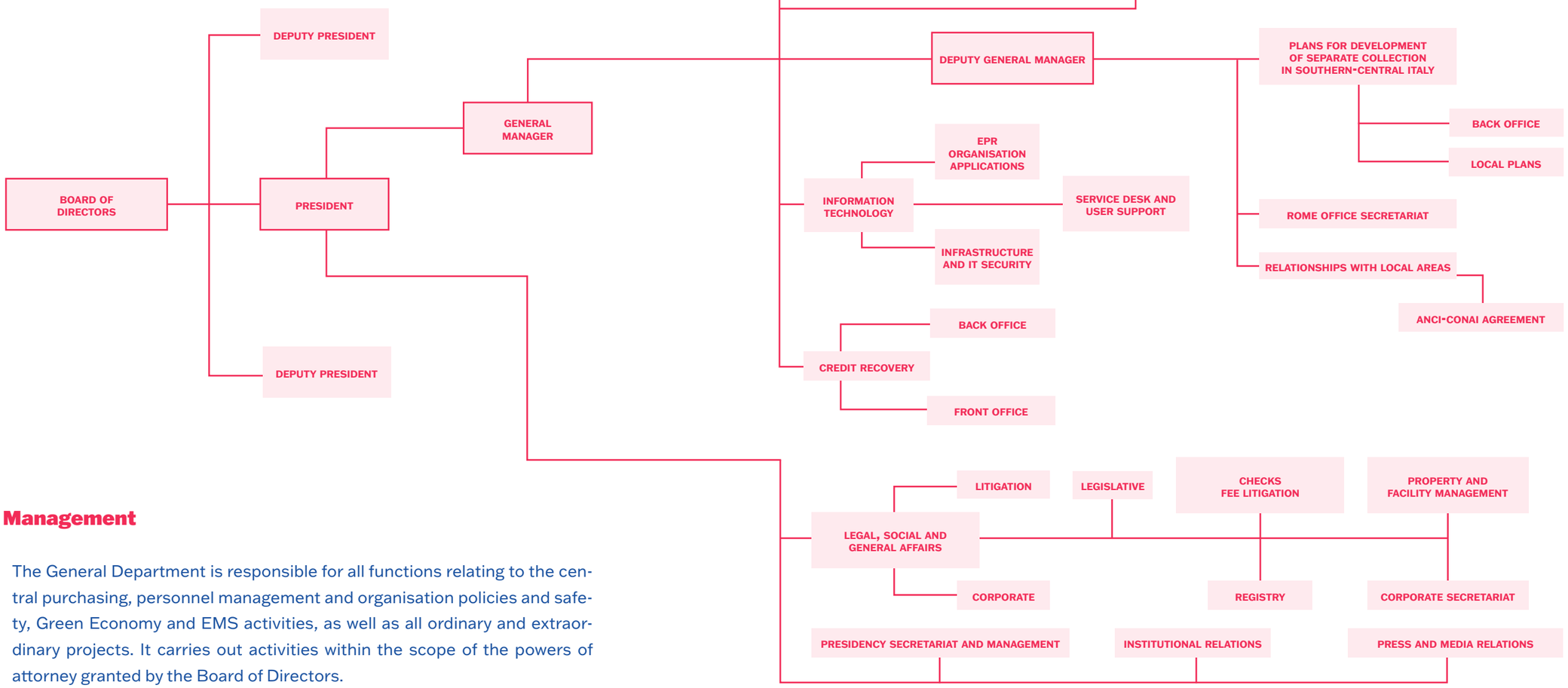


TOPIC	ACTIONS
Procedures and management	• Control protocols of the 231 Management Model. • Risk Assessment Document, drawn up by the Employer in collaboration with all the figures set forth in Legislative Decree 81/2008 as amended, with the participation of the Prevention and Protection Service Manager (RSPP) and the Medical Officer (MC) referring to the activities performed and all employees at the Milan and Rome offices. • Risk Assessment Document for interference risks, in order to manage risks related to activities carried out at CONAI or at third-party premises.
Risk assessment	Risk Assessment Document drawn up pursuant to Article 28 of Legislative Decree 81/2008, identifying, assessing and formalising the results for all risk situations with potential impact on staff health and safety related to: • working environments (structure, microclimate, technological systems, equipment, video terminals); • physical, chemical and biological agents (noise, vibrations, artificial optical radiation, ionising radiation, electromagnetic fields, hazardous substances, biological agents); • checks of air systems and plumbing systems; • organisational factors (manual handling of loads, night work, working at heights, presence of foreigners or atypical workers, presence of pregnant women, work-related stress); • fire. The numerical risk assessment is carried out by associating each hypothesised accident with a possibility of occurrence and a resulting damage magnitude. The company implements information/training processes to increase workers' awareness of health and safety issues as well as warning them of possible dangers.
Medical Officer	CONAI has arranged its own prevention and protection service by identifying and appointing a Medical Officer in possession of one of the qualifications and the training and professional requirements set forth in article 38 of Legislative Decree 81/08. The Medical Officer works with the employer on risk assessment matters, in accordance with the provisions of article 29, paragraph 1 of the same Legislative Decree, and is appointed by the employer to carry out health surveillance and for all other tasks set forth in the decree.
Participation and improvement	In accordance with article 35 of Legislative Decree 81/08, the employer convenes a periodic meeting at a predetermined frequency. During the periodic safety meeting, an improvement plan is prepared and updated with annual validity, (Annex 4 of the Risk Assessment Document) containing the actions to be taken in order to reduce the risks for the health and safety of workers in relation to the evidence that emerged during the periodic inspections of the Protection Service Manager, Workers' Safety Representative and the Medical Officer at the workplace. The plan also establishes who is responsible for implementing the actions and the relevant timetable.

7.6 Training, welfare and employee management policies

CONAI's internal structure[113] consists of several functions that report to the General Management on the following processes:

113
The governing bodies (Board of Directors and Board of Statutory Auditors) are not employees of CONAI and therefore do not fall within the scope of this survey.



General Management

The General Department is responsible for all functions relating to the central purchasing, personnel management and organisation policies and safety, Green Economy and EMS activities, as well as all ordinary and extraordinary projects. It carries out activities within the scope of the powers of attorney granted by the Board of Directors.

Deputy General Management

The Deputy General Management is responsible for the operation and management of both ordinary and extraordinary local activities related to the development of separate collection of packaging waste and recovery of packaging waste throughout Italy, including as regards the application of the ANCI-CONAI Framework Agreement, and manages associated relations with ANCI and local authorities. It is directly responsible for the Local Relations Department, which is divided into two organisational macro-areas, Northern-Central Local Relations and Southern-Central Local Relations.

Management and Presidency Secretariat

The Management and Presidency Secretariat is based at the operational headquarters in Milan, where 94% of the entire CONAI organisation operates. In addition to the usual functions, it supports and coordinates the activities of top management with the entire organisation. The head office in Rome houses the Institutional Relations Department and the Head of the Department of Development Plans for Separate Collection in Southern-Central Italy. The secretariat performs administrative management tasks, while also being responsible for fire prevention and first aid standards for the Rome office.

Human Resources and Staff Administration

Manages the administrative, organisational and procedural phases of labour relations. The department administers personnel development activities and “compensation & benefit” plans, manages recruiting processes and occupational health and safety activities.

Institutional Relations

Maintains and cultivates relations with national and European institutions in the sector (for the European institutions, also in collaboration with the International Department), developing and implementing relations with political and institutional decision-makers. It provides regular updates on political activity on issues of institutional interest.

Communication

Develops and implements the annual communication plan through which it promotes and disseminates the Consortium’s identity using the most popular media, advertising, national and local events and shows. The department develops and promotes projects for the advancement of environmental culture and education in cooperation with organisations, institutions, universities and schools of all levels.

Press Relations

Develops, maintains and cultivates relations with leading traditional, digital and web-based media and information organisations of national and local relevance. Through these instruments, it promotes the Consortium’s activities by highlighting its projects and results, including at the European level.

Information Technology

Manages and maintains CONAI’s entire ICT infrastructure. The department defines the technical and functional infrastructure, guaranteeing that it is effective, efficient and continuously updated, in order to ensure maximum operability and flexibility in the management of the Consortium’s information assets for all internal and external stakeholders concerned.

Legal Affairs

Carries out activities of a cross-sectoral nature to manage general legal issues and to oversee, from a legal and administrative point of view, institutional-type areas and management policies. The department ensures compliance with the specific regulatory provisions which the Consortium is subject to, and manages disputes with the Consortium, legislative monitoring, and studies regulations of interest to the Consortium.

International Activity

Promotes the activities and policies of the CONAI system in the European context, maintains relations with Italian officials and representatives in the EU institutions, as well as relations with European organisations and bodies regarding environmental regulations, particularly EXPRA, of which CONAI is a founding member.

Research Centre for the Circular Economy

Carries out activities on various topics of interest such as: prevention – by developing actions related to the prevention of packaging waste generation; reporting on the placement on the market, reuse, recycling and recovery of packaging – through studies and statistics which it periodically drafts and disseminates. It coordinates the Environmental Management System and EMAS activities and is responsible for drafting the Sustainability Report. It participates in various Observatories and working tables, both internal and external.

Relationships with Local Areas

Oversees the operation of local activities in relation to the functions assigned to CONAI System. In agreement with the public administrations concerned, it defines the optimal local areas where an integrated system should be made operational, including collection, sorting and transport of sorted materials to collection and disposal centres. It also manages the technical activity of the ANCI-CONAI Framework Programme Agreement and promotes programme agreements with operators to encourage recycling and recovery of packaging waste. It also maintains the link between public administrations, Packaging Material Consortia and other economic operators.

Plan for Development of Separate Collection in Southern-Central Italy

Coordinates local projects specifically geared towards the geographical areas lagging furthest behind, mainly concentrated in Southern-Central Italy, regarding packaging collection/recycling/recovery and packaging waste recovery. For the Lazio, Campania, Basilicata, Puglia, Calabria and Sicily regions, it also manages the application of the ANCI-CONAI Framework Programme Agreement and all related issues.

EPR Organisation members

Engages in constant monitoring of CONAI EPR Fee evasion/avoidance. Conducts national information campaigns on the correct application of consortium rules for EPR Organisation members. Develops updated and simplified consortium procedures for application, declaration, and exemption and reimbursement of the EPR Fee. Handles responses to queries concerning doubts about the interpretation of specific national and consortium regulations formulated by companies, trade associations, consultants, etc.

Credit Recovery

Manages the credit recovery process for the EPR Fee, preferably seeking out-of-court solutions for recovery, according to methods and timeframes regulated by procedures deliberated by the Board of Directors, aimed at ensuring transparent and systematic management for the entire CONAI System.

Administration

Drafts the Consortium's annual balance sheet, budget and quarterly financial statements. The department manages the accounts of the active cycle relating to the EPR Fee of Packaging Material Consortia. It also manages relations with banks to ensure proper management of working capital assets and investments in accordance with the Consortium's objectives.

CONAI OFFICES

Milan

The building is owned by the Consortium, built in 1948 (with an occupied surface area of 2,896 m^2, for a gross heated volume of 13,609 m^3) and connected with access roads, sewers, low-voltage power lines and the methane gas network, in accordance with municipal and regional regulations. Part of the 1st floor and all of the 3rd, 4th and 5th floors contain the rooms for CONAI personnel carrying out office duties.
Part of the 1st and 2nd floors are leased to Rilegno, CiAI and Comieco. The building acquired the Class E energy performance certificate in 2010. A new assessment for the renewal of the energy performance certificate is being carried out in 2024.

Rome

The office is an apartment owned by the Pontifical Croatian College of St Jerome, which is responsible for complying with current regulations.

General information	
Website	www.conai.org
Registered office – Rome	Via Tomacelli, 132
NACE code	94.99
Secondary NACE code	38.32.3
Operational office – Milan	Via Litta, 5
ATECORI 2007 code	82.99.1
Telephone no.	02 540441
Toll-free no.	800 337799
No. of employees	67

7.7 Equal opportunities

The Consortium's activities are carried out by 67 employees[114].
The following data are reported on the total number of employees as of 31 December 2023.

STAFF COMPOSITION BY CONTRACT TYPE

Permanent	67
Fixed term	0
Full-time	59
Part-time	8

STAFF COMPOSITION

Level/age	Women	Men	Total
Executives	3	5	8
Managers	9	8	17
Level A	12	9	21
Level B	13	5	18
Level C	3		3
Total	**40**	**27**	**67**

NUMBER OF MANAGERS OF ONE OR MORE OPERATIONAL UNITS

Level/age	Women	Men	Total
Executive level	3	5	8
Age > 55 years	2	3	5
Age 36-55 years	1	2	3
Manager level	3	3	6
Age 36-55 years	3	3	6
Total	**6**	**8**	**14**

PROMOTIONS ON ANNUAL BASIS

Grade level	Workforce as of 31 December 2023		Promotions	
	MEN	WOMEN	MEN	WOMEN
Level A	9	12	-	2
Level B	5	13	1	1
Level C	-	3	-	-
Executive level	8	9	2	3
Manager level	5	3	1	-
Total	**27**	**40**	**4**	**6**

EMPLOYMENT CONTACTS BEGUN IN 2023

Level/age	Men	Women	Total	% of total employees	Region
Level A, B, C age 26-35 years	1	2	3		Lombardy
Level A, B, C age 26-35 years	1	-	1		Lazio
Total			**4**	**5.97%**	

EMPLOYMENT CONTACTS ENDED IN 2023

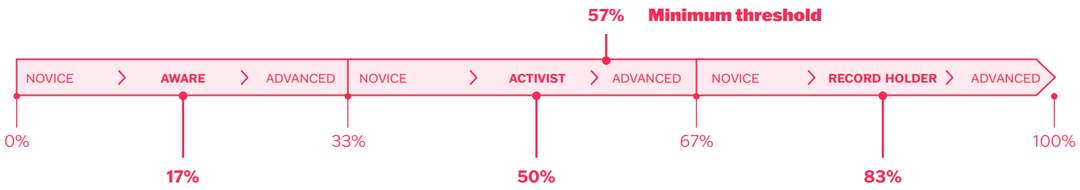
Level/age	Men	Women	Total	% of total employees	Region
Level A, B, C age 26-35 years	1	2	3		Lombardy
Level A, B, C age 26-35 years	1	-	1		Lazio
Level A, B, C age 36-55 years	1	-	1		Lombardy
Total			**5**	**7.48%**	

Source: Data generated by CONAI Human Resources and Staff Administration Department.

114
There are no external workers who are not employees and whose tasks are managed by the organisation.

CONAI also started a certification process in accordance with PDR 125/2022, carrying out an initial gap analysis against the requirements of the practice. Following a self-assessment in which compliance was estimated to be very close to 60% (the minimum threshold to apply for certification), CONAI set itself the goal of formalising the corporate approach to gender equality with the definition of a multi-year action plan and defined objectives and KPIs.

Overall performance



7.7.1 | Staff remuneration and development

CONAI applies a remuneration policy in line with the National Labour Collective Agreement (CCNL) for the rubber and plastic industry for the Worker and Manager categories, and in line with the CCNL Industry Executives for the Executives category. Remuneration is defined according to the specific skills of the role. Staff costs are appropriately reported in the Annual Financial Statements and regulated through the Human Resources Management Procedure within the Organisation, Management and Control Model. Staff costs in the reporting period amounted to €5,784,000[115], an increase of 8% compared to 2021 due to the increase in the average number of employees and salary dynamics. The average cost per employee increased by 6%, including higher costs for severance pay.

Annual assessments are conducted on the performance and professional development of employees, with the percentage change authorised each year by the Board of Directors. There are currently no assessments of employees' environmental performance.

There are no transition assistance plans to support employees who are about to retire or cease employment. Severance pay is awarded at the end of the employment relationship due to retirement and/or voluntary resignation, or upon a documented request for advance payment, in accordance with the relevant regulations in force.

115
https://www.conai.org/download/bilancio-e-relazione-sulla-gestione-2022/?tmstv=1694643137

VARIANCE IN GROSS ANNUAL REMUNERATION

Payments linked to increased or different benefits (e.g. overtime, various allowances and reimbursements, bonuses, etc.) are excluded from the calculation.

Position	Women	Men
Executives	-3.48%	2.46%
Managers	-7.66%	7.41%
Level A	-0.87%	1.14%
Level B	2.66%	-7.64%
Level C	-	-

Source: Data generated by CONAI Human Resources and Staff Administration Department.

7.7.2 | Welfare and industrial relations

In 2023, the Welfare platform offers were implemented, taking advantage of regulatory opportunities such as the fuel bonus and the reimbursement of energy expenses, or allowances granted to workers with dependent children. These initiatives affirm the Consortium's commitment to providing care and welfare for its employees.

In the Rewards System, the main initiatives include Supplementary Healthcare and insurance for non-occupational accidents, as well as renewal for the year 2023 of the COVID policy to cover risks arising from infectious circumstances, coverage for costs arising from hospital stays, and compensation for convalescence and care as well as adverse events caused by the COVID 19 vaccine.

In addition, all workers have access to a company mobile phone for mixed use, electronic tickets that have the maximum tax exemption for the category, and paid leave in addition to the amount provided by the National Labour Collective Agreement.

To complement the welfare initiatives for its employees, CONAI has introduced the BONOOS service platform.

BONOOS is an innovative startup organised as a benefit company whose mission is to raise awareness among beneficiaries about the contents and opportunities of **fiscal and social welfare of a public nature**, in order to **increase individual and family income support by developing a greater and more widespread ability** to access and use incentives that they may be entitled to.

More than 450 public welfare initiatives are estimated to be divided between family, study, disability, non-self-sufficiency, health, transport, leisure, and home, generating an **average increased purchasing power of approximately €1,200** per person.

The internal survey launched in mid-December 2023 demonstrated employees' interest in the new initiative, with a utilisation rate of 78.1% after just four months. The most frequently viewed public incentive categories were those dedicated to home, health, family and transport.

The introduction of the **Remote Working Regulation** as an innovative aid to work-life balance, that CONAI has made available to all workers, was undoubtedly the most popular among the welfare initiatives. It is a rightful addition to the CONAI Rewards System and, together with all the other initiatives that are constantly being updated and improved, is an attractive benefit which also **makes us competitive** in the processes that regulate the new dynamics of the world of work. To date, 98.51% of employees participate in this remote working initiative.

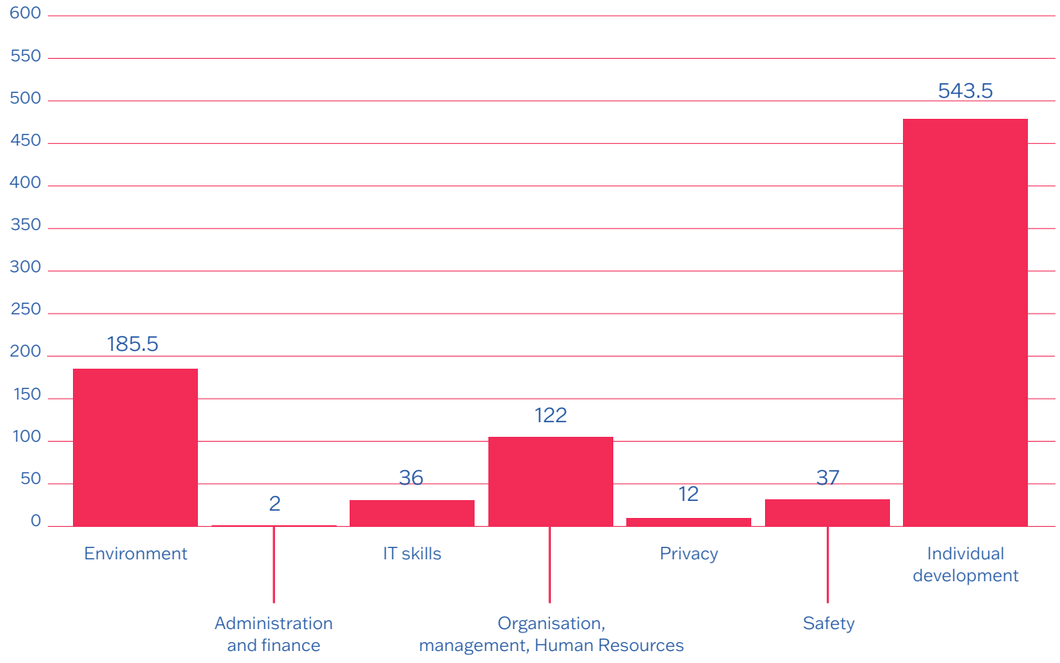
With regard to training, 938 hours were dedicated to this in 2023, which is 8.5% less than in 2022, and almost 60% less than the total training hours in 2021. Those 938 total hours represent an average of 17.05 hours per person, most of which were taken via live webinars.
The decrease compared to the previous two years can be understood though the lens of increasing commitments related to new project development and new services related to innovation, as well as managing new processes relating to the new leadership appointments in the second half of 2023. That drop, however, is not consistent with one of the fundamental pillars on which CONAI has set its human resources management policy; indeed, the Consortium's management has worked to ensure that the 2024 training proposals can meet workers' development needs.
One area which is always much needed, and where training is always much appreciated by those who receive it, concerns soft skills. In 2023, considerable work was carried out in this area, with about 72% of employees being trained – at each level of the organisation. **Soft skills** activities accounted for approximately 58% of the total training hours for the year.
The hours dedicated to Environmental training were also well received, with 185.5 hours dedicated, amounting to 19.78% of the total number of hours (12.53% in 2022).
The costs of activities related to behavioural skills development were entirely financed through the joint interprofessional funds Fondimpresa and Fondirigenti, totalling €21,385.55.

TRAINING OF WOMEN
550.5 hours
15.29 hours
on average

TRAINING OF MEN
387.5 hours
20.39 hours
on average

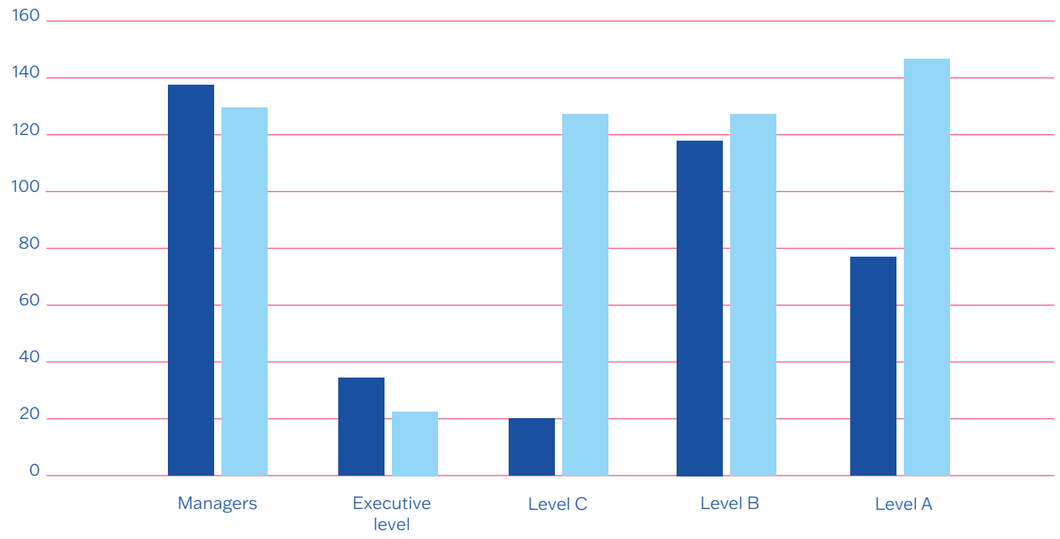
Source: Data generated by CONAI Staff Department.

DISTRIBUTION OF TRAINING HOURS BY SUBJECT AREA



Source: Data generated by CONAI Human Resources and Staff Administration Department.

DISTRIBUTION OF TRAINING HOURS BY GENDER AND LEVEL



Source: Data generated by CONAI Human Resources and Staff Administration Department.

Environmental Management System

In 2015, CONAI began the process of implementing its own Environmental Management System (EMS), in compliance with Regulation (EC) 1221/2009 (EMAS III) and UNI EN ISO 14001. The initial registration process was concluded in November 2016 with the recognition of EMAS Registration – IT 001784.

In line with the functions attributed to CONAI in the reference regulatory framework, the purpose and scope of the EMS can be defined as follows:

Activities to support member firms and the public administration (IAF 39, 24)

The key instruments of the CONAI EMS are: ESG Policy, Environmental Analysis, Environmental Programme, Environmental Statement, management procedures, operating procedures and forms.

8.1 ESG Policy

The ESG Policy[116] was updated and amended in October 2024 under the signature of President Ignazio Capuano and has now been fully implemented. The main points of this Environmental Policy are: Ensuring active support for the circular economy and environmental protection; communicating services and tools to local authorities for quality separate collection; ensuring the connection between companies and institutions for the circular economy; promoting culture; ensuring compliance with regulations; improving accountability and organisational processes; and pursuing a commitment to social equity. Through this Policy, principles, objectives and actions are defined for environmental monitoring and improvement.

116
CONAI, ESG Policy.

ESG Policy

The National Packaging Consortium (CONAI) is a legal person under private law, is a non-profit organisation and, in accordance with the law, must guarantee the achievement of the objectives set by the regulations on packaging and packaging waste. CONAI is a model of extended responsibility of packaging producers/users, in which packaging producers and users participate on an equal basis. Transparency, effectiveness, efficiency and cost-effectiveness are key principles of the Consortium's actions to ensure full compliance with regulations in the sector. In observance of the principle of transparency, CONAI has decided to adopt an Environmental Management System and Gender Equality Management System. The documents have been made consistent with its current Policy and disseminated widely. The Environmental Management System is in line with the provisions of the UNI EN ISO 14001 technical standard and Regulation 1221/2009 as amended, and the Gender Equality Management System is compliant with reference practice UNI/PDR125:2022.

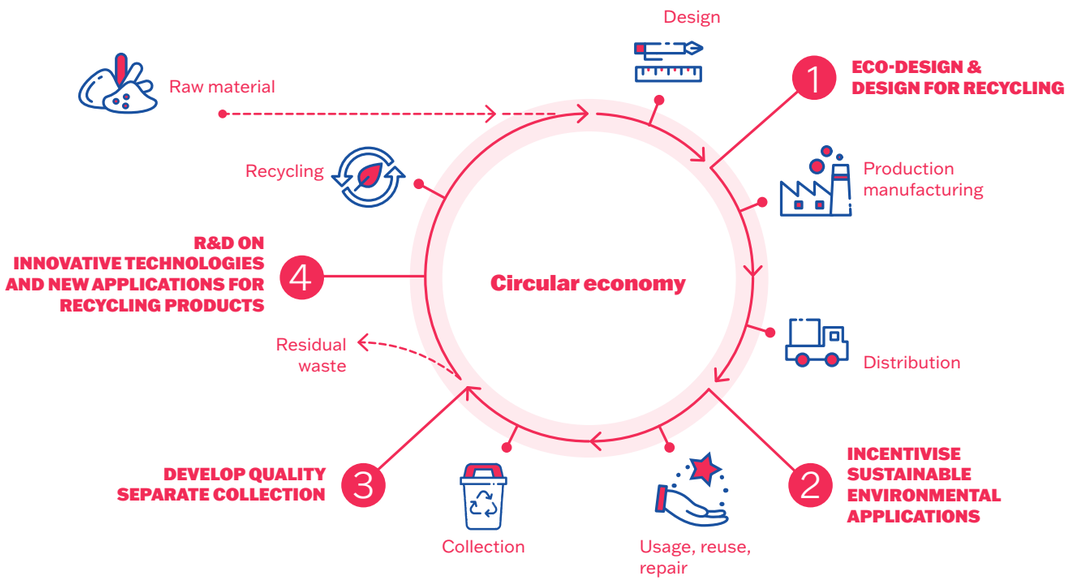
1. Proactive support for the circular economy
2. Services and tools to support local authorities with quality separate collection
3. Connection between firms and Institutions for the circular economy
4. Promotion of circular economy culture
5. Compliance with requirements
6. Accountability
7. Improvements to organisational processes
8. Commitment to gender equality

8.1.1 | Determination of significant direct and indirect environmental aspects

8.1.1.1 | Indirect

CONAI has established and implements specific methods for identifying and determining environmental aspects that have or may have significant impacts on the environment.
Within the scope of these activities, CONAI adopts an approach based on a life cycle perspective, being fully aware that its EPR Fee goes beyond managing environmental aspects strictly related to its own sites and internal processes, and finds greater significance in its statutory commitment to prevention, recovery and recycling of packaging materials.
The above is part of a strategy of circularity in the supply chain through a series of tools and actions promoted by the Consortium, which have been extensively discussed in the previous chapters of the report. The process for determining impacts is shared, to a large extent, with what is set out in the "Materiality matrix" section regarding material topics.

CIRCULAR ECONOMY AND SUPPORTING TOOLS FOR ITS IMPLEMENTATION



The environmental aspects identified by CONAI and **connected to coordination activities** – relevant and significant for the environment given the influence of the CONAI System – are to be considered **positive** and ascribable to the following areas:

1	Prevention of waste generation
2	Achievement of national recycling targets
3	Secondary raw materials, EoW and circular economy
4	Accountability: Traceability, reliability and robustness of data
5	Support for qualitative and quantitative growth of separate collection
6	Support for disadvantaged areas
7	Coordination and role in multi-level governance and stakeholder relations
8	Financial support to ensure effective functioning of the system
9	Greenhouse gas emissions and climate change
10	Energy consumption
11	Consumption of raw materials
12	Direct and indirect economic benefits of packaging recovery
13	Skills development: Training, education and awareness-raising of organisations, associations and citizens
14	Promotion of innovation and research
15	Antitrust compliance
16	Fight against corruption
18	Respect for human rights
19	Health and safety of workers

In the previous Environmental Statement and in the less recent system documents, in relation to this section, reference was made to only two macro-processes (the *PGP*/*PSP*, and the ANCI-CONAI Framework Agreement).

In this update, there was a desire to further refine the analysis on business processes (consistent with the activity of determining material topics), providing greater detail on the aspects subject to assessment and reporting.

Indirect environmental aspects are defined as "significant" if they have significantly material actual or potential impacts and if CONAI can exert a real influence on them.

Starting from the national regulatory indications, analysing the many experiences – including international ones – in the field of environmental assessment procedures, as well as the approaches proposed in the ISO and EMAS management systems for determining significance, two general criteria have been adopted, which respect and reflect the peculiarities of the CONAI organisation:

1. the relevance of the environmental aspect (closely related to the perimeter);
2. the ability to influence the aspect in question.

The operating conditions under which the assessment is made are classified as normal, exceptional (foreseeable/plannable but different from usual) and emergency (conceivable but not foreseeable or plannable).

The result of this analysis is reported in the following table:

CONAI'S SIGNIFICANT INDIRECT ENVIRONMENTAL ASPECTS[117]

	Energy consumption	Greenhouse gas emissions	Air-polluting emissions	Water consumption	Consumption of materials	Production/ management of waste	Transport
Coordination activities	✓	✓			✓	✓	

There have been no further changes in the reporting perimeter since the previous update of the Environmental Statement[118].
In relation to these significant environmental aspects, pertinent environmental performance indicators are set out in the sections above. In the Environmental Statement requirements section, there is a matrix showing the exact references to the sections as defined in EC Regulation 1221/2009 Annex IV.

117
With reference to the "key indicators" identified in Annex IV of the EMAS Regulation, which also include "land use in relation to biodiversity", this latter point was not taken into consideration as it does not correlate with CONAI' s activities.

118
The indirect environmental aspect of water consumption, as in the previous update of the Environmental Statement, is not significant. See the table in section 8.5 of this document.

8.1.1.2 | Direct

The environmental aspects related to the activities **under direct control** – referring to the impacts of CONAI's organisational structure – are generally considered **negative and limited**, given the size of CONAI's offices.
Specifically, direct environmental aspects are those connected to:

20	Managing energy consumption and emissions in offices
21	Managing material and waste in offices
22	Consumption of water in offices
23	Employee transport
17	Training, welfare and employee management policies

In the previous Environmental Statement, in relation to this section, reference was made to only two macro-processes (office administration and transport). In this update, we wanted to further refine the analysis on business processes (consistent with the activity of determining material topics), providing greater detail on the aspects subject to assessment and reporting.
Like the previous section, direct environmental aspects are also analysed according to relevance and influence criteria; under normal, exceptional and emergency operating conditions in order to determine their significance.

The following table identifies CONAI's significant direct environmental aspects[119].

CONAI'S SIGNIFICANT DIRECT ENVIRONMENTAL ASPECTS

	Energy consumption	Greenhouse gas emissions	Air-polluting emissions	Water consumption	Consumption of materials	Production/ management of waste	Transport
Activity CONAI	✓	✓	✓	✓	✓	✓	✓

There have been no further changes in the reporting perimeter since the previous update of the Environmental Statement.
In relation to these significant environmental aspects, pertinent environmental performance indicators are set out in the sections above[120].

119
With reference to the "key indicators" identified in Annex IV of the EMAS Regulation, which also include "land use in relation to biodiversity", this latter point was not taken into consideration as it does not correlate with CONAI's activities.

120
Environmental Statement requirements.

8.2 Environmental Programme

The environmental objectives for the **three-year period 2024-2027** – some continuing from the previous three-year period – **were defined following principles and guidelines set out in the Environmental Policy**.

The following table illustrates the Environmental Programme 2022-2025 (closing) and the update to the new Environmental Programme 2024-2027.

ENVIRONMENTAL PROGRAMME 2022-2025

No.	Specific programme	Description	Goal	Indicator	
1	**Call for Prevention Projects**	CONAI rewards the most innovative and environmentally friendly packaging solutions placed on the market.	Increased number of projects compared to the previous year.	• **373** cases presented (-3%). • **219** cases incentivised (-10%).	1
	Environmental Programme 2024-2027		**Confirmed**		
2	**Prevention instruments**	CONAI and the promotion of tools for firms in support of prevention.	Promote the development of eco-design projects addressed to Associations and Firms in coordination with the Prevention Working Group and Packaging Material Consortia (potentially also EPR Systems).	• **4,148** E-PACK requests handled (-7%). • **3,717** uses of the labelling tool (-31%).	1, 4
	Environmental Programme 2024-2027		**Confirmed**		
3	**Fee modulation**	Modulation of the EPR Fee, within the individual packaging material chains, is a structural tool to favour the prevention of packaging waste generation and raise the level of reusability and recyclability.	Enhance modulation in terms of circular economy logic.	• EPR Fee supplement for paper packaging other than beverage cartons. • Enhancements to modulation criteria for plastic packaging.	1, 4
	Environmental Programme 2024-2027		**In development**	**Additional 2023 indicators:** • Annual % change in recyclable packaging trend • Band C plastic 21.34% (-7.75)[121] • Band D paper, 0.16% [121] (+0%)	
4	**Actions to support local authorities**	ANCI and CONAI have agreed, within the Framework Agreement and with specific reference to the management of packaging waste, to support the local development of the most effective and efficient municipal waste management methods, with a particular focus on the areas of the country that are lagging furthest behind.	Support effective and efficient separate collection models for recycling, in cooperation with operational EGATOs (Optimal Local Area Management Bodies) and, in their absence, individual or associated municipalities.	• **40** authorities that requested support for local activities (+58%). • **33** projects realised (+18%). • Economic value generated: **1,351,183,000** (-40%)**.** • **8,208,000** inhabitants reached (-24%).	1, 2
	Environmental Programme 2024-2027		**Confirmed**		
5	**Call for Local Communication Projects**	The Call for Local Communication Projects co-funds communication, information and education activities with the aim of raising awareness among citizens, local authorities and interested economic operators, encouraging the participation of all stakeholders involved in correct local separate collection.	Promote the initiative and distribute the entirety of the allocated funds.	• **42** projects co-funded out of the total presented (-5%). • **€1.350 million** funds deployed (+13%). • **8 million** inhabitants reached (+7%).	1, 2
	Environmental Programme 2024-2027		**Confirmed**		

121
Only ordinary EPR Fee net of compensation procedures.

No.	Specific programme	Description	Goal	Indicator	
6	**Carbon neutrality**	CONAI wishes to strengthen its commitment to achieving climate neutrality by promoting strategies and actions for different stakeholders.	Highlight and promote the CONAI EPR Fee and the recycling and recovery chain for achieving climate neutrality.	Achievement of intermediate steps: • Baseline carbon footprint. Launch of an initial survey of existing international, European, and national decarbonisation strategies, guidelines and technologies in the main packaging material production sectors (steel, aluminium, paper, glass, plastic, biodegradable and compostable plastic, wood). • Launch of discussions with major industry and associations on a common supply chain strategy for decarbonisation.	1
	Environmental Programme 2024-2027		**Completed**		
7	**Academy and Community**	The CONAI Academy and its Community are a digital environment where you can get information, engage in discussions and receive answers to questions about CONAI, environmental labelling of packaging, eco-design tools, regulatory news, the circular economy and much more.	Improve and promote stake-holder participation and involvement.	• **5,726** sign-ups on the platform. • **11** webinar sign-ups. • **8,529** registered (-29%).	1 4
	Environmental Programme 2024-2027		**Confirmed**		

No.	Specific programme	Description	Goal	Indicator	

8	**Support for EPR Organisation members**	Support for EPR Organisation members is necessary in order to provide assistance in the correct application and management of the EPR Fee. This also takes place through workshops and training/informative sessions in webinars and video tutorials, with particular reference to the new features of the CONAI Guide.	Highlight and promote the role of CONAI for EPR Organisation members and their obligations.	• Figures for communication through update, awareness-raising and information campaigns: **+600,000** informational sessions on various topics.
				• **+46,000** telephone calls handled on the toll-free number (-13%).
				• **+4,900** responses to written requests for clarification of consortium procedures (-2%).
				• Accounting audit figures requested by EPR Organisation members. 25 voluntary certifications undertaken (-16%), in addition to further:
				  • **13** accounting audits requested by EPR Organisation members in 2023 (-23%) (of which 6 already closed in 2023);
				  • **12** similar audits completed in 2023 but started in previous years (+25%).
				• **2** incentives/ simplifications introduced.
					1
					5

	Environmental Programme 2024-2027		**Confirmed**		
9	**Institutional Relations**	CONAI encourages and supports taking the time for in-depth analysis and discussion with various institutional stakeholders and trade associations in order to strengthen the efficiency, effectiveness, transparency and fitness of the CONAI system.	Proactive, proactive and transparent role towards institutions and trade asso-ciations in compliance with the obligations and tasks assigned by law, and promotion of senior management with regard to institutional events.	• **82** institutional meetings (+67%).	3 5
	Environmental Programme 2024-2027		**Confirmed**		

No.	Specific programme	Description	Goal	Indicator	
10	**Education and skills**[122]	CONAI has been particularly active in promoting initiatives and projects aimed at training and developing skills in the circular economy. The activities run at all academic levels, from primary school to professionals.	Leading role in developing skills in the circular economy.	• **692** classes (participation in educational competitions) (+70%). • **339** schools (participation in educational competitions) (+35%). • **17,300** primary school participants (participation in educational competitions) (+76%). • **7** universities (+75%). • **560** university students (+250%). • **2** prizes and **2** special mentions. • **4** weeks of training for new graduates (-50%). • **75** participants/new graduates (-53%).	4
	Environmental Programme 2024-2027		**Confirmed**		
11	**Guidelines and participation**	Improving the participatory role towards institutions, public administration and companies also through the promotion of support tools and/or guidelines.	Drafting of guidelines and tools to support companies and public administrations.	• Guidelines for Facilitating the Recycling of Steel Packaging (published 2024).	5
	Environmental Programme 2024-2027		**In development**	**Additional 2023 indicator:** • Qualitative indicator for support for businesses.	

122
The values of the validated 2022-2025 declaration show a compilation error in the indicator. For consistency, the corrected figure for 2022 is provided. 406 classes (participation in educational competitions); 250 schools (participation in educational competitions); 9,800 primary school participants (participation in educational competitions); 4 universities; 160 university students; 79 applications; 8 weeks of training for new graduates; 160 participants/new graduates.

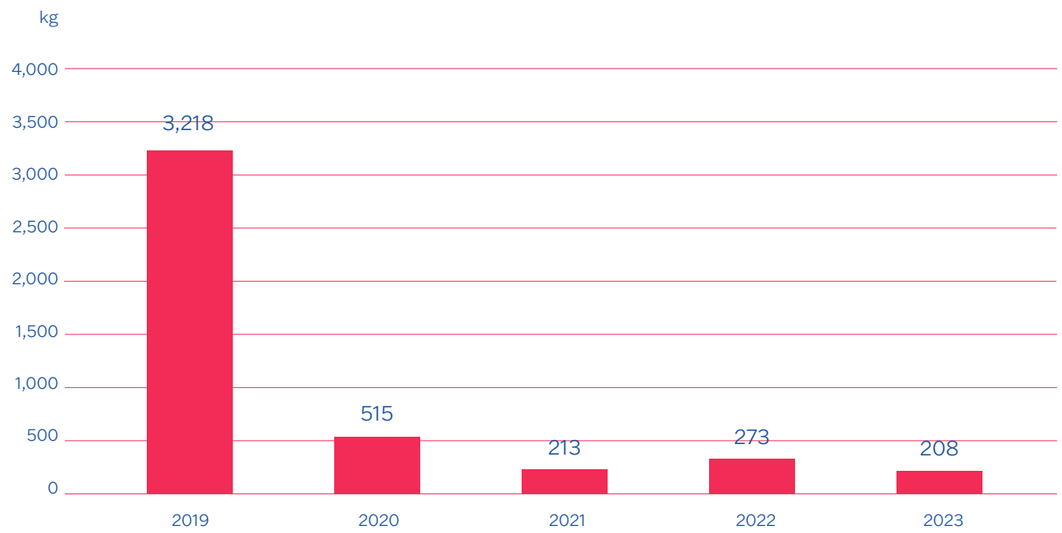
No.	Specific programme	Description	Goal	Indicator	
12	**Quality of data provided to institutions**	CONAI's institutional tasks include preparation of legally required documentation, necessary liaison and coordination functions between public administrations, Packaging Material Consortia and other economic operators, as well as implementing information campaigns and collecting and transmitting recycling and recovery data to the competent authorities.	Increase the uniformity and quality of data provided to the institutions.	• **9** parties adhering to the PNVD. • **9** open issues arising from the validation process. • **7** parties adhering to Life Cycle Costing.	6
	Environmental Programme 2024-2027		**In development**	**Additional 2023 indicators:** • **9** parties adhering to PNVD Focus Area. • Participation in national (SUP) and European (Eurostat) working groups and tables on reporting.	
13	**Institutional relations**	The objective of the proposed regulation is to define a standard process for validating the procedures for determining market placement, recycling and recovery data for packaging waste from EPR systems, to guarantee the highest quality of data provided in compliance with current legislation.	Regulatory codification of the process promoted by CONAI for validating the procedures for determining placement on the market, recycling and recovery data for packaging.	UNI 11914 standard has been published. **Target achieved**	3
	Environmental Programme 2024-2027		**Completed**		

14	**Improve-ments to processes**	Improvements to organisational processes and the Environmental Management System.	Refinement of consortium procedures and manual update.	Achievement of intermediate steps. • Update to manual and system documentation. **in progress** • Revisiting environmental aspects, risks and opportunities, including in relation to a new risk matrix starting from the principles outlined in the environmental policy, plans and programmes (Revisiting environmental aspects also with respect to the updated context and new stakeholder structure). • Maximum integration with the Environmental Management System (EMS) with consortium procedures and practices.	7 8
	Environmental Programme 2024-2027		**In development**	**Additional 2023 indicators:** • Integration of EMS with other MSs • Implementation of GHG Protocol and Carbon Zero Strategies	

8.3 Managing material and waste in offices

Purchases of paper in the Milan and Rome offices has seen a significant reduction since 2018, which is also linked to the global health emergency that led to a reduced use of the offices. However, the variations recorded over the years can be attributed not only to actual changes in consumption, but also to stock dynamics.

PAPER PURCHASED IN THE MILAN AND ROME OFFICES



Source: Data generated by CONAI Research Centre, from Environmental Management System data: Consumption ascertained from paper purchase orders.

The amount of paper purchased per employee varies greatly over the years, with a value of 3 kg per employee in 2023 which, as mentioned above, is primarily justified by the renewed digitisation of the Consortium's working methods.

INDICES OF PAPER CONSUMPTION IN THE MILAN AND ROME OFFICES

	2019	2020	2021	2022	2023
Kg of paper purchased / No. of employees	51.1	8.3	3.3	4.0	3.1
Employees	63	62	65	68	68
Kg of paper purchased / kt of recycling by consortium management	0.67	0.10	0.04	0.06	0.04
Recycling by consortium management (kt)	4,797	4,975	5,143	4,826	4,451

Source: Data generated by CONAI Research Centre, from Environmental Management System data.

CONAI OFFICES

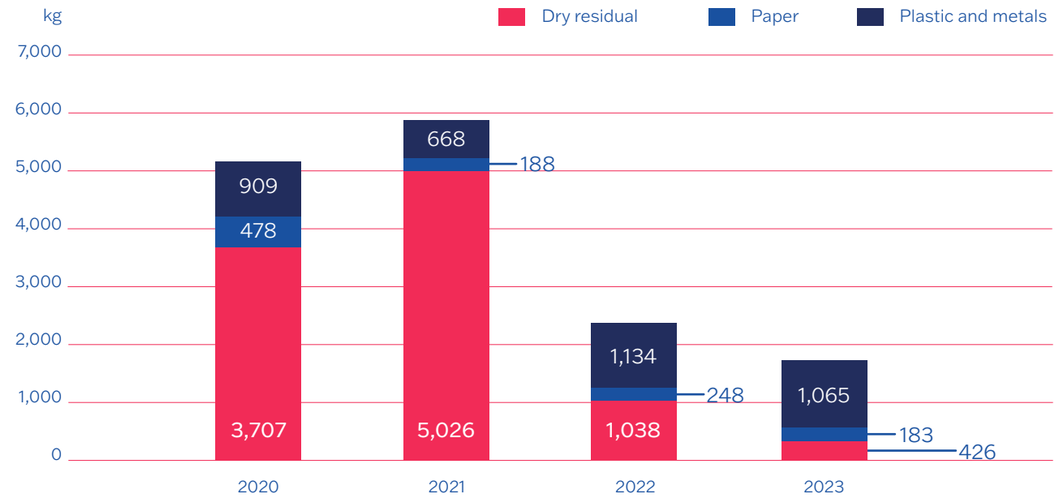
Sustainable procurement

CONAI is committed to an internal policy that prioritises green procurement. When purchasing, the organisation gives first preference to those certified according to the main internationally and European recognised standards: FSC-PEFC (indicating cellulose from sustainably managed forests) and Ecolabel, the European Union's eco-label (certifying that the product has a low environmental impact throughout its life cycle). Since 2014, the offices at the Milan headquarters have achieved the goal of entirely replacing the use of traditional paper with certified and/or recycled paper.

The 2023 figure for dry waste and plastic/metal waste was estimated from measurement of waste disposal from office bins. Meanwhile, for paper waste, the production figure is directly related to the figure for the supply of reams of paper, as illustrated and discussed above. For the Rome office, it is not possible to accurately calculate the amount of waste generated as it is accounted for within the condominium costs, and therefore this consumption is not included in this analysis.

As can be seen in the graph below, the total waste generation in 2023 estimated in this way was less than the previous year (-1.9%). This value is mainly justified by the updated conversion factors and accurate measurement of waste disposal from bins during the year. In fact, the sample weight for multi-light plastic-metal decreased from a unit value of 3.68 kg to 2.88 kg, while dry residual waste was 1.5 kg. However, it must be emphasised that, in relation to the degree of filling (which cannot be measured) of the containers surveyed, the estimate made and presented here may be in excess of the actual waste generation for the year. CONAI is continuing in its efforts to improve here, by continuously launching solutions that can deliver increasingly accurate data in this regard.

WASTE PRODUCED IN THE MILAN OFFICES



Data generated by CONAI Research Centre, from Environmental Management System data: Consumption ascertained from number of bins emptied by weight.

INDICES OF WASTE PRODUCED IN THE MILAN OFFICES

	2019	2020	2021	2022	2023
Kg of waste / No. of employees	153.3	82.1	90.5	35.6	24.6
Employees	63	62	65	68	68
Kg of waste / kt of recycling by consortium management	2.01	1.02	1.14	0.50	0.38
Recycling by consortium management (kt)	4,797	4,975	5,143	4,826	4,451

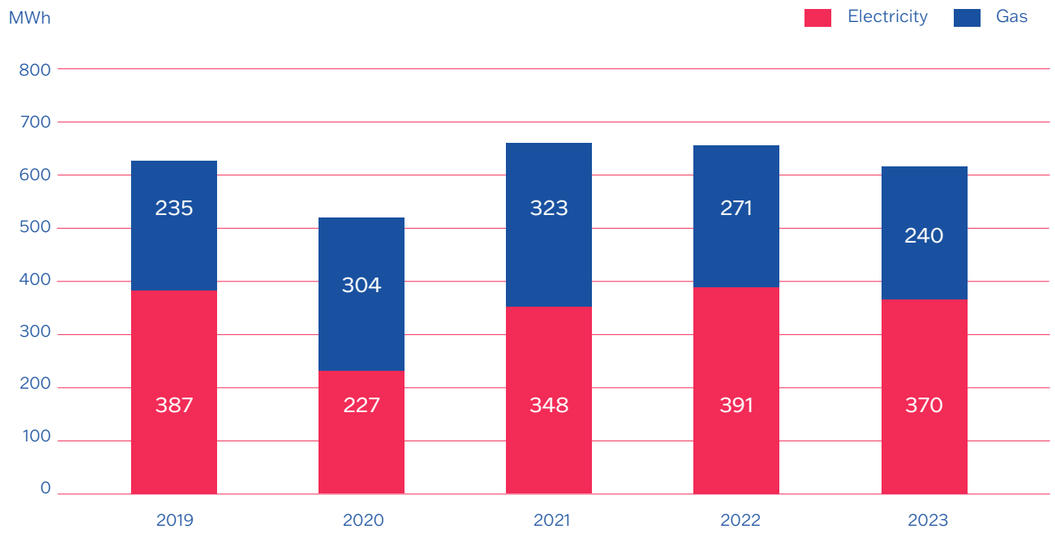
Source: Data generated by CONAI Research Centre, from Environmental Management System data.

8.4 Managing energy consumption and emissions in offices

The final energy consumption of CONAI's offices in 2023 is about 610 MWh, of which 61% is electricity consumption and the remaining 29% is methane gas for heating[123]. Compared to the previous year, there was a 5% reduction in methane gas, accompanied by an 11% reduction in electricity consumption.

123
The figure excludes the methane gas consumption of the Rome office.

FINAL ENERGY CONSUMPTION OF THE MILAN AND ROME OFFICES[124]



Data generated by CONAI Research Centre, from Environmental Management System data: Consumption ascertained from energy bills.

124
ARERA conventional calorific value P = 0.038576 GJ / Smc, conversion factor 38.57 MJ / KWh / 3.6 = 10.71 KWh / Smc

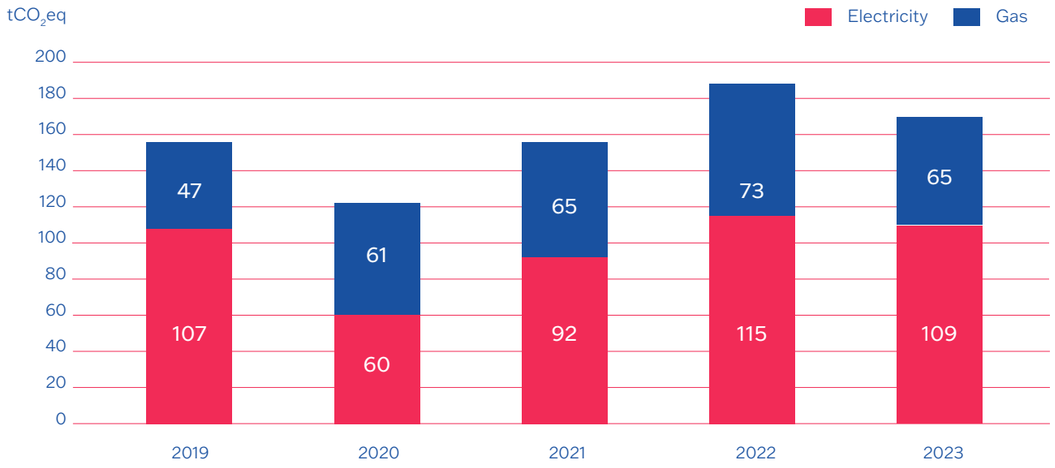
The reduction and subsequent stabilisation of consumption over the years can be attributed: firstly, to plant efficiency measures, such as the replacement of heating systems (condensation boilers instead of old traditional boilers) and cooling systems (new air-conditioning systems with high energy standards), lighting systems (replacement of lighting points with LED lamps) and the modernisation of the operating system of the three lifts in the Milan office to high environmental and safety standards (with replacement of the relevant switchboards); and secondly, to diligent management and use of those systems.

In addition, 2024 saw the completion of the installation of the photovoltaic system for the Milan office, which began in 2023. This is a plant with a nominal capacity of 40 kW which was commissioned in 2024, which in the first 10 months of the year has already produced 35.8 MWh of electricity, saving 25.39 tCO_2eq.

In 2023, the work carried out in the Milan and Rome offices generated around 174 tonnes of CO_2 emissions in the atmosphere, 63% of which came from electricity consumption (-5%) and 37% from gas consumption for heating (-11%). The increase in recorded emissions is mainly attributable to updated emission factors[125].

125
ISPRA, Efficiency and decarbonisation indicators in Italy and in the biggest European countries – 2023 edition, Table 1.13 – Emissions factors in the power sector (g CO_2/kWh).

CO_2eq EMISSIONS PRODUCED BY THE MILAN AND ROME OFFICES



Source: Data generated by CONAI Research Centre, from Environmental Management System data: Consumption ascertained from gas bills.

For a better assessment of the performance of the CONAI offices, indices have been developed that relate consumption and CO_2 emissions to the number of employees and the amount of packaging waste recycled by consortium management. As with the absolute values, both indices show a general continuous improvement over the years.

INDICES FOR ELECTRICITY AND HEAT CONSUMPTION AT THE MILAN AND ROME OFFICES

	2019	2020	2021	2022	2023
MWh / No. of employees	9.9	10.8	10.3	9.7	9.0
tCO_2eq / No. of employees	2.5	2.6	2.4	2.8	2.8
Employees	63	62	65	68	68
MWh/kt recycling by consortium management	0.13	0.13	0.13	0.14	0.14
$kgCO_2$/kt recycling by consortium management	0.03	0.03	0.03	0.04	0.04
Recycling by consortium management (kt)	4,797	4,975	5,143	4,826	4,451

Source: Data generated by CONAI Research Centre, from Environmental Management System data.

Energy consumption per employee decreased from 11.9 MWh in 2018 to 9 MWh in 2023, and emissions from 3 tCO_2 to 2.8 tCO_2. Energy consumption per tonne recycled increased from 0.16 MWh in 2018 to 0.14 MWh in 2023, while emissions remain stable at 0.04 $kgCO_2$/kt.

Regarding the use of methane gas for heating in the CONAI offices in Milan, this does not lead to significant emissions of atmospheric pollutants (SOx, PM10, PM2.5, NOx, NMVOC and CO), and the systems are subject to annual periodic checks. For the Rome site, the heating system is not managed by CONAI. However, careful monitoring is carried out on the requirements in force in terms of efficiency and maintenance. In terms of polluting emissions from the company car fleet (7 vehicles), all the cars used comply with the most recent standards on pollution classes.

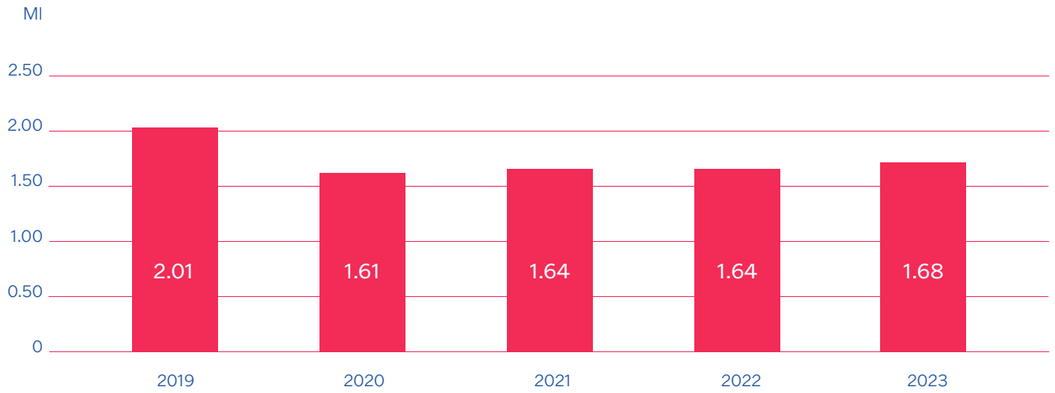
The share of electricity from renewable sources is 46.31% calculated on the energy mix used by electricity suppliers from data made public by the Gestore dei Servizi Energetici[126].

126
Documents (gse.it).

8.5 Water consumption in offices

Consumption at the Milan office refers to the entire building, including the premises occupied by Rilegno, CiAI and Comieco. The water supply of the Milan office is managed through the main water supply, while waste water is connected to the sewerage system. The figure is similar to the previous year, although it is significantly lower than the levels before the start of the pandemic.
For the Rome office it is not possible to deduct consumption from the general condominium costs and therefore, such consumption is not accounted for in this analysis.

WATER CONSUMPTION IN THE MILAN OFFICES[127]



Source: Data generated by CONAI Research Centre, from Environmental Management System data: Consumption ascertained from water bills.

127
The 2022 figure, the same as the 2023 figure, is not yet final. It is determined through the service manager's average annual consumption, calculated as established in article 10 of Annex A (TIMSII) of ARERA Resolution 218/2016/R/IDR.

INDICES OF WATER CONSUMPTION AT THE MILAN OFFICES

	2019	2020	2021	2022	2023
m³ / No. of employees	32	26	25	24	25
Employees	63	62	65	68	68
m³ / kt of recycling	0.4	0.3	0.3	0.3	0.3
Recycling by consortium management (kt)	4,797	4,975	5,143	4,826	4,451

Source: Data generated by CONAI Research Centre, from Environmental Management System data.

The indices on water consumption in relation to employees and tonnes of packaging waste recycled through consortium management show a decrease in the years after 2018: consumption per employee fell from 37 m³ to 25 m³, and consumption per tonne recycled from 0.5 to 0.3. These dynamics are also attributable to optimisation and efficiency measures achieved in the building.

8.6

Employee transport

CONAI has calculated emissions[128] related to corporate transport considering three main areas: business travel (**business travel**), use of corporate fleets (**corporate fleet**) and employee journeys between home and work (**employee commuting**). This chapter illustrates the results of the emissions generated by these activities for the reference period, using the "Carbon Footprint Mobility" product, powered by a methodology developed by Zucchetti and validated by Bureau Veritas Italia, in compliance with the GHG Protocol Corporate Standard and ISO 14064-1.

Business travel

Emissions due to business travel include journeys made by employees for work purposes, considering different modes of transport:

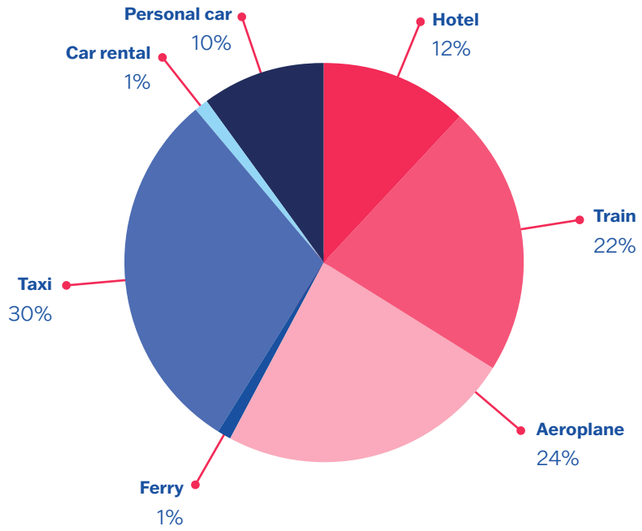
- **Aeroplane:** Departure and arrival airport data were entered into the application, which calculated the orthodromic distances of flights to which an 8% correction factor was added, in line with DEFRA guidelines. The flights were finally categorised into domestic, short-haul and long-haul, each with a different emission factor provided by DEFRA (2023).

128
For the calculation of emissions, the Carbon Footprint Mobility software was adopted, which combines data from business trips, company vehicle use and employees' home-work journeys. The emission factors used for each type of transport come from the DEFRA database (2023, v1.2) and have been adjusted to the specific transport mode and fuel used.Emissions are expressed as CO_2 equivalent (CO_2e), including the following greenhouse gases: carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O), converted to kg CO_2e based on global warming factors (GWP-100) provided by the International Panel on Climate Change (IPCC) in the AR5 (Annual Report 5). Total emissions are calculated by adding together the contributions of each gas. In addition, results are presented for each of the three business scopes considered, associated with specific GHG Protocol emission reporting scopes:
- Business travel: Scope 3, Category 6;
- Corporate fleet: Scope 1 (direct combustion from mobile sources);
- Employee commuting: Scope 3, Category 7.

- **Train:** The software calculated the distance between railway stations using a Google Maps API service, with specific emission factors for high-speed rail transport also provided by DEFRA (2023).
- **Taxi and car rental:** A "spend-based" methodology was adopted, where total travel expenditure was converted into CO_2e emissions using the emission factors associated with taxi and car rental services, as defined by the NAICS-6 (v1.2) Supply Chain Greenhouse Gas Emission Factors database.
- **Personal cars:** Emissions for journeys made in personal cars were calculated based on kilometres travelled and vehicle characteristics (size and type of fuel), using DEFRA emission factors (2023).

TOTAL EMISSIONS FROM BUSINESS TRAVEL

Method of transport	CO_2e
Taxi	20,430.73
Aeroplane	16,747.00
Train	15,140.11
Hotel	8,282.8
Personal car	6,926.79
Car rental	508.08
Ferry	357.50
Overall total	**68,393.03**



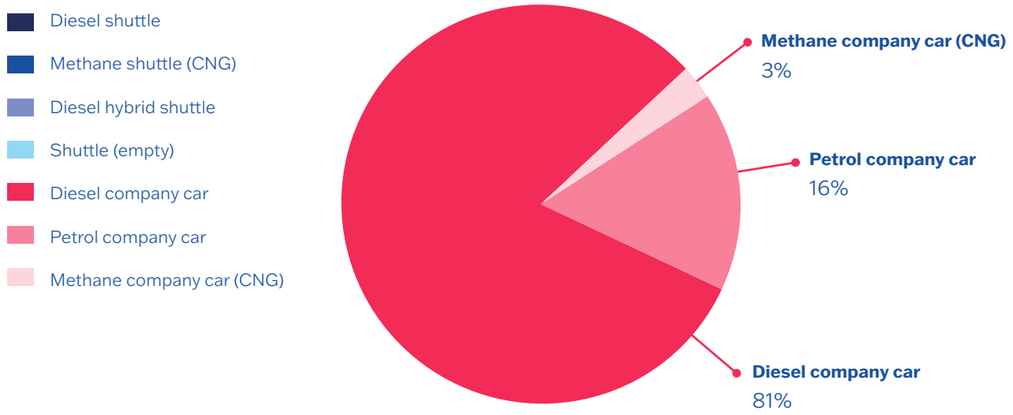
Emissions from air travel account for the largest share, followed by the use of taxis and personal cars. This indicates the need for emission reduction policies for corporate travel, with a possible shift towards more sustainable modes of transport, such as rail or car sharing.

Corporate fleet

Corporate fleet emissions refer to the use of company vehicles. For the calculation, fuel consumption data from the company's fuel cards were used, allowing for an accurate estimate of emissions based on fuel type.

TOTAL EMISSIONS FROM THE CORPORATE FLEET

Method of transport	CO_2e
COMPANY CAR	
Diesel	271,300.90
Petrol	52,709.48
Methane	9,476.26
Overall total	**333,486.65**



The total emissions of the corporate fleet are therefore **333,486 kg CO_2e**. The methodology adopted excluded Well-to-Tank (WTT) emissions, instead focusing on Tank-to-Wheel (TTW) emissions from fuel combustion.

Employee commuting

Emissions[129] related to employee journeys between home and work (employee commuting) were calculated through a combination of data provided by employees and standardised emission factors.
This table shows the total emissions for each means of transport used by employees for home-work journeys, with n overall total of 214,373.35 kg CO_2e.

TOTAL EMISSIONS FROM EMPLOYEE COMMUTING

Method of transport	kg of CO_2e
Personal car	208,106.73
Motorbike	1,153.48
Train	285.95
Local bus	1,340.39
Generic public transport	593.46
Ferry	2,893.35
Overall total	**214,373.35**

In accordance with Regulation (EC) 1221/2009, Annex IV, point b, the emissions are shown per employee. For Scope 1 emissions relating to corporate fleets, the value is 49.04 tCO_2eq; for Scope 3 emissions, which include home-work journeys and business trips, the value is 41.58 tCO_2eq.
For recycling managed by the CONAI System, Scope 1 emissions are 0.74 tCO_2eq; for Scope 3 emissions, they are 0.64 tCO_2eq.

129
The methodology used follows the GHG Protocol guidelines, specifically for Scope 3 (Indirect Upstream Emissions), Category 7. The modes of transport considered include the use of trains, personal cars and motorbikes. They were estimated by multiplying the total annual distance by the specific emission factors for each mode of transport, based on the DEFRA (2023) database. Transport considered includes personal cars, trains and motorbikes, with emissions calculated in kg CO_2e/km.

8.7

Relevant environmental legal provisions of reference and declaration of conformity

CONAI maintains an up-to-date list of the environmental regulations (voluntary and otherwise) that apply to it, and periodically assesses CONAI's state of compliance, ensuring the requirements are met.
With reference to the legal framework in the environmental field, **CONAI therefore declares full compliance with the applicable legislation and regulations**.

The main applicable regulatory obligations are set out below for illustrative purposes.

General requirements

- Waste Framework Directive 2008/98/EC as amended (notably, the amendment in 2018 by Directive 2018/851/EU of 30 May 2018).
- Packaging and Packaging Waste Directive 94/62/EC as amended (notably, the amendment in 2018 by Directive 2018/852/EU of 30 May 2018).
- Legislative Decree 152/06 Consolidated Environmental Act as amended by Legislative Decree 116/2020 implementing European directives.
- SUP Directive.
- *CONAI Statute* and *Implementing Regulations*.
- *Code of Ethics*.
- *Antitrust guidelines*.

- *General Programme for the Prevention and Management of Packaging and Packaging Waste (PGP).*
- *Annual General Report.*
- *Specific Plan for the Prevention and Management of Packaging and Packaging Waste (PSP).*
- *Management Report and Financial Statements.*
- CONAI Convention – Packaging Material Consortia.
- National ANCI-CONAI Framework Agreement 2020-2024.
- Decree 81/2008.

Waste

- *Regulations for the management of municipal and assimilated waste and the protection of decorum and environmental hygiene* approved by resolution 118 of the Municipal Council of the Municipality of Milan of 6 November 2000, as amended by resolution 20 of the Municipal Council of 26 March 2002
- *Municipal Regulation for the management of municipal waste* in the Municipality of Rome approved by Municipal Council Resolution 105 of 12 May 2005.
- Legislative Decree 152/06 Consolidated Environmental Act, article 220, paragraph 2, Packaging Communication and article 1 Law 70/94.

Fire prevention

- Presidential Decree 151/2011 *Regulation simplifying the framework of procedures relating to fire prevention.*
- Ministerial Decree 10/03/1998 *General criteria for fire safety and emergency management in workplaces.*
- For the "fire risk assessment" (as a specific part of the Risk Assessment Document as per article 28, paragraph 2 of Legislative Decree 81/2008 as amended), see article 46 of Legislative Decree 81/2008 and Ministerial Decree 10/03/1998, both for the criteria set out in Annex I, and for the classification of the level of risk envisaged (article 2 of Ministerial Decree 10/03/1998).

Civil thermal plants

- Legislative Decree 152 of 3 April 2006 (*Environmental regulations*: Part V – *Regulations on air protection and reduction of emissions in the atmosphere* – Title II: Civil thermal plants).
- Legislative Decree 183 of 15 November 2017.
- Presidential Decree 412 of 26 August 1993 as amended.
- Presidential Decree 74 of 16 April 2013 – *Regulation defining the general criteria on the operation, conduct, control, maintenance and inspection of thermal systems for winter and summer air conditioning of buildings and for the preparation of hot water for sanitary uses, pursuant to article 4, paragraph 1, letters a) and c), of Legislative Decree 192 of 19 August 2005.*
- Presidential Decree 75/2013 *Regulations governing accreditation criteria to ensure the qualification and independence of experts and bodies to be entrusted with the energy certification of buildings, pursuant to article 4, paragraph 1, letter c) of Legislative Decree 192 of 19 August 2005.*
- Ministerial Decree 10 February 2014 *New formats of the "Plant Book" for all thermal air-conditioning and domestic hot water production systems and of the "Energy Efficiency Report"*, both applicable from 15 October 2014.
- Lombardy Region Decree 11785 of 23 December 2015 implementing DGR X/3965 and DGR X/4427 of 2015 *Operational provisions for the operation, maintenance, control and inspection of civil thermal plants.*

Impact on traffic

- Highway Code.
- Ministerial Decree of 27 March 1998 *Sustainable transport in urban areas.*

Greenhouse gases

- Regulation 517/2014/EU of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006 and subsequent Implementing Regulations.
- Presidential Decree 146/2018 implementing Regulation (EU) No. 517/2014 (repealing, as of 24 January 2019, Presidential Decree 43/2012, suppressing, inter alia, the Declaration referred to in article 16, paragraph 1 of Presidential Decree 43/2012, which, with respect to 2018 information (reporting deadline 31 May 2019) will not have to be transmitted.[130] However, as from 24 September 2019, following the first useful intervention for leakage control, maintenance, servicing, repair and/or dismantling of the equipment already installed on the date of entry into force of Presidential Decree 146/2018, the certified firm or, in the case of firms not subject to the certification requirement, the certified natural person, shall communicate to the Data Bank, by telematic means, the information referred to in paragraphs 4, 5 and 7 of article 16 of Presidential Decree 146/2018.[131]
- Legislative Decree 163 of 5 December 2019, approving the "Penalty framework for the violation of the provisions of Regulation (EU) 517/2014 on

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Concerning the Obligation for natural persons and firms to certify and register in the National Telematic Register referred to in article 15 of Presidential Decree 146/2018, see: https://www.fgas.it/

131
Individuals and firms that, as of 24 January 2019, are already registered in the National Telematic Register, must obtain the relevant certificates or attestations referred to in articles 7, 8 and 9 (of Presidential Decree 146/2018) within eight months, i.e. by 24 September 2019. Failure to comply with this deadline will result in removal from the National Telematics Register after notification to the person concerned.

fluorinated greenhouse gases and repealing Regulation (EC) 842/2006", effective 17 January 2020 and repealing Legislative Decree 26 of 5 March 2013.

Civil water discharges

- Legislative Decree 152/06 Consolidated Environmental Act, part III title III.
- Regulations for the sewerage service in the Municipality of Milan.
- Lombardy Region Regulation 6 of 29 March 2019 *Framework and administrative regimes for discharges of domestic wastewater and urban wastewater, framework of discharge controls and approval procedures for urban wastewater treatment plant projects*.
- Lombardy Region Regulation 2 of 24 March 2006 "Framework for the use of surface and underground water, the use of water for domestic purposes, water saving and water reuse in implementation of article 52, paragraph 1, letter c) of Regional Law 26 of 12 December 2003".
- Building regulations of the Municipality of Milan.

9

Appendix and additional information

9.1 CONAI and the Sustainable Development Goals

CONAI's activities have always been focused on environmental protection, and they have never been more central to governance policies at the international level. The 2030 Agenda for Sustainable Development, adopted by all UN member states in 2015, provides a shared blueprint for peace and prosperity for life on the planet, now and in the future. At its core are 17 Sustainable Development Goals (SDGs), which are an urgent call to action by all countries in a global partnership.

The CONAI System with its functions and activities directly **contributes** to the **pursuit of 9 of the 17 Sustainable Development Goals** of the 2030 Agenda.

Each of the identified 9 priority SDGs can be linked to at least 1 topic in the materiality matrix.

Priority SDGs for CONAI

- Skills development: Training, education and awareness-raising of organisations, associations and citizens.

- Promotion of innovation and research.
- Secondary raw materials, EoW and circular economy.

- Consumption of raw materials.
- Energy consumption.
- Greenhouse gas emissions and climate change.

- Support for disadvantaged areas.

- Accountability: traceability, reliability and robustness of data.
- Direct and indirect economic benefits of packaging recovery.
- Financial support to ensure effective functioning of the system.

- Support for qualitative and quantitative growth of separate collection.
- Prevention of waste generation.

- Achievement of national recycling targets.

- Greenhouse gas emissions and climate change.

- Consumption of raw materials.
- Energy consumption.
- Skills development: Training, education and awareness-raising of organisations, associations and citizens.

Since 2018, ISTAT has been publishing the *SDGs Report. Statistical information for the 2030 Agenda in Italy*, which aims to guide users within the complex system of indicators produced. In addition to Italy's positioning along the path of sustainable development, the Report offers a number of thematic and analytical insights both at a local level and with respect to the different socio-demographic characteristics of people. There are many points of contact with the system of Equitable and Sustainable Well-being indicators ("BES"). Below is a summary scheme that relates CONAI's environmental planning to the relevant SDGs and BES indicators published in the latest ISTAT reports.[132]

132 https://www.istat.it/it/archivio/275718

SDGs	BES global indicators	Performance summary[133]	CONAI Environmental Programme
Goal 4 Quality education.	**4.1.2** – Completion rate (primary education, lower secondary education, upper secondary education). **4.3.1** Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex. **4.b.1** Volume of official development assistance flows for scholarships, by sector and type of study.	In 2022, in Italy, 21.4% of 15-year-old students did not reach the basic level of competence in reading. This figure is an improvement over 2018. Mathematical skills are worsening: 29.6% of 15-year-old pupils do not reach the basic level. • In Primary II, more pupils do not reach the basic level of competence in Italian (31.4%) and mathematics (36.1%) than in 2019 and 2021. • Already by Primary II, slight local gaps are observed, most evidently for mathematics. Pupils who do not reach the basic level in mathematics account for 40% of pupils in the South, compared with 32.6% in the Centre and 34.6% in the North. The proportion of 18-24 year olds who left the education and training system without a diploma or qualification was 10.5%, an improvement on the previous year (11.5%). • 30.6% of 25-34-year-olds completed tertiary education, which is up from 2022 (29.2%), but still far from the 45% target for 2030.	**10** Education and skills. 
Goal 7 Ensure access to affordable, reliable, sustainable and modern energy for all.	**7.1.2** Proportion of population with primary reliance on clean fuels and technology. **7.2.1** Renewable energy share in the total final energy consumption.	After the previous year's increase driven by the post-pandemic recovery, energy consumption is set to fall by 3.1% in 2022. Energy intensity at an all-time low in 2022. Italy remains in fifth place in the European ranking, with an energy intensity that amounts to just under 85% of the EU27 average value. In 2022, with 508 kg oil equivalent per capita, the residential sector reached its lowest level of consumption in the last ten years, with the exception of 2014. In 2022, the overall contribution from renewable sources to gross final energy consumption remained substantially stable (19.1%).	**6** Carbon neutrality. 

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For full information, see the SDGs Report on the following page: https://www.istat.it/storage/rapporti-tematici/sdgs/2024/Rapporto-SDGs2024-Ebook.pdf.

SDGs	BES global indicators	Performance summary	CONAI Environmental Programme
Goal 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	**8.b.1** Existence of a developed and operationalised national strategy for youth employment, as a distinct strategy or as part of a national employment strategy.	In 2023, the trend of the economic cycle, although weakened, remained positive. However, the annual changes in GDP in volume (+0.9%) and per capita (+1.0%) were lower than in 2022 and the value added per person employed decreased by 0.7%. In 2023, the recovery of the Italian labour market continued. The employment rate for 20-64 year-olds rose to 66.3% (+1.5 percentage points); the unemployment rate (7.7%) fell by 0.4 percentage points. Despite the recovery in recent years, the differentials with the EU remained high: Italy is in last place in the European ranking of the employment rate (-9 percentage points compared to the average EU27 level) and second only to Greece and Spain with respect to the unemployment rate (-1.6 percentage points compared to the EU27). The share of part-time employees due to lack of alternatives continued to fall: for every 1 man there were 3 women in this condition. The fall in the irregular employment rate that began in 2019 continued, accompanied by a slight reduction in local gaps.	**4** Actions to support local authorities.   **10** Education and skills. 
Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.	**9.2.1** Manufacturing value added as a proportion of GDP and per capita. **9.2.2** Manufacturing employment as a proportion of total employment. **9.4.1** CO_2 emissions per unit of value added. **9.5.1** Research and development expenditure as a proportion of GDP.	In 2022, CO_2 emissions intensity showed a decrease, down to 154.9 tonnes per € million (from 158.5 tonnes in 2021), continuing the downward trend that had paused in 2021. The intensity of research, as measured by the ratio of R&D expenditure to GDP, in 2021 – the last year with definitive data – is contracting (1.43% of GDP, from 1.51% in 2020): the increase in R&D expenditure of almost €1 billion (at current prices) was more than offset by the strong rebound in GDP following the recession in the first pandemic year (8.3% in real terms). 37.6% of companies with at least 10 employees in tourism and catering sold online to end customers and 20% to public institutions and businesses.	**4** Actions to support local authorities.  **6** Carbon neutrality. 
Goal 10 Reduce inequality within and among countries.	**10.1.1** Growth rates of household expenditure or income per capita among the bottom 40% of the population and the total population.	In 2023, the per capita gross disposable income of households residing in Italy rose again (+4.2%) after the previous year's decline. But purchasing power decreased (-0.5%).	**4** Actions to support local authorities.  

SDGs	BES global indicators	Performance summary	CONAI Environmental Programme
Goal 11 Make cities and human settlements inclusive, safe, resilient and sustainable.	**11.6.1** Proportion of solid waste collected and managed in controlled facilities out of municipal solid waste generated.	In 2022, the process of decreasing the share of municipal waste sent to landfill continued, standing at 17.8% of municipal waste generated (-1.2 percentage points compared to 2021), which is still a long way from the EU target for 2035 (10%). Generation of municipal waste is decreasing compared to the previous year (see Goal 12). The decrease was smaller in the capital cities, where 32.6% of municipal waste was generated (9.4 million tonnes; -0.7% compared to 2021). Air pollution levels continued to fall in 2022, particularly for PM 2.5, but values remained high in large cities, resulting in risks to human health.	**4** Actions to support local authorities. **5** Call for Local Communication Projects
Goal 12 Ensure sustainable consumption and production patterns.	**12.2.2** Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP. **12.4.2** (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment. **12.5.1** National recycling rate, tonnes of material recycled. **12.7.1** Number of countries implementing sustainable public procurement policies and action plans.	In 2022, domestic material consumption continued to grow slightly in volume and in relation to population, but decreased in relation to GDP. The amount of municipal waste produced per inhabitant fell again, reaching 492 kg per inhabitant and approaching the minimum levels seen during the pandemic (487 kg). 2022 signalled an upturn in waste management processes: the recycling percentage (49.2%) returned to growth; the separate collection rate, up by 1.2 percentage points, stood at 65.2%. However, delays in compliance with regulations remained significant and local disparities were widespread. Social/environmental reporting within public administrations is still not very widespread (14.5% of public institutions were involved in 2021/2022), but more than half of public administrations (51.7%) make green purchases that comply with Minimum Environmental Criteria (CAM). The share of subsidies for fossil fuels over GDP increased (0.81%).	**6** Carbon neutrality. **12** Accountability.
Goal 13 Take urgent action to combat climate change and its impacts.	**13.2.2** Total greenhouse gas emissions per year.	The advantage achieved in 2020 in reducing greenhouse gas emissions as a result of the restrictive measures for the pandemic emergency was eroded in 2021, both in Italy and in Europe. In 2022, however, Europe's emissions fell again, resuming the downward trend measured since 1990.	**6** Carbon neutrality. **12** Accountability.

SDGs	BES global indicators	Performance summary	CONAI Environmental Programme
Goal 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	**15.3.1** Proportion of land that is degraded over total land area.	In 2022, soil sealing by artificial cover (incidence of "consumed" soil on the local area) was 7.14% (8.55% in the North, 6.76% in the Centre, 5.93% in the South), but exceeded 10% in Lombardy, Veneto and Campania.	**4** Actions to support local authorities. **12** Accountability.

9.2 CONAI and the strategy for the circular economy

CONAI, plays an important role in the national strategy for the circular economy by contributing, within its competencies, to the promotion of good sustainability practices for packaging and packaging waste.

Chapter	Paragraph	Strategy/ Goal	Description	CONAI contribution	CONAI Environmental Policy
2	2.1	**Promote eco-design**	Support firms in improving the eco-design of packaging.	Pensare Futuro ("Thinking the Future").	1
	2.3	**Measure and monitor circularity**	Measure and improve the circularity of packaging produced by member firms.	Pensare Futuro ("Thinking the Future"). Social and economic impacts of CONAI. The environmental benefits of managing packaging and packaging waste management.	1 2 4
	2.4	**Extended Producer Responsibility (EPR)**	Extend producer responsibility for the entire product life cycle, including the post-consumer phase.	CONAI in figures. Financial overview of the CONAI System.	1 6
4	4.1	**Recycle and recover materials**	Implement measures to increase the recycling rate of materials, reduce the use of virgin raw materials and save energy.	Social and economic impacts of CONAI. The environmental benefits of managing packaging and packaging waste management.	1 4 6
	4.1	**Training and development of skills**	Foster training and development of skills in the circular economy.	Sustainability Culture according to CONAI.	4
5	5.5	**Support the bio economy**	Promote bio-economy-based production models to reduce dependence on non-renewable resources and support the circular economy.	Social and economic impacts of CONAI. The environmental benefits of managing packaging and packaging waste management.	1 4 6
6	6.1	**Digitise the circular economy**	Use digital technologies to improve material and waste traceability, optimise resource management and facilitate monitoring of circularity targets.	Pensare Futuro ("Thinking the Future"). Support for qualitative and quantitative growth of separate collection.	1 2
8	8.2	**Climate neutrality**	Contribute to the reduction of greenhouse gas emissions by increasing circularity and adoption of recycled materials.	The sector's contribution to combating climate change.	1

9.3 GRI Content Index

STATEMENT OF USE
Consorzio Nazionale Imballaggi (CONAI) has reported the information cited in this GRI Content Index for the period [01/01/2023 to 31/12/2023] with reference to the GRI Standards.

GRI 1 USED
GRI 1: Foundation 2021

GRI STANDARD	DISCLOSURE	LOCATION
GRI 2 General disclosures 2021	**2-1** Organisational details	15, 74, 188, 193
	2-2 Entities included in the organisation's sustainability reporting	15, 80
	2-3 Reporting period, frequency and contact point	15
	2-5 External assurance	15
	2-6 Activities, value chain and other business relationships	74, 82, 98, 146-147
	2-7 Employees	188, 194, 195
	2-8 Workers who are not employees	194, 195
	2-9 Governance structure and composition	74, 79, 100
	2-10 Nomination and selection of the highest governance body	76, 77, 78
	2-11 Chair of the highest governance body	77, 78
	2-12 Role of the highest governance body in overseeing the management of impacts	100, 203
	2-13 Delegation of responsibility for managing impacts	77, 78
	2-14 Role of the highest governance body in sustainability reporting	100, 106
	2-15 Conflicts of interest	76, 182
	2-17 Collective knowledge of the highest governance body	100, 103, 234, 240
	2-22 Statement on sustainable development strategy	100, 103, 203, 234, 240
	2-23 Policy commitments	182, 183, 185, 203, 208
	2-27 Compliance with laws and regulations	183, 185, 227-230
	2-28 Membership associations	98
	2-29 Approach to stakeholder engagement	92, 102, 103, 105, 106
	2-30 Collective bargaining agreements	196

GRI STANDARD	DISCLOSURE	LOCATION
GRI 3 Material topics 2021	**3-1** Process to determine material topics	88, 92, 102, 103, 105, 204
	3-2 List of material topics	108, 204-207
	3-3 Management of material topics	106, 204-207, 257
GRI 201 Economic performance 2016	**3-3** Management of material topics	150, 153
	201-1 Direct economic value generated and distributed	22, 154, 171, 172, 174
GRI 203 Indirect Economic Impacts 2016	**3-3** Management of material topics	20, 22, 36
	203-1 Infrastructure investments and services supported	24, 25, 26, 28, 30, 31, 33
GRI 205 Anti-corruption 2016	**3-3** Management of material topics	184
	205-1 Operations assessed for risks related to corruption	184
GRI 206 Anti-competitive Behaviour 2016	**3-3** Management of material topics	185
	206-1 Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	185
GRI 301 Materials 2016	**3-3** Management of material topics	36, 214
	301-1 Materials used by weight or volume	214
	301-2 Recycled input material used	216
GRI 302 Energy 2016	**3-3** Management of material topics	36, 218
	302-1 Energy consumption within the organisation	218
	302-4 Reduction of energy consumption	42
GRI 303 Water and effluents 2018	**3-3** Management of material topics	221
	303-1 Interaction with water and shared resource	221, 222
	303-5 Water consumption	221, 222

GRI STANDARD	DISCLOSURE	LOCATION
GRI 305 Emissions 2016	**3-3** Management of material topics	36, 44, 218, 223-226
	305-1 Direct (Scope 1) GHG emissions	225
	305-2 Energy indirect (Scope 2) GHG emissions	218
	305-3 Other indirect (Scope 3) GHG emissions	44, 47-60, 224, 226
GRI 306 Waste 2020	**3-3** Management of material topics	36, 214
	306-1 Waste generation and significant waste-related impacts	214
	306-3 Waste generated	115, 214, 216, 217
	306-4 Waste diverted from disposal	119, 124, 138, 132, 141
GRI 401 Employment 2016	**3-3** Management of material topics	188, 193
	401-1 New employee hires and employee turnover	194, 195
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	196-199
GRI 403 Occupational health and safety 2018	**3-3** Management of material topics	186
	403-1 Occupational health and safety management system	186
	403-2 Hazard identification, risk assessment and incident investigation	186
GRI 404 Training and education 2016	**3-3** Management of material topics	64, 66, 68, 69, 208-214
	404-1 Average hours of training per year per employee	188
	404-2 Programmes for upgrading employee skills and transition assistance programmes	165, 188
GRI 405 Diversity and equal opportunity 2016	**3-3** Management of material topics	196
	405-1 Diversity of governance bodies and employees	194, 195
	405-2 Ratio of basic salary and remuneration of women to men	196

9.4 GRI-ESRS Interoperability Matrix

The following is a comparative table of GRI indicators, applied in this document according to the “with reference to” option, with the new ESRS standards whose application is currently being explored.

GRI STANDARD	GRI DISCLOSURES AND REQUIREMENTS	ESRS DISCLOSURES AND REQUIREMENTS	NOTES	EXPLANATION
GRI 2 General disclosures 2021	**2-1** Organisational details	See requirements of Directive 2013/34/EU		
	2-2 Entities included in the organisation’s sustainability reporting	ESRS 1 5.1; ESRS 2 BP-1 §5 (a) and (b) i		
	2-3 Reporting period, frequency and contact point	ESRS 1 §73		
	2-5 External assurance	See external assurance requirements of Directive (EU) 2022/2464		
	2-6 Activities, value chain and other business relationships	ESRS 2 SBM-1 §40 (a) i to (a) ii, (b) to (c), §42 (c)		
	2-7 Employees	ESRS 2 SBM-1 §40 (a) iii; ESRS S1 S1-6 §50 (a) to (b) and (d) to (e), §51 to §52		
	2-8 Workers who are not employees	ESRS S1 S1-7 §55 to §56	**3**	GRI 2-8 covers workers who are not employees and whose work is controlled by the organisation. ESRS S1-7 covers non-employee workers: people with contracts with the undertaking to supply labour (“self-employed people”) or people provided by undertakings primarily engaged in “employment activities” (NACE Code N78).
	2-9 Governance structure and composition	ESRS 2 GOV-1 §21, §22 (a), §23; ESRS G1 §5 (b) See also corporate governance statement requirements of Directive 2013/34/EU for public-interest entities		
	2-10 Nomination and selection of the highest governance body	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	2-11 Chair of the highest governance body	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	2-12 Role of the highest governance body in overseeing the management of impacts	ESRS 2 GOV-1 §22 (c); GOV-2 §26 (a) to (b); SBM-2 §45 (d); ESRS G1 §5 (a)		
	2-13 Delegation of responsibility for managing impacts	ESRS 2 GOV-1 §22 (c) i; GOV-2 §26 (a); ESRS G1 G1-3 §18 (c)		
	2-14 Role of the highest governance body in sustainability reporting	ESRS 2 GOV-5 §36; IRO-1 §53 (d)		
	2-15 Conflicts of interest	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
	2-17 Collective knowledge of the highest governance body	ESRS 2 GOV-1 §23		
	2-22 Statement on sustainable development strategy	ESRS 2 SBM-1 §40 (g)		
	2-23 Policy commitments	ESRS 2 GOV-4; MDR-P §65 (b) to (c) and (f); ESRS S1 S1-1 §19 to §21, and §AR 14; ESRS S2 S2-1 §16 to §17, §19, and §AR 16; ESRS S3 S3-1 §14, §16 to §17 and §AR 11; ESRS S4 S4-1 §15 to §17, and §AR 13; ESRS G1 G1-1 §7 and §AR 1 (b)		

GRI STANDARD	GRI DISCLOSURES AND REQUIREMENTS	ESRS DISCLOSURES AND REQUIREMENTS	NOTES	EXPLANATION
	2-27 Compliance with laws and regulations	ESRS 2 SMB-3 §48 (d); ESRS E2 E2-4 §AR 25 (b); ESRS S1 S1-17 §103 (c) to (d) and §104 (b); ESRS G1 G1-4 §24 (a)	**1A**	GRI 2-27 covers all significant non-compliance with laws and regulations, and breakdowns by types of incidents of non-compliance. ESRS requirements cover information on current financial effects, non-compliance with regards to pollution, anti-corruption and anti-bribery, and severe human rights incidents, in a number of topical standards.
	2-28 Membership associations	"Political engagement" is a sustainability matter for G1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	**2B**	
	2-29 Approach to stakeholder engagement	ESRS 2 SMB-2 §45 (a) i to (a) iv; ESRS S1 S1-1 §20 (b); S1-2 §25, §27 (e) and §28; ESRS S2 S2-1 §17 (b); S2-2 §20, §22 (e) and §23; ESRS S3 S3-1 §16 (b); S3-2 §19, §21 (d) and §22; ESRS S4 S4-1 §16 (b); S4-2 §18, §20 (d) and §21		
	2-30 Collective bargaining agreements	ESRS S1 S1-8 §60 (a) and §61		
GRI 3 Material topics 2021	**3-1** Process to determine material topics	ESRS 2 BP-1 §AR 1 (a); IRO-1 §53 (b) ii to (b) iv		
	3-2 List of material topics	ESRS 2 SBM-3 §48 (a) and (g)		
	3-3 Management of material topics	ESRS 2 SBM-1§ 40 (e); SBM-3 §48 (c) i and (c) iv; MDR-P, MDR- A, MDR-M, and MDR-T; ESRS S1 S1-2 §27; S1-4 §39 and AR 40 (a); S1-5 §47 (b) to (c); ESRS S2 S2-2 §22; S2-4 §33, §AR 33 and §AR 36 (a); S2-5 §42 (b) to (c); ESRS S3 S3-2 §21; S3-4 §33, §AR 31, §AR 34 (a); S3-5 §42 (b) to (c); ESRS S4 S4-2 §20, S4-4 §31, §AR 30, and §AR 33 (a); S4-5 §41 (b) to (c) See below for additional linkages to specific topics.		

GRI STANDARD	GRI DISCLOSURES AND REQUIREMENTS	ESRS DISCLOSURES AND REQUIREMENTS	NOTES	EXPLANATION
GRI 201 Economic performance 2016	**201-1** Direct economic value generated and distributed	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
GRI 203 Indirect Economic Impacts 2016	**203-1** Infrastructure investments and services supported	"Communities' economic, social and cultural rights" is a sustainability matter for S3 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed according to ESRS 1 §11 and pursuant to MDR-M.	**2B**	
	203-2 Significant indirect economic impacts	ESRS S1 S1-4 §AR 41; ESRS S2 S2-4 §AR 37; ESRS S3 S3-4 §AR 36		
GRI 205 Anti-corruption 2016	**3-3** Management of material topics	ESRS G1 G1-1 §7; G1-3 §16 and §18 (a) and §24 (b)		
	205-1 Operations assessed for risks related to corruption	ESRS G1 G1-3 §AR 5	**1B**	GRI 205-1 requires quantitative data on the extent of the risk assessment. ESRS G1-3 §AR 5 is a narrative disclosure.
GRI 206 Anti-competitive Behaviour 2016	**206-1** Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	This topic is not covered by the list of sustainability matters in ESRS 1 AR §16.		
GRI 301 Materials 2016	**3-3** Management of material topics	ESRS E5 E5-1 §12; E5-2 §17; E5-3 §21		
	301-1 Materials used by weight or volume	ESRS E5 E5-4 §31 (a)	**1B**	GRI 301-1 requires a breakdown by non-renewable and renewable materials used.
	301-2 Recycled input material used	ESRS E5 E5-4 §31 (c)		

GRI STANDARD	GRI DISCLOSURES AND REQUIREMENTS	ESRS DISCLOSURES AND REQUIREMENTS	NOTES	EXPLANATION
GRI 302 Energy 2016	**3-3** Management of material topics	ESRS E1 E1-2 §25 (c) to (d); E1-3 §26; E1-4 §33		
	302-1 Energy consumption within the organisation	ESRS E1 E1-5 §37; §38; §AR 32 (a), (c), (e) and (f)	**2B**	Differences exist between the two in how energy consumption data is aggregated and disaggregated.
	302-4 Reduction of energy consumption	"Energy" is a sustainability matter for E1 covered by ESRS 1 §AR 16. Hence this GRI disclosure is covered by MDR-P, MDR-A, MDR-T, and/or as an entity-specific metric to be disclosed	**2A**	
GRI 303 Water and effluents 2018	**3-3** Management of material topics	ESRS E2 §AR 9 (b); E2-1 §12; E2-2 §16 and §19; E2-3 §20; ESRS E3 E3-1 §9; E3-2 §15, §17 to §18; E3-3 §20		
	303-1 Interaction with water and shared resource	ESRS 2 SBM-3 §48 (a); MDR-T §80 (f); ESRS E3 §8 (a); §AR 15 (a); E3-2 §15, §AR 20		
	303-5 Water consumption	ESRS E3 E3-4 §28 (a), (b), (d) and (e)		
GRI 305 Emissions 2016	**3-3** Management of material topics	ESRS E1 E1-2 §22; E1-3 §26; E1-4 §33 and §34 (b); E1-7 §56 (b) and §61 (c); ESRS E2 §AR 9 (b); E2-1 §12; E2-2 §16 and §19; E2-3 §20	**2A**	GRI 305 requirement 1.2 requires reporting the type and scheme of which offsets are part.
	305-1 Direct (Scope 1) GHG emissions	ESRS E1 E1-4 §34 (c); E1-6 §44 (a); §46; §50; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 40; AR §43 (c) to (d)		
	305-2 Energy indirect (Scope 2) GHG emissions	ESRS E1 E1-4 §34 (c); E1-6 §44 (b); §46; §49; §50; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 40; §AR 45 (a), (c), (d) and (f)		
	305-3 Other indirect (Scope 3) GHG emissions	ESRS E1 E1-4 §34 (c); E1-6 §44 (c); §51; §AR 25 (b) and (c); §AR 39 (a) to (d); §AR 46 (a) (i) to (k)		

GRI STANDARD	GRI DISCLOSURES AND REQUIREMENTS	ESRS DISCLOSURES AND REQUIREMENTS	NOTES	EXPLANATION
GRI 306 Waste 2020	**3-3** Management of material topics	ESRS E5 §AR 7 (a); E5-1 §12; E5-2 §17; E5-3 §21		
	306-1 Waste generation and significant waste-related impacts	ESRS 2 SBM-3 §48 (a), (c) ii and iv; ESRS E5 E5-4 §30		
	306-3 Waste generated	ESRS E5 E5-5 §37 (a), §38 to §40	**1B**	GRI 306-3 requires quantitative data (i.e. a breakdown of the composition of the waste in metric tonnes). ESRS E5-5 §38 requires a narrative disclosure.
	306-4 Waste diverted from disposal	ESRS E5 E5-5 §37 (b), §38 and §40	**1B**	See GRI 306-3.
GRI 401 Employment 2016	**3-3** Management of material topics	ESRS S1 S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); ESRS S2 §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	401-1 New employee hires and employee turnover	ESRS S1 S1-6 §50 (c)	**2A**	GRI 401-1-b requires breakdowns by age group, gender and region.
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	ESRS S1 S1-11 §74; §75; §AR 75		
GRI 403 Occupational health and safety 2018	**3-3** Management of material topics	ESRS S1 S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); ESRS S2 §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	403-1 Occupational health and safety management system	ESRS S1 S1-1 §23	**1A**	GRI 403-1-a requires reporting the legal requirements and management system standards on which the system is based. This information is not required in ESRS as this is regulated within the European Union.
	403-2 Hazard identification, risk assessment and incident investigation	ESRS S1 S1-3 §32 (b) and §33		

GRI STANDARD	GRI DISCLOSURES AND REQUIREMENTS	ESRS DISCLOSURES AND REQUIREMENTS	NOTES	EXPLANATION
GRI 404 Training and education 2016	**3-3** Management of material topics	ESRS S1 S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); ESRS S2 §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	404-1 Average hours of training per year per employee	ESRS S1 S1-13 §83 (b) and §84		
	404-2 Programmes for upgrading employee skills and transition assistance programmes	ESRS S1 S1-1 §AR 17 (h)		
GRI 405 Diversity and equal opportunity 2016	**3-3** Management of material topics	ESRS S1 S1-1 §17; §20 (c); S1-2 §27; S1-4 §38; §39; §AR 40 (a); S1-5 §44; §47 (b) and (c); ESRS S2 §11 (c); S2-1 §14; §17 (c); S2-2 §22; S2-4 §32; §33 (a) and (b); §36; §AR 33; §AR 36 (a); S2-5 §39, §42 (b) and (c)		
	3-3 Management of material topics	ESRS S1 §24 (a)		
	405-2 Ratio of basic salary and remuneration of women to men	ESRS 2 GOV-1 §21 (d); ESRS S1 S1-6 §50 (a); S1-9 §66 (a) to (b); S1-12 §79	**1A**	GRI 405-1-b requires breakdowns by employee category.

NOTES LEGENDS

1A
Differences in granularity: GRI requires further breakdowns or granularity.

1B
Differences in data type: GRI requires quantitative disclosure and ESRS requires qualitative disclosure.

2A
Differences in scope: GRI disclosure is broader and/or more specific than ESRS.

2B
Differences in scope: GRI and ESRS disclosures have the same disclosure objective but differ in how data points are formulated.

2C
Differences in scope: GRI 403 covers employees and workers who are not employees but whose work and/or workplace is controlled by the organisation. ESRS S1-14 covers employees and non-employee workers (people with contracts with the undertaking to supply labour ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78). For fatalities, ESRS S1-14 covers workers working on the undertaking's sites.

3
Difference in definition of non-employees: GRI 2-8 covers workers who are not employees and whose work is controlled by the organisation. ESRS S1-7 covers non-employee workers (people with contracts with the undertaking to supply labour ("self-employed people") or people provided by undertakings primarily engaged in "employment activities" (NACE Code N78)).

9.5 Environmental Statement requirements

EMAS

REGULATION (EC) 1221/2009		CONAI ENVIRONMENTAL STATEMENT – 2024 Update
Article 8, paragraph 3	All documents modified and updated pursuant to paragraph 2 shall be verified and validated within six months.	The peculiarity of institutional reporting determines: - Acquisition of consolidated data for the reporting year (2023) as of 31 May of the following year (2024); - Acquisition of pre-consolidated data for the current year (2024), as of 30 September 2024 (exclusively for the quantitative data of the National System and CONAI System). For these reasons, processing data for the current year would require excessive reliance on preliminary estimates which would need to be systematically adjusted upon each update to the Environmental Statement. This approach is not in line with our desire to raise the environmental statement to a consolidated level by integrating it into the Sustainability Report, and launching the Consortium's first integrated report. For these reasons, all data – relating to environmental quantities and externalities, for all reporting perimeters – are consolidated as of 31 December 2023.

Annex IV REGULATION (EC) 1221/2009	CONAI ENVIRONMENTAL STATEMENT – 2023 Update	CONAI ENVIRONMENTAL STATEMENT – 2024 Update
a) A summary of the organisation's activities, products and services, the organisation's relationship with any parent organisations as appropriate, and a clear and unambiguous description of the scope of EMAS registration, including a list of sites included in the registration;	The National Packaging Consortium	The National Packaging Consortium Environmental Management System
b) The environmental policy and a brief description of the governance structure on which the organisation's environmental management system is based;	The National Packaging Consortium Environmental Policy	Governing bodies Environmental Policy

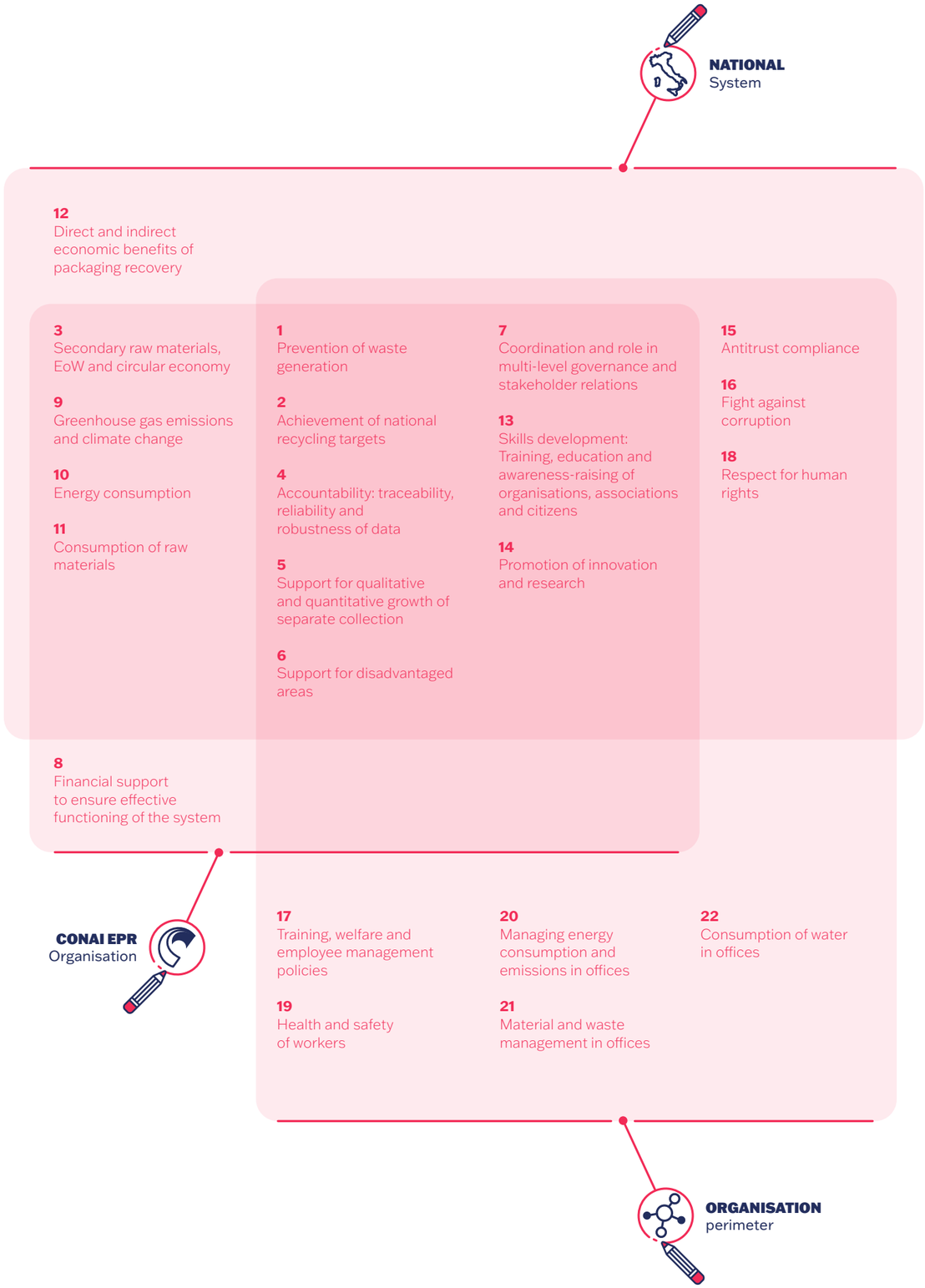
Annex IV REGULATION (EC) 1221/2009	CONAI ENVIRONMENTAL STATEMENT – 2022 Update	CONAI ENVIRONMENTAL STATEMENT – 2023 Update
c) A description of all the significant direct and indirect environmental aspects which result in significant environmental impacts of the organisation, a brief description of the approach used to establish their significance, and an explanation of the nature of the impacts as related to these aspects;	CONAI and stakeholders Determination of impacts CONAI in figures Environmental Management System Determination of significant direct and indirect environmental aspects	CONAI and its stakeholders Determining impacts Environmental Management System The System in figures
d) A description of the environmental objectives and targets in relation to the significant environmental aspects and impacts;	Environmental Programme	Environmental Programme
e) A description of the actions implemented and planned to improve environmental performance, achieve objectives and targets, and ensure compliance with environmental regulatory obligations.	Environmental Programme CONAI in figures CONAI and its organisation	Environmental Programme The System in figures CONAI and its organisation
f) A summary of the data available on the environmental performance of the organisation with respect to its significant environmental aspects. The report contains the core indicators and specific environmental performance indicators as set out in Section C. If there are environmental objectives and targets, the relevant data should be indicated;	CONAI in figures	The System in figures
Core indicators apply to all types of organisations. They focus on performance in the following key environmental areas:		The environmental benefits of managing packaging and packaging waste
• Energy efficiency	National System – Energy consumption CONAI System – Energy consumption Organisation – Managing energy consumption and emissions in offices	The contribution of firms to managing energy resources Managing energy consumption and emissions in offices Employee transport
• Material efficiency	National System – Consumption of raw materials CONAI System – Consumption of raw materials Organisation – Material and waste management in offices	The contribution of firms to protecting material Material and waste management in offices

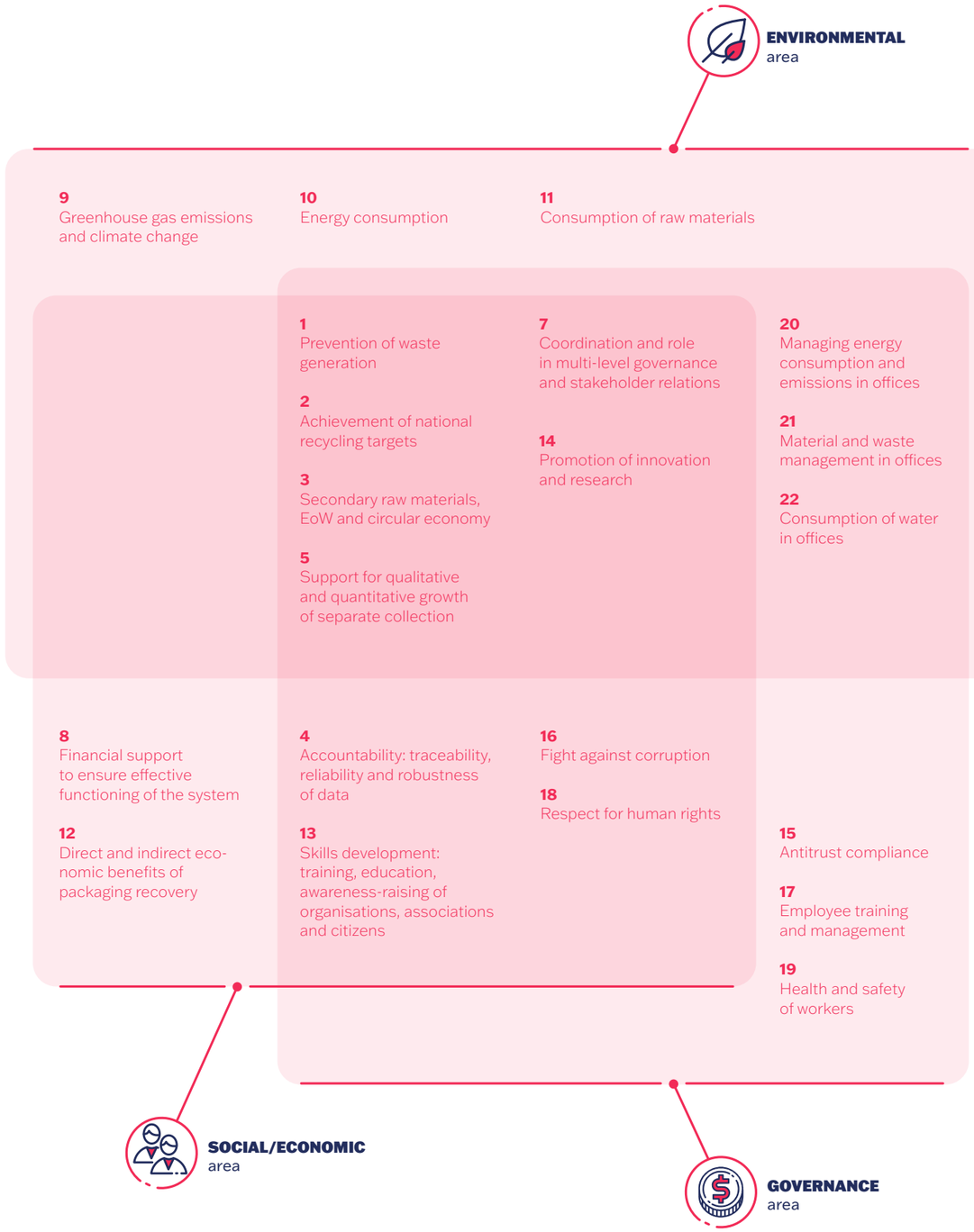
Annex IV REGULATION (EC) 1221/2009	CONAI ENVIRONMENTAL STATEMENT – 2022 Update	CONAI ENVIRONMENTAL STATEMENT – 2023 Update
• Water	National System – Call for Eco-design Projects Organisation – Water consumption in offices	National System – Call for Eco-design Projects Water consumption in offices
• Waste	CONAI in figures Organisation – Material and waste management in offices	The System in figures Material and waste management in offices
• Biodiversity		
• Emissions	National System – Greenhouse gas emissions and climate change CONAI System – Greenhouse gas emissions and climate change Organisation – Managing energy consumption and emissions in offices	Managing energy consumption and emissions in offices The sector's contribution to combating climate change
g) A reference to the main legal provisions that the organisation has to take into account to ensure compliance with environmental regulatory obligations and a statement on legal compliance	Reference legal provisions and declaration of conformity	Reference relevant environmental legal provisions and declaration of conformity
h) A confirmation of the requirements set out in article 25 paragraph 8, and the name and accreditation or licence number of the environmental verifier with the date of validation		

9.6 Impact reports on material topics

A risk matrix is the tool used to assess and manage risks within an organisation or in a given context.
In risk matrices, perimeters and different factors can represent different areas or levels of analysis.
In the case of CONAI, three perimeters are analysed: National System, CONAI System and Organisation, and three areas of impact (Environment, Social/economic and Governance).

Based on the impacts attributable to each individual topic (association of many -> one), it is possible to identify the relationships underlying the reporting.




ENVIRONMENTAL
area
9
Greenhouse gas emissions and climate change
10
Energy consumption
11
Consumption of raw materials
1
Prevention of waste generation
2
Achievement of national recycling targets
3
Secondary raw materials, EoW and circular economy
5
Support for qualitative and quantitative growth of separate collection
7
Coordination and role in multi-level governance and stakeholder relations
14
Promotion of innovation and research
20
Managing energy consumption and emissions in offices
21
Material and waste management in offices
22
Consumption of water in offices
8
Financial support to ensure effective functioning of the system
12
Direct and indirect economic benefits of packaging recovery
4
Accountability: traceability, reliability and robustness of data
13
Skills development: training, education, awareness-raising of organisations, associations and citizens
16
Fight against corruption
18
Respect for human rights
15
Antitrust compliance
17
Employee training and management
19
Health and safety of workers
SOCIAL/ECONOMIC
area
GOVERNANCE
area

La Politica ESG di CONAI

Il Consorzio Nazionale Imballaggi (**CONAI**) ha **personalità giuridica di diritto privato, non ha fini di lucro** e, ai sensi di legge, **deve garantire il raggiungimento degli obiettivi fissati dalla normativa relativi agli imballaggi e rifiuti di imballaggio.**

CONAI è un modello di responsabilità estesa dei produttori/utilizzatori di imballaggi, al quale partecipano in forma paritaria le **imprese produttrici e utilizzatrici di imballaggi**. Trasparenza, efficacia, efficienza ed economicità sono principi cardine dell'agire del Consorzio per garantire piena compliance con la normativa di settore.

CONAI indirizza e garantisce l'attività di sette consorzi di filiera (Ricrea, Cial, Comieco, Rilegno, Corepla, Biorepack, Coreve) relativi al materiale utilizzato per la produzione dell'imballaggio e assicura il **coordinamento e la cooperazione tra tutti gli operatori pubblici e privati interessati alla gestione degli imballaggi e dei rifiuti di imballaggio**.

Le attività del Consorzio sono finanziate attraverso il **Contributo Ambientale Conai** (CAC) versato dalle imprese aderenti e che è utilizzato, in via prioritaria, dai Consorzi di Filiera per il ritiro degli imballaggi primari o comunque conferiti al servizio pubblico nonchè per la raccolta, il recupero e il riciclo dei rifiuti di imballaggi del circuito commercio&industria. Il **Contributo è determinato e modulato da CONAI in funzione della riutilizzabilità, facilità di selezione e riciclabilità degli imballaggi.**

Nel rispetto del principio di trasparenza, CONAI ha deciso di **attuare e rendere conforme** alla presente "Politica" un **Sistema di Gestione Ambientale** in linea con quanto previsto dalla norma tecnica **UNI EN ISO 14001 ed al Regolamento 1221/2009 e smi e un sistema di Gestione della Parità di Genere** conforme alla prassi di riferimento UNI/PDR125:2022 dandone ampia diffusione.

L'impegno di CONAI si articola in diversi ambiti di intervento.

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Supporto fattivo all'economia circolare

CONAI esercita la sua influenza su tre livelli:

- il primo "*Sistema Paese*" - di natura indiretta - quale garante degli obiettivi di riciclo e recupero dei rifiuti di imballaggio nazionali;
- il secondo "*Sistema CONAI*" legato alla gestione dei rifiuti di imballaggio effettuata, in via sussidiaria al mercato, dai Consorzi di Filiera (gestione consortile);
- il terzo "Organizzazione" – di natura diretta – riferito alla propria attività come persona giuridica.

In merito al Sistema Paese ed alla gestione consortile, nel novero delle proprie responsabilità, CONAI **promuove l'accrescimento della quantità di imballaggi riutilizzabili e riciclabili** e il miglioramento dei risultati ambientali intervenendo con azioni concrete a monte e a valle della filiera e coordinando le attività a livello di governance multi-livello.
Con riferimento specifico alle azioni dirette, CONAI interviene attraverso **incentivazioni specifiche** (come la modulazione contributiva) e la **realizzazione di progetti e strumenti al servizio delle Associazioni e delle imprese con lo scopo di minimizzare l'impatto** ambientale degli imballaggi (prevenzione ed ecodesign) e di migliorare - **quantitativamente e qualitativamente - le performance di riciclo.**

Servizi e strumenti agli Enti Locali per RD di qualità

A valle della filiera, **CONAI promuove** un insieme di iniziative volte a supportare gli Enti Locali nel miglioramento della qualità della raccolta differenziata (RD) e delle performance di riciclo. In particolare, CONAI collabora attivamente con gli enti territoriali nell'ambito degli accordi con ANCI, promuovendo azioni mirate a ottimizzare la raccolta differenziata di qualità. Tra queste, rientrano il sostegno a progetti di ricerca e sviluppo per il riciclo anche delle frazioni più complesse degli imballaggi e l'organizzazione di eventi e campagne di comunicazione su scala nazionale e locale. Tali attività sono affiancate dallo sviluppo, a cura dei Consorzi di filiera, di un network che comprende impianti di trattamento, riparazione, rigenerazione e riciclo degli imballaggi commerciali e industriali rafforzando così l'infrastruttura necessaria per una gestione efficace, efficiente, economica e trasparente dei rifiuti di imballaggio.

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Raccordo tra le imprese e Istituzioni per l'economia circolare

CONAI promuove la cooperazione tra soggetti pubblici e privati, coordinando il necessario raccordo tra le Pubbliche Amministrazioni, i Consorzi di filiera e gli altri operatori economici garantendo e incentivando il confronto con i propri stakeholders anche attraverso l'organizzazione di Gruppi e Tavoli di Lavoro stabili (es. GdL Prevenzione, GdL Semplificazione, GdL Diversificazione, GdL Internazionale, Tavolo Comune AQ ANCI-CONAI), nonché attraverso la piattaforma on line CONAI Academy Community.

Promozione della cultura per l'economia circolare

CONAI crede fortemente nella valorizzazione delle competenze, siano esse interne o esterne all'organizzazione. Per creare cultura, CONAI **promuove costantemente la collaborazione con le Università e il settore Accademico** attraverso programmi formativi in tema di economia circolare (Green Jobs) e la realizzazione di webinar di aggiornamento per gli addetti ai lavori, nonché coinvolge il cittadino attraverso campagne di comunicazione e progetti culturali che utilizzano anche il linguaggio dell'arte.

Conformità alle prescrizioni

CONAI si impegna al **rispetto di tutte le normative vigenti (Rendicontazione Piani e Programma generale di prevenzione), degli Accordi (AQ ANCI-CONAI)** e degli impegni presi in favore dei propri stakeholders. CONAI, in aggiunta, supporta le imprese nell'adeguarsi ai nuovi obblighi comunitari cui sono soggette (es. etichettatura ambientale degli imballaggi) attraverso servizi e strumenti dedicati.

Accountability

CONAI valorizza e rende sempre più fruibile alle Istituzioni e ai diversi stakeholders il suo patrimonio unico di dati e informazioni: dall'immesso al consumo, ai dati riferiti alla gestione dei rifiuti a livello locale, passando per le metodiche di calcolo ed i relativi risultati in termini di benefici ambientali della filiera della valorizzazione dei rifiuti di imballaggio a livello nazionale. **Garantisce la trasparenza e razionalizzazione del flusso di informazioni relativo alle filiere degli imballaggi**, atte a consentire la puntuale rendicontazione delle performance di riciclo e recupero a livello nazionale. Tutte le metodologie di rendicontazione dei dati del Sistema consortile sono continuamente aggiornate ai più alti standard di qualità e validati annualmente da un Ente terzo accreditato. **Individua le responsabilità specifiche** nell'ambito della propria organizzazione e adotta, ove possibile, i più alti standard di conformità in riferimento alle Best Practices riconosciute (GRI, ESRS, VSME).

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Miglioramento dei processi organizzativi

La Direzione adotta un Sistema di gestione ambientale conforme ai requisiti della norma ISO 14001 e Regolamento 1221/2009 e smi (EMAS) e un sistema di Gestione per la Parità di Genere conforme alla UNI/PDR 125:2022. **CONAI favorisce l'attuazione dei migliori metodi organizzativi e sensibilizza la struttura alla partecipazione e al miglioramento continuo** volti al conseguimento degli obiettivi dei Sistemi di Gestione.

CONAI implementa procedure interne volte alla individuazione, riduzione e monitoraggio degli impatti ambientali connessi allo svolgimento delle proprie attività. Adotta, inoltre, criteri ambientali nei rapporti con i fornitori anche in materia di acquisti verdi, coinvolgendo tutto il personale e gli stakeholder e sensibilizzandoli sulle tematiche di miglioramento ambientale.

Impegno per la Parità di Genere

CONAI considera la sostenibilità sociale come un elemento fondamentale in tutte le fasi di reporting, attribuendo ai principi di Diversità, Equità e Inclusione (DEI) la stessa importanza del proprio impegno sui temi di sostenibilità ambientale. Per questo motivo ha deciso di dotarsi di un Sistema di Gestione per la Parità di Genere che formalizzi i suoi principi ed impegni nei temi relativi alle pari opportunità e alla valorizzazione delle diversità. CONAI si impegna a trasmette i valori di parità sociale a tutti i livelli di rendicontazione creando, al contempo e per quanto pertinente il perimetro dell'organizzazione, un ambiente inclusivo e libero da pregiudizi, assicurando pari opportunità nello **sviluppo della carriera di ogni dipendente con particolare attenzione al tema** della genitorialità. Attraverso i canali di segnalazione aziendale e una formazione mirata CONAI si impegna a contrastare con ogni mezzo tutti gli episodi di molestie, mobbing e violenze sia fisiche sia verbali sul luogo di lavoro

La Direzione si impegna a garantire l'adozione degli strumenti atti al raggiungimento degli obiettivi stabiliti, verificandone l'idoneità, e adattandoli alle nuove esigenze dettate dall'evoluzione normativa, territoriale e delle conoscenze.

Il Presidente
Ignazio Capuano

Milano, 24 ottobre 2024

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This Environmental Declaration was verified
and validated by DNV Business Assurance Italy S.r.l.
on 31/10/2024.

This Sustainability Report has been shared with CONAI's main stakeholders on 19/11/2024.

The document is accessible on the official website ***www.conai.org***, in the **Sustainability Report section of Document Downloads.**

For information and clarifications, please write to:
reporting@conai.org