2025

Sustainability Report

Environmental Statement Reg. (EC) 1221/09 EMAS as amended

CONAI

Contents

Letter from the President 8

Greeting from the General Manager 10

Introduction 12

1 Corporate value between sustainability and competitiveness 17

1.1 The future of environmental sustainability amid emerging challenges and competitive transition 18

1.2 The current sustainability outlook 20

1.3 Elements of discontinuity and challenges for the Italian business community and supply chains 25

1.4 Priorities and guidelines for the National System 32

1.5 Business models in the recycling sector in EU countries 35

1.6 Regulation (EU) 2025/40 and opportunities for businesses 40

2 Value for organisations and businesses 47

The value of the CONAI system 48

2.1 System governance 49

2.2 Businesses 54

2.2.1 ECOPACK Call for Eco-design Projects 56

2.2.2 The potential of prevention 59

2.2.3 CONAI Academy webinars 60

2.3 Local areas 61

2.3.1 Local projects 61

2.4 Culture 69

2.4.1 The importance of training 69

2.4.2 Promotion of culture through language 72

2.4.3 Contribution to research 73

3 The impacts of the system: figures for 2024 79

3.1 Packaging waste streams in Italy: Placement on the market 80

3.2 Packaging waste streams in Italy: Re-use 84

3.3 Packaging waste streams in Italy: Recycling 87

3.3.1 Legislative Decree 196/2021 on the reduction of the impact of certain plastic products on the environment 92

3.4 Packaging waste streams in Italy: Energy recovery 96

4 Governance, compliance and transparency 101

4.1 The National Packaging Consortium 102

4.2 Consortium management of packaging and packaging waste 108

4.3 CONAI and its organisation 113

4.3.1 Organisation, Management and Control model 113

4.3.2 Respect for human rights 114

4.3.3 Fight against corruption 114

4.3.4 Antitrust compliance 115

Appendix 117

A Prevention measures in waste generation 118

A.1 Structural measures 121

A.2 Support services and tools 125

B Accountability: traceability, reliability and robustness of data 136

B.1 Transparent reporting 136

B.1.1 National Programme for Data Validation 137

B.1.2 Relationships with the institutions 140

B.2 The CONAI System's independent and market-based management of packaging waste 141

B.3 Industrial and commercial packaging management 145

B.4 The economic benefits of managing packaging and packaging waste 148

B.5 The environmental benefits of managing packaging and packaging waste 157

B.6 The contribution of businesses to protecting material 160

B.7 The contribution of businesses to managing energy resources 165

B.8 The sector's contribution to combating climate change 168

C The role of the EPR Fee 172

C.1 Financial statements of the CONAI System 176

C.2 Economic support for local areas 178

D | CONAI and its stakeholders 182

D.1 | Context analysis 182

D.2 | Stakeholders 186

D.3 | Materiality matrix 192

E | System and organisation 198

F | Training, welfare and employee management policies 222

G | Tables attached to the study “Business models in the recycling sector in EU countries” 234

H | Reconciliation tables 243

H.1 | Environmental Statement requirements 243

H.2 | VSME matrix 245

H.2.1 | Reduction and reporting of greenhouse gas (GHG) emissions 247

H.2.2 | Practices, policies, initiatives and performance for a sustainable transition 248

Letter from the President

Sustainability is a choice that determines the future of the country and of businesses; it is not an option. At CONAI, we have known this for more than twenty-seven years: managing packaging materials correctly means generating economic, employment and environmental value, and doing so in a tangible way.

In 2024, our system generated over €3.8 billion in turnover, contributed €2 billion to GDP, and supported almost 25,000 jobs. These figures speak to the multiplier effect of a system that to date has made it possible to combine environmental protection with the growth of entire industrial supply chains.
Every euro of CONAI EPR Fee generated €3.60 in value for the national economy: a result that demonstrates how sustainability can also be extraordinarily productive.

And then there is the environmental aspect, which (of course) is never secondary: 76.7% of packaging waste placed on the market in 2024 was recycled. This figure speaks to efficiency, responsible choice, and real impact.
Every tonne recycled reduces dependence on virgin resources, cuts CO_2 emissions and saves primary energy: in 2024 alone, recycled material saved an amount of energy equivalent to the domestic consumption of half of Italian households in a year.

The CONAI System therefore not only manages post-consumer packaging materials: it activates supply chains, enables strategic sectors, creates jobs and saves natural resources. It is a unique role, which sets us as an international example of applied circular economy, capable of bringing together concrete results, vision and responsibility.

The numbers tell us how far we have come. Our commitment shows us the path we must follow every day: to continue to transform recycling into a real, measurable and shared opportunity for a more efficient and sustainable country.

Ignazio Capuano
CONAI President

Greeting from the General Manager

There are moments when numbers cease to be cold facts and become stories. The 2025 Sustainability Report is one such moment: every figure, every indicator is a tangible sign of a commitment that transcends the boundaries of the consortium to speak to the entire country.

This year in Urbino, at the Festival of Cultural Journalism, I once again awarded young journalists who have succeeded in translating sustainability into stories. The CONAI Phoenix Award for Young Environmental Journalism 2025 has shone a spotlight on stories of passion and expertise: journalism that does not merely inform, but invites us to look at the world with new eyes – in an edition of the Festival that gently reminded us that sustainability is also a matter of language, style and intuition. For it is not measured solely in tonnes recycled or materials recovered; it is perceived in the details, in everyday choices, in the connections we decide to create.

It is an ecosystem of decisions and responsibilities, where what was once waste becomes opportunity, where secondary materials become the first act of innovation.
This is also corroborated by recent studies on cooperative collection and recycling models: shared commitment produces value, not only for those who enact it, but for everyone who reaps the benefits.

Our 2025 Report aims to make the invisible visible – stories of materials, people and supply chains that intertwine, like a multi-layered motion picture. From Green Jobs courses and school projects to dialogue with local communities and awareness campaigns, the common thread is clear: sustainability is about experience and participation.
And if it seems that we are describing matters that are too complex and distant, I would like to reassure you: there's still room for a smile. Because when we want environmental culture to truly reach everyone, a sense of light-heartedness a little lightness goes a long way. Like when you discover that a piece of plastic may have travelled more than an absent-minded tourist, or that a sheet of recycled paper has actually seen more offices than a career manager.
The game, if you will, is to transform the everyday into the extraordinary, With a constant and ever-present commitment.

Our journalism award, our work with students, the Report: it's all part of the same story. Every word and every choice can become action, innovation, example. That is what sustainability is: the ability to make visible what often escapes us, to transform responsibility into curiosity, and curiosity into awareness.
May this new Sustainability Report therefore not be a book of numbers, but an invitation to participate, to imagine. After all, the future cannot be recycled: it is built day after day, choice after choice... and when needed, even with a touch of humour and poetry.

Simona Fontana
CONAI General Manager

Introduction

Reporting on environmental, social and governance performance is of paramount importance for CONAI – Consorzio Nazionale Imballaggi (National Packaging Consortium), serving not only as a tool for transparency towards its stakeholders, but also as a strategic lever in order to continuously improve its activities and overall impact nationwide.

In the 2025 Sustainability Report, which complements the Environmental Statement validated in accordance with Regulation (EC) 1221/2009 (EMAS), CONAI presents a detailed analysis of its performance for the year 2024[1], examined on three distinct levels – National System, CONAI System and Organisation – to highlight the Consortium's tangible contribution to achieving the sustainability objectives defined by its Governance.
The document has been drawn up in accordance with VSME (Voluntary Sustainability Reporting Standards for Non-listed SMEs) standards, adopting Option B – Basic Module and Comprehensive Module, in order to ensure comprehensive, transparent and comparable reporting in line with European best practices. All the information provided is relevant, accurate, understandable and verifiable, in accordance with the principles of the standard.

The 2025 Sustainability Report is prepared on an individual basis, limited to information and activities specific to CONAI; however, in line with the nature of the Consortium, the document also includes data on placement on the market, recycling and recovery of packaging by Packaging Material Consortia and Self-compliant EPR Organisations, which are an integral part of the national packaging management and recycling system.

No information has been omitted for reasons of confidentiality; any topics not covered, such as impacts on biodiversity, are considered inapplicable or of little relevance to the Consortium. The financial information in the Report is consistent with the data contained in the 2024 Financial Statements[2], approved by the Members' Assembly.

1
This document provides numerical data that may be subject to rounding, even with respect to previous institutional publications, in order to simplify consultation and comprehension. Comparative information is provided with respect to the previous year.

2
For further economic and financial details and for complete consultation of the financial statement data, please refer to the "Management Report and Financial Statements 2024", available on CONAI's institutional website at the following link: www.conai.org/?dlm_download_category=bilanci-conai

The Consortium maintains active ISO 14001:2015 and EMAS certifications, issued by RINA Services SpA.

Sustainability policies[3] are formalised and published on the www.conai.org website.

The process of drafting the Report involved the direct participation of the Governing Bodies and Management, ensuring consistency with the Consortium's sustainability strategy and independent technical assurance by RINA Services SpA[4].

3
Further information and insights into the issues addressed by CONAI's sustainability policies are provided for each topic in the various chapters of this document. For a summary of the policies adopted, current and future initiatives and related objectives, please refer to Appendix "H.2.2", pag. 248.

4
The verification statement is available at www.conai.org in the "Document downloads" section.

1

Corporate value between sustainability and competitiveness

1.1 The future of environmental sustainability amid emerging challenges and competitive transition

The current context of the environmental transition is increasingly complex, with economic, technological and geopolitical transformations redefining the relationship between sustainability, innovation and competitiveness at international, European and national levels. Against this backdrop, there is not only a need to understand how sustainability can evolve from an environmental principle into a structural lever for economic and industrial development, but also to strengthen and consolidate the commitment of the production system and the national framework, asserting the need to advance the green transition without hesitation or delay, and to direct public policies, business strategies and investment models accordingly.

With this objective, CONAI, together with The European House – Ambrosetti (TEHA Group), promoted the study *The Future of Environmental Sustainability amid Emerging Challenges and Competitive Transition* and initiated a process of analysis and dialogue with companies, institutions and financial operators. The initiative, which involved key decision-makers and stakeholders across various sectors of the economy through interviews and a thematic Working Group held on 2 October 2025 in Milan, aimed to provide a shared knowledge base to guide decision-makers in the production system and the capital market, highlighting the contribution of an industrial and consortium system that for over twenty-seven years has been one of the strongest infrastructures of Italian sustainability.

Today, the ecological transition can no longer be viewed solely an environmental objective: it represents a new dimension of competitiveness, in which the ability to innovate, attract investment and generate value becomes an integral part of the country's growth strategies. From this perspective, sustainability takes the form of a next-generation industrial policy, combining environmental ambition with economic pragmatism, promoting production efficiency, technological integration and public-private collaboration.

For Italian companies, this means approaching the transition not as a constraint, but as an opportunity to strengthen their competitive position and make a tangible contribution to the prosperity of the National System.
More specifically, the study, based on an analytical and multi-stakeholder approach, was developed along three main lines:

- an integrated analysis of the economic, regulatory and technological landscape, aimed at identifying trends and discontinuities that influence the ecological transition;
- direct involvement of industrial and institutional stakeholders, through interviews and round tables, to understand needs, perceptions and operational priorities;
- translation of the collected evidence into policy priorities, aimed at making sustainability a measurable driver of growth, innovation and shared value creation.

The initiative is part of a broader effort to strengthen the National System's ability to combine environmental ambition with industrial pragmatism, promoting a development model capable of addressing the challenges of climate change without weakening economic competitiveness, particularly in light of the international context and macroeconomic framework.
With this in mind, CONAI positions itself as a system-level actor and facilitator of the *competitive transition*[5] – the process through which companies adopt sustainable business models and practices to improve their competitiveness, foster dialogue between the public and private sectors, promote the use of common metrics, and experiment with solutions that make sustainability not only more accessible, but also more advantageous for businesses.

5
University of Cambridge, 2025.

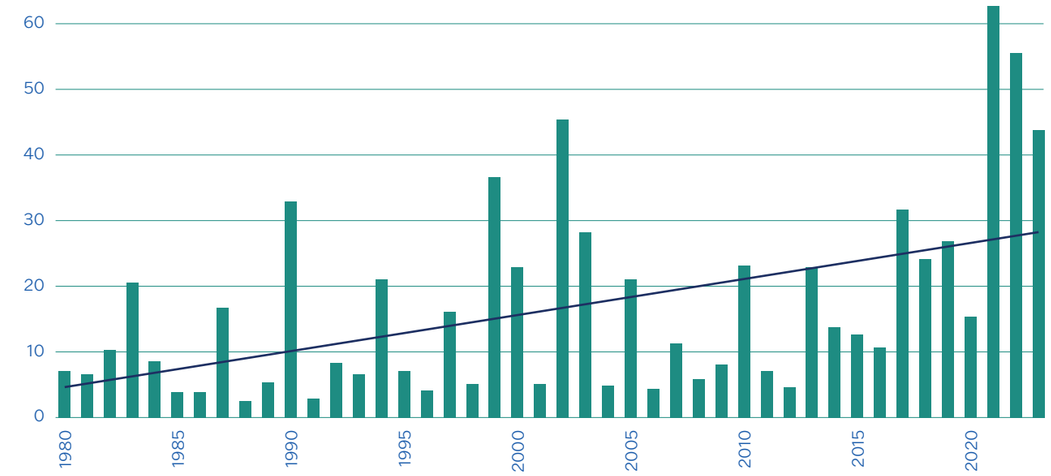
1.2 The current sustainability outlook

Sustainability is currently undergoing a phase of maturity and transformation. After decades of evolution – from the first regulatory control policies of the 1970s to the era of voluntary instruments and environmental performance – a new phase has begun: the era of the competitive transition. In this stage, sustainability is no longer just a constraint or a requirement, but a lever of industrial advantage and positioning for businesses and economic systems.

The sustainable transition can now be considered, to a large extent, an issue that has now been "assimilated" by businesses and institutions. Yet there remains a real risk that inaction will have repercussions – including in terms of the "cost of inaction" or of slowing down the shared commitment to the green transition – for society, the economy and the competitiveness of entire supply chains.

Despite the progress made, the urgency remains high. The costs of climate change are increasing steadily: between 1980 and 2023, extreme events caused an estimated €738 billion in economic losses in the European Union, with a significant acceleration in recent years.

ANNUAL ECONOMIC LOSSES CAUSED BY EXTREME WEATHER AND CLIMATE EVENTS IN THE EU (€ BILLION, 1980–2023)



Source: EEA, *Economic losses from weather and climate-related extremes in Europe* (2024).

These effects are not evenly distributed: the Mediterranean area, in which Italy is located, is one of the global epicentres of the climate crisis. The basin is now recognised as one of the world's main climate hotspots – an area warming about 20%[6] faster than the global average, where the combination of environmental fragility and high population density amplifies impacts on local areas, economies and communities.

At the same time, pressure on the use of natural resources is growing. Over the past fifty years, the material footprint per capita[7] has increased on all continents[8], and globally most of the resources consumed still come from non-renewable sources. Earth Overshoot Day 2025 – marking the moment when the planet's annual regenerative capacity is exhausted in just seven months – shows that production and consumption patterns remain unsustainable.

On the social and cultural front, a gap persists between scientific consensus and public perception[9]. Counter-intuitively, while almost the entire scientific community recognises that human-induced climate change is already underway, a significant portion of the European population still expresses uncertainty or indifference. This gap fuels hesitation and delays in transition policies, often without full awareness of the costs of inaction. As a result, a narrative risks emerging that supports slowing down investment and commitment to environmental sustainability, encouraging a wait-and-see attitude or, worse, scepticism regarding what can realistically be achieved.

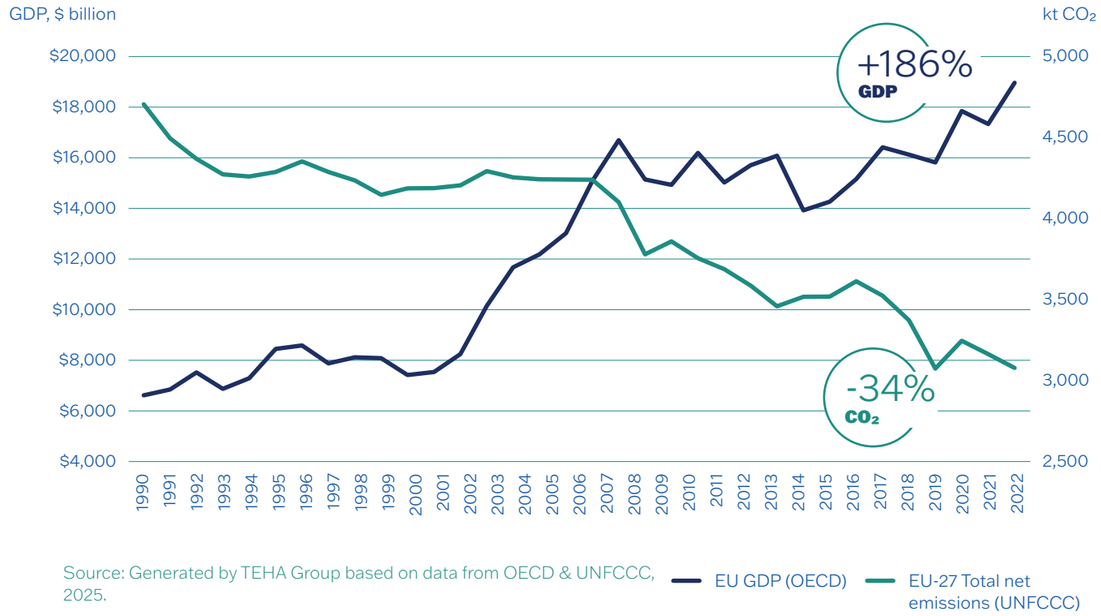
6
Generated by TEHA Group based on data from Copernicus and the United Nations Environmental Programme – UNEP, 2025.

7
RMC (Raw Material Consumption) = Material Footprint, understood as the net national consumption of raw materials (biomass, fossil fuels, metallic and non-metallic minerals).

8
Generated by TEHA Group based on data from the Global Material Flows Database, 2025.

9
Eurobarometer, Climate Change, 2025.

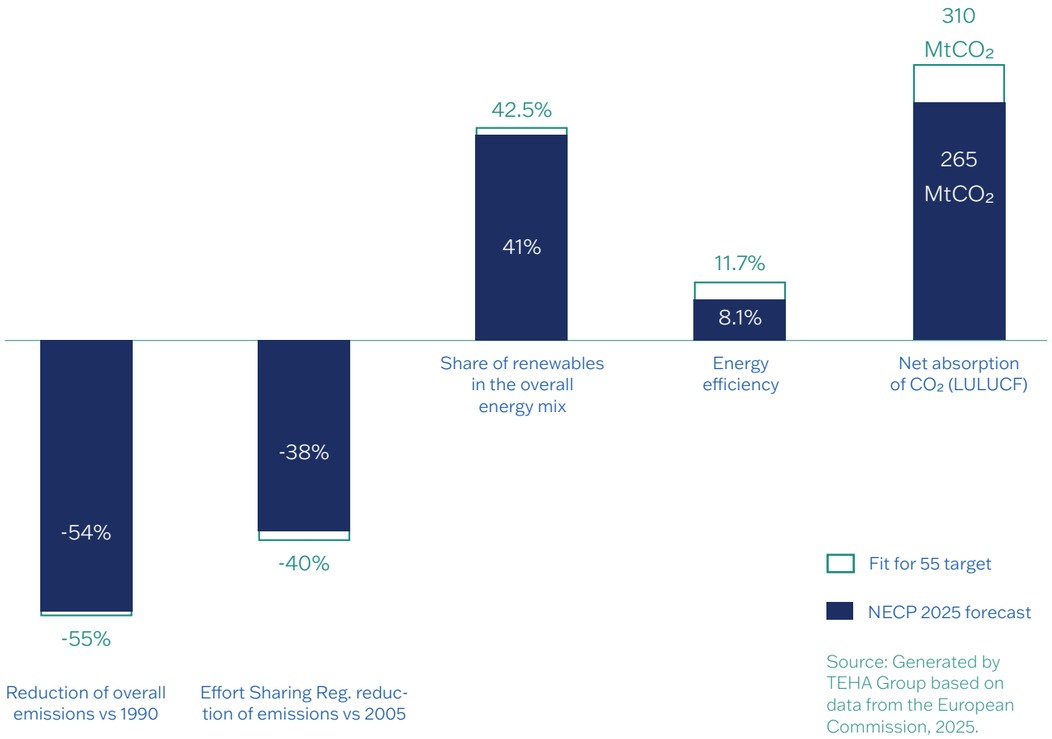
DECOUPLING OF ECONOMIC GROWTH FROM GHG EMISSIONS IN EUROPE (1990–2023)



Source: Generated by TEHA Group based on data from OECD & UNFCCC, 2025.

Such an approach would overlook, first and foremost, the real possibility of combining economic growth with sustainable development. Europe stands as both a reference point and an area of tension: over the past thirty years, it has succeeded in decoupling economic growth from CO_2 emissions, increasing GDP while reducing emissions. Moreover, the new National Energy and Climate Plans further align EU Member States with the objectives of the Fit for 55 package – the European plan to cut emissions by 55% by 2030 compared with 1990 levels, and fully achieve climate targets within the current decade.

EU MOVING CLOSER TO FIT FOR 55 CLIMATE TARGETS THROUGH NEW NATIONAL ENERGY AND CLIMATE PLANS (2024 NECPS)

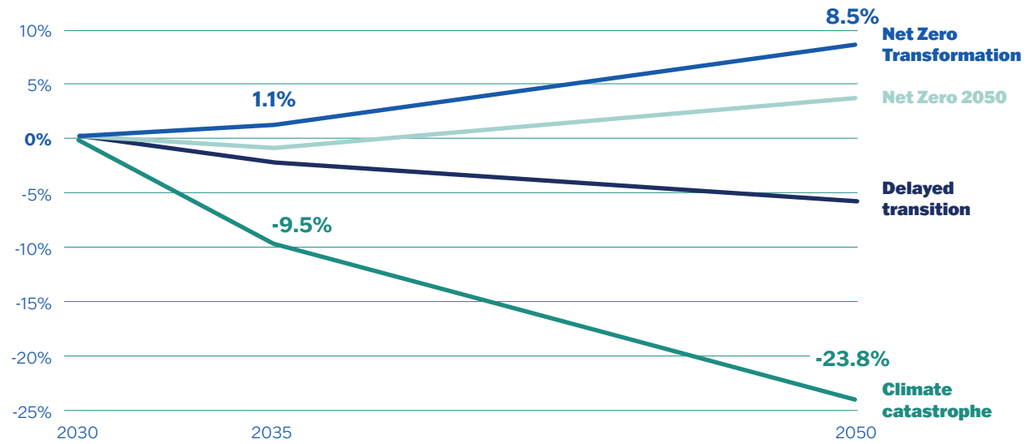


Source: Generated by TEHA Group based on data from the European Commission, 2025.

Secondly, it would disregard the costs of inaction or slowdown: the Net Zero Transformation[10] scenario shows that accelerating investment in decarbonisation and innovation could translate into stronger and more sustainable medium-term economic growth for Italy. Conversely, a fragmented or postponed approach would risk amplifying the economic and social costs of the transition, reducing the country's ability to fully reap the benefits of the green transformation.

10
Net Zero 2050: the strategy for implementing structural policies for decarbonisation supported by substantial investments in innovation with the aim of decarbonising the economy by 2050, ASviS, 2025.

PROJECTIONS OF THE IMPACT OF DIFFERENT SCENARIOS ON ITALY'S REAL GDP IN 2035 AND 2050 (PERCENTAGE CHANGE IN GDP COMPARED TO 2025)



Source: Generated by TEHA Group based on data from ASviS, 2025.

In this context, the driving role of institutions, though crucial, is no longer sufficient. For the first time, divergent views are emerging on how to reconcile sustainability and development. The world's major powers – the United States, the European Union and China – are adopting different approaches to the transition, reflecting economic, political and social priorities that are not always aligned. As a result, climate policies risk producing asymmetric effects, with a stronger impact on the most vulnerable economies and social groups.

Europe is redefining its strategy for sustainable prosperity, focusing on three priorities identified in the Draghi Report: decarbonisation and competitiveness, closing the innovation gap and reducing strategic dependencies. The aim is to increase overall investment from 22% to 27% of GDP by 2030 and strengthen the continent's industrial capacity. Despite this acceleration, a structural contradiction persists: the European Union adds around €477 billion in investment each year to meet its climate goals, but continues to allocate around €60 billion in public funds to support fossil fuels[11]. This asymmetry reflects the difficulty of coherently directing available resources and makes it even more urgent to effectively reallocate capital towards clean technologies and solutions with low environmental impact.

In this scenario, the financial system and economic supply chains assume a central role, with innovation and technological development serving as fundamental levers for the success of the green transition.

Digital innovation and artificial intelligence, among others, have significantly improved energy efficiency and are now key tools for accelerating decarbonisation and optimising production processes.

11
Generated by TEHA Group based on data from Enerdata, Trinomics, 2024.

Sustainable finance has reached record levels, and 93% of business leaders consider it a key factor for commercial success[12]. Citizens are also paying increasing attention to responsible consumption choices. However, structural weaknesses remain: in the first quarter of 2025, European investors withdrew $1.2 billion from ESG funds[13], and over a third of the world's population still considers "green" to be too expensive[14].

Businesses therefore face a decisive challenge: finding their own pace in the transition, pragmatically and with an innovation-driven approach, translating objectives into concrete actions, identifying relevant trends, selecting a small set of targeted actions, integrating sustainability into investments and developing the skills needed to operate in complex environments.

RESULTS ACHIEVED AND NEW CHALLENGES IN 50 YEARS OF SUSTAINABILITY FOR BUSINESSES, INVESTORS, CONSUMERS AND SOCIETY

	SMES AND LARGE ENTERPRISES	INVESTORS	CONSUMERS	SOCIETY
RESULTS ACHIEVED	93% of global leaders believe sustainability is important for business success	€5.87 trillion global sustainable finance market in 2024 (projected CAGR of 19.8% 2025–2034)	46% of EU consumers have purchased more sustainable products to reduce environmental impact	70% of people worldwide for whom climate change influences their key decisions
NEW CHALLENGES	54% of SMEs in the EU for which the lack of public incentives is the main barrier to sustainability	–$1.2 billion ESG investments withdrawn by EU investors in Q1 2025	<33% of the world's population believes that green is too expensive	22% of Italians are willing to pay more taxes to finance the fight against climate change

Source: Generated by TEHA Group based on data from Eccles (2024), SDA Bocconi and Generali (2025), Global Market Inside (2024), Financial Times (2025), Euromonitor (2024), Kantar (2023), Oxford & UNDP (2024), IPSOS (2024).

In the new context of the "competitive transition", the central question is no longer the direction to take, but the timing, approach and quality of execution with which to pursue the transition.

.

12 Generated by TEHA Group based on data from Eccles, 2024.

13 Generated by TEHA Group based on data from the Financial Times, 2025.

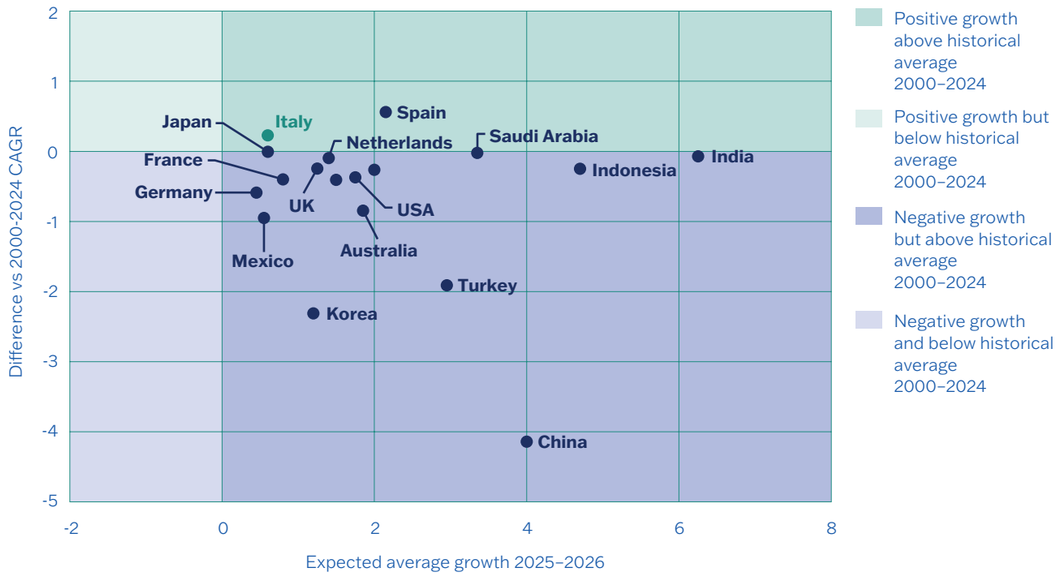
14 Generated by TEHA Group based on data from Kantar, 2023.

1.3 Elements of discontinuity and challenges for the Italian business community and supply chains

After a decade of progress and results stemming from institutional consensus and a multilateral framework around the need for coordinated action and shared commitment, the competitive transition is now entering a phase at risk of slowdown, if not outright stagnation. This shift is being shaped by economic, geopolitical, and regulatory forces that are redefining the global competitive landscape. TEHA and CONAI have looked at the contingent factors that are affecting companies' capacity and willingness to invest and innovate sustainably, and identified two drivers of slowdown: economic deceleration and protectionism and barriers to global trade; and two discontinuities: the crisis of multilateralism and regulatory uncertainty.

Regarding the first aspect, growth across the major global economies remains weak, staying below historical averages. Projections for 2025–2026 indicate moderate expansion across all major economic areas, a sign of an economic cycle that remains fragile. Italy and Spain are partial exceptions, with growth expected to be slightly above their 2000–2024 historical averages, though still within an overall context of slowdown.

COMPARISON BETWEEN EXPECTED GROWTH IN 2025–2026 AND HISTORICAL AVERAGE GROWTH IN MAJOR GLOBAL ECONOMIES (%), 2025–2026 AVERAGE (%) AND DIFFERENCE VS 2000–2024 CAGR (%)



Source: Generated by TEHA Group based on data from the IMF, 2025.

At the same time, the Italian industrial sector is showing signs of contraction: between 2022 and 2025, industrial production fell by 11.5%[15]. This industrial contraction, in a context of sluggish transition and geopolitical instability, may limit growth, employment and investment, amplifying the structural fragility of the national production system.

Within this environment, sustainability will be able to rely less on public resources, which are already constrained by corrective budget measures, subsidies for strategic industries and increasingly reduced fiscal margins – especially in a Europe where twelve countries, including Italy, have public expenditure exceeding 45% of GDP and negative budget balances[16]. Greater involvement of private capital will therefore become essential. As observed by Mario Draghi, former President of the ECB and Prime Minister of Italy, as well as author of the recent Draghi Report: "The more we push reforms, the more private capital will step up and the less public money we will need, even at the cost of breaking long-standing taboos"[17].

These dynamics are part of a global picture increasingly influenced by trade tensions and new forms of protectionism. Since August 2025, the European Union has faced a generalised increase in US tariffs and a tightening of market access conditions, with direct negative impacts on its trade supply chains. Estimates for 2025 indicate that the new US tariffs of 15% on imports could cost the EU around €69 billion per year[18]. Italy, one of the countries most exposed to trade with the US, could face a direct impact on its exports at a cost of over €8 billion.

.

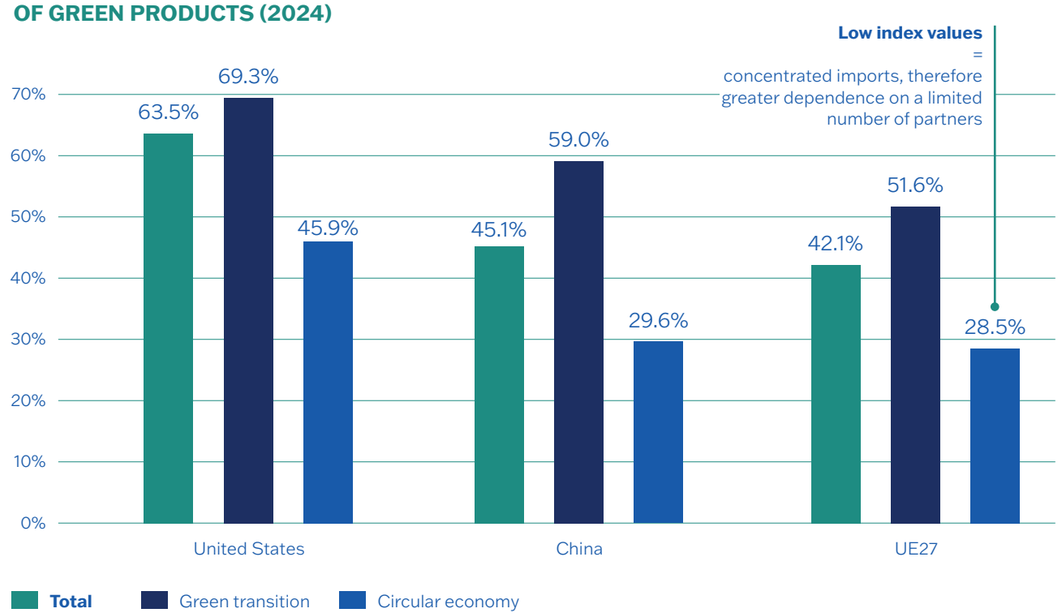
15
Generated by TEHA Group based on data from ISTAT, 2025.

16
Generated by TEHA Group based on data from the IMF, 2025.

17
Speech to the European Commission on 16 September 2025.

In terms of protectionism, more expensive exports and competition from US and Chinese products risk further eroding key sectors for the environmental transition. Europe's import structure for goods and components related to the green transition is highly concentrated[19], relying on a small group of trading partners: the geographical heterogeneity index of its "green" imports (51.6) – goods and technologies related to the ecological transition – is lower than that of the United States (69.3) or China (59). This dependency increases the vulnerability of supply chains to external shocks and fluctuations in global flows, heightening the risk of disruptions and price increases.

GEOGRAPHICAL HETEROGENEITY INDEX OF IMPORTS BY MACRO-CATEGORY OF GREEN PRODUCTS (2024)



Source: Generated by TEHA Group based on data from CEPII – Baci and UN Comtrade, 2025.

.

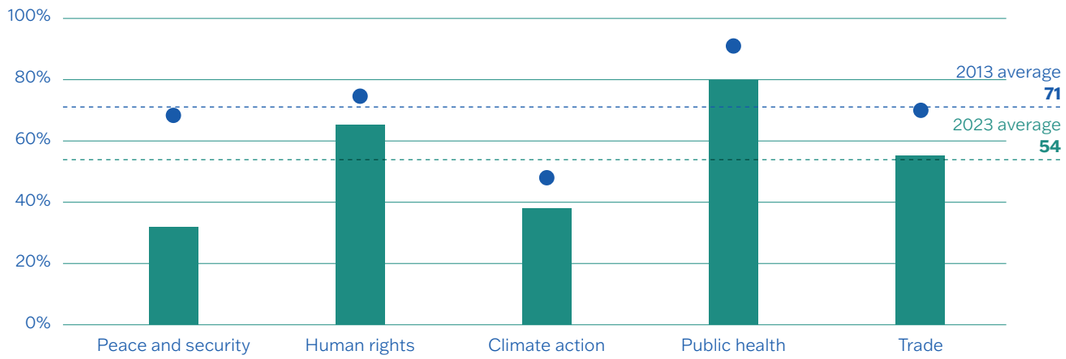
18
Generated by TEHA Group based on data from UNCTADstat and various sources, 2025.

19
Generated by TEHA Group based on data from CEPII – Baci and UN Comtrade, 2025.

Alongside economic and trade complexities, a third line of discontinuity is emerging at the global level: the growing difficulty of sustaining a multilateral commitment on climate, reflecting a rapidly shifting geopolitical balance. In 2025, more than 200 countries gathered in Bonn ahead of COP30[20] to define new measures to limit the global temperature rise to 1.5 °C compared to pre-industrial levels.

The Multilateralism Performance Index fell by around 17 points between 2013 and 2023, reaching its lowest levels in the area of climate action. Global emissions continued to rise, reaching 37 Gt in 2023 (compared to the 27 Gt compatible with +1.5° C target), while the share of renewable energy remained around 30%, below the targets set for 2030. Commitments to climate finance, amounting to around $100 billion per year of total global flows (public and private), also remain far below the estimated requirement of over $1 trillion[21], underscoring the difficulty of translating political commitments into concrete results.

MULTILATERALISM PERFORMANCE INDEX BY CATEGORY OF INTERVENTION/POLICY (INDEX 0/100), 2013–2023



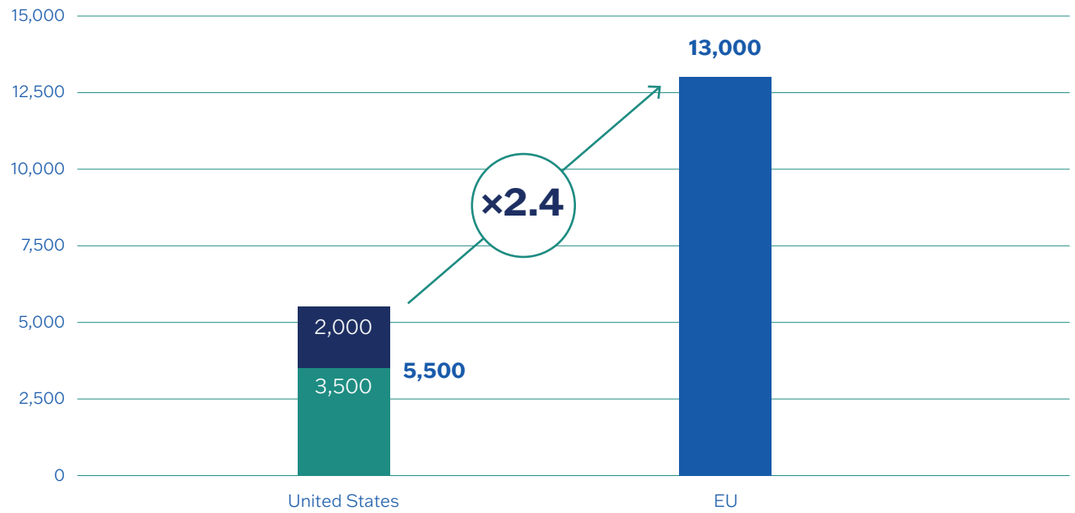
Source: Generated by TEHA Group based on data from IEP – Multilateral Index, 2025.

The fourth contingency identified in the analysis of discontinuities shaping the international sustainability landscape concerns the regulatory framework for climate objectives. In Europe, this framework is defined largely at the EU level and common among Member States. In the rest of the world, however, it is based on different institutional models: in the United States it is federal and decentralised, while in China it is centrally planned by the single party.

Regardless of these varying governance structures, 2025 marks a period of major regulatory discontinuity. The United States, European Union, and China are all revising their climate targets, in some cases slowing them, in others recalibrating or strengthening them. In the case of the European Union a significant internal review is underway: geopolitical pressures, new defence priorities and the reflections highlighted in Mario Draghi's Competitiveness Report have reinforced the need to rethink the regulatory approach to the climate transition. The European Commission has begun a process of regulatory redesign in this direction, formalised through the "Omnibus package", aimed at addressing these critical issues and ensuring greater coherence between environmental objectives and economic competitiveness.

However, European regulatory idiosyncrasy exists within a structurally more complex regulatory context compared to other advanced economies. Between 2019 and 2024, the EU approved around 13,000 legislative acts – more than double those enacted in the United States during the same period.

NUMBER OF LAWS, RESOLUTIONS AND LEGISLATIVE ACTS ADOPTED IN THE EUROPEAN UNION AND THE UNITED STATES (UNITS), 2019–2024



Source: Generated by TEHA Group based on data from the IMF and various sources, 2025.

On the financial front, despite significant growth in public and private funds allocated to environmental sustainability, the European Union's banking and regulatory framework still does not allow full capital mobility[22], effectively limiting even capital earmarked for green purposes. This has a direct impact on the ability to attract stable, long-term capital for competitive transition, in the absence of a single European instrument dedicated to supporting sustainable capital. At the same time, European programmes in this area continue to multiply, but without an integrated regulatory framework they risk fragmentation and failing to produce a systemic leverage effect.

These dynamics take on particular relevance in Italy, where the productive structure is composed largely of small and medium-sized enterprises (SMEs), representing about 97% of all firms[23]. SMEs too have been gradually drawn into climate targets, committing to investments aligned with the sustainable

20
COP30: 30th Conference of the Parties to the United Nations Convention on Climate Change.

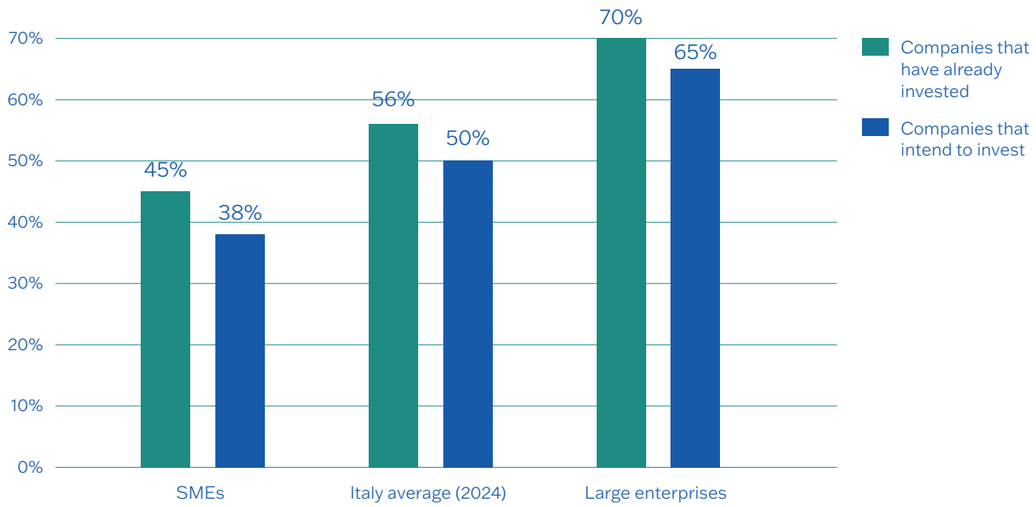
21
Climate Policy Initiative (CPI): Insights for COP29, 2025.

22
Generated by TEHA Group based on data from AFME and various sources, 2025.

23
Unioncamere, 2025.

transition. However, in 2023 Italian SMEs recorded a 16% decline in profitability compared with previous years. In this context, additional pressures from compliance costs, regulatory discontinuity or uncertainty in strategic planning risk compromising their investment capacity. Only 38% of SMEs currently report plans to invest in sustainability, compared with 65% of large enterprises, revealing a widening gap that underscores the need for targeted policy intervention to mitigate margin erosion and support competitiveness for businesses on the green path.

INVESTMENTS BY ITALIAN COMPANIES IN CLIMATE AND ENERGY: ALREADY INVESTED VS INTENDED (% OF TOTAL), 2022–2024 AVERAGE



Source: Generated by TEHA Group based on data from EIBIS 2024: Italy – Country Report and CRIBIS, 2025.

The structural slowdowns and discontinuity factors described here will inevitably have an impact on the strategic choices of the companies and sectors involved. Identifying these factors makes it possible to define priority areas of intervention and to direct actions and support levers to sustain the environmental sustainability trajectory of the production system. The validation of slowdown factors by public and private stakeholders also provides a useful lens through which to distinguish the most relevant critical issues for each supply chain and to define the most effective corrective actions. With this in mind, TEHA and CONAI have launched a joint initiative to explore these elements in depth and identify the most appropriate policy levers and operational tools to bridge gaps and strengthen the country's sustainable transition.

1.4 Priorities and guidelines for the National System

Through a process that also included a series of confidential interviews, TEHA has identified seven strategic priorities considered essential to maintaining the commitment to the country's competitive transition.

Overall, the analysis and consultation process aimed to identify guidelines and system priorities to guide decision makers in maintaining a high level of commitment to the green transition and promoting investments in environmental sustainability, in line with the new requirements dictated by the current phase of the competitive transition.

Based on this work, The European House – Ambrosetti (TEHA), in collaboration with CONAI and with the involvement of institutions, businesses and financial operators, identified **seven strategic priorities** for action considered essential to consolidate and reinvigorate the country's commitment to sustainable, innovative and competitive growth.

1. CLEAR, RESULTS-ORIENTED RULES TO STRENGTHEN CONFIDENCE AND INDUSTRIAL PLANNING

In a context still characterised by evolving regulations, companies operate in a landscape that requires greater coherence and strategic guidance. It is therefore desirable to define a few measurable, shared objectives, accompanied by coherent tools and governance that periodically evaluates their results.

2. ENSURE REGULATORY STABILITY AND FOCUS ON SMES TO AVOID UNCERTAINTY AND SUPPORT INVESTMENT

The completion of the new European regulatory frameworks should ideally go hand in hand with policy stability and predictability. In recent years, the proliferation of rules and regulatory instruments has fostered caution among companies, making long-term investment planning more tentative.

In this context, ensuring continuity in rules and support measures, providing instruments dedicated to addressing short-term financial margins of businesses, especially SMEs, could provide the economic sustainability necessary to ensure that environmental choices for the transition do not translate into additional costs.

3. FOSTER INNOVATION AND PARTNERSHIPS

Innovation is a decisive factor in accelerating the competitive transition. It is necessary to encourage research and the adoption of innovative technological solutions that can reduce environmental impacts and improve the efficiency of production processes. The dissemination of new technologies must be accompanied by the sharing of best practices and the creation of research and development (R&D) partnerships among startups, established companies and research centres, so as to strengthen the capacity of the production system to innovate in a collaborative and sustainable manner.

4. INTEGRATE GREEN AND DIGITAL TRANSITION AS A LEVER FOR SUSTAINABLE GROWTH

Promoting the green and digital transition as a single, integrated development opportunity can serve as a decisive lever for supporting national economic growth. The goal is to achieve a stable decoupling between development and environmental impacts through the combined use of digital technologies and sustainable solutions that can optimise process efficiency and reduce emissions.

For this to happen, the twin transition must be accompanied by training and skills-updating programs, to ensure the availability of professionals equipped for new production models and consolidate the competitiveness of the National System.

5. MAKE FINANCE SIMPLER AND MORE ACCESSIBLE FOR SMES

Access to adequate financial instruments is a prerequisite for achieving sustainability goals. However, access to credit remains complex, especially for SMEs, which struggle to integrate climate-related obligations and meet the requirements set by financial operators. It is necessary to simplify access to capital and encourage the mobilisation of all sources of capital through more favourable rules and harmonised procedures at European level, including within the framework of the EBA (European Banking Authority). The creation of dedicated credit channels and thematic funds can expand the possibilities for investment in sustainable projects, offering businesses concrete tools to approach the transition with financial stability.

6. PROMOTE TRAINING AND KNOWLEDGE AS DRIVERS OF SUSTAINABILITY IN SUPPLY CHAINS

Sustainable transformation cannot be achieved without widespread dissemination of knowledge and awareness throughout supply chains. Strengthening training, information and communication pathways helps to consolidate a shared culture of sustainability, improving the ability of businesses to adapt and innovate. Investment is needed in continuous training, the sharing of best practices and the creation of sectoral learning networks, so that every actor in the supply chain can actively contribute to the achievement of environmental and economic objectives.

7. ENCOURAGE THE INVOLVEMENT OF LOCAL ADMINISTRATIONS

Encouraging the involvement of public administrations, including local authorities, is essential to promoting effective governance of the competitive transition. Local authorities can act as points of connection between businesses, institutions and communities, fostering collaboration and coordination along production chains. It is necessary to support the experimentation of sustainable practices at the local level, promoting local experiences that integrate innovation, participation and economic development.

Taken together, the seven strategic priorities outlined define a policy trajectory aimed at reinforcing regulatory coherence, industrial competitiveness, and the country's ability to maintain a steady path toward sustainable transition, transforming it into a driver of economic growth and innovation. The key message that emerges is that, across all these fronts, ecosystem actors can play a decisive role as enablers and facilitators of change.

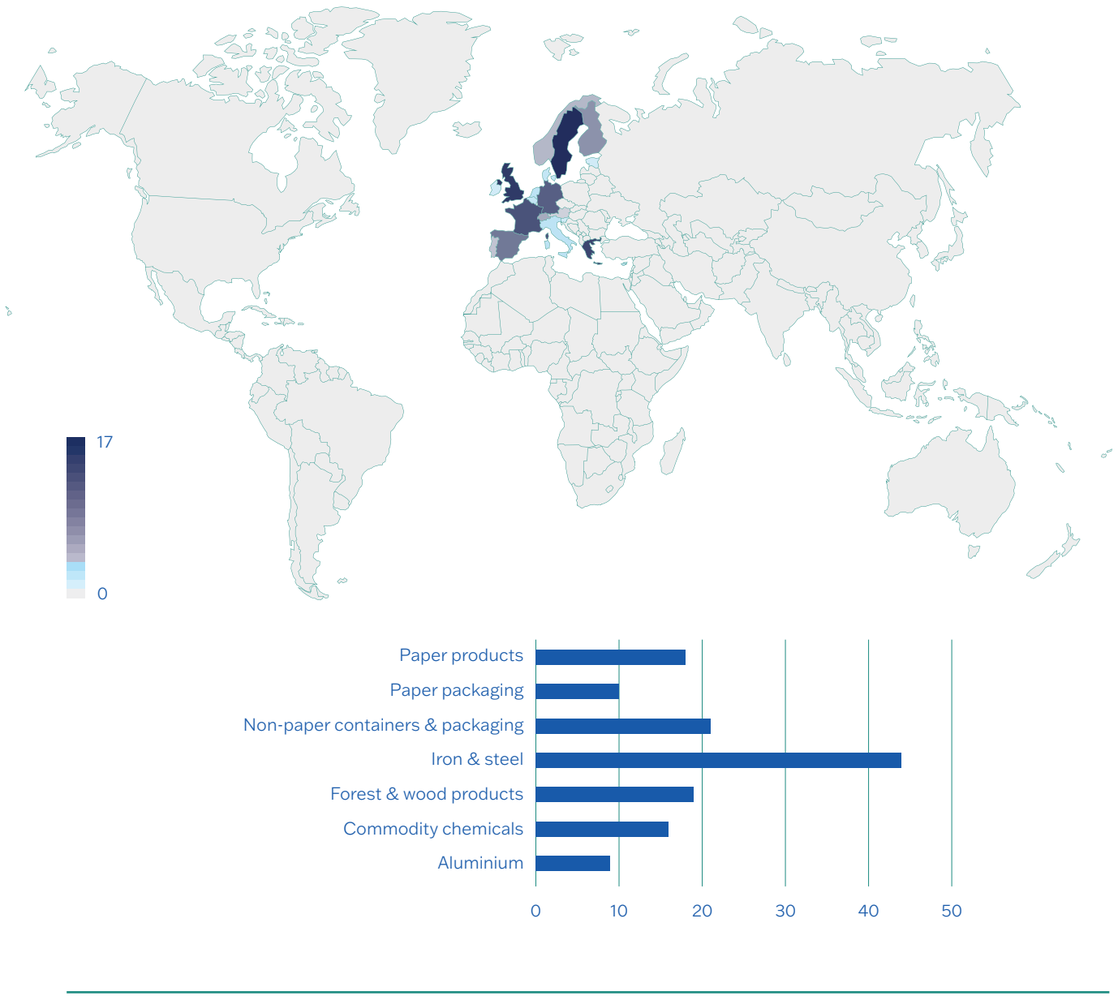
1.5 Business models in the recycling sector in EU countries

The study, promoted by CONAI and conducted by the Centre for Applied Economics Studies at the Catholic University of the Sacred Heart in Milan, examined the relationship between different Extended Producer Responsibility (EPR) schemes and value creation in the manufacturing and packaging sector. The study was launched with the aim of analysing the relationship between commitment to sustainability and the ability to generate economic value, through the application of a regression model.
In particular, the study examined how the two main EPR models – cooperative and competitive – affect the financial performance of listed companies in the packaging sector.

In the cooperative model (as in Italy), the coordination of collection and recycling activities is managed by a single Producer Responsibility Organisation (PRO) at national level, to which producers pay an EPR Fee. In competitive models, on the other hand, each producer independently manages, both financially and operationally, the collection, disposal and recycling of its end-of-life packaging.

The analysis covered 137 listed companies in Europe and the United Kingdom, observed between 2000 and 2024, operating in the production and packaging of: (i) plastic and biodegradable plastic, (ii) paper and cardboard, (iii) aluminium, (iv) steel, (v) wood and (vi) glass.
Geographically, the sample is most concentrated in Sweden, Greece, France, Germany and the United Kingdom.
From a sectoral perspective, higher representation is observed in the iron & steel, paper, and non-paper packaging segments (see map on the following page).

GEOGRAPHICAL DISTRIBUTION OF THE COMPANIES ANALYSED IN THE STUDY



From a methodological point of view, two different regression model specifications were implemented, considering the value creation capacity from a market and investor perspective **(a)**, and from a business perspective **(b)**.

$$R_{i,t} = \alpha + \gamma + \beta X_{i,t} + R(t\text{-}1)_{i,t} + D_{i,t} + \varepsilon_{i,t} \quad \textbf{(a)}$$

$$ROA_{i,t} = \alpha + \gamma + \beta X_{i,t} + ROA_{(t\text{-}1)i,t} + D_{i,t} + \varepsilon_{i,t} \quad \textbf{(b)}$$

Specifically, the dependent variables for the two specifications are, respectively, the annual share price return ($R_{i,t}$) and the return on total assets ($ROA_{i,t}$), calculated as the ratio between the company's profitability captured by EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortisation) and total assets. The control variables include a series of company-level indicators, as described in the table below:

DESCRIPTION OF VARIABLES

Variable	Description
R (Price Return)	Financial performance measured by the percentage change in the annual share price return. It represents the annual return, calculated as (Pt/P(t.1))-1, where Pt is the closing price at the end of the calendar year.
ROA (Return on Assets)	Accounting performance measured as the ratio between EBITDA and Total Assets. Serves as a proxy for short-term performance.
Size	Proxy for the size of the company captured by the Total Assets.
Leverage	Proxy for financial indebtedness, captured by the Debt-to-Equity ratio.
Efficiency Ratio	Proxy for efficiency, measured as the ratio between CAPEX and Total Assets.
Market Volatility	Market volatility captured by the variation in returns of the FTSE100 index.
Rate of Recycle	Recycling rate (Source: Eurostat).
Price Return (t-1) and ROA (t-1)	Financial performance and accounting performance (ROA), lagged by one year.

Source: LSEG.

A concrete commitment to recycling and sustainability is recognised and rewarded by the market, generating value for companies. This is particularly evident when such strategies are implemented through **cooperative models** involving the entire national production system. At the same time, it is essential to view investments in efficiency and environmental policies not as costs, but as **long-term strategic choices**.

Positive effect on equity performance

Companies subject to a cooperative EPR scheme with high recycling rates are rewarded by the market.

Signal of sustainability appreciated by investors

The national commitment to sustainability is recognised as a value.

High upfront costs for businesses

The negative coefficient highlights the economic impact of green policies in the short term.

Not all companies are able to sustain them

Sustainability policies require vision and long-term investment capacity.

Efficiency in long-term investments

Mitigates risk and increases share value over the long term.

Source: Forecast Report – Investments to move Italy forward, Confindustria, 2025.

In conclusion, for companies subject to a cooperative EPR scheme, higher recycling rates of packaging waste have a significant and positive impact on their share price return. Specifically, this result underlines the market's growing focus on corporate sustainability, rewarding companies that demonstrate an increasing commitment to national sustainability issues. However, from a business perspective, it also highlights the relevance of the costs associated with sustainability policies. These are long-term policies, the costs of which tend to be absorbed over time and which not all companies are able to sustain. Finally, from both a business and market perspective, increased efficiency in long-term investments associated with the recycling rate of packaging waste tends to create value for the company both in terms of increased business profitability and in terms of share price return.
The technical details of the study are available in Appendix G – Tables attached to the study "Business models in the recycling sector in EU countries".

1.6 Regulation (EU) 2025/40 and opportunities for businesses

Regulation (EU) 2025/40 (also known as the *PPWR – Packaging and Packaging Waste Regulation*) marks a crucial step for the future of packaging in Europe. The regulation entered into force on 11 February 2025 and will become applicable from 12 August 2026, with some measures taking effect in subsequent years, giving businesses, citizens, and institutions time to adapt to the new framework.

The new rules will bring harmonised and binding criteria for the design and management of packaging in all EU countries. The new sustainability requirements for businesses mainly concern the following issues:

- Substances of concern in packaging: packaging in contact with food cannot be placed on the market if it contains per- and polyfluoroalkyl substances (PFAS) above certain limits.
- Recyclability: all packaging placed on the market must be recyclable according to specific categories, and must also be separately collected, sorted and recycled on a large scale.
- Minimum recycled content for plastic packaging: all plastic packaging must contain minimum percentages of recycled material.

Minimum recycled material content for plastic packaging

2030

FROM 1 JANUARY →

Any part of the packaging made of plastic:

SUP	30%
Contact-sensitive	30%
	10%
Other	35%

2040

FROM 1 JANUARY →

Any part of the packaging made of plastic:

SUP	65%
Contact-sensitive	50%
	25%
Other	65%

- Compostability: certain products must be compostable:
  - Permeable tea, coffee or other beverage bags, or soft after-use system single-serve units that contain tea, coffee or another beverage, and intended to be used and disposed of together with the product;
  - Sticky labels applied to fruit and vegetables.
- Packaging minimisation: packaging for sale (with the exception of packaging in re-use schemes) must minimise empty space.
- Labelling: all packaging placed on the market must carry a label that is uniform throughout the European Union.
- Restrictions on certain packaging formats: certain types of single-use plastic packaging will be prohibited, for example in the hospitality and accommodation sectors for products intended for individual bookings. Examples include small bottles and sachets for soap.
- Re-use of packaging: packaging must provide the option of re-use, both for retail packaging and for packaging used in the hospitality sector and by end consumers.
- Refill: final distributors with a sales area of more than 400 m² must allocate 10% of that sales area to refill stations for both food and non-food products.

In this transformation process, CONAI's commitment is set to be strengthened further through the promotion of its methodologies and tools, ensuring effective and beneficial application for businesses – particularly for SMEs – and for the entire National System.

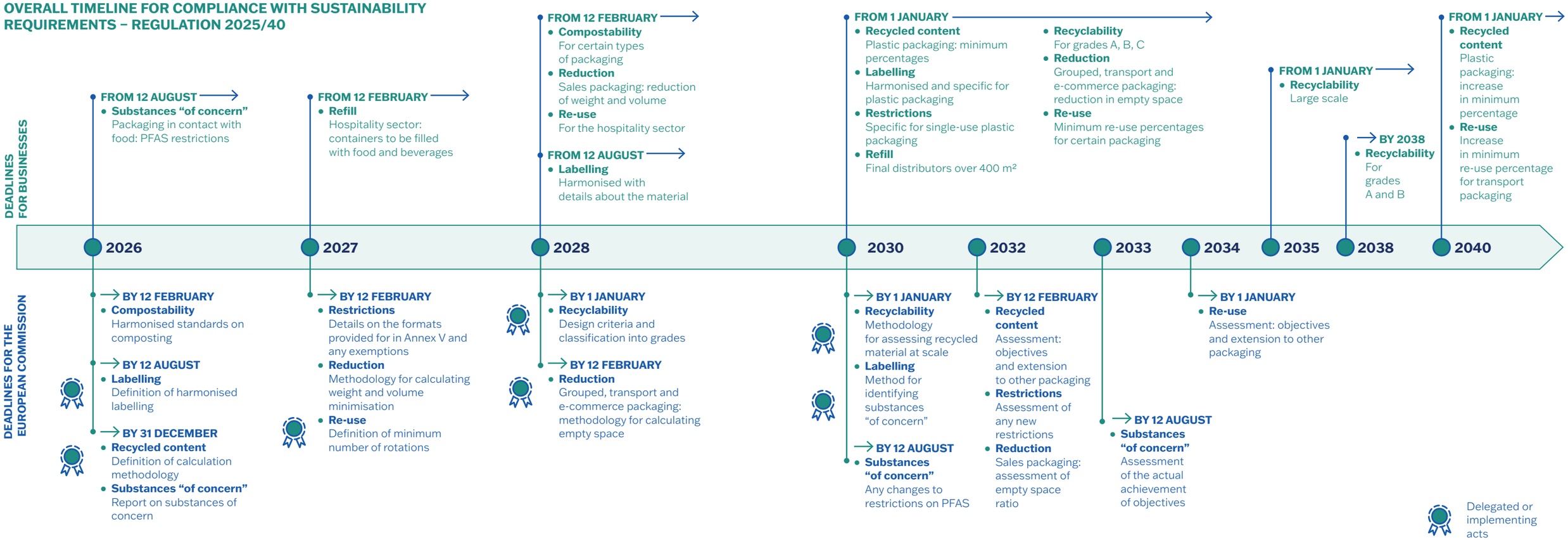
The following are already available free of charge:

- Up-to-date operational tools and guidelines: Clear and constantly updated materials to help navigate obligations, deadlines and design criteria, including the new *CONAI Handbook on the Prevention Measures Referred to in Regulation 2025/40 on Packaging and Packaging Waste*, a document that summarises the main sustainability requirements set out by the new Packaging Regulation.
- Support in regulatory review: Through the *Contact Us* section on conai.org[24], users can select the topic *Packaging Regulation – PPWR* and submit their questions via the dedicated form to receive guidance on understanding the new framework and identifying priority actions to comply with the sustainability criteria established by the Packaging Regulation.
- New PPWR section on the official CONAI website: Includes the handbook on packaging design, a continuously updated FAQ section and additional reference materials. This area will be progressively expanded in line with regulatory developments, providing businesses with a constantly updated and easily consultable resource.
- Training and dissemination activities: free webinars as part of the *CONAI Academy*[25], open to businesses, associations and, more generally, anyone who wants to learn more about the new design rules set out in Regulation 2025/40.

24
https://www.conai.org/en/contacts/.

25
youtu.be/N3zmEBAwB9g

OVERALL TIMELINE FOR COMPLIANCE WITH SUSTAINABILITY REQUIREMENTS – REGULATION 2025/40



CIRCULAR ECONOMY ACT:
new opportunities for the circular economy

The push towards a circular economy has been reinforced by Ursula von der Leyen's policy guidelines for the 2024–2029 term. Among the main objectives of these guidelines are the decarbonisation of the European economy, the strengthening of innovation and sustainable competitiveness, and the adoption of regulations that promote the responsible use of resources.

The adoption of the Circular Economy Act is part of this framework, giving impetus to regulations capable of building an integrated market for secondary raw materials with a view to EU competitiveness and creating a single market for waste, thereby contributing to the EU's strategic autonomy.

Solutions and priorities according to the CONAI System for a stable and competitive recycling market

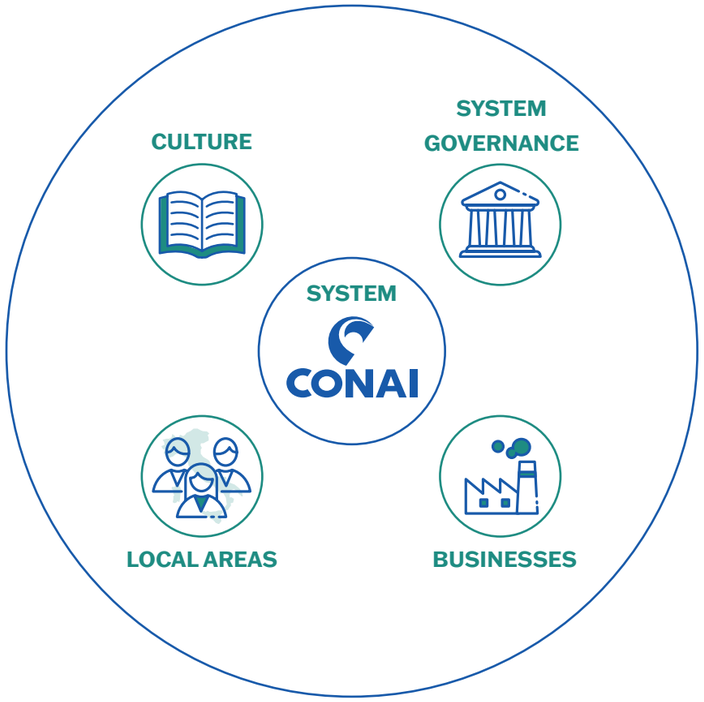
- **Minimum Environmental Criteria:** A driving force to disseminate services and products with a high sustainability value throughout their entire life cycle.
- **End of waste status:** Harmonisation and extension of EoW criteria to more materials to create a single European market for secondary raw material, reducing regulatory fragmentation and costs for businesses.
- **Certification systems to guarantee origin and carbon credits:** Mechanisms to guarantee origin and carbon credits to improve the EPR Fee for secondary raw materials.
- **Environmental assessment and authorisations:** Introduction of harmonised and accelerated procedures for environmental authorisations and assessments (VAS, VIA, AIA) of recycling plants, ensuring rapid turnaround times and high standards.
- **Sectoral incentives:** Tax exemptions and fiscal incentives for the use of certified secondary raw materials.
- **Support for research:** Allocation of structural funds to develop advanced recycling technologies and new applications for materials derived from separate collection.
- **Quality and efficiency of separate collection:** Enhancing infrastructure and quality standards to ensure homogeneous flows and reduce impurities.

2

Value for organisations and businesses

The value of the CONAI system

Participation in the CONAI system is possible in many ways and at many levels: from consortium governance to regional involvement, to research and training. Companies and associations contribute directly to the development of the Consortium's objectives and strategies through its governance bodies; local authorities deal with the operational challenges of separate waste collection and waste management on a daily basis, while the skills that generate awareness among citizens are fundamental in promoting innovation and continuous improvement of the system.



2.1 System governance

Working groups and committees

Working groups and committees play an important role in facilitating dialogue between the various players in the system, with the task of addressing specific issues.

Working Group for "Simplification"

Coordinated by Barbara Gatto (CNA), this group is tasked with examining the classification of specific items as packaging or non-packaging, as well as evaluating and proposing solutions to simplify the procedures relating to application, declaration or exemption of the CONAI EPR Fee. The Group's activities respond to the operational needs of businesses, in accordance with the principles of fairness and in compliance with current legislation, the Statute and the Consortium Regulations.

During 2024, several simplification measures were introduced, which are also reported in the CONAI EPR Fee Guide[26], including:

- concessions for small traders who import limited quantities of empty packaging;
- simplifications for exporters of full packaging destined for foreign countries;
- the possibility for EPR Organisation members to request exemption from the EPR Fee for the export of full packaging already declared, with an increase in the minimum annual threshold for reimbursement (Form 6.6 bis);
- introduction of a specific procedure for managing the fee for packaging made of "chemically modified cellulose" and "regenerated cellulose", in force from 1 April 2024.

26
www.conai.org/download/guida-al-contributo-ambientale-2025

Also in 2024, the Group addressed other important issues, some of which will take effect in 2025, including:

- the collection and processing of data on imported packaged products for statistical purposes and for annual updates;
- a further increase in the threshold for refunds of the EPR Fee on exports (Form 6.6 bis), with an expansion of the number of beneficiary companies;
- revision of the simplified procedure for aluminium, paper and plastic labels (Form 6.14), with the introduction of new flat-rate contributions by turnover band.

In line with its objectives, when updating its procedures, the Group takes into account both the opportunities offered by digitalisation and technological innovation and the need to introduce specific administrative incentives, particularly for micro and small businesses – which are often less structured – and for certain categories or particular flows of packaging. The Group also involves representatives of the associations of member companies. The proposals developed are submitted to the Board of Directors for evaluation and possible implementation. As of March 2025, the Working Group is coordinated by Marco Pagani, Director of Regulatory Affairs and Institutional Relations at FederDistribuzione and member of the CONAI Board of Directors.

Working Group for "Fee Modulation"

Chaired by Domenico Rinaldini (Producer – Steel supply chain), the Group plays a central role in the evolution of the CONAI EPR Fee modulation system, with the aim of enhancing the ease of sorting and effective recyclability of packaging, encouraging more sustainable design choices.

During 2024, several important issues were addressed, focusing mainly on two fundamental aspects that led to the approval of the new EPR Fees in force since July 2025[27]:

- introduction, for the first time and on an experimental basis for one year, of a reward criterion based on recyclability certification, anticipating the contents of the new Regulation 2025/40 for the paper-based packaging supply chain;
- revision of the criterion relating to chain deficit, which takes into account recyclability, the destination circuit and actual management costs for the plastic packaging supply chain.

The working group includes the technical structures of CONAI and the relevant Packaging Material Consortia, as well as the relevant representatives of the Board of Directors.

27
www.conai.org/notizie/conai-da-luglio-2025-variano-i-contributi-ambientali-per-gli-imballaggi-in-legno-plastica-e-vetro-e-per-i-compositi-a-base-carta/

Working Group for "Prevention"

Coordinated by Roberta Rossi (Assolatte-UnionFood), the Group plays a key role in CONAI's sustainability strategy, focusing on promoting eco-design and reducing the environmental impact of packaging placed on the market. It evaluates and proposes to the Board of Directors measures and initiatives that incentivise and support companies to design more sustainable packaging, thereby reducing its environmental impact throughout its entire life cycle. The Group's tasks also include preparing the annual proposal for the ECOPACK Regulation. Numerous companies, associations, Packaging Material Consortia and experts participate in the group.

The International Working Group

Coordinated by President Ignazio Capuano, the Group is responsible for defining the guidelines and international activities of the CONAI EPR Organisation, with particular attention to coordinating work aimed at the adoption of EU legislation in areas of interest.

During 2024, the Group closely followed the progress of negotiations on the Packaging and Packaging Waste Regulation (PPWR), contributing to the definition of technical observations and positions shared with the main European networks. It also actively participated in discussions on the Single Use Plastic Directive (SUPD) and the revision of the Waste Framework Directive, providing analyses and proposals to protect the national system for extended producer responsibility.

The Group works closely with the main European associations, particularly the Extended Producer Responsibility Alliance (EXPRA), ensuring a constant exchange of information and the consolidation of common positions at the EU level.

The Board Members participate in the work, as well as the Presidents and Directors of the Packaging Material Consortia.

Coordination Committee and Verification Committee of the ANCI–CONAI Framework Agreement

The Coordination Committee is the most strictly political body, made up of six ANCI representatives and six CONAI representatives. The ANCI delegation includes mayors and councillors appointed by ANCI, including the current delegate for environmental policies, while CONAI representatives come from the Board of Directors, delegated by it and ensuring that it is properly represented.

The Coordination Committee is primarily responsible for approving the allocation of all resources provided for in the ANCI–CONAI Agreement in addition to the fees specified in the agreements: it therefore identifies individual local projects to support the territory (the final approval of which is then entrusted to the CONAI Board of Directors), approves the rankings of the ANCI–CONAI Call for Local Communication Projects and all reports and therefore the operation of the instruments that operate with resources provided for in the Agreement, namely: training programmes for local administrators and technicians, the ANCI–CONAI database and the Local Authorities Observatory.

The Coordination Committee also discusses any topical issues affecting municipal waste management, with particular reference to packaging waste management, identifying extraordinary measures where necessary. In addition, it monitors the implementation of the Agreement, evaluating amendments to the Agreement itself, including the technical annexes, and proposing them to the signatory parties.

Finally, the Coordination Committee is called upon to settle any issues not resolved by the Verification Committee, which is the technical body governing the Agreement. It is also made up of equal numbers of ANCI and CONAI representatives. The former are appointed by ANCI and are technicians from the waste management sectors of municipalities, while the latter are represented by the directors of the Packaging Material Consortia.

The task of the Verification Committee is to monitor the progress of the Agreement's implementation in terms of the dissemination of agreements and collection standards, as well as to assess reports from the territory relating to complaints or requests for exemptions from the rules set out in the technical annexes. An important task of the Verification Committee is to calculate the annual revision of fees, in accordance with the provisions of the General Part of the Framework Agreement.

It should be noted that the two governance bodies described here will undergo significant changes in both their composition and their respective tasks. With the signing of the new National Framework Programme Agreement and the extension of the signatories (the EPR systems have been added to ANCI and CONAI), the governance bodies will necessarily be expanded to ensure the representativeness of all signatories, and the specific functions will also vary according to the changes in the Agreement.

Scientific Steering Committee for CONAI's Sustainability Report

In recent years, CONAI has devoted considerable effort to the drafting of its Sustainability Report, with the aim of fully reflecting its commitment to responsible and transparent management. To further strengthen this reporting model and to promote structured dialogue with relevant stakeholders, it was decided to establish 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, Lara Ponti, Edo Ronchi and Guido Tonelli will have the dual task of offering a critical and constructive perspective on the Sustainability Report, promoting a process of continuous improvement and strengthening dialogue with institutions and stakeholders.

2.2 Businesses

Innovation that promotes sustainability

Companies face challenges related to the sustainability of their packaging on a daily basis. CONAI provides free tools through the **“Pensare Futuro”** project (“Thinking the Future”).

PENSARE FUTURO
INSIEME A CONAI PER LA PROGETTAZIONE SOSTENIBILE

The “Pensare Futuro”project includes packaging eco-design tools made available by CONAI to all businesses.

Design for Recycling
New Guidelines for Facilitating the Recycling of Steel Packaging.

CONAI EcoD Tool
Simplified LCA and packaging eco-design tool.

- 284 **registered users since 2020**
- 1,115 **forms completed**

ECOPACK

E-PACK

- 1,476 **requests handled**

Labelling website

- 34,832 **users**
- 314 **FAQs**
- 82 **good ideas**
- 185 **labelling specialists**

DifferENTI
New information available on separate collection and selective collection.

Pensare Futuro (“Thinking the Future”) **2024**

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

ecoPACK 2024
BANDO CONAI PER L'ECODESIGN

- 414 **cases presented** → +11% **over 2023**
- 118 **prize-winning businesses** → +9% **over 2023**
- 248 **projects incentivised** → +13% **over 2023**

FROM THE FIRST TO THE ELEVENTH EDITION
2013–2024

CASES AWARDED
1,569

TOTAL PRIZE MONEY AWARDED
€4,700,000

2.2.1 | ECOPACK Call for Eco-design Projects

€600,000

DISTRIBUTED TO BUSINESSES IN 2024

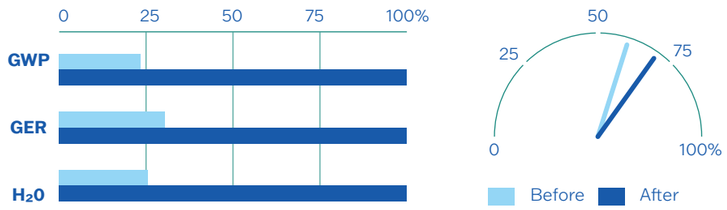
The **ECOPACK Call for Eco-design Projects** represents an important opportunity both for companies – which have the opportunity to be awarded for their innovative and eco-sustainable packaging solutions – and for the system, because it acts as an observatory for eco-design. It is sponsored by the Ministry of the Environment and Energy Security.

The Call for Eco-design Projects provides a single prize for all selected companies, as well as five "circular innovation incentives" for companies that have distinguished themselves through the implementation of specific innovative solutions. The awarding of these latter prizes is entrusted to a wider technical committee, composed of eco-design experts from the academic world (POLITO, POLIMI, IUAV) and representatives of consumer associations (Altroconsumo). Below are the five companies awarded the special prize in 2024.

COMPONENTS FOR KITCHENS
NUOVA SAIMPA SRL

The company has redesigned its packaging system for transporting handles for various sectors, switching from single-use to reusable packaging. Previously, the products were transported on single-use PS trays, alternating with cardboard dividers and expanded PE sheets inside a corrugated cardboard box. Subsequently, the trays and boxes were redesigned to be reusable, following a re-use procedure implemented between the company and its customers. In addition, the cardboard and plastic interlayers used previously were removed and the weight of the trays was reduced by 40%.

Eco-design levers
- Re-use
- Facilitating recycling
- Saving raw material
- Simplifying the packaging system

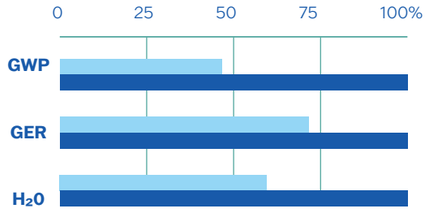


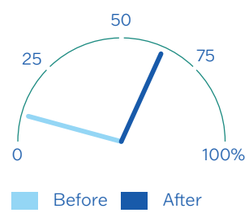
Scope: **432 units**

ACQUA ALLE ROSE FACIAL TONER
MANETTI & ROBERTS

Manetti & Roberts carried out work on the bottle and cap of their Acqua alle Rose facial toner product. Specifically, the original solution featured a PVC bottle and ABS cap, while the new one uses a 100% r-PET bottle and PP cap.

Eco-design levers
- Facilitating recycling
- Use of recycled material
- Saving virgin raw material





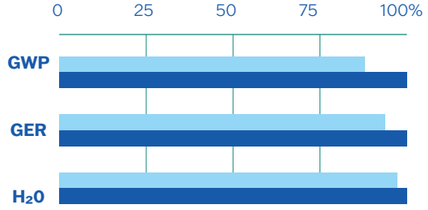
Scope: **300 ml**

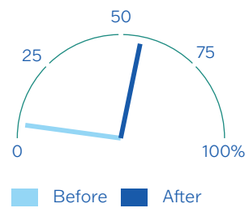
LINDOR TRUFFLES INDIVIDUAL WRAPPING
LINDT & SPRÜNGLI

MAÎTRE CHOCOLATIER SUISSE DEPUIS 1845

The wrapping of the Lindt group's flagship chocolate – Lindor Truffles in all their flavours – previously consisted of a polypropylene film laminate with a central aluminium strip. The new solution involved changing the type of lamination of the two layers of polypropylene and aluminium, which remained unchanged. What has changed is the twist of the wrapper, which triggers the separation of the two components. The new solution allows the two components to be separated when the chocolate is opened.

Eco-design levers
- Facilitating recycling





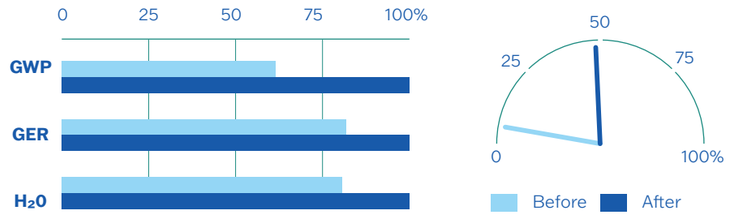
Scope: **1 unit**

PIZZA STRETCHED AND SHAPED BY HAND
SDR PACK SPA IN COLLABORATION WITH MARGHERITA SRL

The pizza packaging has been modified in terms of its film composition, switching from a PP+PET+MET+PE plastic multilayer to a PE monomer, facilitating the recycling process.
In addition, the weight of the packaging has been reduced, allowing for a 6% saving in virgin raw materials.

Eco-design levers

- Facilitating recycling
- Saving virgin raw material



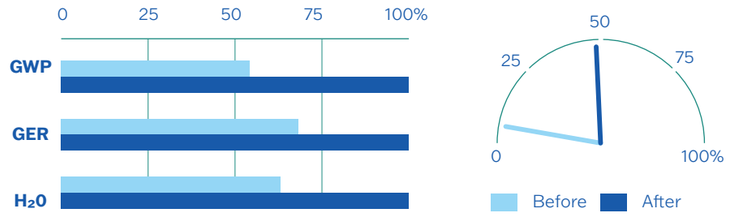
Scope: **990 g**

CHOCOLATE CHIP BISCUITS
SDR PACK SPA IN COLLABORATION WITH MASSIMO ZERO SRL

The company has modified the composition of the bag, switching from a multi-layer OPP+OPP+PE solution to a single-material, recyclable OPP+OPP solution. The weight of the bag has also been reduced by 30%.

Eco-design levers

- Facilitating recycling
- Saving raw material
- Saving virgin raw material



Scope: **220 g**

2.2.2 | The potential of prevention

The main evaluation instrument used in the CONAI Call for Eco-design Projects is the “EcoTool” calculation tool, which uses the two different packaging solutions (before and after) to develop three specific indicators for quantifying the environmental benefits of the new solution. The indicators are:

- **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;
- **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;
- **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.

It is therefore possible to process data from the CONAI EcoTool in aggregated form in order to estimate the potential environmental benefits linked to the spread of best practices implemented in Italy by producers and users of these types of packaging.

For each type of packaging, the average potential environmental benefits that could be generated by “amplifying” the eco-design levers to all packaging belonging to the standard basket and placed on the market in Italy have been calculated. 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 2024[28].
The analysis was carried out on a sample of 414 eco-design initiatives.

28
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 2023 simulation are reported below:

- Raw material saved: -25%
- Water saved: +112%
- Primary energy saved: -40%
- Emissions avoided: -85%.

ENVIRONMENTAL BENEFITS OF PREVENTION ACTIVITIES ESTIMATED BY ANALYSIS

RAW MATERIAL SAVED
6 million tonnes

The weight of
394 Towers of Pisa

WATER SAVED
164 billion litres

65,000 Olympic
swimming pools

ENERGY SAVED
50 TWh

The average annual
electricity consumption of
13 million households

EMISSIONS AVOIDED
7 million tCO_2

Emissions generated
by 17,500 Rome–New York
return flights

Source: Generated by Life Cycle Engineering from CONAI data.

2.2.3 | CONAI Academy webinars

The CONAI Academy webinars enhance the relationship between businesses, associations and institutions, exploring key issues, presenting eco-design tools and regulatory updates.

Name	Date	Total registered	Connected live
2024 Guide: News and EPR Fee refunds	15 February 2024	1,354	808
CONAI Call for Eco-design Projects	6 March 2024	331	120
Design for Recycling	28 May 2024	322	137
New simplified declaration method	30 May 2024	117	103
Update on the new simplified declaration method for the CONAI EPR Fee (CAD Service)	4 June 2024	242	192
Green Claims: obligations and prohibitions	11 October 2024	2,373	1,110
Total		**4,739**	**2,470**

2.3 | Local areas

Local areas taking the lead

Municipalities and local authorities face various challenges when it comes to waste management, mainly related to managing different collection and treatment infrastructures.

2.3.1 | Local projects

€1,850,000

DISTRIBUTED TO LOCAL AUTHORITIES FOR LOCAL PROJECTS

The measures pursued by CONAI within the framework of the ANCI–CONAI Framework Agreement are proving increasingly important for the development of effective and efficient waste management models, with objectives that are tailored to local needs in different areas of the country, promoting innovation and prospects in already developed areas and aiming to bridge the gap in regions that are lagging behind.

SUMMARY OF CONAI SUPPORT ACTIVITIES 2024

Entity involved	CONAI support activities 2024	Objectives
LOMBARDY REGION		
Municipality of Legnano	Support in identifying specific service methods, integrated with those currently in use, for the management of plastic packaging waste from small and medium-sized non-residential users.	• Optimisation of the management of non-residential plastic packaging waste.
VENETO REGION		
Municipality of Verona	Support for a communication campaign aimed at explaining the new collection system that has been introduced, and raising awareness of the importance of proper household waste separation.	• Assistance and support for the introduction of a new collection model, mainly door-to-door, in the city.
TRENTINO-ALTO ADIGE REGION		
Municipalities of Vallagarina and Altipiani Cimbri	Support for start-up activities for the new home collection service.	• Standardisation of the collection service with a view to the subsequent introduction of the Pay-As-You-Throw (TARIP) waste collection tariff throughout the area.
LIGURIA REGION		
Municipality of Genoa	Support activities for the design of services in the Albaro district.	• Identification of effective and efficient methods of separate collection in urban areas with small and micro roads.
Municipality of Savona	Support activities for the implementation of the industrial plan for services.	• Implementation of separate collection with the introduction of a new collection system throughout the city.
EMILIA ROMAGNA REGION Together with the Region, a fair and equitable tariff model has been refined, with the preparation of a standard regulation scheme and updating of the simulation tool, in order to enable the concrete implementation of pay-as-you-throw pricing in the Emilia-Romagna region.		
TUSCANY REGION		
Municipality of Pisa University	Collaboration with the University of Pisa for the design and optimisation of a separate collection service at all the Tuscan university's campuses.	• Implement a technical/organisational model for efficient waste management within the University.
ABRUZZO REGION Collaboration with AGIR Abruzzo continued on the drafting of the Local Plan for the region's integrated municipal waste management service. The aim is to define the organisational and operational procedures and the timing for developing the model deemed most effective for achieving the separate collection targets of each individual municipality, in line with those set out in the regional plan for the entire region.		
LAZIO REGION Support activities focused mainly on the Metropolitan City of Rome and in support of the Provinces, in view of the suspension of the local authorities established by Regional Law No. 19 of 16 November 2023.		
Rome Capital Agreement of the CONAI Extraordinary Plan for the Metropolitan Cities of Southern-Central Italy	Sharing a new model for separate collection: the citizens' local area municipality model. The complexity of a city with almost 3 million residents plus the flows of waste that circulate daily makes it difficult to plan timely and stable interventions.	• Select the municipality which will be involved in the intervention. • Quantitative and qualitative increase in separate collection of packaging.
SAF Frosinone Company owned by the municipalities and provincial administration of Frosinone	Preparation of a technical, economic and managerial feasibility study for waste management in the context of the Optimal Local Area in the Frosinone province.	• Joint waste management. • Identification of a single operator.
PUGLIA REGION Collaboration and dialogue continued with the Region, the AGER agency and ANCI Puglia, with a particular focus on the Waste Traceability System (STR–Ager Puglia), which has been enhanced and made mandatory by the agency. As part of the National Recovery and Resilience Plan (PNRR), 39 projects have been funded to improve separate waste collection, and phase 2 is currently underway, dedicated to providing technical support to make the projects operational by 2026.		
Municipality of Bari and AMIU Puglia Agreement of the CONAI Extraordinary Plan for the Metropolitan Cities of Southern-Central Italy	Continuation of the extension of the door-to-door separate collection system in the city districts. Experimental project involving selective waste collection with rewards, in collaboration with the Municipality of Bari, AMIU and Packaging Material Consortia.	• Improvement in the quantity and quality of materials delivered to the various collection systems in the area. • Introduction of incentives for citizens to dispose of specific packaging.
Municipality of Foggia	Startup and communication activities.	• Exceed 26% separate collection.
Municipality of Lecce	Preparation of the new Management Plan for integrated separate collection services and Feasibility Study for the transition to TARIP.	• Consolidation of the current level of separate collection (70%).
In terms of area planning, work has been carried out in the Bari area, in collaboration with the competent authority, on the drafting of the **ARO BA4 Local Plan** (7 municipalities). Meanwhile, in the Taranto area, the drafting of the **ARO TA2 Local Plan** (6 municipalities) has been completed.		
CAMPANIA REGION CONAI's activity has been intense and widespread, both in terms of planning and service design, with a massive effort to update the Local Plans for the Local Entities (EDAs) and subsequently, where defined, to draft the District Sub-Area Plans (SADs) with the aim of identifying a single integrated cycle operator for each SAD, as required by regional law. As part of the National Recovery and Resilience Plan (PNRR), 8 projects have been funded to improve separate waste collection, and phase 2 is currently underway, dedicated to providing technical support to make the projects operational by 2026.		
Municipality of Benevento	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 (65% in 2023).

Entity involved	CONAI support activities 2024	Objectives
Municipality of Naples Agreement of the CONAI Extraordinary Plan for the Metropolitan Cities of Southern-Central Italy	Planning, start-up and communication phase to citizens and non-residential users.	• Implementation of a new separate collection model in three major areas of the city: the historic centre, the Spanish quarters and the shopping centre (80,000 inhabitants). • "Naples: Different in the Heart" project.
Municipality of Salerno	Support activities to achieve and consolidate positive results for separate collection (almost 74% in 2024).	• Preparation of a feasibility study aimed at transitioning to TARIP.
Caserta Local Entity 104 municipalities	Update of the 2022 Local Plan for joint management of the urban hygiene service.	• Drafting of the plan for the services of the entire province to be put out to tender.
Benevento Local Entity 79 municipalities	Support for the integration and updating of the Local Plan and for the design of urban hygiene services.	• Achieving and consistently maintaining 75% separate collection. • Identification of a single operator.
Municipality of Battipaglia	Update of the separate collection plan, study for the transition to TARIP and project.	• Consolidation of the percentage of separate collection. • Implementation of incentive mechanisms for users doing the right thing.
Municipality of Fisciano	Update of the collection model in the municipality and at the University of Salerno with a communication campaign.	• Improvement of the separate collection percentage up to 85%. • Improvement of the quality of the materials delivered at the university. • Implementation of CONAI RUS Guidelines (Network of Sustainable Universities) for Italian universities.
Municipality of Nocera Inferiore	Drafting of a feasibility study for the transition to TARIP.	• Trial on a statistical sample of the city. • Identification of parameters for applying TARIP.

Several projects were also completed as part of other specific local initiatives with the following entities:
- **Pontecagnano Faiano**;
- **Avellino Local Entity** (114 municipalities);
- **Napoli 1 Local Entity** (9 municipalities including the Municipality of Naples);
- **Naples 2 Local Entity** (24 municipalities).

For the District Sub-Areas, District Sub-Area Plans for the Northern Agricultural Area, Southern Agricultural Area, Amalfi Coast, Ecodiano, Picentini and Battipaglia have been drawn up.

→

Entity involved	CONAI support activities 2024	Objectives
CALABRIA REGION Collaboration has continued at the regional level, even though the protocol with the Region has not been renewed, with the launch of various initiatives to improve separate collection in the area such as: • training for municipal administrations; • technical support for the design of separate collection systems; • information campaigns. Support for the Region and ARPACAL continued with the upgrading of the Regional Waste Traceability System for the 404 registered municipalities. As part of the National Recovery and Resilience Plan (PNRR), five projects have been funded to improve separate waste collection, and phase 2 is currently underway, dedicated to providing technical support to make the projects operational by 2026.		
Municipality of Crotone	Start-up support and communication for the implementation of the new PAP collection 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 (44% in 2023).
Municipality of Catanzaro	New services plan.	• Consolidation of the current level of separate collection (68%).
SICILY REGION Collaboration with the Region continued in line with the ten-year agreement, which also involves the participation of MASE, and saw the continuation of the work of the preparatory coordination working group for the implementation of the activities of the agreement itself. As part of the National Recovery and Resilience Plan (PNRR), 13 projects have been funded to improve separate waste collection, and phase 2 is currently underway, dedicated to providing technical support to make the projects operational by 2026.		
Municipality of Noto	Preparation and dissemination of the separate collection services plan.	• Planning of the new separate collection service. • Increase in the quality and quantity of packaging waste collected.
Municipality of Catania Agreement of the CONAI Extraordinary Plan for the Metropolitan Cities of Southern-Central Italy	Incentive project for all users in the municipality, with a related communication campaign.	• Improvement in the quantity and quality of separate collection (35% in 2023).
Municipality of Palermo Agreement of the CONAI Extraordinary Plan for the Metropolitan Cities of Southern-Central Italy	Revision of the Business Plan with RAP Palermo for the launch of new separate collection systems.	• Improvement in the quantity and quality of separate collection (17% in 2023).
Municipality of Messina Agreement of the CONAI Extraordinary Plan for the Metropolitan Cities of Southern-Central Italy	Communication campaign dedicated to common errors and project for the University of Messina.	• Improvement of the separate collection percentage up to 85%. • Improvement of the quality of the materials delivered at the university. • Implementation of the CONAI RUS Guidelines (Network of Sustainable Universities) for Italian universities.

→

Entity involved	CONAI support activities 2024	Objectives
Municipality of Syracuse	Drafting of a feasibility study for the transition to TARIP.	• Trial on a statistical sample of the city. • Identification of parameters for applying TARIP.
S.R.R. ATO 4 Agrigento Est	Update of service plans for three lots, including the Municipality of Agrigento.	• Development of the services project to be put out to tender.

Other projects included in the local initiatives for updating urban hygiene service plans concern the following entities:
- **Municipality of Misterbianco**;
- **Municipality of Ragusa**;
- **Municipality of San Giovanni la Punta**;
- **Municipality of Mazara del Vallo**;
- **Municipality of Ribera**.

"Sicilia Munnizza Free"
CONAI actively supports "Munnizza Free", a regional project by Legambiente Sicilia dedicated to the dissemination of good practices for the management of municipal waste, packaging and littering. The initiative involves municipalities, urban hygiene service managers and Packaging Material Consortia through provincial Ecoforums, Ecofocus in metropolitan cities and regional workshops. Particular attention is paid to the prevention of littering, with awareness-raising activities in schools, training events and volunteer campaigns to clean up beaches and seabeds. The project promotes virtuous local experiences, encouraging sustainable and responsible management of municipal waste.

Source: Municipalities' separate collection percentages are declared by the municipalities in some cases, or otherwise taken from the ISPRA 2024 Report based on 2023 data.

ANCI–CONAI Call for Local Communication Projects

€1,500,000
ALLOCATED FOR LOCAL COMMUNICATION PROJECTS

Participating in the ANCI–CONAI Call for Local Communication Projects is a real chance to promote responsible behaviour and spread sustainable practices.

The Call for Local Communication Projects allows municipalities, either individually or in association, government bodies and/or service managers appointed by them to obtain co-financing for the implementation of local communication projects that they have developed. Published annually, it collects applications from across the country, dividing them into three macro-areas: Northern, Central and Southern Italy, each of which is allocated a different budget, generally higher for the central and southern regions in order to prioritise areas in need of greater support.

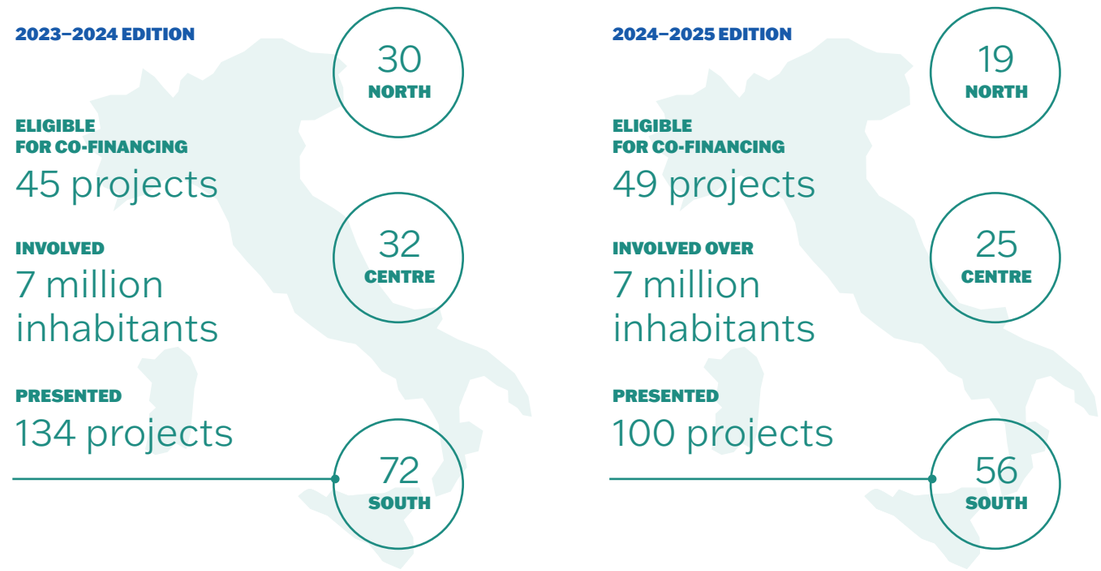
The 2023–2024 edition of the Call closed in 2024, awarding co-financing to 45 projects aimed at promoting local information on the separate collection of packaging waste, selected from 134 proposals received from all over the country, mainly from the southern regions (72 projects received) and, to a lesser extent, Central Italy (32 projects received) and Northern Italy (30 projects received). The applications approved for co-financing involved more than 650 municipalities with a total catchment area of approximately 7 million inhabitants. Over €1,420,000 was awarded for the activities carried out and reported on last year.

€1,500,000 allocated for local communication projects.

The 2024–2025 edition of the ANCI–CONAI Call for Local Communication Projects was published in 2024, with 100 projects competing, mostly from the regions of Southern Italy (56 projects) and to a lesser extent from Central Italy (25 projects) and Northern Italy (19 projects). Based on the applications submitted, 49 projects involving around 600 municipalities and over 7 million inhabitants were approved for co-financing.

In the event that the successful applicants do not carry out (or only partially carry out) all the communication activities indicated in their respective projects, the unallocated resources will be awarded to the projects that followed them in the ranking, until the budget allocated to each macro-area is exhausted.

ANCI–CONAI CALL FOR LOCAL COMMUNICATION PROJECTS



Among the projects submitted as part of the ANCI–CONAI Call for Local Communication Projects for the 2024–2025 edition, the following deserve special mention:

- The communication project submitted for a municipality in the province of Ferrara, which aimed to accompany the activation of the new collection system in the coastal towns of the Emilia-Romagna region. The communication campaign supported the start-up activities for the new door-to-door collection methods, specifically involving the sending of letters and calendars, the distribution of new collection kits and the setting up of information points aimed mainly at residential users. As these are popular tourist destinations, multilingual information material (in Italian, English, German and French) on the new services was distributed throughout the area concerned via tourist offices and estate agencies that manage short-term rentals of local accommodation.
- The communication project for a Tuscan municipality focused its awareness-raising activities primarily on schools, using creative communication to engage students through gamification, and on the general public, including the many tourists who visit the city for local events, highlighting the importance of proper household waste separation for all the environmental and economic benefits it brings.
- Finally, an institutional communication campaign was proposed for a Sicilian municipality with two aims: to share the important results achieved in terms of separate collection with institutions, citizens and the media; and to continue efforts to ensure proper waste separation, to increase collection rates. As part of the communication campaign, ample space was dedicated to institutional meetings, media events and multi-channel information that could reach all users.

2.4 Culture

Skills development and citizen participation

The transition to a circular economy cannot be developed without the support of citizens, who play a fundamental role even without being directly involved in the operations of Packaging Material Consortia. Their participation, through responsible consumption behaviour, attention to separate collection and interest in sustainable solutions, drives the system and guides production and regulatory choices.

2.4.1 The importance of training

Training and environmental education remain essential tools for developing skills (green skills) and creating professional opportunities (green jobs), promoting real cultural change.

New edition of the project for Primary Schools with Recycling Game

In the 2024/2025 school year, the “Class Recycling” (“Riciclo di classe”) project was launched in a completely renewed format. An educational kit (with updated content) was distributed to 2,500 schools across the country, for a total of 3,000 classes.
At the heart of the new project is the online Recycling Game (“Riciclo Game”), available at riciclogame.scuola.net. It lets classes have fun learning – at school or at home – about the characteristics of the seven materials and the key rules for effective separate collection.

Every citizen plays a key role
in environmental issues:
responsibility begins with the purchase
of packaged goods and is demonstrated
through conscious actions.
Separate collection is the first step
towards proper waste management.

In the educational contest, schools are asked to produce and invent new games, including offline ones. The available tools include a teacher's guide, a poster with the ten rules for quality separate waste collection, and a practical handbook offering teachers practical suggestions and playful, hands-on activities to help classes develop their contest entry.

PCTO project for secondary schools

CONAI has developed the second edition of the project for secondary schools, focusing on the circular economy and recycling professions (green jobs). The programme, aimed at students in secondary schools and technical institutes, takes place within 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 aged between 16 and 19. It consists of 10 modules and explains the meaning of the circular economy as applied to CONAI and the world of packaging, with a specific focus on the seven Packaging Material Consortia.

Partnership with ENEA for degree prizes

The second edition of the collaboration project with ENEA has come to an end, recognising degree awards for dissertations on topics related to the circular economy.
At the same time, the first edition was published of the scientific publication *ENEA-CONAI Master Thesis Award 2023 and 2024. Proceedings of the selected thesis*, with more than forty scientific articles summarising the best dissertations and contributions from those who participated in the 1st and 2nd editions of the project. The publication is available on the ENEA website: www. pubblicazioni.enea.it. The works examine all aspects of circularity, in a collection that not only aims to enhance the creative abilities of young people, but also to serve as an observatory of ideas and possible solutions.

Green Jobs Higher Education Project

CONAI continues the "Green Jobs" project, aimed at transferring technical and regulatory skills in the field of the circular economy to young graduates. In 2024, the eighth edition of the Advanced Training Course "Waste Management in the Circular Economy" was completed in collaboration with the Universities of Bergamo and Brescia and ASA High Institute for the Environment of the Catholic University of the Sacred Heart (Brescia), involving 68 young people under the age of 35 from Lombardy and Veneto. In April, a technical visit was organised for the students to Montello SpA, a plant specialising in the sorting and recycling of post-consumer plastic packaging and recovery of organic waste. On 6 May, the closing event was held to award certificates to the participants.
Also in 2024, a new phase of Green Jobs was launched in Puglia and Basilicata, in collaboration with the University of Bari Aldo Moro, which gave rise to the ninth edition of the training course. Previewed in October in Rome at a conference in the press room of Palazzo Montecitorio, on the initiative of the Honourable Patty L'Abbate, the Advanced Training Course was attended by 77 students, including recent graduates and professionals. The seven Packaging Material Consortia and seven recycling companies in various product sectors were involved in the lessons of both courses, and the CONAI book *Circular Economy: The Packaging Challenge* was distributed as teaching material.

First edition of the Startup Award

In 2024, the first edition of the Startup Award was held in collaboration with the Foundation for Sustainable Development. At the close of the call for applications, publicised with the support of STEP Tech Park and the InnovUp network, a number of the most innovative startups that had developed business ideas in the field of the circular economy were selected. The first prize was a six-month acceleration programme in the US, with the opportunity to present their startup to American investors in the sector.
The selected companies are as follows:

1. **Around**[29], a technology platform that offers re-use solutions for packaging through a proprietary app on a B2B platform. It uses traceability technologies such as QR codes and RFID for specific applications such as restaurants, canteens and supermarkets, providing customised reports in real time. Founding team: Giulia Zanatta, Daniele Cagnazzo, Alberto Garuccio, Marco Patti, Mutahir Hussain, Caterina Marrapodi.
2. **SMUSH Materials**[30], founded in 2024 by Luca Ficarelli, Marco Lenzi, Luca Schettino and Prof. Sara Mantero of the Polytechnic University of Milan, is a startup targeting the packaging market with compostable packaging solutions derived from agricultural waste and mushroom mycelium. SMUSH uses mycelium, the root system of fungi that grows naturally by

29
www.aroundrs.it
30
www.smushmaterials.com

colonising organic materials and acting as a natural adhesive. The solutions are impact-resistant, fire-retardant, waterproof, thermally insulating and fully compostable, offering a versatile and sustainable alternative to more conventional packaging materials.

3. **Voidless**[31], an innovative startup in the industrial packaging machinery sector, specialises in creating tailor-made packaging solutions. The technology, represented by the P2 system, allows customised boxes to be produced in real time directly in logistics centres, optimising the use of materials and significantly reducing waste. Advanced 3D optimisation algorithms are used to adapt the boxes to the specific dimensions of each product or order, improving operational efficiency and reducing environmental impact.

CONAI seminar for members of the Order of Journalists

Following Palermo and Milan, the seminar **Recycling and the circular economy: the Italian model setting the standard in Europe** was held once again, and eligible for obtaining credits for compulsory training. It involved 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.

2.4.2 | Promotion of culture through language

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 CONAI Phoenix Award for Young Environmental Journalism.

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.

31
www.voidless-packaging.com

CONAI Phoenix Award for Young Environmental Journalism

2024 saw the third edition of this journalism award, which CONAI dedicates to young journalists who have written about sustainability, recycling and environmental protection. As every year, prizes were awarded for a radio or television report and a written article. The award was once again sponsored by 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 2025 edition of the competition was launched at the end of 2024.

2.4.3 | Contribution to research

Research is a fundamental tool for understanding recycling dynamics, monitoring regulatory developments, analysing consumer trends and supporting evidence-based decisions.

In Europe

DEPOSIT RETURN SYSTEM (DRS) FOR PET BOTTLES[32]
Update of the study conducted with SDA Bocconi on the opportunities for introducing a deposit return system in Italy. The survey analysed updated data on selective collection, in collaboration with Corepla and CORIPET, and included new estimates on placement on the market. The aim is to evaluate the effectiveness of models already tested in other countries, considering costs, environmental benefits and social impacts.

COMPARISON OF EPR AND LOCAL AUTHORITIES IN THE EU
In collaboration with SDA Bocconi, a comparative study was launched between extended producer responsibility (EPR) systems and local authorities in France, Germany and Spain. The analysis examined methods of collaboration, monitoring tools and data flows between EPR bodies and systems, with the aim of identifying solutions that can be replicated in Italy and improving synergy between municipalities and consortia.

32
www.conai.org/download/report-analisi-di-costo-efficacia-dellintroduzione-di-un-drs-per-il-riciclo-in-italia/?tmstv=1757267105

BENCHMARKING EUROPEAN EPR SCHEMES[33]

Update of the analysis of the environmental, economic and management performance of EPR systems in Europe, including alternative schemes such as DRS and taxation systems. The study made it possible to compare Italian results with those of other European countries, highlighting strengths and areas for improvement and providing objective elements to support dialogue with European institutions.

PPWR – THE EU RECYCLING VALUE[34]

Entrusted to CHR Morris Srl, the study assessed the environmental, economic and social impacts of the objectives of the new European Packaging Regulation (PPWR). The research analysed waste reduction scenarios, recycling rates and costs for producers and operators, providing useful technical tools for defining Italy's position in European discussions and guiding national policies.

SUPD TRANSPOSITION IN EU COUNTRIES[35]

Report produced with DGA Group on how the SUP Directive (Single Use Plastics Directive) is being implemented in various EU countries. The survey highlighted differences in interpretation, possible alignments and best practices, providing a clear framework for Italian companies and public bodies to effectively comply with European regulations.

EXPRA SURVEY ON SINGLE-USE PET BOTTLES

Together with Verde Research and Consulting, a survey was conducted among EXPRA members on the collection of PET bottles ≤3 litres. The research examined measurement and reporting methodologies, estimating Italy's position in relation to European targets more accurately and providing useful data for planning targeted interventions to increase collection and recycling.

ANALYSIS OF COFFEE CAPSULE MANAGEMENT AND CONTENT TREE DEVELOPMENT

The study on used coffee capsules, in collaboration with Parpounas Sustainability Consultant, analysed collection, reporting and management schemes in various European countries. At the same time, the development of the "Content Tree" digital tool with Hyper Srl has made it possible to organise regulatory information on environmental labelling, prevention, EPR and management systems, simplifying compliance for Italian companies in foreign markets.

HALF-YEARLY OBSERVATORY ON EPR FEES IN COLLABORATION WITH THE WUPPERTAL INSTITUTE

This is a six-monthly report commissioned by CONAI from the Wuppertal Institute, which maps EPR fees at European level for a set of common packaging types in the countries analysed. The document examines the trend in fees through an aggregate indicator developed for each category of packaging considered. [36] [37]

33
www.conai.org/download/screening-the-efficiency-of-packaging-epr-in-europe-abstract-english-version/?tmstv=1757267189

34
www.conai.org/download/1report-romanian-deposit-return-system-drs-performance-2024-one-year-after-implementation-eng/

35
www.conai.org/download/information-note-on-the-transposition-of-the-single-use-plastics-directive-supd/?tmstv=1757267390

36
Report 4: www.conai.org/download/report-4-packaging-epr-fee-in-eu-i-semester-2024-eng/

37
Report 5: www.conai.org/download/report-5-packaging-epr-fee-in-eu-ii-semester-2024-eng/

In Italy

SCELTA PROJECT – OBSERVATORY ON CONSUMPTION[38]

In 2024, the fifth edition of the project was promoted, in collaboration with the Sant'Anna School of Advanced Studies in Pisa. The survey involved 1,031 citizens, collecting data on perceptions, behaviours and consumption choices related to product circularity. The analysis deepened the understanding of the measures introduced by the PPWR, the perceived environmental impact of packaging throughout its life cycle and regulatory developments on green claims. The study provides valuable guidance for communication policies, packaging design and corporate strategies.

OBSERVATORY ON LOCAL PREVENTION INITIATIVES

Update of the mapping of prevention actions by local authorities, with a survey of 3,402 municipalities, representing approximately 44.9 million inhabitants. The research monitored initiatives such as public water dispensers, bulk products and biodegradable tableware, providing a comprehensive overview of best practices and emerging trends at the local level.

RESEARCH ON GREEN CITIES[39]

In collaboration with the Foundation for Sustainable Development, analyses were carried out on urban waste management in major Italian cities. The report *Regulating the quality of municipal waste management services: challenges for local authorities* offers operational guidance to support municipalities in implementing the TQRIF and adapting to new regulatory requirements.

SECONDARY RAW MATERIALS INDEX

Since 2023, CONAI has developed a bimonthly index with Prometeia on the price trend of secondary raw materials for packaging. The indicator measures the share of recycled materials out of the total packaging sent for recycling, distinguishing between packaging managed and not managed by CONAI. The periodic update provides strategic data to monitor the market, identify trends and guide policies for the recovery and utilisation of materials.

38
www.conai.org/download/progetto-scelta-2024-presentazione/

39
www.greencitynetwork.it/documenti/

THE ENVIRONMENTAL COST
of national packaging recycling

The use of secondary raw materials in finished products (including packaging) as a substitute for virgin raw materials brings concrete and scientifically proven environmental benefits in terms of energy consumption and greenhouse gas emissions avoided, which are associated with the extraction and processing of raw materials. Resource circularity is therefore one of the key elements in decarbonising a country's economy.

Although the use of secondary raw materials is promoted at European level in the 2020 Circular Economy Action Plan[40], it is still undervalued through specific market mechanisms aimed at rewarding the lower energy and carbon intensity of these materials. At the national level, a tax credit[41] has recently been introduced to benefit manufacturers who certify the use of a certain proportion of secondary raw material in their finished products. This measure is currently only valid for a period of three years; it therefore represents a starting point, but cannot yet be considered a structural mechanism for promoting recycling.

In addition, there are other economic mechanisms that create a competitive disadvantage for virtuous recycling practices. This is the case, for example, with the European Emission Trading System (EU ETS)[42], in force since 2005. It rewards energy recovery from waste through waste-to-energy plants by exempting them from paying for their emissions, while no similar benefit is recognised for those plants under the ETS that use secondary raw material and enable the manufacture of products with a high recycled content, even though material recovery is preferable as it occupies a higher position in the waste management hierarchy[43].

Recycling technologies are sufficiently mature to produce secondary raw material of comparable quality to virgin material and to drastically reduce climate-changing gas emissions in relation to the production and processing of materials. In Italy, the recycling rate exceeds 70%[44], which means the supply of secondary raw material is high and well established, but it is not balanced by demand, which would therefore have significant room for improvement if it were adequately stimulated by economic mechanisms.

For these reasons, CONAI, in collaboration with the Foundation for Sustainable Development, has launched a study with the aim of identifying and evaluating possible tools and mechanisms to enhance and strengthen the contribution to decarbonising the national economy of recycled material products, starting with packaging. In particular, this study examines three key elements of a possible mechanism for promoting the use of secondary raw materials:

1. the first element concerns the possibility of transparently and reliably tracing the recycling chain, starting from secondary raw materials to the production of manufactured goods with a specific recycled content;

2. the second element refers to the development of models and software to calculate the generally positive impacts of using these secondary raw materials as a substitute for equivalent virgin raw materials, both in terms of energy savings and greenhouse gas emissions reduction;

3. the third element is the actual incentive mechanism that could be put in place, downstream of a reliable quantification of the use of secondary raw material in a given product and the associated energy and carbon benefits. There are numerous options, ranging, for example, from the introduction of tax credits that can access the white certificate mechanism for the energy savings generated, to the possibility of issuing carbon credits (avoided emissions approach) or recognising the related carbon benefits for ETS-regulated plants that use recycled materials as input for their processes (such as by allowing part of the emissions to be discounted as free allowances).

40
eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN

41
www.gazzettaufficiale.it/eli/id/2024/05/21/24A02466/SG

42
climate.ec.europa.eu/eu-action/carbon-markets/eu-emissions-trading-system-eu-ets/about-eu-ets_en

43
www.mase.gov.it/portale/documents/d/guest/consolidato_rifiuti_05lug2018-pdf

44
www.statigenerali.org/wp-content/uploads/2024/10/Relazione-sullo-stato-della-green-economy-in-Italia-2024.pdf

3

The impacts of the system: figures for 2024

3.1 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[45], 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 2023–2024, for the part attributable to the volumes pertaining to the CONAI System, are reported together with the corrections identified at European level.

In defining the data, specific adjustments were taken into account, introduced following the regulatory changes provided for in the revision of European Commission Decision 2005/270/EC as amended, which establishes the tables relating to the database system pursuant to Directive 1994/62/EC of the European Parliament and of the Council on packaging and packaging waste, updated to the Interpretative Guidelines of April 2025[46].

These corrections have an average impact of 1.3% on the total placement on the market.

An analysis of the 2024 data compared with that of 2023[47] shows a slight increase in the data for placement on the market (+0.7%), mainly due to a physiological rebound after the decline in 2023.

45
CONAI's activities concern only non-hazardous waste.

46
circabc.europa.eu/ui/group/b01d2930-990e-44fb-9121-a9a6b00a1283/library/e723431f-fa86-4688-8b16-da15bc1992c2/details

47
The 2023 figures have been adjusted to take into account the corrections mentioned above and following the usual verification and adjustment activities carried out by CONAI.

PACKAGING PLACED ON THE MARKET (2023–2024)[47]

Material	2023 consolidated	2024	Annual change
	t	t	%
Steel	484,229	504,149	4.1
Aluminium	84,300	91,500	8.5
Paper	5,024,414	4,984,109	-0.8
Wood	3,332,669	3,444,682	3.4
Plastic and bioplastic	2,289,950	2,308,769	0.8
of which traditional plastic	2,212,028	2,226,523	0.7
of which compostable plastic	77,923	82,246	5.5
Glass	2,642,425	2,618,750	-0.9
Total	**13,857,988**	**13,951,959**	**0.7**

Source: 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 2025).

DATA AT A GLANCE

Steel
Increased quantities of “drums”, “raw material for packaging” and from tank regeneration.

Aluminium
Increase almost entirely attributable to the new “composite” corrective measure (EU Decision 2019/655).

Paper
After the highs reached in 2021 and 2022, the quantities have returned to pre-Covid levels.

Wood
Increase following the significant rebound in 2022.

Glass
Slight decrease confirmed, in line with the quantities of glass packaging subject to the CONAI EPR Fee.

Plastic
Slight increase with consumption of polymers, mainly PE, PET and PP.

Biodegradable and compostable plastic
Increase in compostable bioplastic packaging.

PLACEMENT ON THE MARKET BY SELF-COMPLIANT EPR ORGANISATIONS

	2023 consolidated	2024
PAPER	t	t
Comieco	5,017,210	4,965,618
Erion Packaging	7,204	18,491
Total paper	**5,024,414**	**4,984,109**
WOOD	t	t
Rilegno	3,330,784	3,440,202
Erion Packaging	1,885	4,480
Total wood	**3,332,669**	**3,444,682**
TRADITIONAL PLASTIC	t	t
Corepla	1,872,672	1,878,121
CONIP crates	73,061	75,492
CONIP pallets	64	-
PARI	13,075	13,783
Coripet	249,371	253,361
Erion Packaging	3,784	5,766
COMPOSTABLE BIOPLASTIC	t	t
Biorepack	77,923	82,246
Total plastic	**2,289,950**	**2,308,769**

Source: 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 2025).

3.2 Packaging waste streams in Italy: Re-use

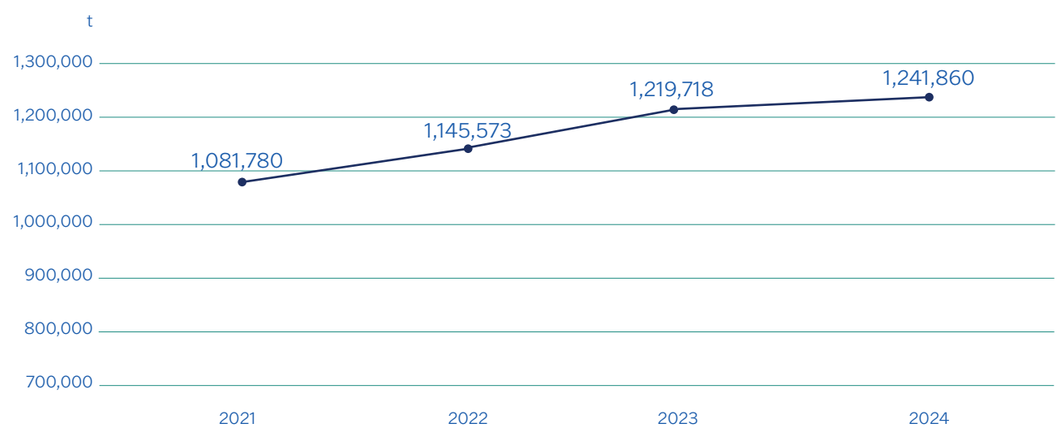
CONAI communicates data on reusable packaging placed on the market to national institutions on an annual basis through its periodic report to the European Commission on the implementation of Directive 94/62/EC and subsequent amendments, as well as through the Single Declaration Model (MUD).

Reporting re-use 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 certifying its actual rotation. For this reason, thanks in particular to the work of the Rilegno Consortium, which is 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.

Below are the quantities of reusable packaging declared to CONAI through the dedicated incentive procedures[48]. These figures represent only a portion of the total in circulation and refer to the types of packaging for which these procedures are provided. In addition, the data reflect a methodological update of the reporting criteria applied over the last four years, with the aim of including all procedures relating to reusable packaging.

The growth trend in reusable packaging continues: **more than 1.2 million t** declared to CONAI.

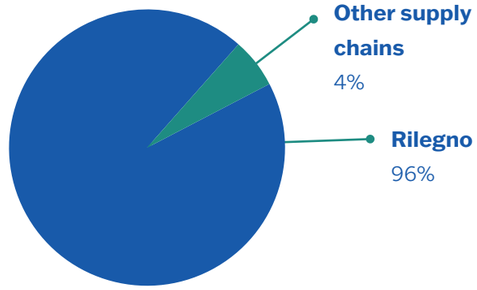
REUSABLE PACKAGING IN INCENTIVE PROCEDURE



Source: CONAI, General Programme for the Prevention and Management of Packaging and Packaging Waste 2024.

Effect of packaging chains with incentive procedures in 2024

96% of the reusable packaging declared to CONAI through incentive procedures belongs to the wood packaging supply chain, especially pallets, which are ideally suited to re-use or repair in industrial settings.



Source: Generated by CONAI.

48
See Appendix "A.1", pag. 121.

Of the total quantities of reusable packaging declared through the incentive procedures, only a percentage is included in the institutional reporting to the Ministry and European authorities. This is because only quantities belonging to controlled and verifiable re-use circuits, identified through specific declaration items, are considered. The following table shows the details by material and type[49].

REUSABLE PACKAGING FROM CONTROLLED CIRCUITS

Material	Type of packaging	2023	2024	Annual change
		kt	kt	%
Plastic	Crates	3,671	2,736	-
	Baskets	18,551	11,370	-
	Reusable Procedure 6.20	14,941	18,304	18
	CONIP crates	2,675	2,549	-5
	Bags, carrier bags and big bags	38,244	39,669	4
	Total PLASTIC	**78,081**	**74,629**	**-5**
Wood	Reusable Procedure 6.20	37,911	18,338	-107
	Pallets conforming to specifications	539,311	570,893	6
	Total WOOD	**577,223**	**589,231**	**2**
Steel	Reusable (drums)	8,209	6,303	-30
	Total STEEL	**8,209**	**6,303**	**-30**
Glass	Applicable bottles as per circular 02 July 2012	50,185	30,429	-65
	Reusable Procedure 6.20	948	1,874	49
	Total GLASS	**51,133**	**30,791**	**-66**
Total reusable		**714,646**	**700,954**	**-2**

Source: Generated by CONAI.

49
It should be noted that the data for reusable glass packaging for 2023 and 2024 will be subject to further revisions following the checks, currently underway, relating to declarations made under the incentive procedures. Therefore, this data will be updated to ensure greater accuracy in reporting.

3.3 Packaging waste streams in Italy: Recycling

The effective recycling rate for 2024, calculated in line with the Eurostat guidelines for verifying the 2025 and 2030 recycling targets, shows an increase compared to 2023, mainly due to the increase in the quantities of packaging recycled. In absolute terms, this meant that 10.7 million tonnes of packaging waste were effectively recycled.

EFFECTIVE RECYCLING

Material	2023 consolidated	2024	Annual change
	t	t	%
Steel	431,048	435,539	1.0
Aluminium	59,300	62,400	5.2
Paper	4,654,965	4,605,294	-1.1
Wood	2,164,246	2,314,294	6.9
Plastic and bioplastic	1,123,200	1,178,935	5.0
of which traditional plastic	1,079,704	1,131,424	4.8
of which compostable plastic	43,496	47,511	9.2
Glass	2,045,768	2,102,979	2.8
Total effective recycling	**10,478,527**	**10,699,441**	**2.1**

Source: 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 2025).

PERCENTAGE OF EFFECTIVE RECYCLING OUT OF MATERIAL PLACED ON THE MARKET

Material	2023 consolidated	2024	Annual change
	%	%	% POINTS
Steel	89.0	86.4	-2.63
Aluminium	70.3	68.2	-2.15
Paper	92.6	92.4	-0.25
Wood	64.9	67.2	2.24
Plastic and bioplastic	49.0	51.1	2.01
of which traditional plastic	*48.8*	*50.8*	
of which compostable plastic	*55.8*	*57.8*	
Glass	77.4	80.3	2.88
Total effective recycling	**75.6**	**76.7**	**1.07**

Source: 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 2025).

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

RECYCLING BY COMPETENCE: CONAI EPR ORGANISATION AND SELF-COMPLIANT EPR ORGANISATIONS

	2023 consolidated	2024
PAPER*	t	t
Comieco	4,648,692	4,594,128
Erion Packaging	6,273	11,166
Total paper	**4,654,965**	**4,605,294**
WOOD*	t	t
Rilegno	2,162,361	2,309,814
Erion Packaging	1,885	4,480
Total wood	**2,164,246**	**2,314,294**
TRADITIONAL PLASTIC	t	t
Corepla	882,352	927,004
CONIP crates	54,711	55,076
CONIP pallets	310	227
PARI	13,075	13,197
Coripet	123,368	126,254
Coripet from selective collection	4,285	5,766
Erion Packaging	1,603	3,900
COMPOSTABLE BIOPLASTIC	t	t
Biorepack	43,496	47,511
Total plastic	**1,123,200**	**1,178,935**

* Further inter-consortium studies are underway with the aim of improving supply chain reporting.

Source: 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 2025).

SUPPLY CHAIN OF PLASTIC AND BIODEGRADABLE AND COMPOSTABLE PLASTIC

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[50] requires great consideration from the entire National System. Further complexity in reporting is required due to the specific calculation point defined by Decision 2019/165, which is basically located in the middle of the industrial recycling phase, requiring Packaging Material Consortia and Self-compliant EPR Organisations to devise complex measurement procedures.

A point of pride at the European level, the reporting of the biodegradable and compostable plastics supply chain applies a calculation method that takes into account the waste generated during the composting process.

Below is a detailed breakdown of the supply chain's recycling:

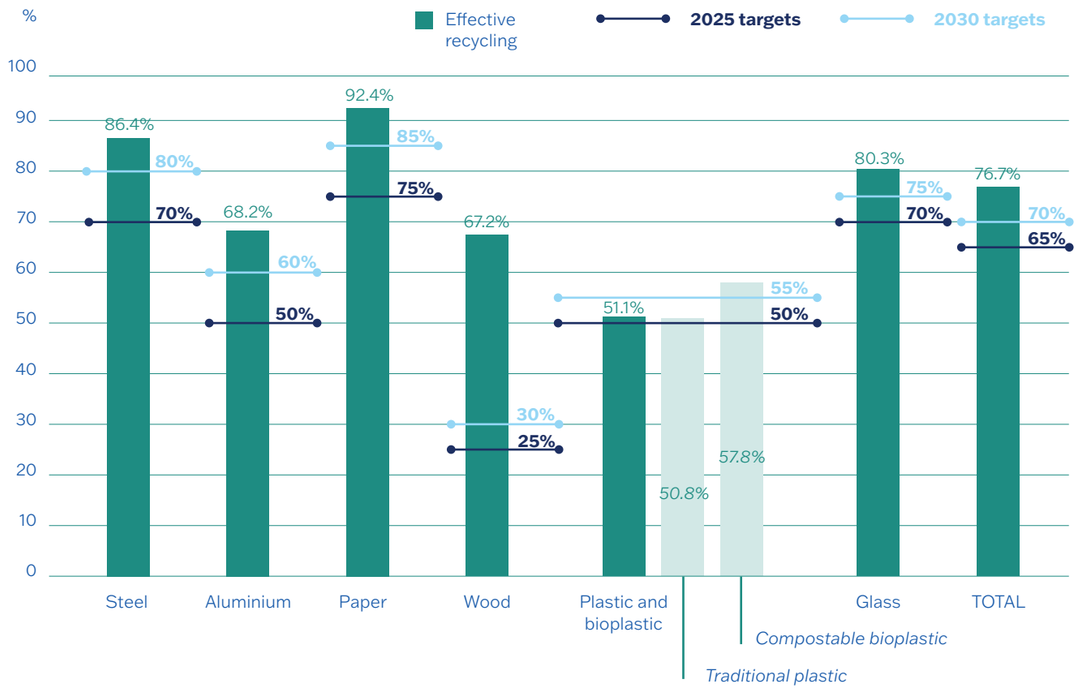
RECYCLING OF THE PLASTIC SUPPLY CHAIN

			2023	2024
			t	t
Corepla	Sent to mechanical recycling	PET	140,105	149,597
		HDPE	74,953	76,554
		FILM	168,129	192,659
		FILS	2,971	-
		IPP	54,685	58,350
		Mixed packaging	223,720	243,854
		EPS	10,434	11,431
		Total	**674,997**	**732,445**
	Sent to recycling – SRA		38,456	39,226
	Sent to chemical recycling		4,209	2,625
	Regeneration and recycling (PIFU)		22,251	22,551
	Total sent to recycling		**739,913**	**796,847**
	Corepla effective recycling		**589,122**	**640,006**
Coripet	Sent to mechanical recycling	PET from separate collection	154,210	157,818
		PET from selective collection	5,356	7,208
	Total sent to recycling		**159,566**	**165,026**
	Coripet effective recycling		**127,653**	**132,021**
PARI	Mechanical recycling	PE FILM	13,075	13,197
	Sent to recycling = effective recycling		**13,075**	**13,197**
CONIP	Mechanical recycling	Crates	54,711	55,076
		Pallets	310	227
	Sent to recycling = effective recycling		**55,021**	**55,303**
Erion Packaging	Mechanical recycling	PE film, EPS	1,603	3,900
	Total sent to recycling		1,603	3,900
	Erion Packaging effective recycling		**1,603**	**3,900**
TRADITIONAL PLASTIC Sent to recycling			**969,178**	**1,034,273**
TRADITIONAL PLASTIC Effective recycling			**786,474**	**844,427**
Biorepack	Organic recycling	Plastic biodegradable and compostable	43,496	47,511
	Total biodegradable		**43,496**	**47,511**
EFFECTIVE RECYCLING FROM EPR			**829,970**	**891,938**
EFFECTIVE RECYCLING FROM MARKET			**293,230**	**286,998**
TOTAL EFFECTIVE RECYCLING			**1,123,200**	**1,178,936**

Source: 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 2025).

50
commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/revenue/own-resources/plastics-own-resource_en

ACHIEVED RESULTS COMPARED WITH 2025 AND 2030 TARGETS



Source: 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 2025).

The projections available to date forecast that the 2025 targets set out in annex E part IV of Legislative Decree 152/2006 as amended will be reached for all packaging supply chains. In light of the supply chain targets set for 2030, uncertainty remains for the plastic packaging sector, exacerbated by the difficulties facing the recycling industry at European level.

3.3.1 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 restrictions on placement on the market (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.

Interception targets

The calculation methodology adopted, which is the result of a joint process with the institutions and in compliance with the provisions of Decision (EU) 2021/17, was defined during a joint working group meeting attended by CONAI, Corepla, Coripet, ANCI, ANEA and FederDistribuzione.
In a nutshell, this approach involves a calculation process that takes into account:

- **flow from separate collection**, with multiple measurement points at the entrance and exit of the sorting plant, determining the gross and net quantities of beverage bottles intercepted in the SUP target;
- **estimated correction factor for weight loss and humidity**: 3%, determined based on the multi-year mass balances of all national sorting plants;
- **flow from selective collection**: already in accordance with the calculation point;
- **placement on the market**, which takes two additional correction factors into account:
  - **weight and percentage** (estimated at around 10%) **of CPL PET outside target**;
  - **weight and percentage** (estimated at around 8%) **of CPL PET caps and lids**.

The 2023 figure shows a decrease of -1.5% compared to the first reporting year (2022), attributable to the update of the estimation factor for target CPL, resulting from product analyses carried out during the reference year.

INTERCEPTION RATE FOR BEVERAGE BOTTLES — **YEAR 2023**

$$\frac{\text{Selective collection (5,371)} + \text{Traditional separate collection in SUP target (282,106)} * \text{Weight loss coeff. (97\%)}}{\text{CPL PET placed on the market in SUP target (394,432)} + \text{Caps and labels placed on the market (31,555)}} = 65.5\%$$

67.03% year 2022

PRELIMINARY RESULTS FOR 2024 — **YEAR 2024**

$$\frac{\text{Selective collection (7,420)} + \text{Traditional separate collection in SUP target (289,594)} * \text{Weight loss coeff. (97\%)}}{\text{CPL PET placed on the market in SUP target (390,473)} + \text{Caps and labels placed on the market (33,838)}} = 68.0\%$$

The preliminary figure for 2024 of 68% shows growth, although it is still below the target set by law (77% by 2025).
In this context, CONAI, Corepla and Coripet are promoting a series of joint and targeted actions, through:

- **Strategic coordination and technical committees**
  - A permanent technical committee has been set up, coordinated by CONAI with the active participation of Corepla and Coripet, with the aim of ensuring continuous updating of strategies and operational actions in view of the 2025 target.
  - The committee also involves the main trade associations, to ensure a shared and structured approach on a national scale.
- **Data analysis and monitoring**
  - A joint in-depth study on Single Declaration Model (MUD) flows has been launched with the aim of preventing double counting and improving the traceability of PET bottle flows not directly reported to the CONAI EPR Organisation. These volumes, initially estimated by CONAI at around 20,000 tonnes[51], were not included among those officially reportable due to persistent difficulties in quantifying them.
- **Preparation of guidelines and operational tools**
  - Guidelines and tools are being developed to support businesses and operators involved in collection and recycling, with the aim of facilitating the adoption of shared practices and improving the effectiveness of the overall system.

51 www.conai.org/download/piano-specifico-di-prevenzione-e-gestione-degli-imballaggi-e-dei-rifiuti-di-imballaggio-2024

Recycled content

With specific reference to the implementation and management of the recycled content requirement for PET beverage bottles, it should first be noted that this requirement is incorporated into national law as an overall average for all bottles placed on the market.
In this regard, it should be noted that MASE, in communication No. 0236554 of 23 December 2024[52] on the "Implementation of the recycled content requirement in PET beverage bottles (R-PET)" clarified that "[...] **by 2025, each economic operator shall ensure the use of a minimum of 25% R-PET in the total weight of plastic bottles placed on the market in Italy, in order to make an effective contribution to the binding national average target**, and then support the gradual transition to the calculation per production plant provided for by the PPWR regulation".
It then asked "**[...] Consortia and Self-compliant EPR Organisations to ensure compliance, in coordination with industrial operators who, for this purpose and to guarantee national reporting obligations, must ensure the timely transmission and completeness of data for subsequent validation by ISPRA**".

In accordance with the above-mentioned regulatory provisions and in compliance with their respective competences, CONAI, Corepla and Coripet signed a specific Memorandum of Understanding in February 2024 aimed at implementing joint initiatives for more accurate reporting of data on the consumption of single-use plastic beverage bottles subject to SUP regulations.

CONAI, Corepla and Coripet have therefore commissioned the market research company Plastic Consult Srl to carry out a quarterly survey of the companies concerned, with the aim of collecting data not only on the quantities of beverage bottles placed on the market, but also on the content of recycled plastic (R-PET).
The quarterly survey is therefore the tool identified by CONAI, Corepla and Coripet to ensure the correct reporting of these flows in compliance with MASE requirements.

With specific reference to the available data and in accordance with Article 6 of the SUP Directive, which states that "from 1 January 2025, PET bottles must contain at least 25% recycled plastic", it is estimated that in 2023 (the first reporting year with data transmission scheduled for 2025) the average recycled content rate will be 11.8%.

For 2024, this value is estimated to grow, reaching a level of 15.8%.

52 www.conai.org/notizie/implementazione-dellobbligo-di-contenuto-di-riciclato-nelle-bottiglie-per-bevande-in-pet-r-pet-chiarimenti-del-mase/

3.4 Packaging waste streams in Italy: Energy recovery

The current legislation no longer sets a recovery target; nevertheless, CONAI intends to continue monitoring these flows in order to ensure greater traceability of information on supply chains.

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.

Overall, in 2024, the amount of packaging waste sent to energy recovery grew by 1.7% compared to the previous year.

PACKAGING WASTE SENT TO ENERGY RECOVERY AND PERCENTAGE

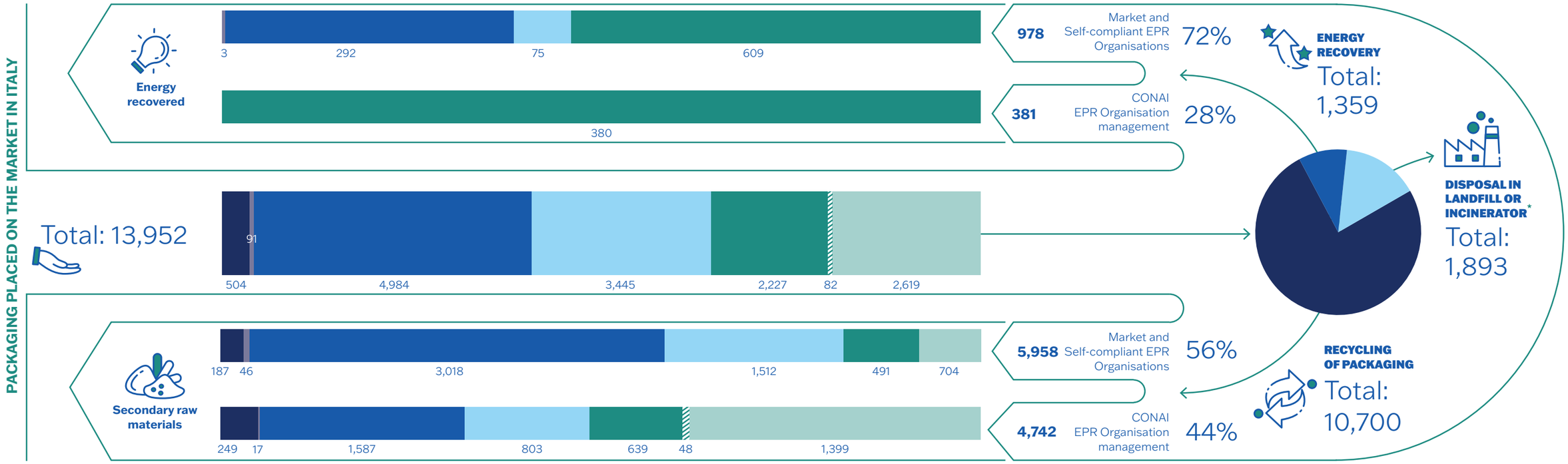
Material	2023 consolidated	2024	Annual change
	t	t	% points
Steel	0	0	0
Aluminium	3,200	3,200	0
Paper	292,142	291,613	-0.18
Wood	58,203	76,070	30.7
Plastic	983,611	988,822	0.53
Glass	0	0	0
Total	**1,377,156**	**1,359,705**	**1.69**

PACKAGING WASTE SENT TO TOTAL RECOVERY AND PERCENTAGE

Material		2023 consolidated	2024	Annual change
		t	t	%
Packaging waste sent to total energy recovery	t	11,815,684	12,059,146	2.1
Total recovery out of material placed on the market	%	85.3	86.4	1.1

Source: 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 2025).

PERFORMANCE OF THE CONAI EPR ORGANISATION IN ITALY IN 2024 (KT)



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

Data in kilotonnes.
Source: CONAI Research Centre from institutional data.

4

Governance, compliance and transparency

4.1 The National Packaging Consortium

CONAI is a private, non-profit consortium, representing the both producers and users of packaging. It is the cornerstone of the national system for managing packaging and packaging waste, and with 651,713[53] EPR Organisation members, 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.

53

As of 31 December 2024. The CONAI Board of Directors' resolution of 26 March 2025 updated this figure to 638,154 members.

CONAI'S DUTIES TO THE ENVIRONMENT

- Ensuring the achievement of the packaging waste recovery and recycling targets currently in force, overseeing the cooperation of consortia and other economic actors.
- Promoting environmental packaging and packaging waste impact prevention, through study and research into the production of environmentally friendly, reusable and recyclable packaging.
- Reducing the amount of packaging waste going to landfill by promoting recovery alternatives.
- Ensuring compliance with the "polluter pays" principle as regards producers and users by means of EPR Fee calculation.
- Organising information, training and awareness-raising campaigns aimed at packaging users and consumers in particular.
- Incentivising recycling and recovery of secondary raw materials by promoting the market for them.
- 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).
- 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.
- Promoting and coordinating the separate collection of packaging waste in accordance with efficiency, effectiveness and affordability criteria.
- 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).

CONAI promotes a development model whereby innovation, business competitiveness 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[54]. 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. In summary, 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, each application must be accompanied by a declaration of acceptance of the candidacy and a certificate attesting to the absence of causes of ineligibility and incompatibility, under penalty of nullity. 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.

- The **Board of Directors** consists of 19 members, four of whom are women[55]. 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 ensure that the diversity of the entities that make up the CONAI EPR Organisation is represented, each of the two categories within the CONAI Board of Directors 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 users 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 the President of the Consortium from among its members, who is responsible for ensuring that the Consortium operates in accordance with its interests.

- The **Board of Auditors** verifies the regularity of the Consortium's accounting management, expressing itself collectively in specific reports to the Assembly on the budget and the annual financial statements. It consists of seven standing members and two alternate members, two of whom are women. Three of the standing 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.

- The Board of Directors has also entrusted a **collegial Supervisory and Control Board**, composed of three persons, one of whom acts as coordinator, with the task of supervising the operation of and compliance with the Model and ensuring that it is updated. The Supervisory and Control Board has autonomous powers and is included in CONAI's organisational chart as a staff unit, in the highest hierarchical position, reporting 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.

54
www.conai.org/en/about-conai/governance

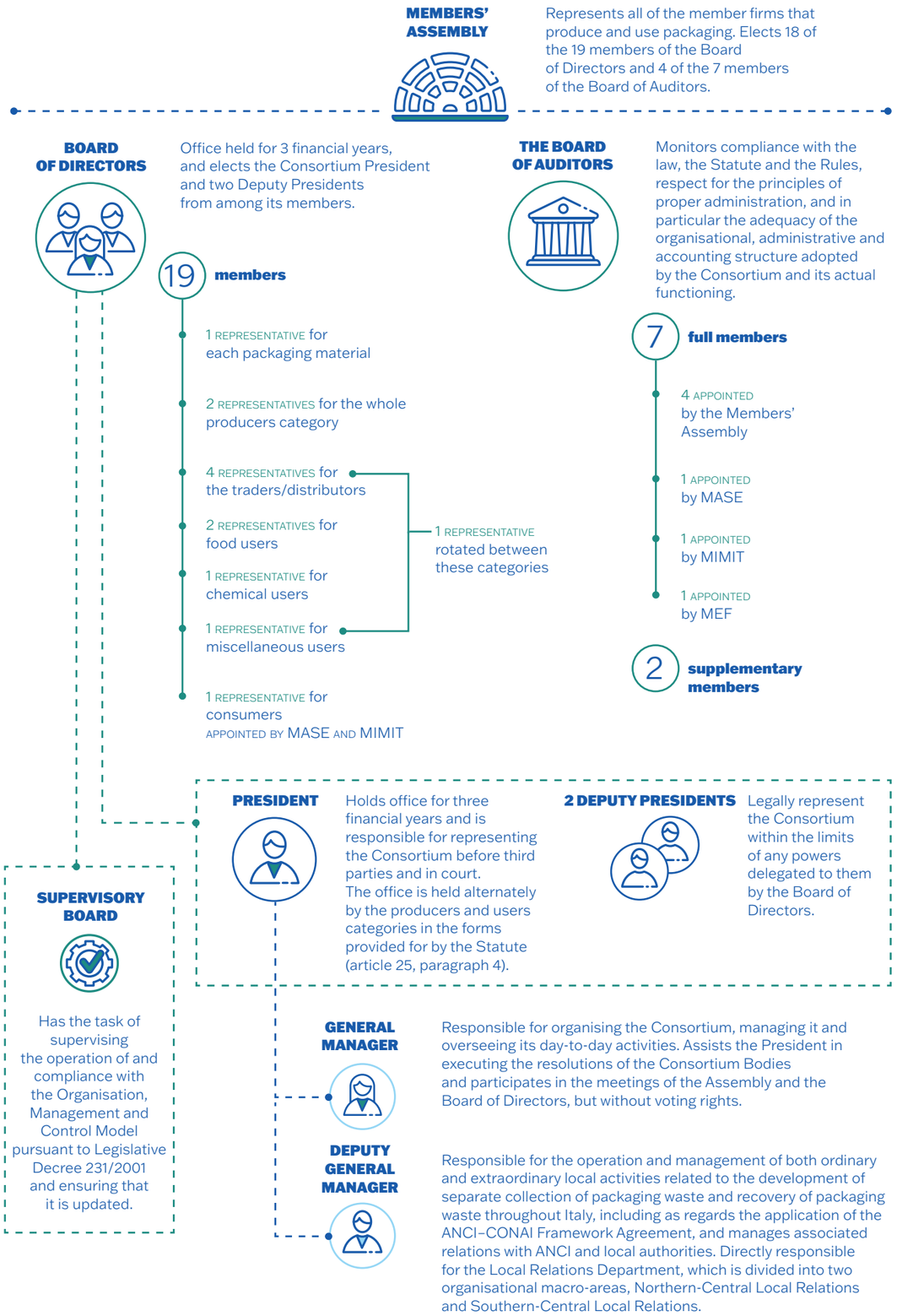
55
The gender diversity ratio for the Board of Directors is 21%.

- The **President** remains in office for three financial years and is responsible for representing the Consortium before third parties and in court. The position alternates between 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. His term of office will expire in 2026.

- The **two Deputy Presidents** are the legal representatives of the Consortium within the limits of the powers delegated to them by the Board of Directors. The Deputy Presidents of the Consortium are Angelo Tortelli, representing the users, traders and distributors, and Antonio Feola, representing the other users. Their term of office will expire in 2026.

- The **General Manager**, as 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. The General Manager of the Consortium is Simona Fontana.

- The **Deputy Manager**, considering CONAI's strategic and operational objectives, supports and assists the General Manager in the management of activities related to the development of separate collection and relations with ANCI and local authorities. The Deputy Manager of the Consortium is Fabio Costarella.



4.2 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

Aluminium
CiAl

Bioplastic
Biorepack

Paper and cardboard
Comieco

Wood
Rilegno

Plastic
Corepla

Glass
CoReVe

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 four Self-compliant EPR Organisations in 2025.

PARI, a Self-compliant EPR Organisation developed by Aliplast SpA for the management of its flexible PE packaging waste, attributable to the commercial and industrial circuit.

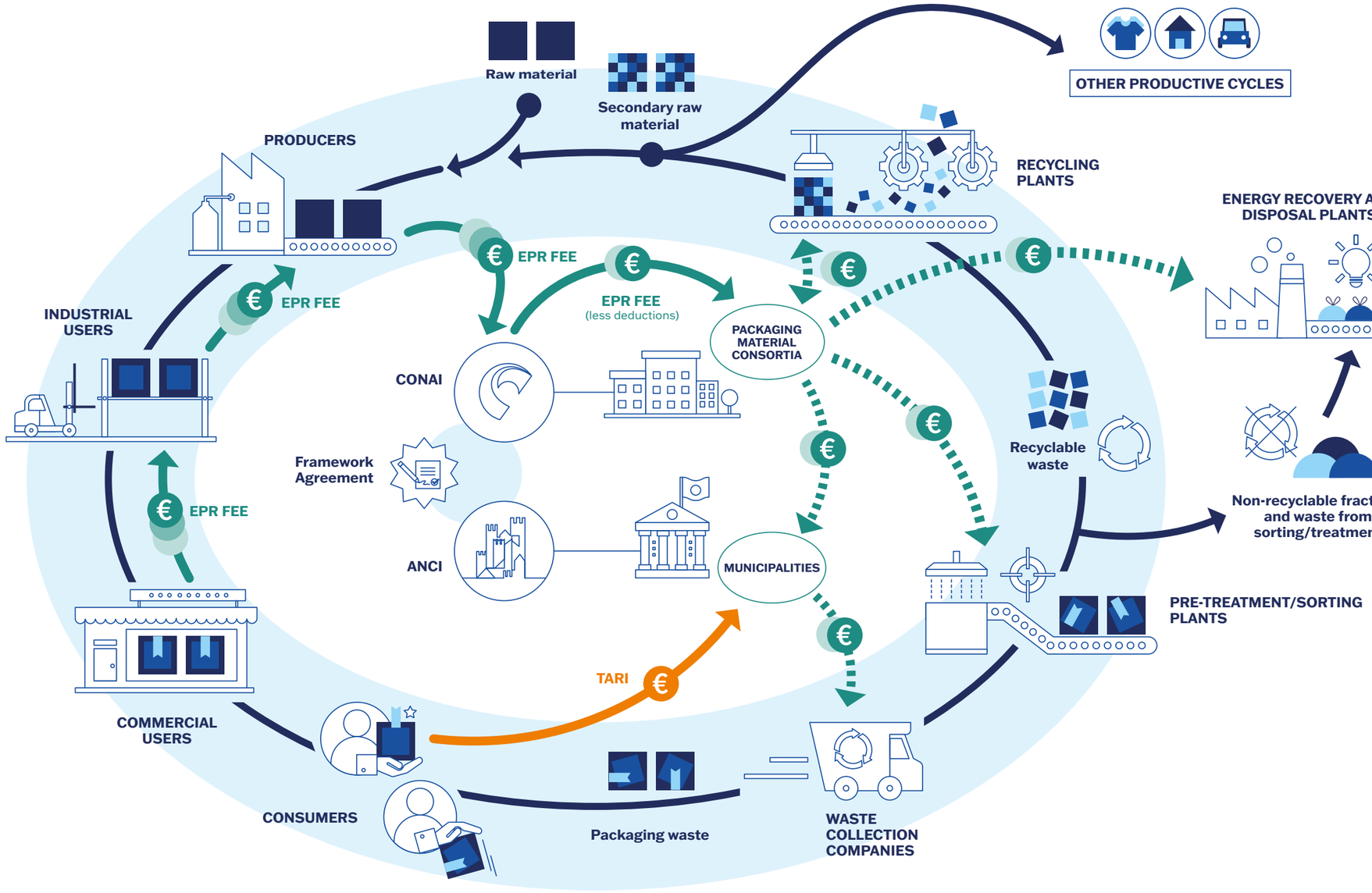
CONIP, an organisation that manages, guarantees and promotes the collection and recycling of the plastic crates and pallets of its EPR Organisation members at the end of the life cycle.

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

Erion Packaging, a system designed to enable member companies to fulfil their extended producer responsibility obligations in the supply chain for packaging and packaging waste made of paper, plastic and wood from technological products.

In accordance with current legislation, upon expiry of the current ANCI-CONAI Framework Agreement on 31 December 2024, CONAI and the Self-compliant EPR Organisations will promote a national framework programme agreement (APQN) with the National Association of Italian Municipalities (ANCI), the Union of Italian Provinces (UPI) or the Optimal Local Area Management Bodies, in order to guarantee coverage of the costs arising from separate collection, transport, sorting and other preliminary operations for packaging waste, as well as the methods of collection of such waste for recycling and recovery purposes.
The programme agreement consists of a general section and related technical annexes for each packaging material and is also signed by the Packaging Material Consortia.

THE NATIONAL SYSTEM OF PACKAGING WASTE MANAGEMENT



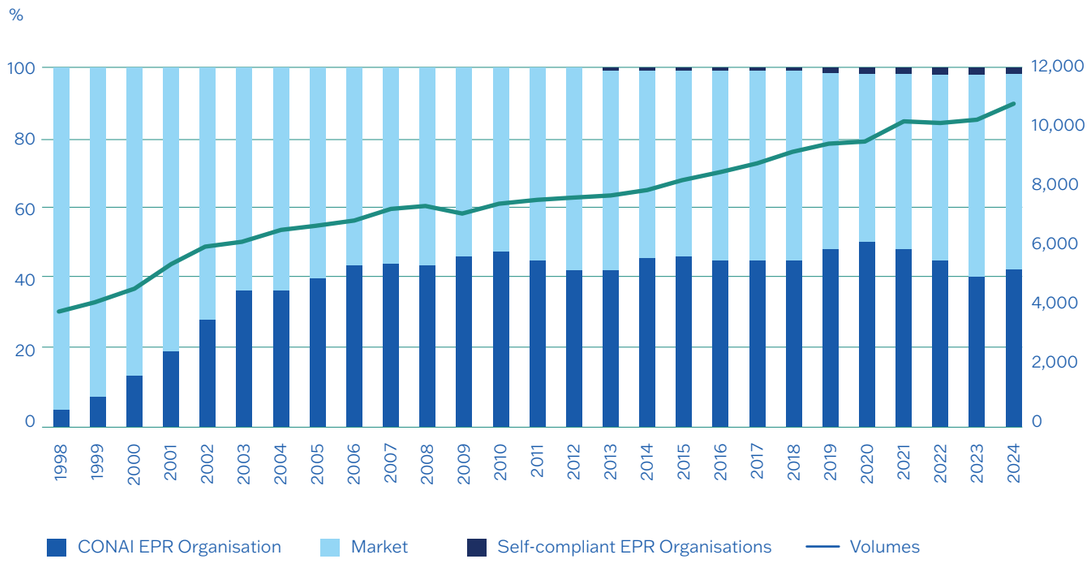
THE CONAI SYSTEM

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. In this context, CONAI expresses its role by ensuring that environmental protection and competition are not opposing variables, but complementary ones.

This is clearly evident from the data and results of packaging waste recycling, obtained through the combined management of the consortia and the market. In fact, since the CONAI System began its operations, there has never been a reduction of volumes between these two dimensions. Instead, there has been constant growth that has enabled the country to achieve objectives set by the legislator ahead of schedule.

MANAGEMENT BY THE CONAI EPR ORGANISATION AND BY THE MARKET OVER THE LAST 27 YEARS



4.3 CONAI and its organisation

4.3.1 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[56] and a Code of Ethics[57]. 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 for 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 has never been convicted or sanctioned for violations of anti-corruption and anti-extortion regulations. It 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.

56
www.conai.org/download/modello-di-organizzazione-gestione-e-controllo-2015/?tmstv=1696304430

57
www.conai.org/download/codice-etico-conai-2012/?tmstv=1696304430

4.3.2 | Respect for human rights

There are no relevant activities within the CONAI organisation that could constitute a violation of human rights.
The Code of Ethics, in addition to highlighting the conduct relevant for the purposes of Legislative Decree 231/2001 as amended, draws attention to 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.

4.3.3 | 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, with regard to corruption offences, in the Special Section 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 absence 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 ensure systematic and continuous control. CONAI has also adopted "Guidelines on the protection of persons reporting crimes or irregularities ('whistleblowing')", attached to the Organisation, Management and Control Model, with which it intends to guarantee full protection and maximum confidentiality for whistleblowers and to remove any factor that may hinder or otherwise discourage reporting of crimes or irregularities.

4.3.4 | Antitrust compliance

The culture of antitrust compliance, in particular, works to make market dynamics competitive, protecting those interests that would be harmed if anti-competitive conduct were to occur.
This issue is of particular interest to CONAI in relation to the activities carried out by the Consortium and, in particular, to the coordination of the activities of the individual consortia operating in the various packaging waste supply chains, as well as to the liaison between these consortia and the Public Administration.

In February 2022, the CONAI Board of Directors approved the "CONAI Anti-Trust Compliance Programme", which clearly expresses the Consortium's desire to promote and implement the prevention of antitrust violations at every level of its structure. In particular, the Antitrust Compliance Programme adopted by CONAI fosters the development of a corporate culture of competition protection and reinforces the Consortium's commitment, from top management to executives, employees and external partners, to compliance with antitrust rules through thorough awareness of the antitrust risks associated with their activities. The Programme also provides for the recipients to be constantly and regularly updated in line with the continuous evolution of specific legislation. There have been no proceedings and/or further action by the Authority against CONAI during the reporting period in relation to anti-competitive behaviour and antitrust violations.

Appendix

A Prevention measures in waste generation

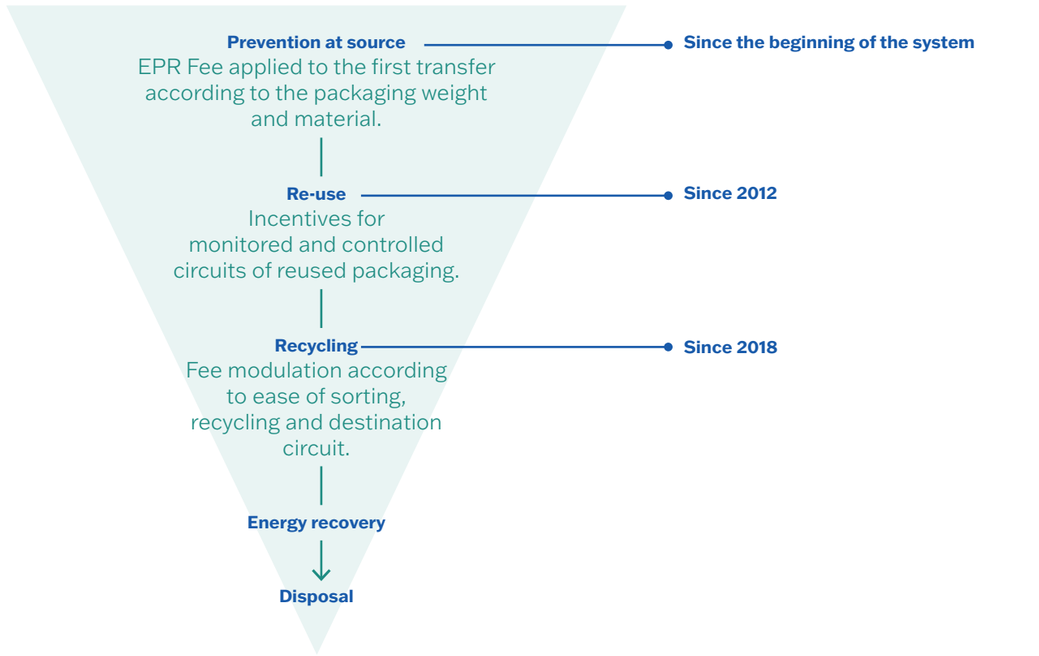
Prevention is the priority measure among the Consortium's strategies. CONAI promotes the work of companies in taking action upstream, already at the design and consumption stage of packaging, to ensure that it is:

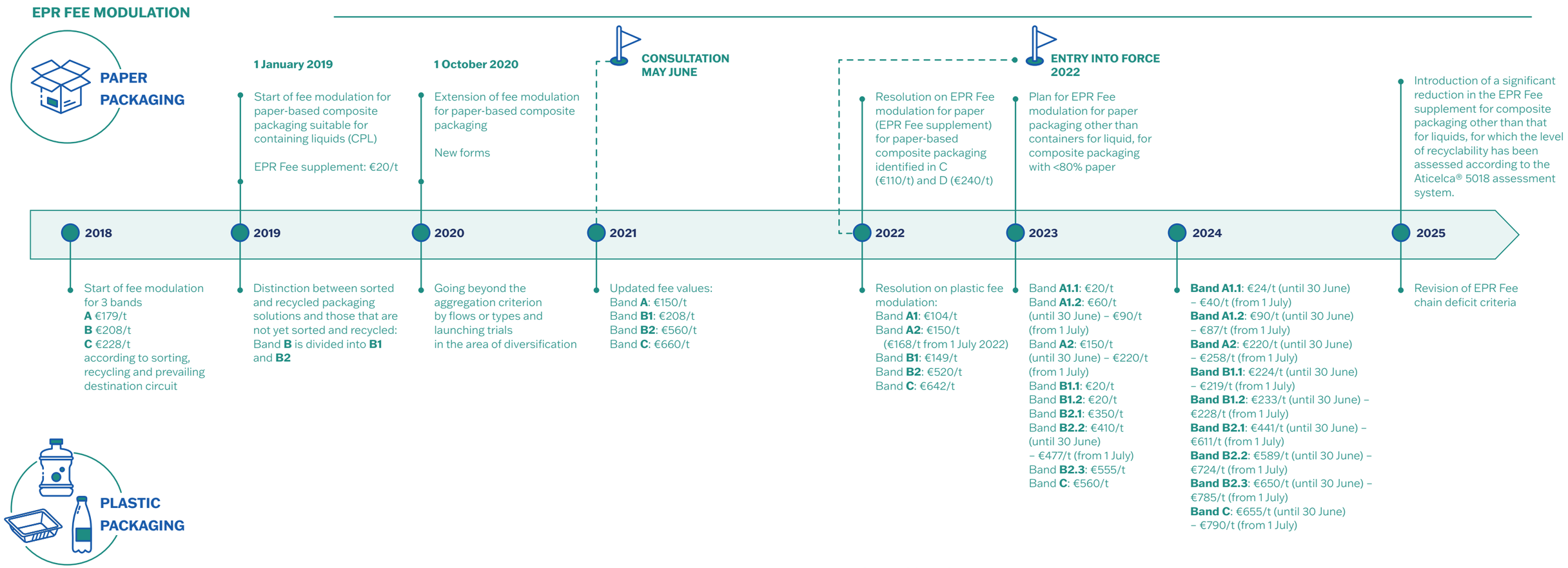
- more easily reusable or recyclable;
- less impactful in terms of resource consumption;
- compatible with the selection and recovery chains available in the production area.

The measures introduced by CONAI are mainly divided into two macro areas:

1. **structural measures** that directly affect the CONAI EPR Fee;
2. **support services and tools** that assist companies in the design of sustainable packaging.

EVOLUTION OF EPR FEE MODULATION





Source: CONAI: General Programme for the Prevention and Management of Packaging and Packaging Waste 2025.

A.1 | Structural measures

Fee modulation for plastic and paper packaging

The CONAI EPR Fee is the main source of funding for the system and can also act as an incentive mechanism that can influence companies' choices.

Since 2018, CONAI has adopted a criterion for modulating the EPR Fee based on the ease of sorting and recyclability of packaging. In short, the more sustainable the packaging, the cheaper it will be to manage.
The supply chains concerned are, in various ways, those of plastic packaging and paper packaging.
The diagram above shows the main decisions that have influenced fee modulation over the years.

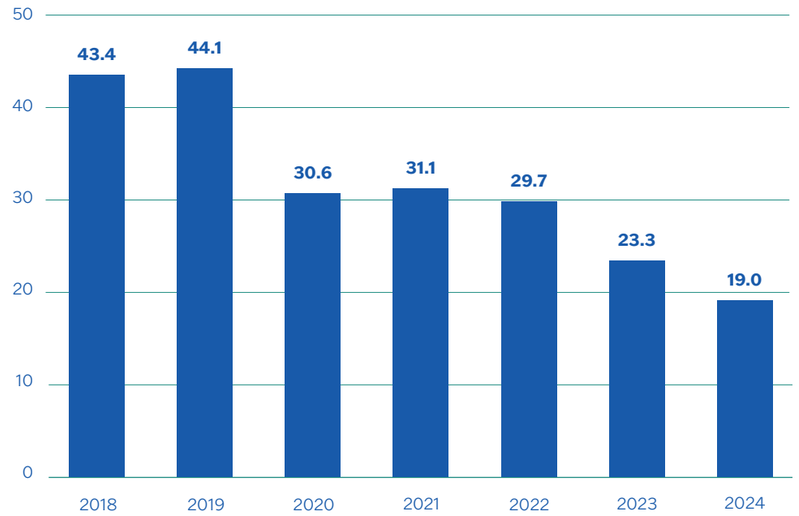
In 2024, effective from 1 July 2025, it was decided to extend the fee modulation project for paper packaging and, at the same time, to introduce a significant reduction in the EPR Fee supplement for composite packaging other than that for liquids subjected to laboratory testing conducted in accordance with UNI 11743:2019 and for which the level of recyclability has been assessed according to the Aticelca® 5018 assessment system.
From **1 July 2025**, there was therefore a move from **6 to 8 EPR Fee bands**, some of which offer **incentives for certified packaging**.

Band	Type	Previous EPR Fee	EPR Fee from July 2025
		€/t	€/t
1	Single-material	65.00	65.00
2	Type A composites (90–95% paper)	65.00	65.00
3.1	Type B1 composites (certified, 80–90%)	65.00	75.00
3.2	Type B2 composites (non-certified)	65.00	90.00
4	CPL	85.00	135.00
5.1	Type C1 composites (certified, 60–80%)	175.00	130.00
5.2	Type C2 composites (non-certified)	175.00	175.00
6	Type D composites (<60% paper or composition unknown)	305.00	305.00

To support companies in the correct application of the new criteria, Operational Guidelines[58] have been prepared, accompanied by Design for Recycling ideas for increasingly recyclable cellulose-based composite packaging.

As regards the **fee modulation of plastic packaging**, efforts continued to review and update the criteria and logic behind fee modulation, linking the values of each band not only to the recyclability and destination circuit of the specific types of packaging, but also to the management costs incurred by CONAI–Packaging Material Consortia, thus adding the specific chain deficit for each macro type of packaging as a factor in defining the individual fee values per band.
The entire process of fee modulation is geared towards taking into account developments in recyclability at EU level and therefore towards the logic of actual recycling rather than potential recycling, confirming the criteria underlying the fee modulation adopted to date.
One figure that clearly summarises the results of the actions taken, both on packaging and on the selection and recycling supply chains, is the percentage of band C packaging in relation to the total packaging placed on the market. Packaging for which there are no ongoing recycling activities or which cannot be sorted or recycled with current technology has fallen from 43.3% of the total in 2018 to 19% in 2024[59]. This is an important result that demonstrates the importance of fee modulation as a concrete and effective lever.

BAND C PACKAGING IN RELATION TO THE TOTAL AMOUNT OF PACKAGING PLACED ON THE MARKET (% of total)



Incentive procedures for reusable packaging

Over the years, CONAI has paid particular attention to packaging structurally designed for multi-year use. For this, it reserves facilitated or simplified formulas for the application of the EPR Fee, with the constant involvement of business associations and companies representing the industrial or commercial sectors concerned.

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.

58 www.conai.org/wp-content/uploads/2025/04/Linee-Guida-nuove-fasce-contributive-imballaggi-compositi-a-base-cellulosica.pdf

59 www.corepla.it/wp-content/uploads/2025/05/Punto-3-odg_PROGRAMMA-SPECIFICO-DI-PREVENZIONE.pdf

For the following types of packaging, there are also considerable fee 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 re-use 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 arrangements that do not involve a transfer of ownership), since 2012 another form of incentive (as an alternative to the others) has been provided through the possibility of suspending payment of the EPR Fee until the packaging completes its re-use cycle or is otherwise dispersed outside 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 the country. In this case, the incentive represents both a considerable simplification of the formulas for applying and declaring the EPR Fee (based on the number of items sold rather than on the weight of the individual components and relevant accessories) and through the simultaneous recognition of periodic payments 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 in the CONAI EPR Fee Guide are available at www.conai.org.

A.2 | Support services and tools

Pensare Futuro ("Thinking the Future"): Services for businesses

In addition to the structural measures mentioned above, CONAI promotes a range of services and digital platforms aimed at **spreading the culture of eco-design** among companies and facilitating regulatory compliance, with a focus on all stages of the life cycle.

HANDBOOK ON THE PREVENTION MEASURES REFERRED TO IN REGULATION 2025/40 ON PACKAGING AND PACKAGING WASTE[60]

On 22 January 2025, Regulation 2025/40 was published in the Official Journal of the European Union. Already in 2024, the proposed Regulation engaged CONAI in analysing and monitoring regulatory developments.

Given the complexity and structure of the regulation, a PPWR sub-group was formed within the prevention group with the aim of drawing up a handbook on the main sustainability requirements to help companies adapt to the new provisions. The sub-group's meetings were held at the end of 2024 and continued into the first quarter of 2025.
The document, which is open for public consultation until 20 June, was presented on 16 April 2025 during a dedicated webinar (the second on the PPWR). Given that the legislation still leaves room for interpretation and defines criteria whose concrete implementation is postponed until the adoption of delegated and implementing acts by the European Commission, it will be a dynamic document updated from time to time in line with secondary legislation that will clarify the aspects that are still open.

DESIGN FOR RECYCLING

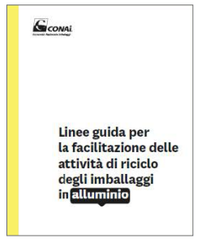
To further support companies that intend to take action on the recyclability of packaging during the design phase, in 2016 the "**Design for Recycling**" web platform was created, which can be visited at www.progettarericiclo.com in Italian and English. It collates the CONAI guidelines on design for recycling of packaging, created in collaboration with the main Italian universities active in the field of design, the Packaging Material Consortia and the relevant associations.

60
www.conai.org/wp-content/uploads/2025/09/VADEMECUM-CONAI-PPWR-progettazione-degli-imballaggi.pdf

The design indications in the guidelines are based on the description of the industrial processes involved in packaging waste treatment operations: collection, sorting and recycling. Through analysis of these phases, readers are guided through which aspects must be considered during the design phase so that the packaging is compatible with existing processes.
With this in mind, the guidelines provide useful tips and suggestions with the intention of stimulating innovation and design creativity and of devising packaging solutions that represent the best synthesis of functionality, performance, requirements and compatibility with recycling processes.

DESIGN FOR RECYCLING

Published in 2016
IUAV University of Venice



Published in 2018
Polytechnic University of Turin

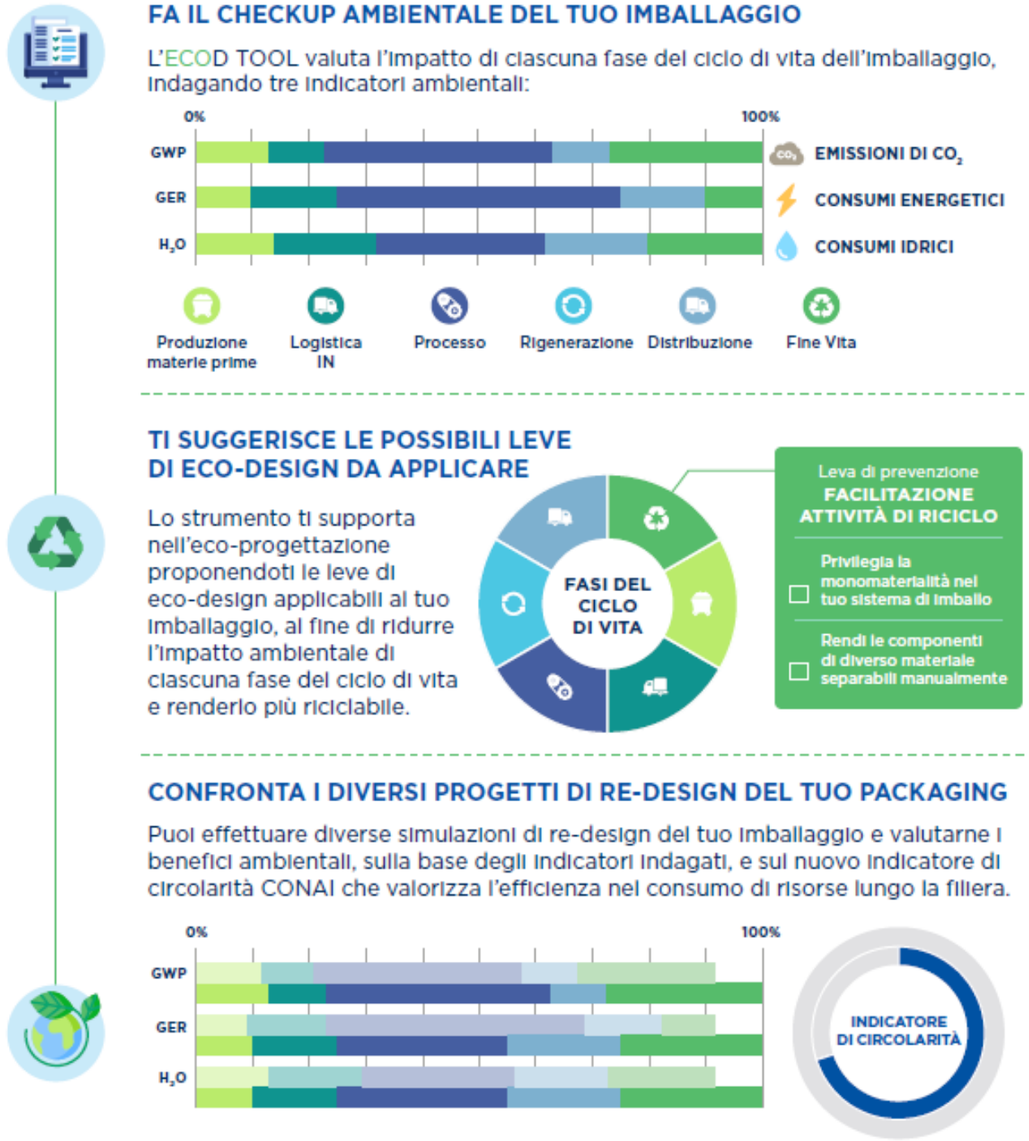
Published in 2020
Polytechnic University of Milan

Published in 2024
University of Bologna

ECOD TOOL

This is a free packaging eco-design tool that suggests 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 analysis allows for the assessment of environmental indicators such as water and energy consumption and CO_2 emissions, as well as a fourth indicator: the **packaging circularity indicator**, developed by CONAI in collaboration with Life Cycle Engineering Srl and the Department of Civil and Environmental Engineering at the Polytechnic University of Milan.



The EcoD Tool can be used by interested CONAI EPR Organisation members and other users, such as students, researchers or consulting firms, to carry out internal analyses and specific case studies for communication and study/research purposes.

ECO-DESIGN LEVERS
promoted by CONAI

In order to further incentivise measures that reduce the withdrawal of primary resources as preventive actions at source, the new lever "virgin raw material savings" was added in 2023. In 2025, following the proposal put forward during the workshop "Let's design the future of the call for proposals", the "refill" lever was introduced. This innovation aims to further strengthen the compliance of CONAI's eco-design levers with the European SUP and PPWR regulations, which identify the increase in reusable packaging, including through refill systems, as a strategic solution.

SAVING RAW MATERIAL
Reducing the consumption of raw materials used in packaging and consequently reducing weight for the same packaged product and performance.

SAVING VIRGIN RAW MATERIAL
Reducing the mass of virgin raw material used in packaging, with the same material family, packaged product and performance.

RE-USE
Designing packaging that perform a minimum number of movements or rotations during its life cycle, for the same use that it was designed for.

REFILL
Designing or planning packaging, purchased by the end user, to be refilled by the distributor or user with the original product.

FACILITATING RECYCLING
Simplifying the recovery and recycling phases of packaging, such as the separability of different components (labels, closures and dispensers, etc.).

USE OF RECYCLED MATERIAL
Replacing a proportion or all of virgin raw material with recycled/recovered material (pre-consumer and/or post-consumer) to contribute to a reduction in resource withdrawals.

OPTIMISING PRODUCTION PROCESSES
Implementing innovative packaging production processes that can reduce energy consumption per unit produced or reduce production waste or reduce the use of production inputs in general.

OPTIMISING LOGISTICS
Improving warehousing and display operations, optimising pallet and vehicle loads, and perfecting the relationship between primary, secondary and tertiary packaging.

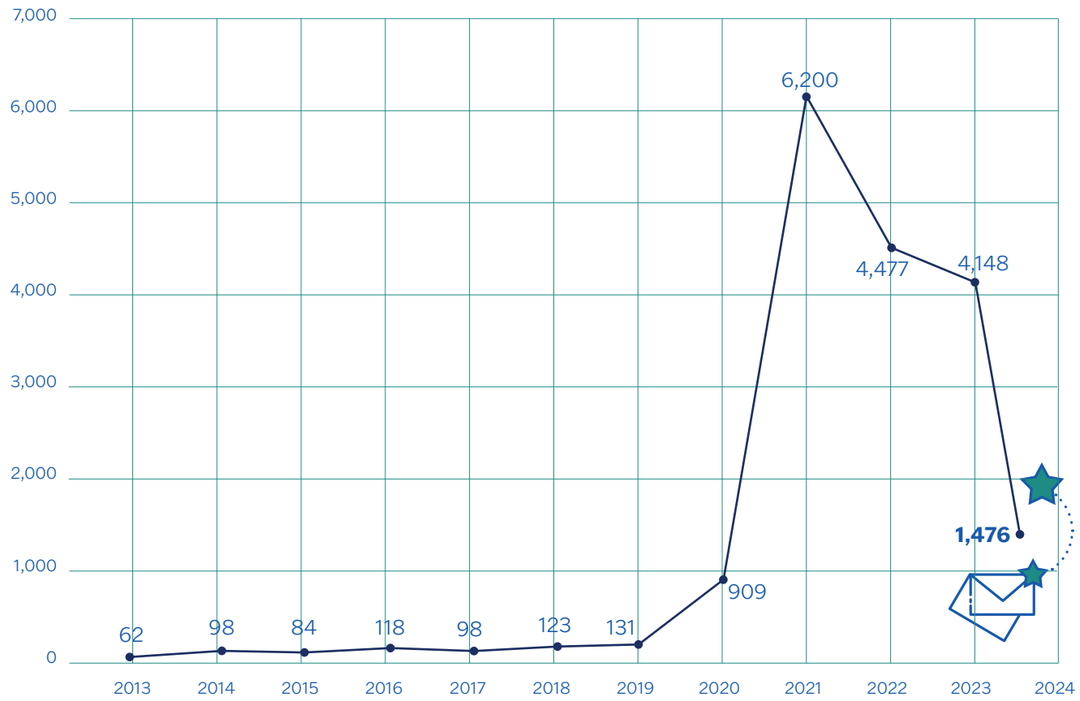
SIMPLIFYING THE PACKAGING SYSTEM
Integrating several functions into one packaging component, eliminating one element and thereby simplifying the system.

E-PACK

E-PACK is an online service that has been active since May 2013, which provides a dedicated e-mail address, epack@conai.org, to support companies and associations in developing packaging with reduced environmental impact through the dissemination of information and documents related to:

- mandatory and voluntary environmental labelling of packaging;
- the essential requirements defined by Directive 1994/62/EC;
- the free tools that CONAI makes available for design for recycling;
- promotion of actions that companies can take to improve the environmental performance of their packaging (eco-design levers);
- eco-design tools to design packaging with reduced environmental impact.

EVOLUTION OF E-PACK REQUESTS HANDLED BY THE EPACK@CONAI.ORG EMAIL ADDRESS



Source: CONAI, Management Report 2024.

After peaking in 2021, there was already a decrease in requests on the subject of labelling in 2022, due to a number of factors:

- multiple activities promoted by CONAI;
- greater awareness of this issue among firms;
- dissemination of information;
- clearer regulatory framework.

CONAI tools for environmental labelling of packaging

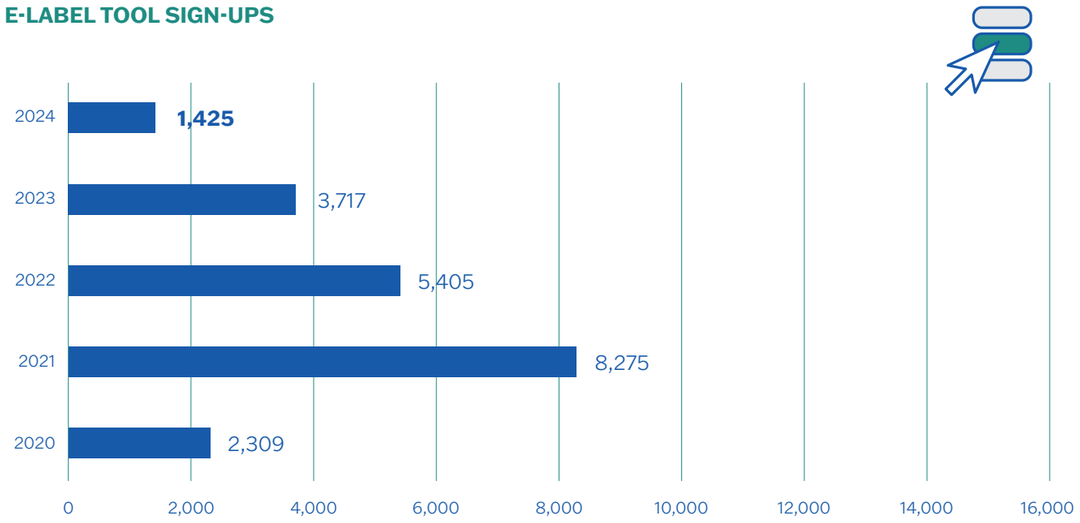
Legislative Decree 116 of 3 September 2020 introduced mandatory environmental labelling for all packaging placed on the market in Italy.

In addition, on 21 November 2022, Ministerial Decree 360 of 28 September 2022 was published, adopting the Environmental Labelling Guidelines pursuant to Article 219, paragraph 5 of Legislative Decree 152 of 3 April 2006, for the correct fulfilment of packaging labelling obligations by responsible parties.

CONAI has therefore developed a series of tools and initiatives in partnership with various associations, to support companies and associations in complying with the labelling requirements for packaging which are continuously updated:

- guidelines for mandatory and voluntary labelling;
- guidelines for sectoral labelling;
- handbook on the use of digital channels for environmental labelling;
- e-label tool, which makes it easy to collate the information required for compulsory and voluntary labelling.

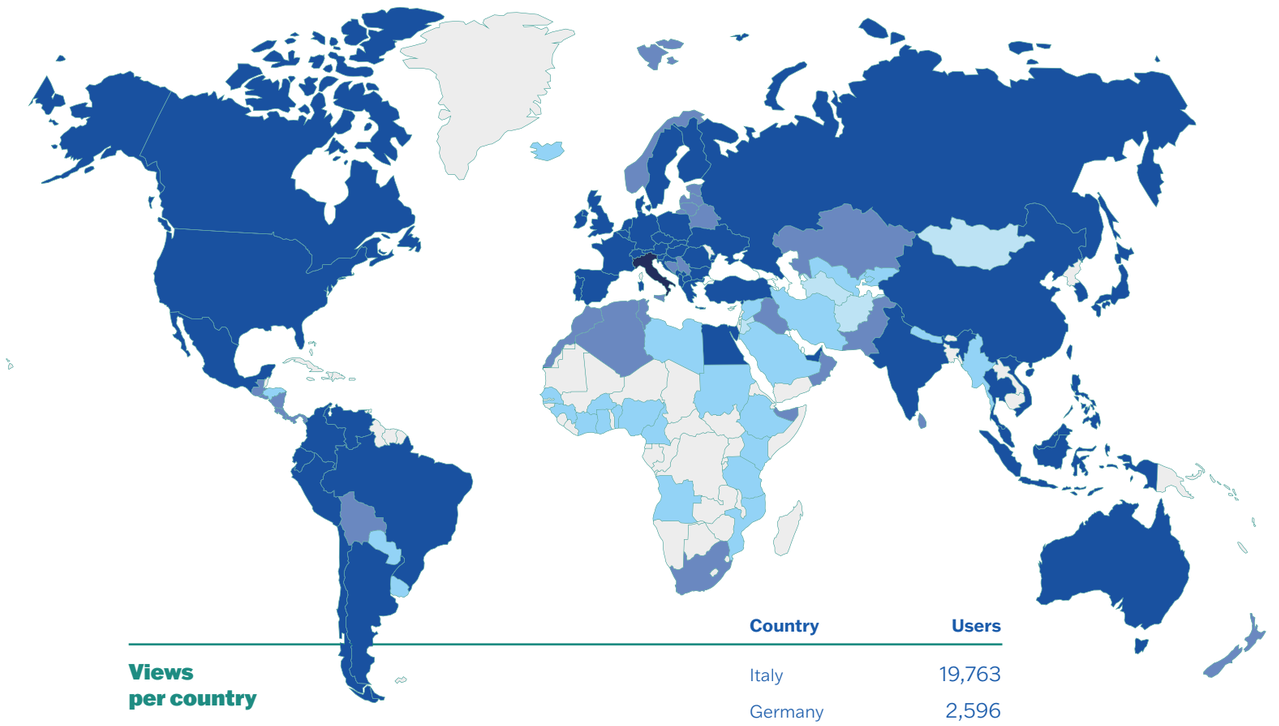
E-LABEL TOOL SIGN-UPS



Source: Generated by CONAI.

- **multilingual website dedicated to environmental labelling**, available at www.etichetta-conai.com/en/. During 2024, the site was viewed by **34,832 users** from around the world. The website contains:
  - 314 FAQs;
  - 82 Good Ideas for environmental labelling;
  - Checklists to support firms in identifying responsibilities and tasks for each stakeholder in the supply chain;
  - list of Environmental Labelling Specialists;
  - all the relevant webinars from the CONAI Academy;
  - a tool for users to test their knowledge of labelling.

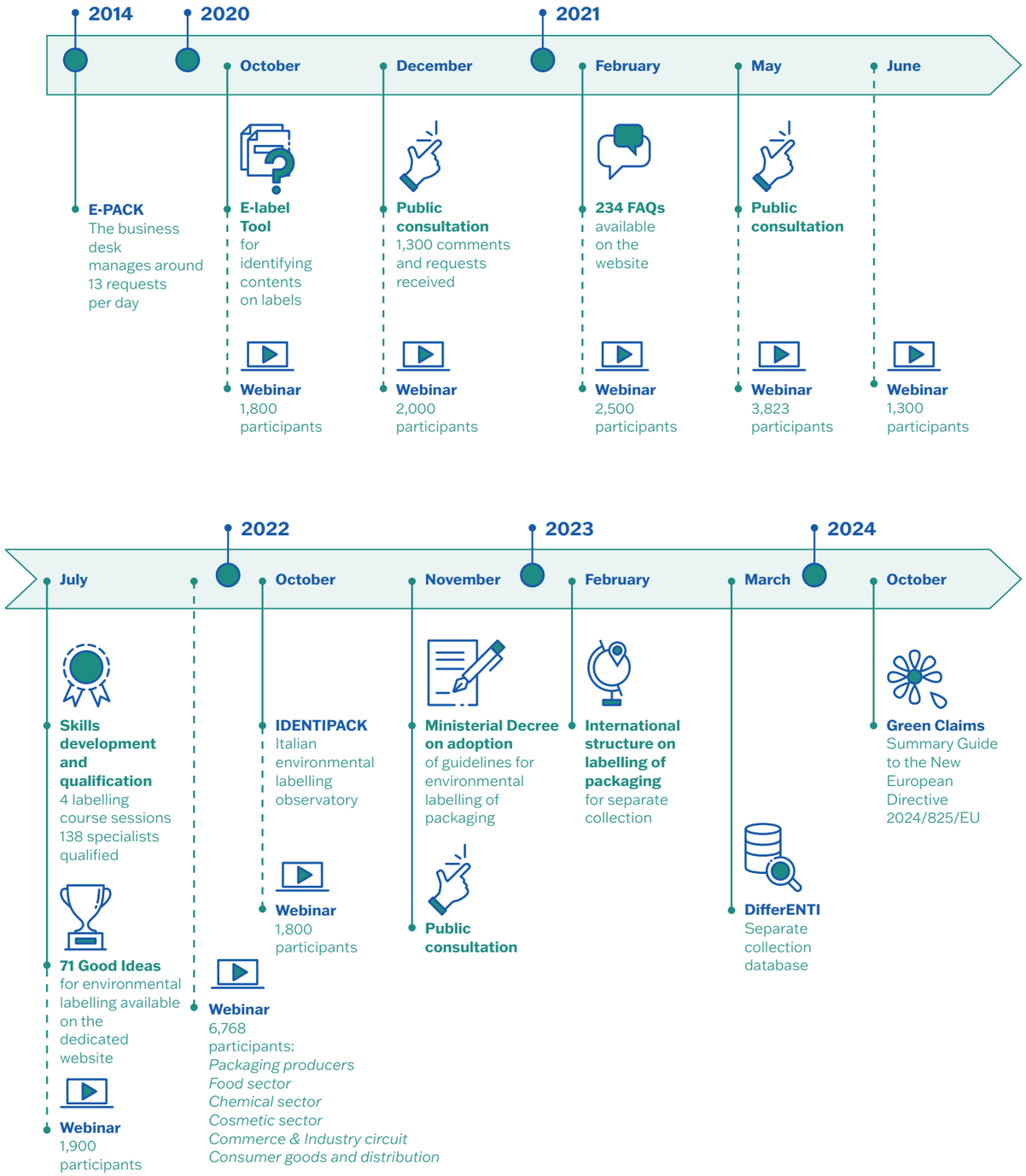
PAGE VIEWS OF WWW.ETICHETTA-CONAI.COM



Views per country

Country	Users
Italy	19,763
Germany	2,596
Spain	1,496
France	451
United Kingdom	443
Netherlands	418
Poland	381

CONAI INITIATIVES ON ENVIRONMENTAL LABELLING



Source: CONAI.

IDENTIPACK

www.osservatorioidentipack.it/en/

Monitoring is essential in order to assess the effectiveness of the information provided and identify any training/information gaps that need to be filled. This is why, with the aim of monitoring the adoption of environmental labelling on consumer packaging, **IdentiPack**, the CONAI and GS1 Italy Packaging Environmental Labelling Observatory, was launched in October 2022. The aim of the study is to monitor, on a six-monthly basis, environmental information shown on packaging relating to the packaging itself. Some of this is required by law, while some is voluntary, such as trademarks and certifications, or suggestions for high-quality separate collection.

Since 2024, the six-monthly report has also been published in English and the website is available in two languages.

IDENTIPACK Environmental Labelling Observatory

KEY FIGURES FOR IDENTIPACK IN THE SECOND HALF OF 2024

WHAT WE ARE MADE OF

See page 13 of the December 2024 report

46.8%
PRODUCTS
with alphanumeric identification code of the packaging composition material
+ 2.6 pp
vs. previous year

72.2%
UNITS SOLD
with alphanumeric identification code of the packaging composition material
+ 2.5 pp
vs. previous year

GIVE US THE (RIGHT) END WE DESERVE

See page 19 of the December 2024 report

56.4%
PRODUCTS
with instructions on the type of packaging and proper disposal for separate collection
+ 2.5 pp
vs. previous year

80.0%
UNITS SOLD
with instructions on the type of packaging and proper disposal for separate collection
+ 1.9 pp
vs. previous year

WE ASSURE YOU OF OUR SUSTAINABILITY

See page 23 of the December 2024 report

0.2%
PRODUCTS
with information on the packaging's compostability certification
+ 0.0 pp
vs. previous year

0.3%
UNITS SOLD
with information on the packaging's compostability certification
– 0.0 pp
vs. previous year

TRAIN WITH US, THE WASTE SEPARATION PERSONAL TRAINERS

See page 27 of the December 2024 report

6.9%
PRODUCTS
with additional information to ensure quality separate collection
+ 0.1 pp
vs. previous year

7.5%
UNITS SOLD
with additional information to ensure quality separate collection
+ 0.1 pp
vs. previous year

TRUST ME, WE'RE WORKING FOR YOU (AND THE PLANET)

See page 31 of the December 2024 report

8.3%
PRODUCTS
with voluntary environmental claims and declarations
+ 0.3 pp
vs. previous year

11.4%
UNITS SOLD
with voluntary environmental claims and declarations
+ 0.2 pp
vs. previous year

FOLLOW US, AND YOU'LL LEARN MORE!

See page 35 of the December 2024 report

3.8%
PRODUCTS
with digital sharing of environmental information
– 0.0 pp
vs. previous year

2.9%
UNITS SOLD
with digital sharing of environmental information
– 0.1 pp
vs. previous year

GREEN CLAIMS

An important new development that completes the range of tools available to support businesses on the issue of labelling is the publication of the regulatory overview document *Green Claims: Obligations and Prohibitions – Summary Guide to the New European Directive 2024/825/EU*[61] , providing consumers with accurate information and avoiding misleading practices such as greenwashing.

This document is the result of collaboration with the Sant'Anna School of Advanced Studies in Pisa and the activities developed within the **"Green Claims" working group**, promoted by CONAI and the Italian Food Union association, which is made up of companies in the food sector.

DifferENTI

www.differenti-conai.com

In 2023, CONAI launched the **differENTI** web platform with the aim of making information on separate collection in Italy more accessible.

The platform brings together the methods of packaging waste disposal in different Italian municipalities in a single database, including:

- practical information on local separate collection;
- information on prevention actions adopted by local authorities.

In the first quarter of 2024, new information was added regarding the colours used for separate collection bins in various Italian cities. In addition, the platform will provide information on the various types of selective collection in Italy (e.g. "Mangiaplastica" digital recycling stations).

differENTI
L'impegno ambientale in ogni ente locale

61
https://www.etichetta-conai.com/en/documents/green-claims/

B | Accountability: traceability, reliability and robustness of data

B.1 | Transparent reporting

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.

All data reporting methods of the CONAI System are continuously updated to the highest quality standards and verified annually by an accredited third party.

B.1.1 | National Programme for Data Validation

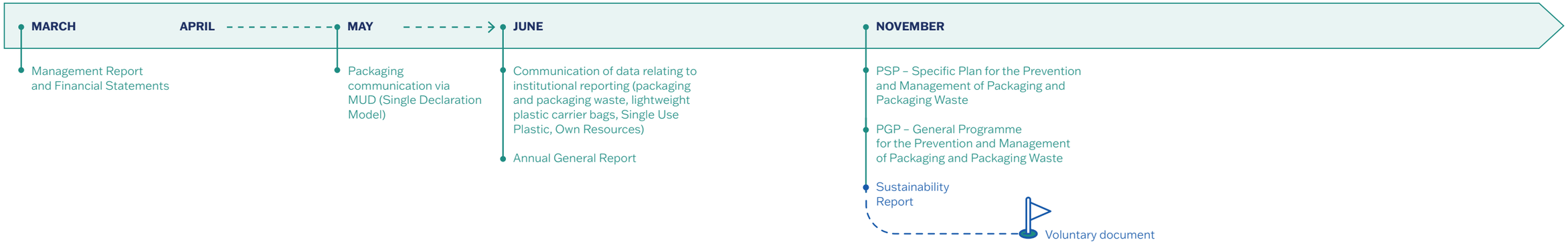
As part of achieving the recycling and recovery targets set by legislation, CONAI, the Packaging Material Consortia and the CONIP Self-compliant EPR Organisation have voluntarily set up a management system as a further guarantee for the institutions to achieve the set targets. The whole validation process – 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 are conducted in the field at several treatment and recycling plants, representing all packaging materials. The activities conducted in 2024 and 2025 were successfully concluded, revealing some points for improvement. The outcome of the activity is summarised in the assessment issued to CONAI by the certifying body and available online[62].

[62] www.conai.org/chi-siamo/certificazioni/programma-nazionale-validazione-dati-sistemi-epr-imballaggi

REPORTING TIMELINE



WITNESS ACTIVITIES

Participant	2024	2025
RICREA	GARM Srl	Victoria Srl, Roni Srl
CiAI	Profilglass SpA, Seruso SpA	Raffineria Metalli Cusiana A2A Ambiente
Comieco	Cartiere SACI PM3, GAIA SpA	DS Smith Recycling Sonoco
Rilegno	Focacity Pallets	USAI Srl
Corepla	IBLU Srl San Giorgio	REVET
Biorepack	Compostaggio Cremonese Srl	Picenambiente SpA
CoReVe	Vetreria Etrusca di Altare	Vetropack Italia, Boffalora
CONAI	A2A SpA Corteolona	Frullo Energia Ambiente Srl
CONIP	Agricola imballaggi	Plasticontenitor

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 2024–2025

Participant	Date	Topic
RICREA	April 2025	Analysis of the steel packaging wire supply chain, with particular attention to its use in the paper industry, material traceability, and calculation methods for CONAI EPR Fee purposes
CiAI	March 2024	Validation of interception rate and recycling of beverage cans
Comieco	September 2025	Regulatory analysis of the rules governing the end-of-waste status pursuant to Ministerial Decree 188/2020 and its relationship with European reporting requirements
Rilegno	February 2024	Evaluation of the appropriateness of redefining the number and frequency of product analyses for determining the moisture content of packaging
Corepla	May 2024	Determination of recycling at the calculation point as defined by EU Decision 665/19, Chemical Recycling and "Secondary Reducing Agent" (SRA)
	October 2024	Monitoring procedure for packaging recycled through market management by MUD (Single Declaration Model)
Biorepack	February 2024	Evaluation of the appropriateness of redefining the number and frequency of product analyses for determining the moisture content of packaging
CoReVe	February 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	January 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 2025.

THE 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, thus ensuring the highest quality of the data provided in accordance 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 to apply a new management system that takes all relevant factors into account, 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 targets in force, and represents the reference standard for data compliance for EPR (Extended Producer Responsibility) schemes and their respective organisations.

This achievement was the result of a project coordinated by the UNI "packaging and environment" Working Group, on a project put forward by CONAI based on the experience of the "Obiettivo Riciclo" project.

B.1.2 | Relationships with the institutions

Enhanced 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[63].

In order to increase understanding of the methodologies and processes involved in generating the data, Eurostat carried out voluntary informal audits, prior to those provided for in Regulation (EU, Euratom) 2021/768, to verify the data reported by the Member States, which were followed by verifications by the Commission, the results of which are summarised in the EU Special Report 2024 on non-recycled plastic packaging waste[64].

The formal visit conducted by Eurostat in Italy from 13 to 15 May 2025 – concerning the years 2021 and 2022 – was an important opportunity to illustrate in detail the articulated reporting methodologies relating to plastic packaging. These methodologies have been documented in the official report *Inventory of Italy on Sources and Methods of Non-Recycled Plastic Packaging Waste*, sent to Eurostat and the competent European bodies. The document was prepared by ISPRA, with the support of CONAI, the Packaging Material Consortia (Corepla and Biorepack) and the Self-compliant EPR Organisations (CONIP, Coripet, PARI and Erion Packaging).

The official verification report was sent by Eurostat to national institutions on 11 August 2025. The document summarises the specific characteristics of the Italian system, the calculation methods used and the conclusions of the verification, which include some requests for clarification on technical reporting parameters, formulated to ensure maximum data accuracy. However, these requests did not affect the overall assessment, which remains positive. In particular, the combination of a mandatory CONAI EPR Organisation, which ensures service coverage as a last resort, and the presence of voluntary Self-compliant EPR Organisations, which obligated parties can join, was appreciated. This structure, together with a comprehensive mechanism of cross-checks and verifications, allows for accurate quantification of national packaging waste flows.

63
commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/revenue/own-resources_en

64
www.eca.europa.eu/ECAPublications/SR-2024-16/SR-2024-16_EN.pdf

B.2 | The CONAI System's independent and market-based management of packaging waste

The results are achieved by the coordinated actions of multiple stakeholders towards a common goal. This section briefly examines the management by each of the stakeholders responsible for recovering and recycling packaging waste of the seven materials.

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

Non-managed recycling includes the portion handled:

- by the market, meaning packaging waste sent for recovery by independent operators operating for profit. These are typically commercial and industrial packaging flows that are recovered on the market for recycling, and a portion of packaging waste present in municipal waste where the municipality/operator has chosen not to adhere to the ANCI–CONAI Framework Agreement or has withdrawn from it;
- by Self-compliant EPR Organisations, meaning the share of packaging waste managed by PARI, CONIP and Erion Packaging mainly for commercial and industrial flows, and by Coripet for the relevant share of packaging waste under its responsibility present in municipal waste.

In the 27 years that the CONAI System has been in operation, there has been a steady growth in self-compliant and market-based management. This is the result of the market-support role of the System, including in years of crisis when it has borne the recycling of a great proportion of packaging waste.

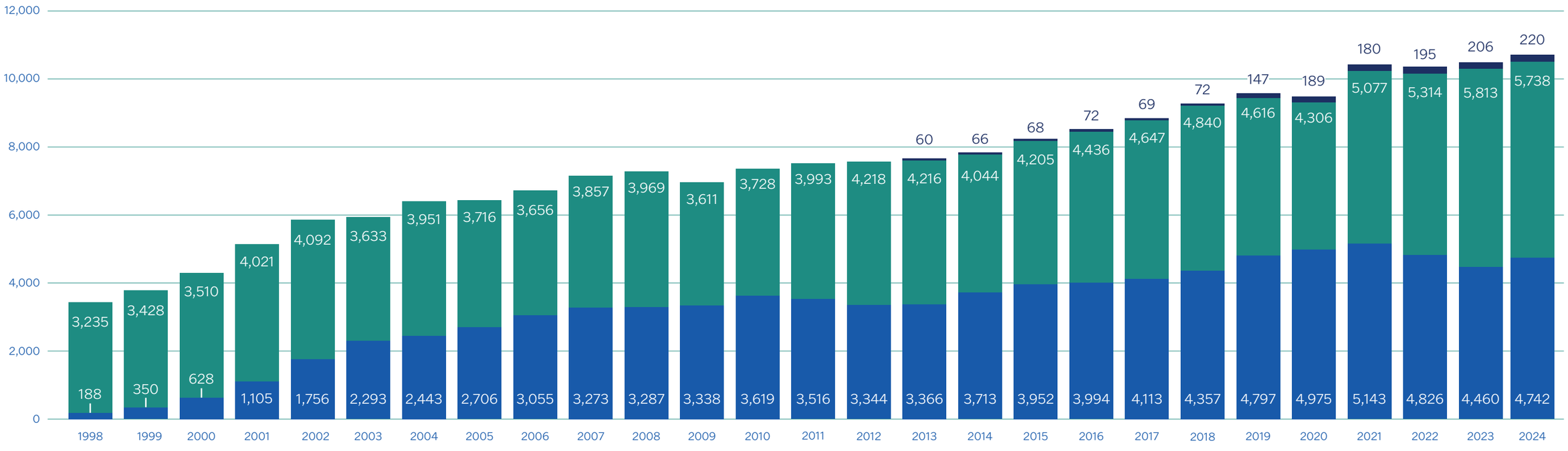
In 2024, packaging waste was recycled in the following ways:

- 44.32% attributable to Packaging Material Consortia (4,742 kt), up 1.76 percentage points compared to 2023 (42.56%). This effect is mainly attributable to the glass supply chain, due to the decrease in the value of glass cullet which, as already highlighted, made it more convenient to manage within the ANCI–CONAI agreement, in line with the principle of subsidiarity of consortium management;
- 53.63% managed by the market by independent operators (5,738 kt), down slightly by 1.85 percentage points compared to 2023;
- 2.06% (220 kt) attributable to the management of Self-compliant EPR Organisations operating in the plastic, wood and paper packaging chain (CONIP – Coripet – PARI – Erion Packaging).

Below is the breakdown by type of recycling management in 2024[65].

65
Percentage values rounded from the quantities presented in institutional documentation.

QUANTITIES OF PACKAGING WASTE SENT FOR RECYCLING BY THE MANAGEMENT SYSTEM

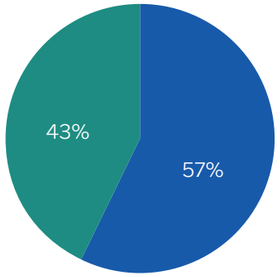


Source: Generated from historical data by the CONAI Research Centre.

CONTRIBUTION TO RECYCLING OF EACH STAKEHOLDER FOR EACH MATERIAL

STEEL

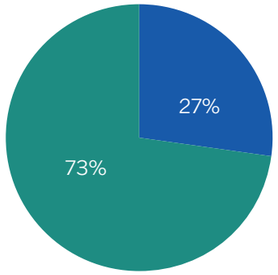
Total: 435.539 kt



- CONAI EPR Organisation
- Market

ALUMINIUM

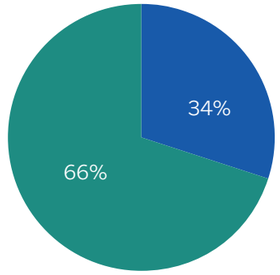
Total: 62.400 kt



- CONAI EPR Organisation
- Market

PAPER*

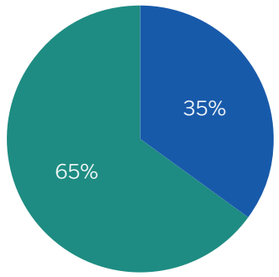
Total: 4,605.294 kt



- CONAI EPR Organisation
- Market

WOOD*

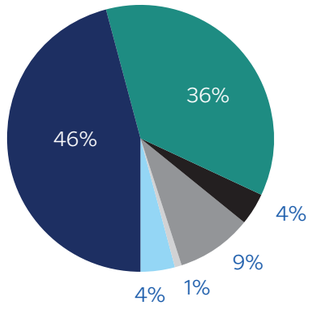
Total: 2,314.294 kt



- CONAI EPR Organisation
- Market

PLASTIC AND BIOPLASTIC*

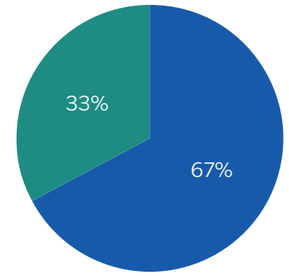
Total: 1,178.935 kt



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

GLASS

Total: 2,102.979 kt



- CONAI EPR Organisation
- Market

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

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

B.3 Industrial and commercial packaging management

A further tool for achieving recycling and recovery targets is the network of platforms made available to companies, which guarantees that industrial and commercial packaging waste is sent to recycling[66].

For these packaging waste streams, the CONAI/Packaging Material Consortia system acts purely as a guarantee: therefore, only in cases where the market is unable 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 activities mainly concern:

- economic support for reusable solutions and/or reclamation and regeneration;
- 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 through conventions for the significant (and growing) presence in urban separate collection.

66
Packaging in the Commerce & Industry circuit refers to "packaging that typically becomes waste at manufacturing and/or distribution companies". This mainly consists of secondary and tertiary packaging or transport packaging.

INDUSTRIAL AND COMMERCIAL PACKAGING

Consortium	Re-use	Regeneration of secondary and tertiary packaging	Recycling of secondary and tertiary packaging	Assimilation
RICREA		• **Drums and tanks:** 35 kt	• **Non-hazardous non-reusable:** 135 kt • **Strapping:** 28 kt	
Comieco			• **Collection at commercial premises and other activities of small and medium-sized businesses (non-residential users)** • **Network of 118 platforms**	• **Cardboard boxes** from residential users in combined separate collection and from non-residential users in selective separate collection

→

Consortium	Re-use	Regeneration of secondary and tertiary packaging	Recycling of secondary and tertiary packaging	Assimilation
Rilegno	**Weight abatement on EPR Fee for reusable packaging:** 984 kt* benefited from EPR Fee reduction	• **Recovered tank bases:** 9.1 kt for 27 plants • **Pallet regeneration project:** 123 kt regenerated pallets from 65 EPR Organisation members	• **Network of 394 platforms:** 1,756 kt	
Corepla		• **Drums and tanks (PIFU):** 22 kt for 28 plants	• **PEPS platform for recycling of expanded polystyrene packaging:** 11.5 kt for 33 plants • **Network of 55 platforms in partnership with CARPI Consortium affiliated plants:** 190 kt	• **Film:** 131 kt

***** In addition to quantities returned to the market in accordance with the codified specifications and used in controlled circuits, this figure includes all other items that are subject to CONAI incentive procedures.

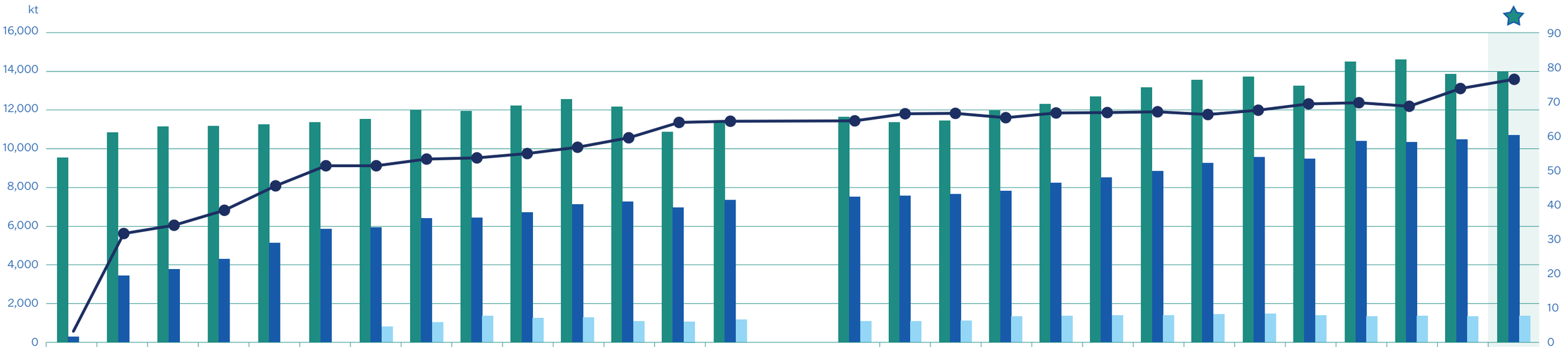
Source: Abstract, General Programme for the Prevention and Management of Packaging and Packaging Waste 2025.

The data reported by CONAI to the institutions is then sent to Eurostat, which updates its database annually[67].

Below is a graph showing the trend in the main indicators of the recycling target under current legislation: placement on the market, recycling and relative rate. It is also important to note that, in line with Decision 2005/270, the amount of wood packaging repaired for re-use is added to both packaging waste placed on the market and recycled packaging waste.

67
ec.europa.eu/eurostat/databrowser/view/env_waspac/default/table?lang=en

NATIONAL PACKAGING DATA



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Placed on the market*	9,529.00	10,846.00	11,122.00	11,168.20	11,262.00	11,367.00	11,536.52	11,989.40	11,952.80	12,219.55	12,540.93	12,169.00	10,862.00	11,411.00
Recycling*	283.1	3,422.94	3,778.14	4,283.70	5,125.20	5,847.70	5,926.00	6,394.00	6,422.10	6,710.66	7,129.44	7,256.50	6,949.00	7,346.00
Recycling rate	3	31.6	34	38.4	45.5	51.4	51.4	53.3	53.7	54.9	56.8	59.6	64	64.4
Energy recovery							810.20	1,038.00	1,364.70	1,262.69	1,267.57	1,093.00	1,086.00	1,182.00

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Placed on the market*	11,637.70	11,345.34	11,462.98	11,962.32	12,317.47	12,703.96	13,157.55	13,565.08	13,730.22	13,255.66	14,508.55	14,615.43	13,857.99	13,952.00
Recycling*	7,509.30	7,561.64	7,642.40	7,823.18	8,224.82	8,501.09	8,829.49	9,268.50	9,561.05	9,469.52	10,399.90	10,334.53	10,478.53	10,699.00
Recycling rate	64.5	66.6	66.7	65.4	66.8	66.9	67.1	66.3	69.6	71.4	71.7	70.7	75.6	76.7
Energy recovery	1,105.19	1,094.38	1,126.17	1,320.53	1,370.63	1,409.06	1,376.59	1,440.19	1,476.20	1,404.56	1,331.82	1,365.45	1,337.16	1,360.00

* Includes repaired for reuse. Placed on the market* Recycling* Energy recovery Recycling rate

Source: Packaging waste by waste management operations, Eurostat.
**The data reported here may differ from previous CONAI publications due to the different data source used.

B.4 The economic benefits of managing packaging and packaging waste

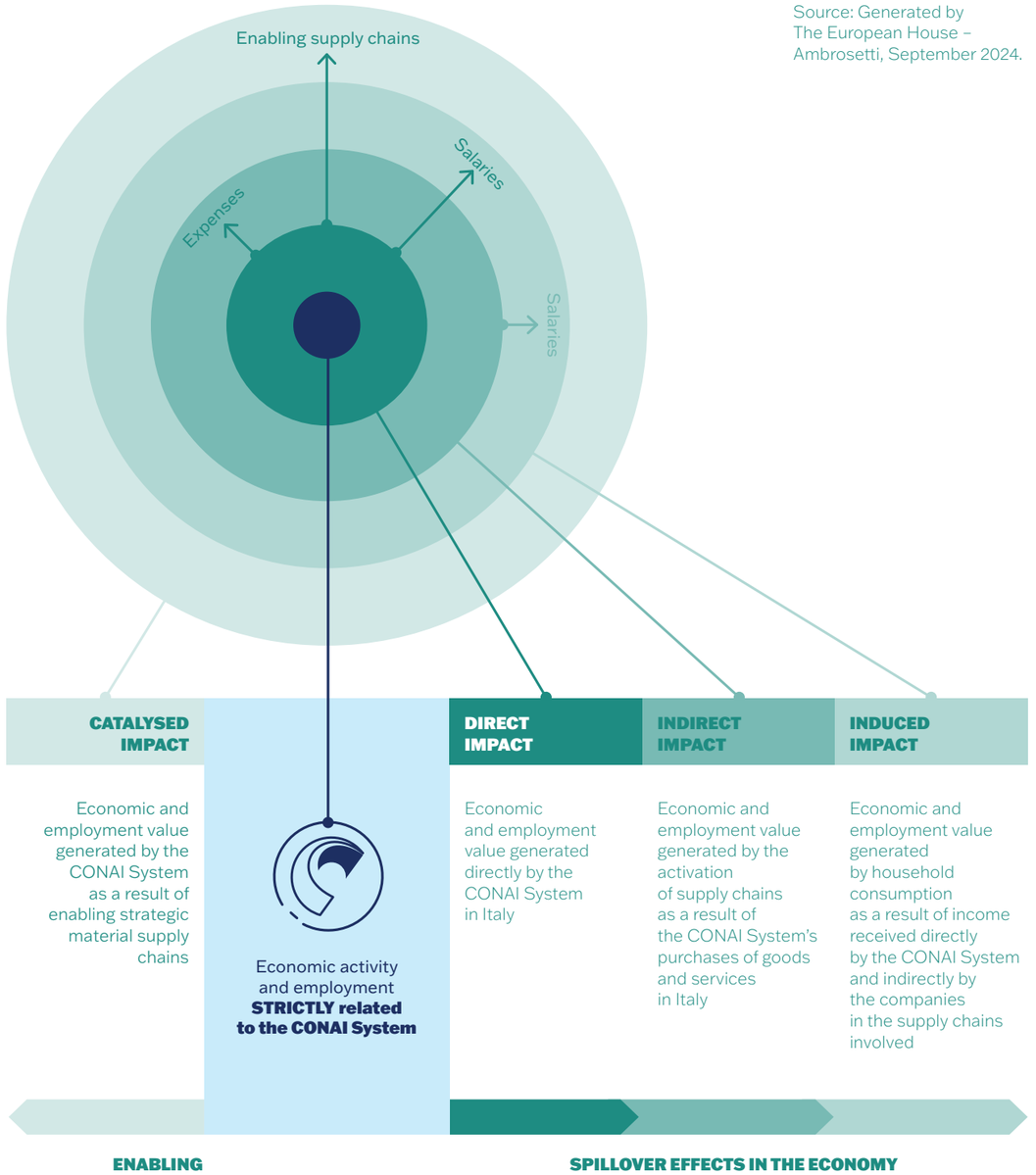
The analysis of the socio-economic impact of the CONAI System in Italy is based on a methodological approach aimed at measuring the Consortium's contribution in terms of generated economy, contribution to GDP and employment. The main objective is to quantify and evaluate the positive effects generated by the System's activities, both directly and through the economic supply chains activated and enabled at national level.
The social and economic impact is measured through the following types of effects:

- direct impact, relating to the activity carried out directly by the Consortium;
- 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.

As for the year 2023, the methodological approach for calculating direct, indirect and induced impacts involves the use of input-output models, based on ISTAT data, adapted to measure sectoral interdependencies and calculate the economic value generated by the various activities of the System.
In addition to the three levels of impact mentioned above (direct, indirect and induced), the study also analyses the catalysed impacts, meaning the economic and employment value generated by enabling strategic material supply chains (such as steel, aluminium, wood, etc.). The "enabling effect" refers to the role that the CONAI System plays in supporting and catalysing the economic and employment growth of entire industrial supply chains, particularly those related to recycling and materials management. This effect goes beyond CONAI's direct contribution to the management of packaging waste: the Consortium enables – meaning it makes possible – the development and growth of strategic sectors, through the supply of secondary raw materials (recycled materials) and the improvement of efficiency of entire production chains (in terms of management and monitoring).

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

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



GENERATED ECONOMY

In 2024, the CONAI System generated a direct turnover of €1,415 million (+9.8% vs 2023). This mainly includes income from the CONAI EPR Fee and other minor components.

In addition to the direct impact, there is a significant indirect impact resulting from the activation of supply chains. In 2024, this impact generated €2,025 million (+19% vs 2023) in indirect turnover. Another important element activated in the economy is the induced impact, meaning the turnover generated by the consumption spending of the households of workers involved in the CONAI System and the companies along the supply chains. In 2024, this impact amounted to €361 million (+4.3% vs 2023).

DIRECT, INDIRECT AND INDUCED TURNOVER (€ MILLION), 2024

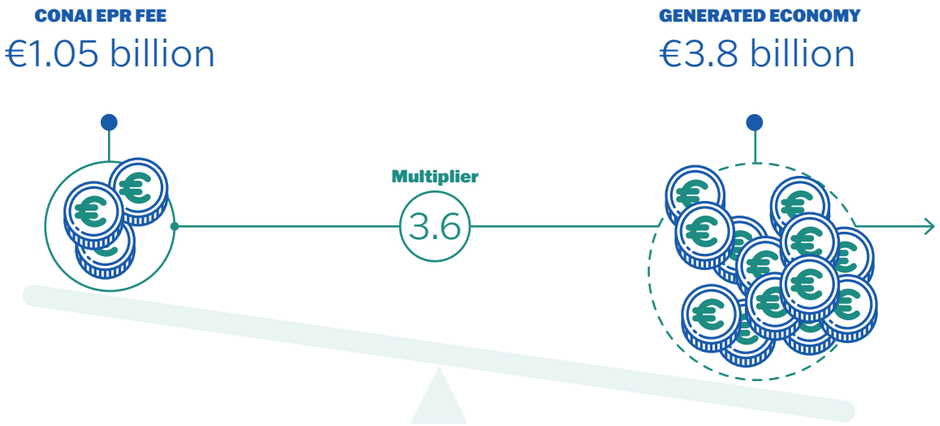
Source: Generated by TEHA Group based on data from CONAI and tables of sectoral interdependencies (input-output) from ISTAT, 2025.

Through the activation of supply and sub-supply chains, the CONAI System therefore generated a total turnover of over €3.8 billion in Italy (+13.9% vs 2023). For every €1 of turnover generated by CONAI in 2024, an additional €1.70 was activated in the economy as a whole (compared to €1.60 in 2023). CONAI's total turnover of over €3.8 billion is comparable to significant economic sectors, such as the entire Italian technical and industrial textiles manufacturing sector.

Looking solely at the impact of the CONAI EPR Fee, which amounted to €1.051 billion in 2024, the multiplier effect on the Italian social and economic network was even more significant. Through the Consortium's activities and the management of packaging waste, the EPR Fee brought in a total turnover of €3.8 billion.

In other words, every €1 collected through the EPR Fee generated €3.6 in turnover in the national economy.

TOTAL IMPACT REPORT OF TURNOVER GENERATED BY CONAI/EPR FEE (€ BILLION), 2024

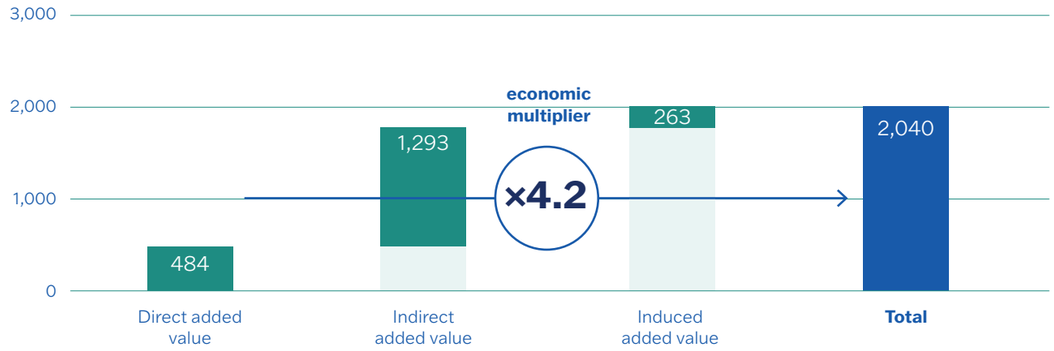


Source: Generated by TEHA Group based on data from CONAI and tables of sectoral interdependencies (input-output) from ISTAT, 2025.

CONTRIBUTION TO GDP

Added Value represents the key measure of CONAI's contribution to the Italian economy, reflecting the actual contribution made to the national GDP. In 2024, the direct Added Value generated by CONAI reached €484 million (+9.8% vs 2023). This is a direct and tangible contribution that reflects CONAI's role as a driver of economic growth through its operations. In addition to its direct impact, CONAI also generated a significant indirect impact in terms of Added Value, amounting to €1.293 billion (+€61 million vs 2023). Companies that supply goods and services to the System, in turn, generate additional economic value. Sectors such as logistics, industrial production and waste management services benefit directly from the Consortium's operations, thus amplifying its contribution to the national GDP. Finally, the induced impact, the economic value generated by the expenditure of workers involved in direct and indirect activities, activated additional Added Value of €263 million (+€42 million vs 2023).

DIRECT, INDIRECT AND INDUCED ADDED VALUE (€ MILLION), 2024



Source: Generated by TEHA Group based on data from CONAI and tables of sectoral interdependencies (input-output) from ISTAT, 2025.

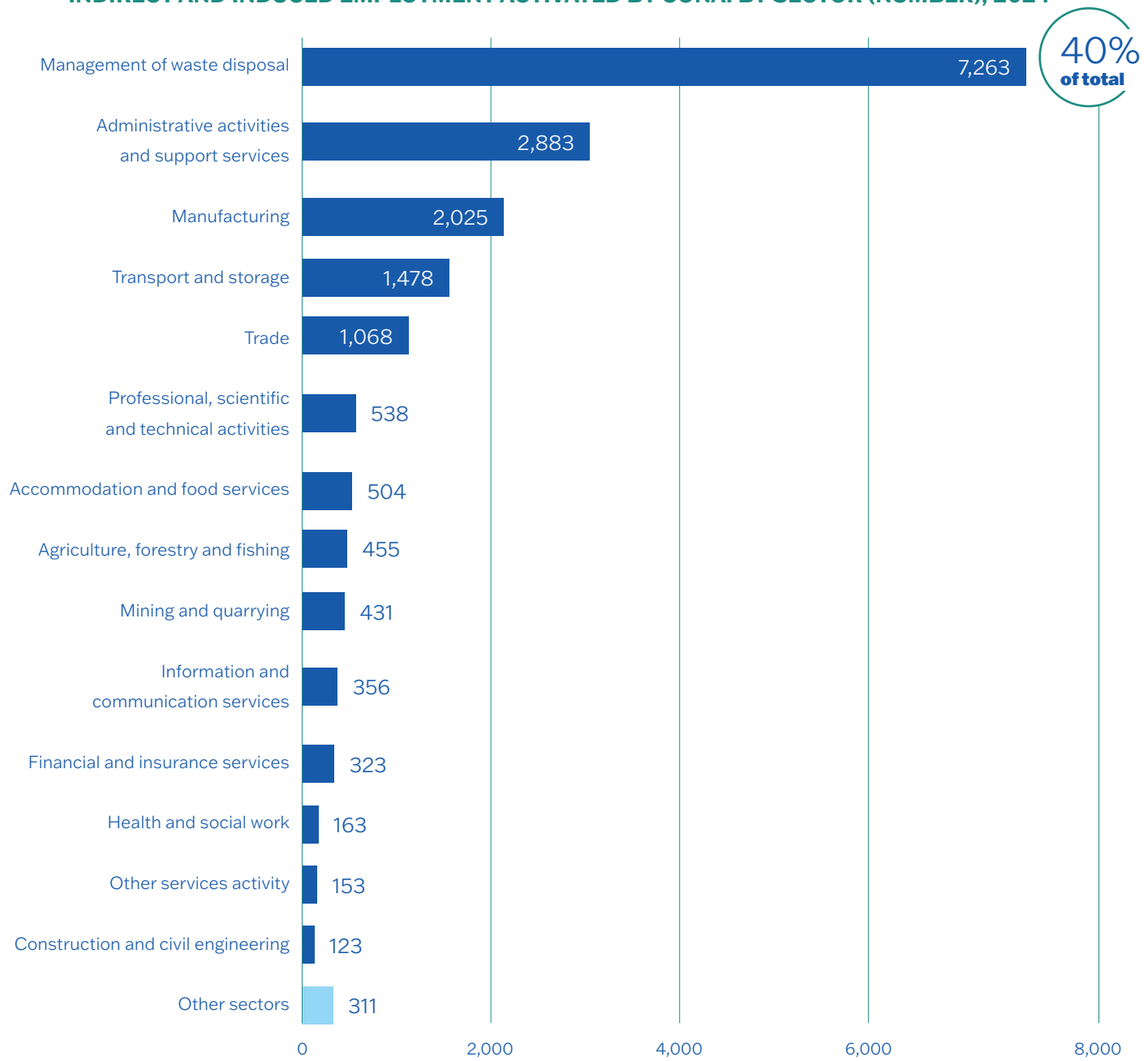
Overall, in 2024, the CONAI System generated a total Added Value of over €2 billion (+6% vs 2023), a level comparable to that of the entire passenger air transport sector and representing more than three times the total Added Value generated by the fishing and aquaculture sector. With an Added Value multiplier of 4.2, every €1 of direct Added Value generated by CONAI resulted in an additional €3.20 for the entire economic system.

EMPLOYMENT

Employment is one of the most significant aspects of the 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 2024, the CONAI System supported 6,815 direct jobs[68](+607 jobs vs 2023). In addition to direct employment, the CONAI System also had a significant effect on indirect employment, thanks to the activation of related supply chains. In 2024, the indirect impact supported 16,372 jobs (+989 jobs vs 2023). Finally, the induced impact on employment resulted in 1,701 additional jobs. These jobs are mainly in the waste management, administrative and support services sectors, and industrial manufacturing.

68
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.

INDIRECT AND INDUCED EMPLOYMENT ACTIVATED BY CONAI BY SECTOR (NUMBER), 2024



Source: Generated by TEHA Group based on data from CONAI and tables of sectoral interdependencies (input-output) from ISTAT, 2025.

Overall in 2024, the CONAI System supported a total of 24,888 jobs (+7.3% vs 2023), including direct, indirect and induced employment. By way of comparison, the number of jobs supported represents 1.3 times the total employment in the mining/extraction sector.

The employment multiplier is 3.7: for every employee directly employed by the System, an additional 2.7 jobs are supported along the activated supply chains, demonstrating the breadth of the employment impact generated by the Consortium's activities.

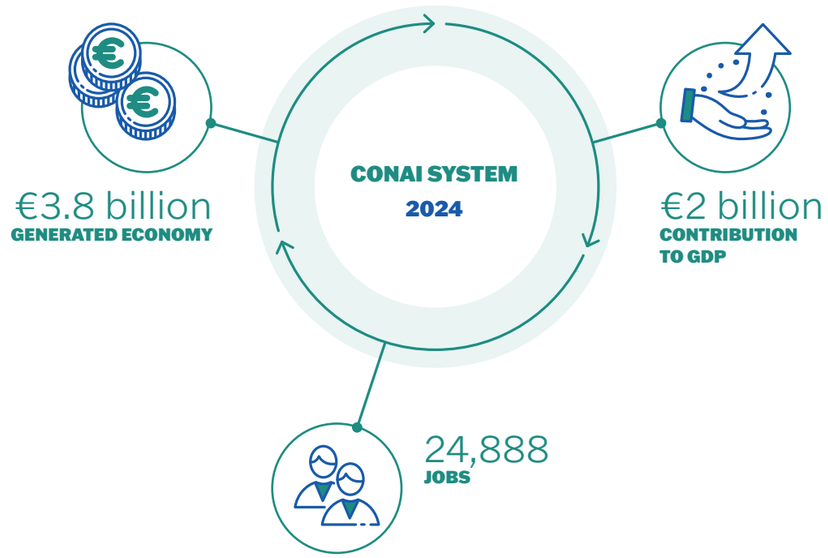
DIRECT, INDIRECT AND INDUCED EMPLOYMENT (NUMBER), 2024

Source: Generated by TEHA Group based on data from CONAI and tables of sectoral interdependencies (input-output) from ISTAT, 2025.

In summary, in 2024, the activities of the CONAI System had a significant impact on the Italian economy, with measurable direct, indirect and induced effects in terms of turnover, contribution to GDP and employment. Specifically:

- it generated €3.8 billion in turnover in the national economy;
- it contributed €2 billion to national GDP;
- in terms of employment, it supported 24,888 jobs.

OVERVIEW OF DIRECT, INDIRECT AND INDUCED IMPACTS GENERATED BY CONAI, 2024



Source: Generated by TEHA Group based on data from CONAI and tables of sectoral interdependencies (input-output) from ISTAT, 2025.

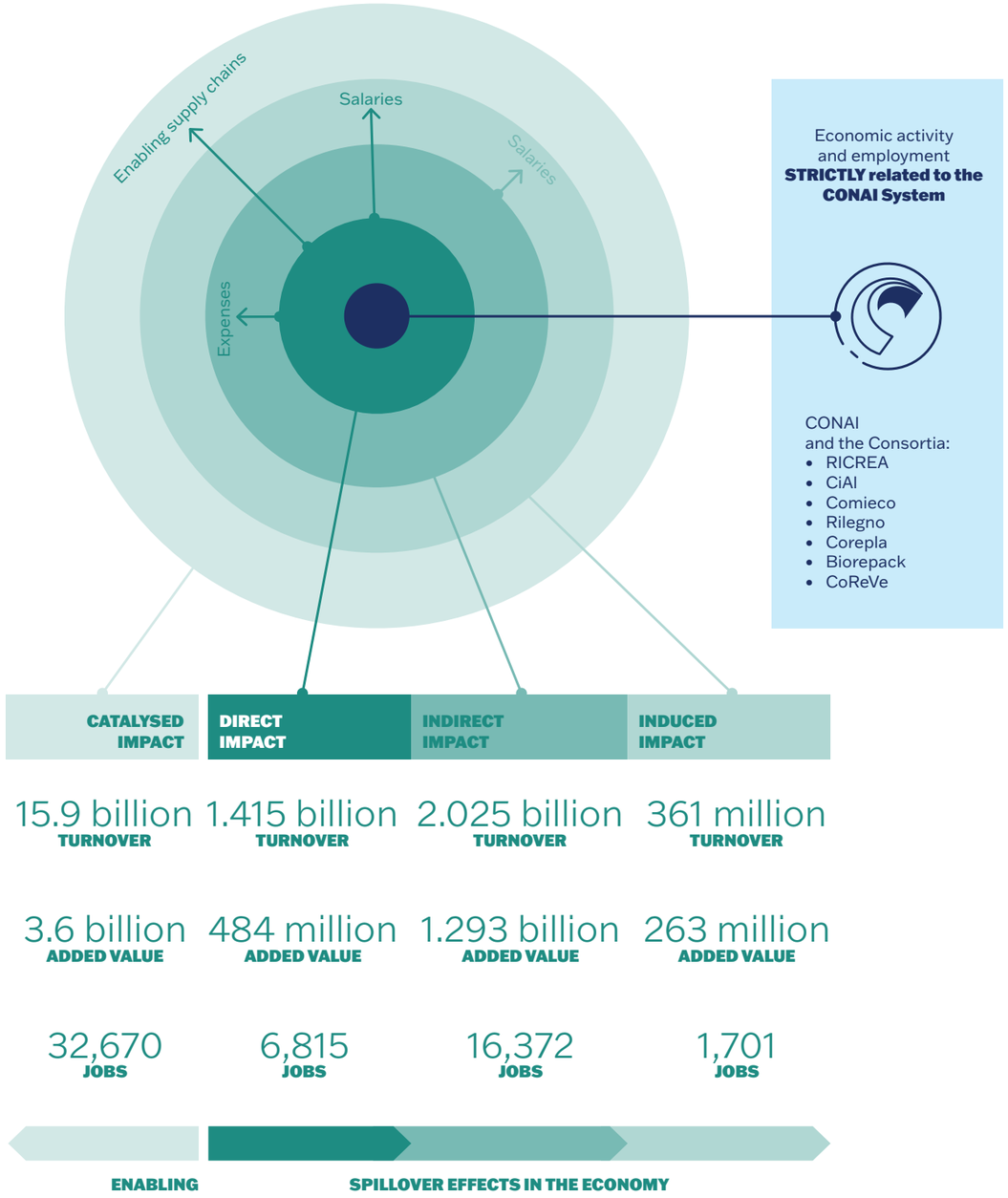
Economic and employment impact catalysed by CONAI: enabled supply chains

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 System's main enabling effects is its role in the generation of secondary raw materials, obtained by recycling materials such as plastic, aluminium, paper, glass, wood and steel. These recycled materials are crucial inputs for many industrial supply chains, such as packaging, construction, textiles, consumer goods production and automotive. In other words, companies are supplied with raw materials that are essential to their production cycle, reducing the need to use other sources;
- Job creation: The enabling effect of the System is not only economic, but also has a significant impact on employment. Companies that use recycled materials or process these materials to create new products create jobs throughout 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 previously have been economically or technically feasible, such as biodegradable and compostable plastics.

In 2024, CONAI catalysed a turnover of €15.9 billion (+2.6% vs 2023). This constitutes the activation of resources and economic opportunities for a wide range of productive sectors, starting with the supply of recycled raw materials. In terms of Added Value, CONAI enabled an impact of €3.6 billion (+2.9% vs 2023). Finally, the employment impact catalysed by CONAI supported 32,670 jobs throughout the industrial and service chain.

THE SOCIAL AND ECONOMIC IMPACT OF CONAI IN ITALY IN TERMS OF DIRECT, INDIRECT, INDUCED AND CATALYSED IMPACTS, 2024.



Source: Generated by TEHA Group, 2025.

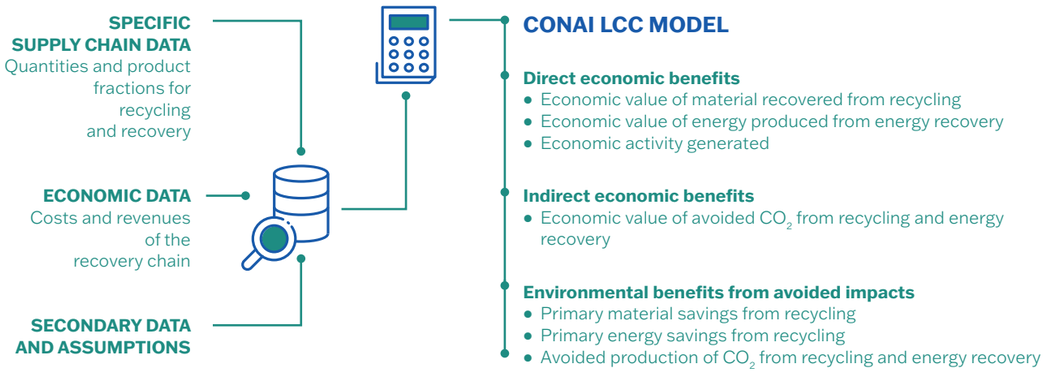
In summary, the enabling effect of the CONAI System represents the Consortium's contribution to creating a favourable environment for the growth and development of strategic supply chains, thanks to the provision of recycled raw materials, the reduction of dependence on virgin resources, the promotion of innovation, and job creation. This effect amplifies CONAI's social and economic impact, extending the benefits beyond the Consortium's direct activities.

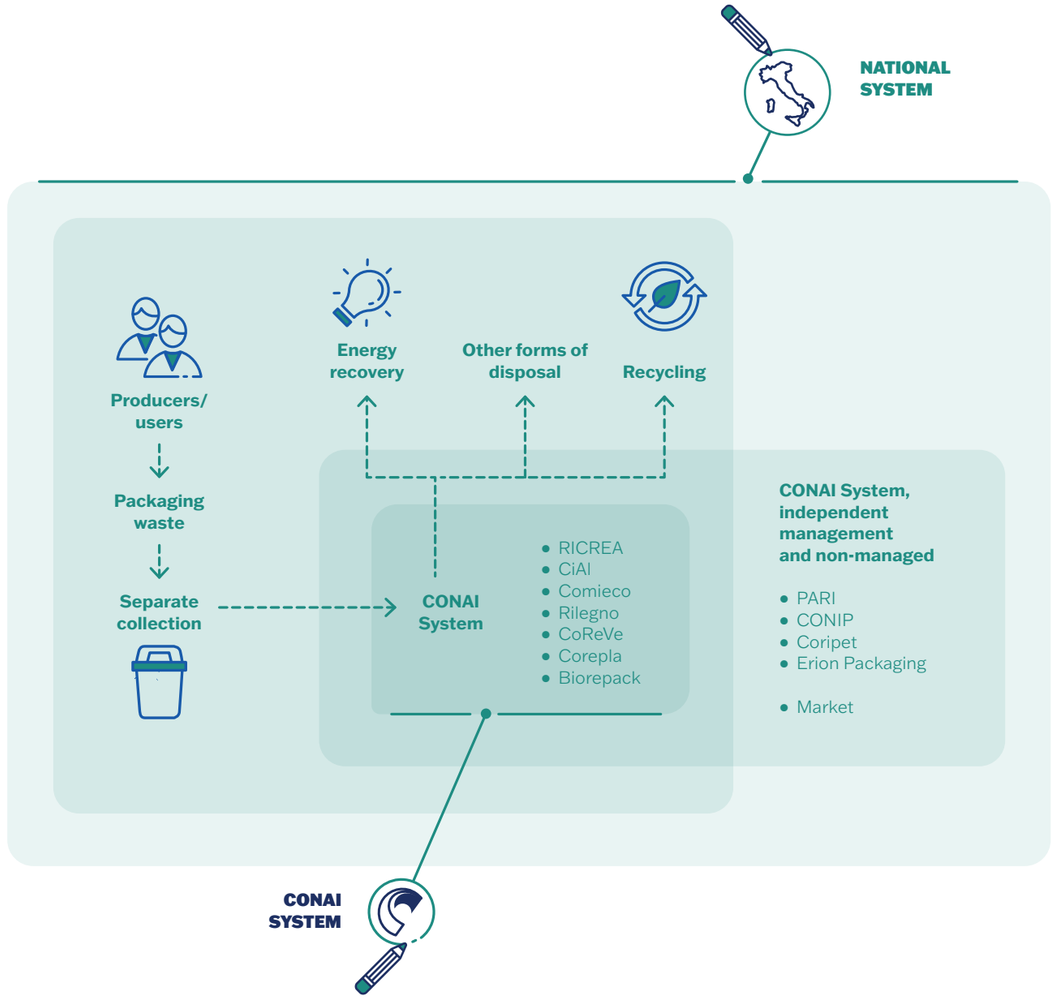
CONAI's contributions to the National System and value generation, already highlighted in last year's work, appear even more significant today in the context of the international sustainability scenario, analysed jointly by CONAI and TEHA. This scenario is marked by obstacles and discontinuities, evident in economic slowdown, pressures on foreign supply chains, the crisis of multilateralism, and regulatory uncertainty. In this context, the ability to act as a system, invest in skills, and promote a multidisciplinary approach to sustainability and education remains one of the main enabling factors for strengthening the country's resilience and competitiveness.

B.5 The environmental benefits of managing packaging and packaging waste

The Life Cycle Costing Tool (LCC) is a methodology based on life cycle analysis (LCA) and 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 in relation to which there are a series of exchange relationships with inputs and outputs.
The physical boundaries analysed refer to the scope of activities of the CONAI System (i.e. waste collected and sent for 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 plastic material flows isolated from those on the market.

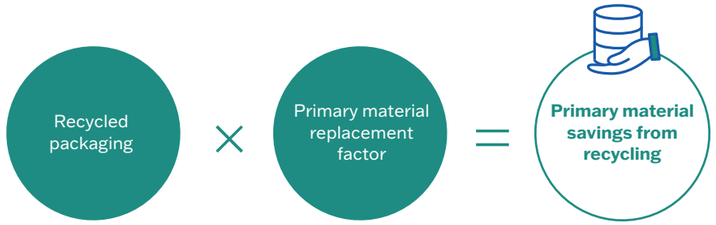
The LCC model is maintained on an annual basis, with three-year rolling reporting: in addition to the current year, the two previous years are updated, reflecting the specific nature of the CONAI EPR Organisation's data reporting. The LCC model is based on the acquisition of primary and secondary data.
The former – modelled in the second and fourth quarters of the year, in a period coinciding with the institutional reporting of the CONAI EPR Organisation – 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 is obtained from literature through the use of specific databases – 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.





B.6 The contribution of businesses to protecting material

Primary material savings from recycling is the amount of primary material[69] 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.



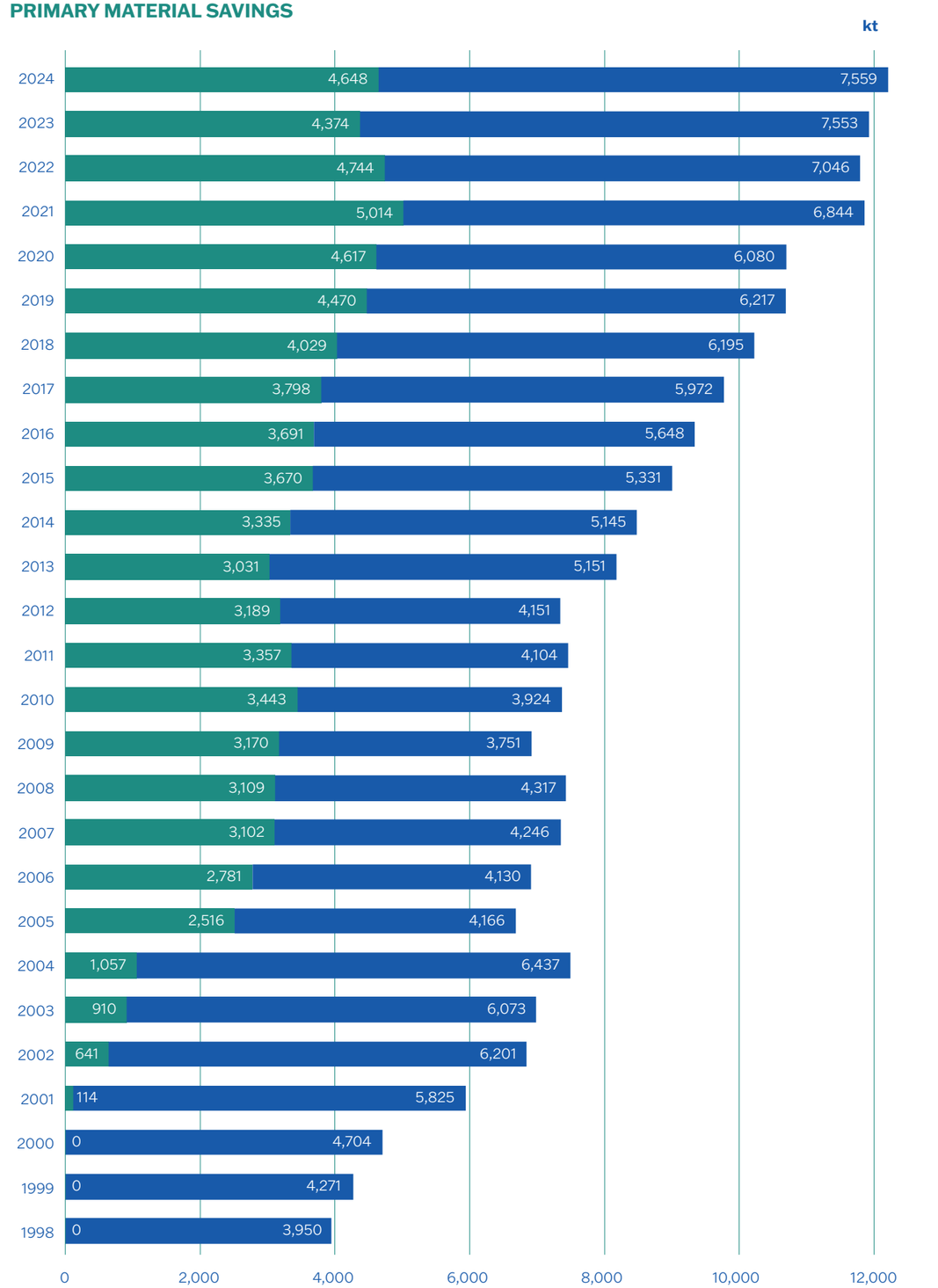
CONAI has estimated the amount of material saved through the use of secondary raw materials obtained from waste from the various supply chains over 27 years of activity to be around **221 million tonnes**.

In 2024 alone, this equates to more than 12 million tonnes, equivalent to the weight of **830 Towers of Pisa[70]**.

69
Primary material is defined as virgin material or a mixture of virgin and recycled material, depending on the market, used to produce packaging or another finished product. It therefore represents a manufactured product obtained by processing virgin or recycled raw materials.

70
Estimated weight of the Tower of Pisa: 14,700 t.

PRIMARY MATERIAL SAVINGS



Source: Generated by the CONAI Research Centre based on LCC Tool data in partnership with Studio Fieschi.

RAW MATERIAL SAVED IN THE DIFFERENT SUPPLY CHAINS

STEEL
495,290 t
1,285 high-speed trains

ALUMINIUM
62,440 t
5.9 billion cans

PAPER
3,901,000 t
1.560 billion sheets of A4 paper

WOOD
4,334,700 t
190 million pallets

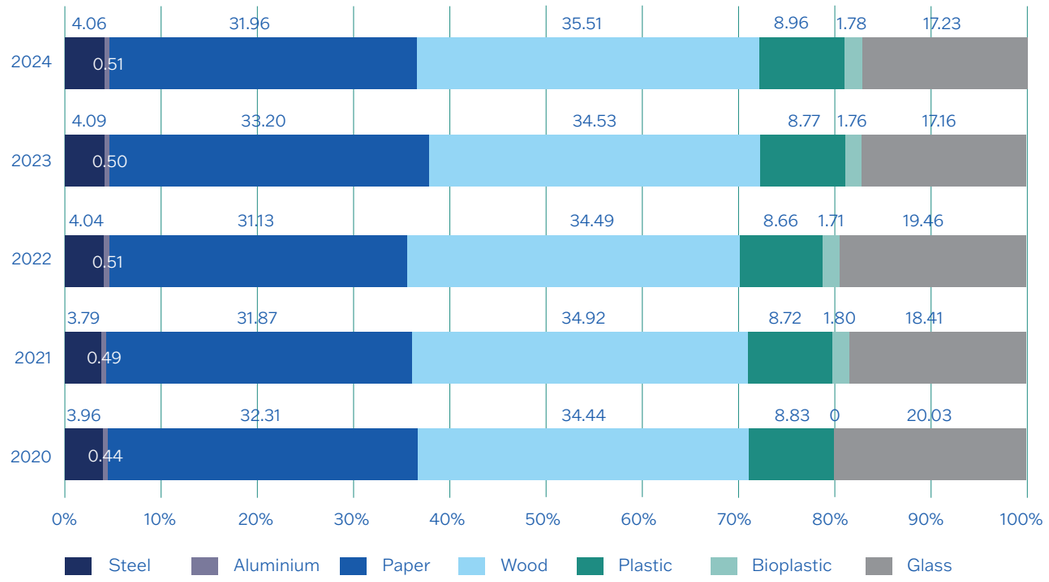
PLASTIC
1,093.18 t
20.66 billion PET bottles (1 litre)

COMPOSTABLE BIOPLASTIC
47,510 t*
24 million bags of soil

GLASS
2,103,000 t
4 billion bottles of wine (750 ml)

* which contribute to generating 217,560 tonnes of mixed composted soil improver.
Source: Generated by the CONAI Research Centre based on LCC Tool data in partnership with Studio Fieschi.

BREAKDOWN OF RAW MATERIAL SAVINGS GENERATED BY RECYCLING FROM 2020 TO 2024

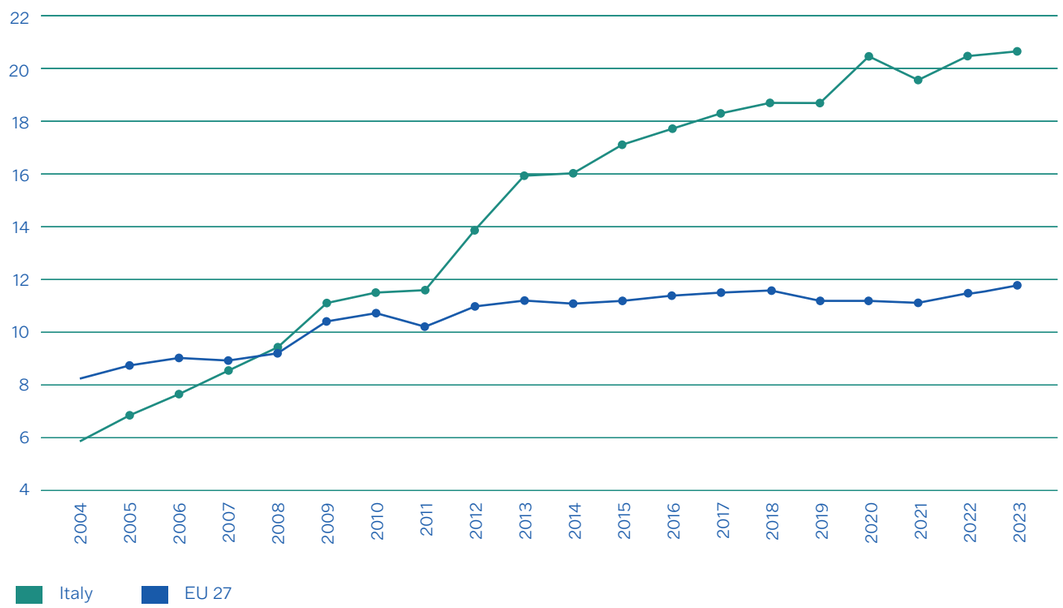


RAW MATERIAL: From savings to real reductions

The *Circular Material Use Rate* (CMU) indicator, developed by Eurostat[71], measures the share of secondary materials reintroduced into production cycles compared to total material consumption. In other words, it indicates how well an economy is able to "close the loop" by reducing its dependence on virgin resources.

According to ISPRA time series based on Eurostat calculations, Italy has shown a growing rate of circular material use since 2004, with values consistently above the EU average over the past decade. This is an outcome indicator that reflects the maturity of certain supply chains (e.g. metals) and the effectiveness of waste management policies.

TREND IN THE CIRCULAR MATERIAL USE RATE



Source: ISPRA 2025 (indicatoriambientali.isprambiente.it/it/economia-e-ambiente/tasso-di-uso-circolare-dei-materiali).

Is it possible to develop a method to quantify the actual rate of raw material extraction, related to the savings from packaging recycling?

Eurostat provides data for the calculation of the CMU indicator in overall terms, but not specifically for the packaging sector. This data refers to the quantities of waste sent for recovery and the quantities of virgin resources used for production purposes. The data are available for each European country and each year, with details by waste category on the one hand and raw materials on the other.

Based on national data for the year 2022, the CMU was calculated for each category of raw material. These categories were then matched with the materials handled by Italy's packaging recovery chain, in order to limit the indicator to the reality of the national management system.

71
Eurostat, 2018, Circular material use rate, calculation method.

Circular material use rate (CMU)

Calculation of the CMU 2022 for Italy, matching materials from the packaging recovery chain to the raw material categories defined by Eurostat.

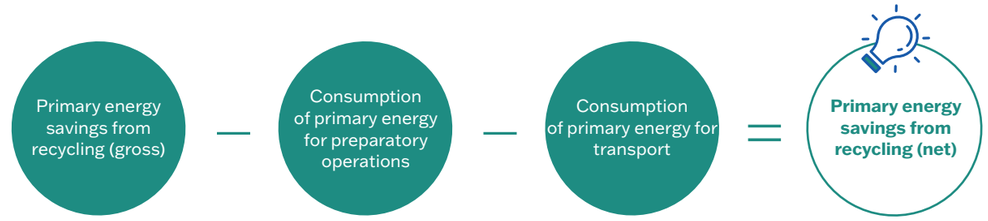
CIRCULAR MATERIAL USE RATE (CMU)

Raw material category	Materials in Italy's packaging recovery chain	CMU Italy 2022
		%
Biomass	Paper, wood, bioplastic	16%
Metal ores	Steel, aluminium	55%
Non-metallic minerals	Glass	26%
Fossil energy carriers	Plastic	6%

This preliminary calculation is in line with both the overall national rate reported by ISPRA and the indicators calculated by Eurostat as the European average.

B.7 The contribution of businesses to managing energy resources

Primary energy savings[72] from recycling is the amount of energy[73] from fossil sources that would be required to produce all the primary material saved. As of 2023, the figure has been further refined by including in the calculation the primary energy consumption related to the preparation for recycling and transport of packaging waste along the supply chain.



In 2024 alone, and with the application of the new method of calculating the indicator, this saved an estimated **55 TWh**, equal to the **domestic consumption of half of all Italian households**[74].

72

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.

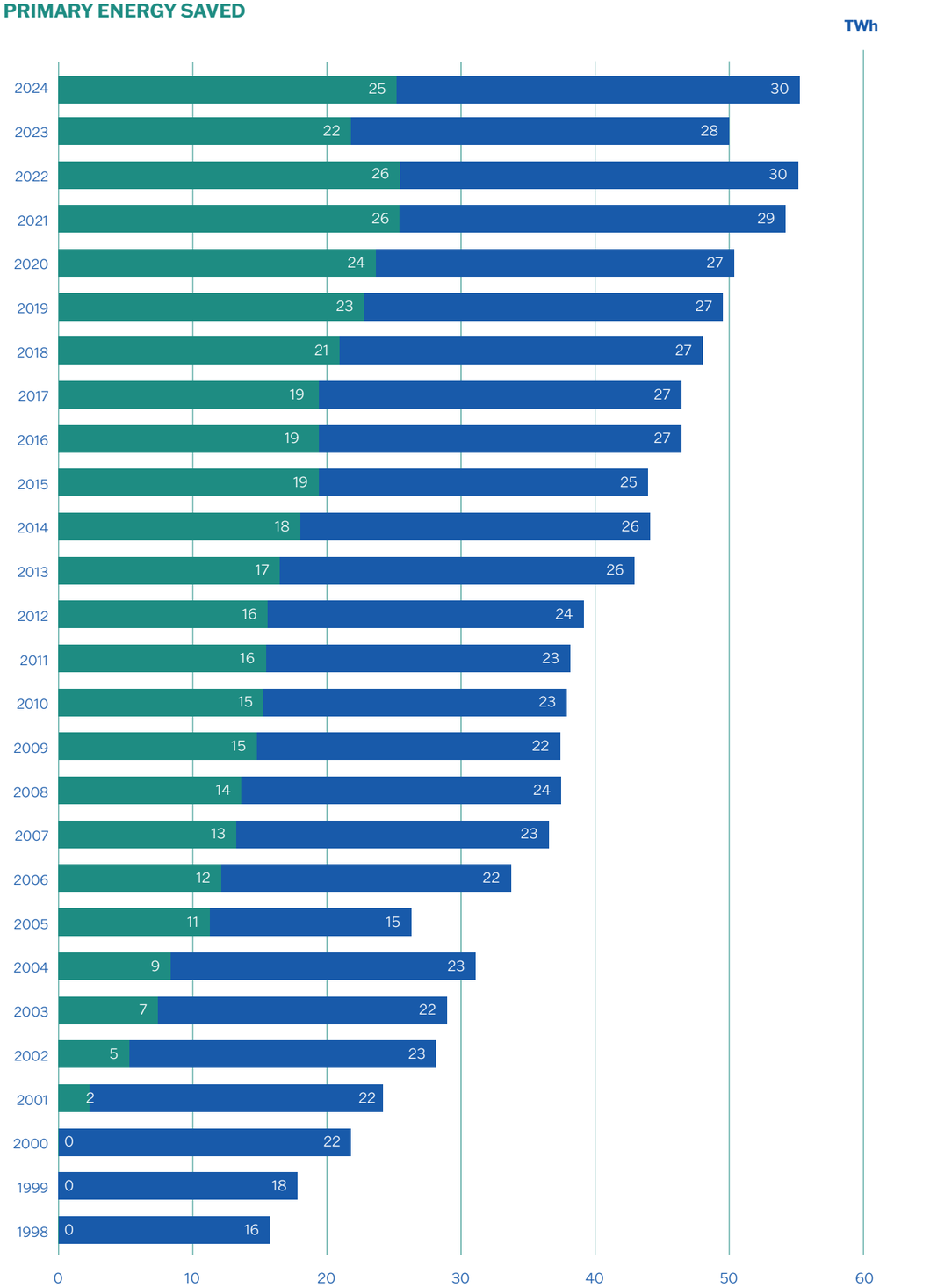
73

The use of primary energy sources necessary to generate and supply electricity, heat or other forms of energy, used in the production and transport process chain of the primary or recycled material.

74

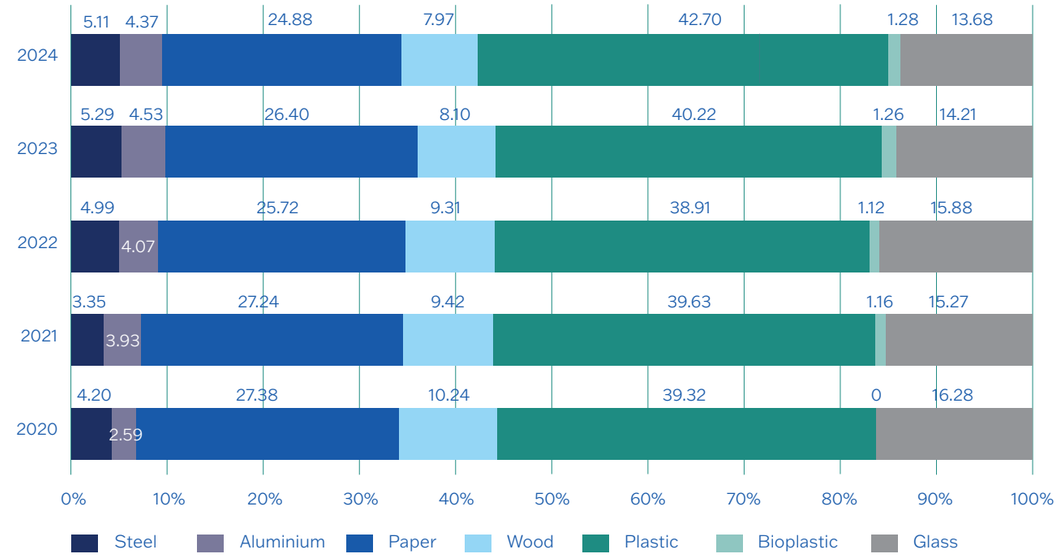
The estimated consumption deriving from fossil fuels per household is 3.78 MWh/household per year.

PRIMARY ENERGY SAVED



Source: Generated by the CONAI Research Centre based on LCC Tool data in partnership with Studio Fieschi.

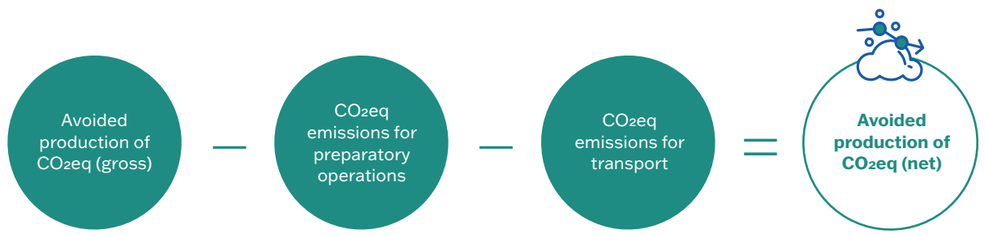
BREAKDOWN OF PRIMARY ENERGY SAVINGS GENERATED BY RECYCLING FROM 2020 TO 2024



B.8 The sector's contribution to combating climate change

The CO_2 avoided from recycling is the difference between the greenhouse gases avoided by not producing primary material and the greenhouse gas emissions produced from preparing used packaging for recycling (transport and processing to turn packaging waste into new raw material). Specifically, the calculation considers the avoided production of primary material, net of emissions related to 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 the measurement.

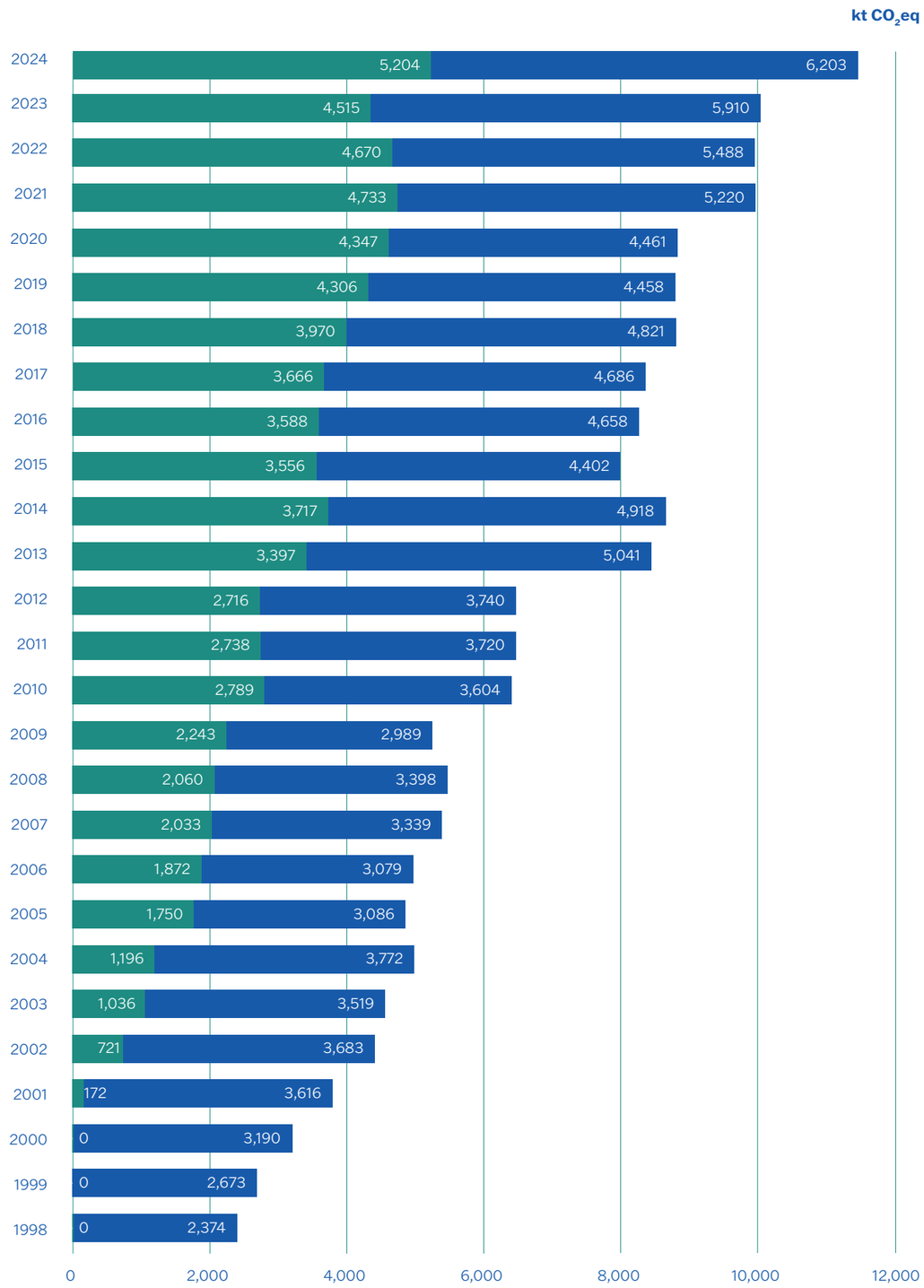


It is estimated that recycling of packaging has allowed almost **114 million tonnes of CO_2eq** to be avoided in Italy over 27 years.

In 2024, this is equivalent to more than 11 million tonnes, equal to the **emissions generated by 9,000 flights around the world**[75].

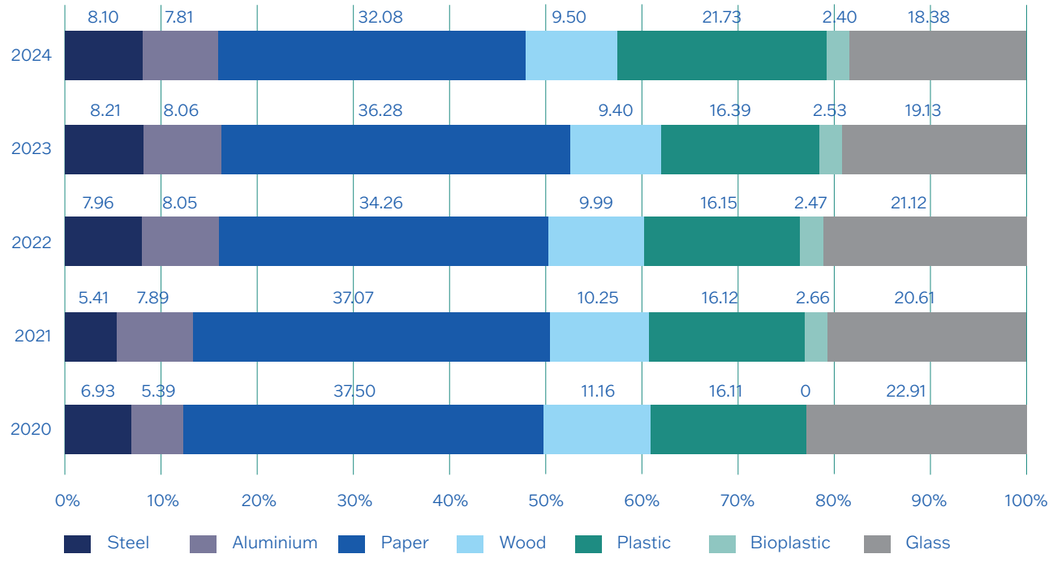
75
Estimated trip emissions for a flight of 40,075 km and an emission of 1,256 tCO_2eq per flight.

AVOIDED PRODUCTION OF CO_2 FROM RECYCLING



Source: Generated by the CONAI Research Centre based on LCC Tool data in partnership with Studio Fieschi.

BREAKDOWN OF AVOIDED CO_2eq EMISSIONS FROM 2020 TO 2024



C The role of the EPR Fee

The CONAI EPR Fee is the initial factor that ensures the functioning of the System. Through the EPR Fee, CONAI member firms fulfil their environmental responsibility while reinforcing their commitment to promoting a circular economy.

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 152/2006, 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 stems from the need for the fee to be adjusted to the economic and operating conditions prevailing 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 capital 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.

CONAI EPR FEE 2024

values in €/t

Period	Steel	Aluminium	Paper	Wood	Plastic	Biodegradable and compostable plastic	Glass
2024	5.00	**7.00/ 12.00**[76]	*Band 1:* **35.00/65.00** *Band 2:* **55.00/85.00** *Band 3:* **145.00/175.00** *Band 4:* **275.00/305.00** [77]	**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** [78]	**170.00/ 130.00**[79]	15.00
2025	5.00	12.00	*Band 1:*[80] *65.00* *Band 2:*[81] 65.00 *Band 3.1:*[82] **65.00/75.00** *Band 3.2:*[83] **65.00/90.00** *Band 4:*[84] **85.00/135.00** *Band 5.1:*[85] **175.00/130.00** *Band 5.2:*[86] 175.00 *Band 6:*[87] 305.00 [88]	**7.00/ 9.00** [89]	*Band A1.1:* **24.00/40.00** *Band A1.2:* **90.00/87.00** *Band A2:* **220.00/258.00** *Band B1.1:* **224.00/219.00** *Band B1.2:* **233.00/228.00** *Band B2.1:* **441.00/611.00** *Band B2.2:* **589.00/724.00** *Band B2.3:* **650.00/785.00** *Band C:* **655.00/790.00** [90]	130.00	**15.00/ 35.00**[91]

Source: Fee Guide 2025 – CONAI.

76
As of 1 April 2024, the **Aluminium** Fee increased from €7.00/t to €12.00/t.

77
As of 1 April 2024, the **Paper** Fee increased 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.

78
As of 1 April 2024, the **Plastic** Fee increased 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.

79
As of 1 April 2024, the **Biodegradable and Compostable Plastic** Fee decreased from €170.00/t to €130.00/t.

80
Single-material.

81
Type A composite packaging.

82
Type B1 composite packaging (certified).

83
Type B2 composite packaging (NON-certified).

84
CPL (composite containers for liquids).

85
Type C1 composite packaging (certified).

86
Type C2 composite packaging (NON-certified).

87
Type D composite packaging.

88
As of 1 July, new bands were created for **paper-based** composite packaging and the Fee underwent some changes.

89
As of 1 July 2025, the **Wood** Fee increased from €7.00/t to €9.00/t.

90
As of 1 July 2025, the **Plastic** Fee increased for 6 bands and decreased for 3 others.

91
As of 1 July 2025, the **Glass** Fee increased from €15.00/t to €35.00/t, and from 1 January 2026 it will increase to €40.00/t.

Changes shown in bold.

C.1 Financial statements of the CONAI System

Unlike last year, the year 2024 closed with an operating surplus, bringing the CONAI EPR Organisation's reserves at the end of the year to €517 million, amounting to 36% of the year's total costs.

Total revenues consist of EPR Fee, sale of materials and other revenues, making for a total of €1,469,046,000, up 39% compared to the previous year[92].

Revenues from the EPR Fee (€1,050,714,000) increased by €332,267,000 and accounted for 72% of total revenues. The increase is attributable to the increase in the average annual EPR Fee for the aluminium, paper and plastic consortia.

Revenues from sale of materials (€360,380,000) increased by €69,635,000 and accounted for 25% of total revenues. This trend is mainly due to the increase in revenues from material sales recorded by the paper and plastic supply chains, partly offset by the decrease in revenues from the steel and glass supply chains. Other revenues (€57,952,000) include revenues from penalties, miscellaneous revenues, and financial income[93].

Total costs include delivery, recycling, energy recovery and facility operation, adding up to a total of €1,415,071,000, an increase of around 11% compared to the previous year.

Delivery costs (€808,960,000) accounted for 56% of total costs and increased by €113,110,000 due to higher delivery volumes (+8%) and higher unit costs (+8%).

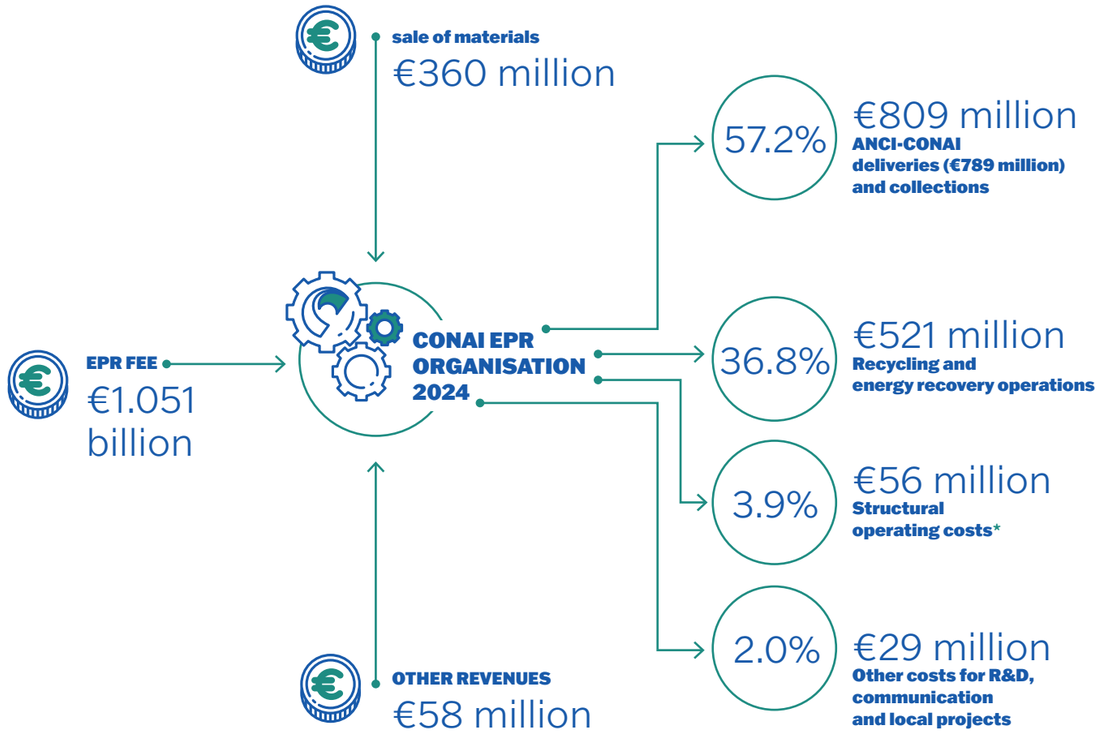
Recycling costs (€433,354,000, amounting to 30% of total costs) increased by €27,078,000, mainly due to higher costs for sorting (+€14,987,000), recycling fees (+€12,591,000), logistics (+€1,573,000), and product analyses (+€2,103,000).

Energy recovery costs (€87,433,000, amounting to 6% of total costs) decreased by 1%, mainly due to a reduction in unit costs (-12%) as volumes increased.

Structural operating costs (€56,319,000, amounting to 4% of total costs) include general and personnel costs and increased by €3,838,000, mainly due to higher overheads. Personnel costs, which are part of this item, amounted to €22,774,000 and accounted for only 1.6% of total costs.

The costs of R&D, communication and local projects (€29,005,000, amounting to 2% of total costs) increased by only 1%.

ECONOMIC RESULTS OF SYSTEM



Operating surplus of €40 million (net of €5 million in financial management, taxes and depreciation/impairments), **bringing the total amount of capital reserves to cover 3–4 months of total costs**, in line with the self-regulation mechanism for reserves.

* Total value of CONAI costs (€15 million) net of the operating costs of the Consortia. CONAI's actual costs amount to €30.4 million.

Source: Summary generated by CONAI based on data from the Management Report and Financial Statements 2024.

92 CONAI does not fall within the exclusion criteria from the EU benchmarks aligned with the Paris Agreement.

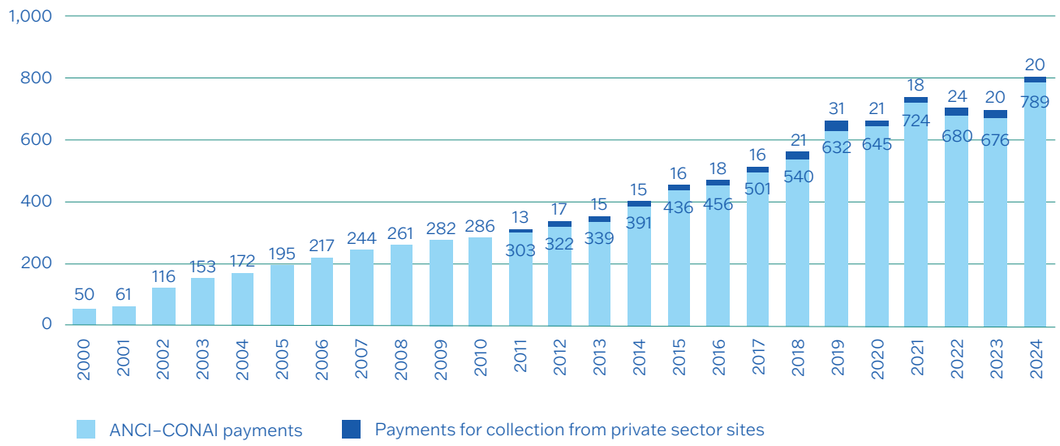
93 General Programme for the Prevention and Management of Packaging and Packaging Waste 2025.

C.2 Economic support for local areas

Payment made to municipalities for separate collection

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 2024.

PAYMENTS SUPPORTING SEPARATE COLLECTION



More than €9.5 billion

paid by CONAI to municipalities/operators to support separate collection* between 2001 and 2024.

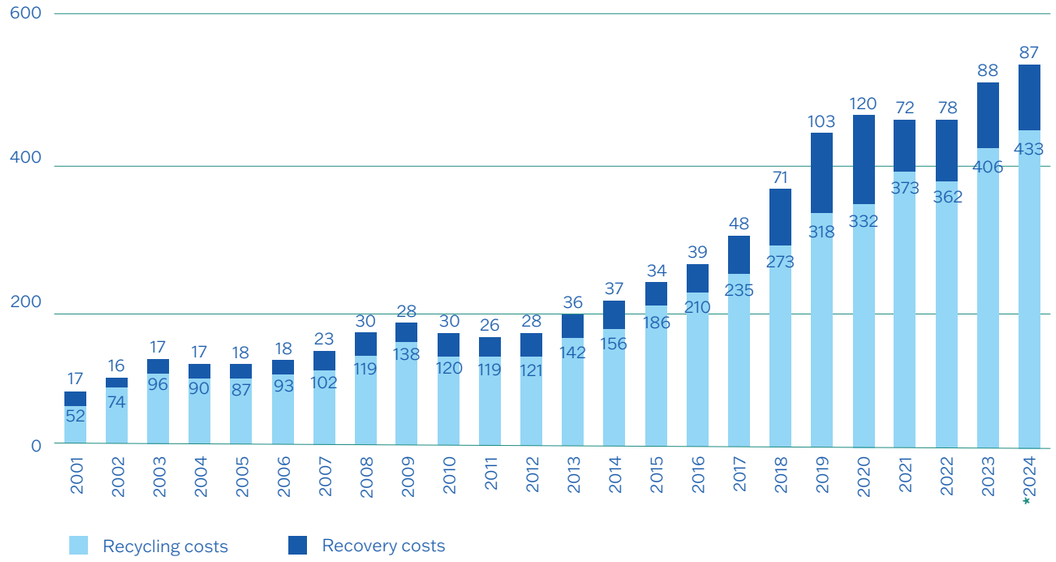
* Further investigations are underway for the final balance of fees for collection from private sector sites based on pre-2011 data.

Source: Generated by the CONAI Department for Administration and Department for Relationships with Local Areas based on historical data.

Fee paid to recycling and recovery operators for treatment of packaging waste

The fee paid to sector operators – through the Packaging Material Consortia – is the instrument through which CONAI promotes the development of the supply chain for recycling and recovery of packaging waste.
The amount of recycling and energy recovery costs paid to operators increased significantly between 2001 and 2024. This item also includes costs incurred for the creation of new recycling streams and for experimental activities promoted by Packaging Material Consortia.

COSTS INCURRED FOR RECYCLING AND RECOVERY



More than €5.5 billion

paid by CONAI to preparation plants for recycling and recovery between 2001 and 2024.

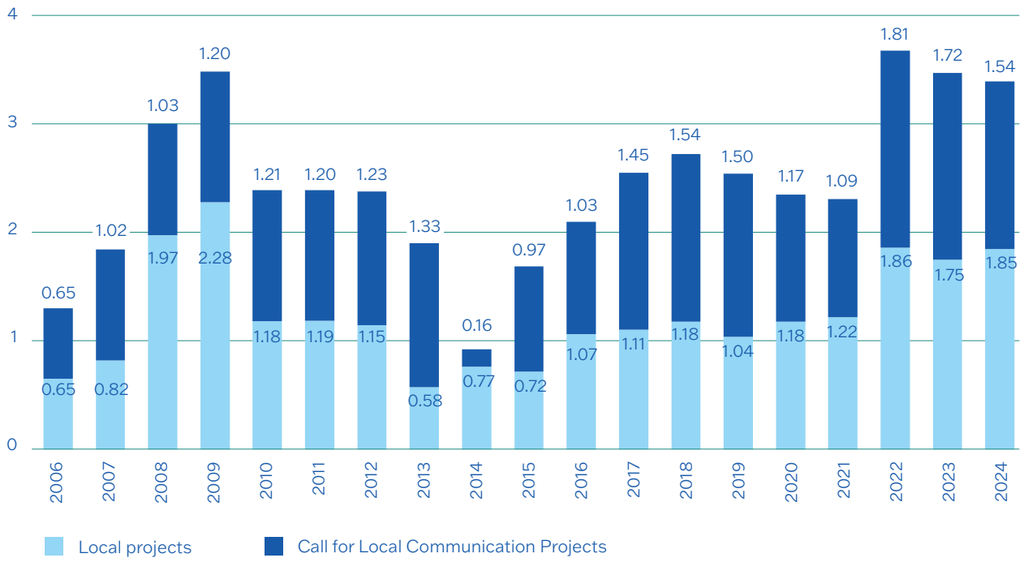
* Data rounded down.

Source: Generated by the CONAI Department for Administration and Department for Relationships with Local Areas based on historical data.

Local projects

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 local projects according to the requests for support coming from the local area, which are duly verified before acceptance.

FUNDS TO SUPPORT THE DEVELOPMENT OF SEPARATE COLLECTION AND LOCAL PROJECTS



More than €46 million

paid by CONAI to support local projects and local communication projects between 2006 and 2024.

Source: Generated by the CONAI Department for Administration and Department for Relationships with Local Areas based on historical data.

D CONAI and its stakeholders

D.1 Context analysis

CONAI has updated its context analysis, directly related to the concept of materiality and the risk matrix, in line with ISO 14001, EMAS Regulation and UNI/PdR 125:2022, with the aim of aligning strategic priorities with stakeholder expectations and current regulations.

In the current context, CONAI's work is influenced by a number of factors, both internal and external. On the one hand, regulatory developments and growing stakeholder expectations require continuous adaptation of consortium strategies and practices; on the other, internal dynamics such as implementing new management tools and strengthening operational skills are leading to optimised performance.

Calculation and reporting methodologies

REPORTING OWN RESOURCE PLASTIC

Third 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[94].

REPORTING UNDER DIRECTIVE 2019/904 (SUP)

Reporting under the SUP Directive continues with new communications concerning:

- Recycled content of beverage bottles (article 13, e);

which complement the previous communications concerning:

- Interception rate for beverage bottles (article 13, c);
- Beverage cups and food containers placed on the market (article 13, a).

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

EU LEGISLATION

Regulation 2025/40 on packaging and packaging waste (PPWR)

- Amends Regulation 2019/1020/EU
- Amends Directive 2019/904/EU
- Repeals Directive 1994/62/EC

New for the PPWR

19 December 2024 – **Final approval**

22 January 2025 – **Published** in the Official Journal of the European Union

11 February 2025 – **Entered into force**

12 August 2026 – Must be **directly applied by Member States**

Regulation 2024/1781 – Ecodesign for Sustainable Product Regulation (ESPR)

Establishes the framework for defining eco-compatible design requirements for sustainable products.

- Published on 13 June 2024.
- Amends Directive 2020/1828/EU.
- Amends Regulation 2023/1542/EU.
- Repeals Directive 2009/125/EC.

Directive 2024/825/EU – Empowering Consumers Directive (ECD)

- Amends Directive 2005/29/EC on unfair commercial practices.
- Amends Directive 2011/83/EU on consumer rights.

Green Claims Directive (GCD)

- Verify voluntary green claims in business-to-consumer commercial practices.
- Environmental statement based on scientific evidence validated by independent third parties.

Directive 2019/904/EU – Single Use Plastic Directive (SUPD)

- Revision of Implementing Decision 2023/2683/EU on the method for calculating the recycled content of PET bottles.

NATIONAL LEGISLATION

Legislative Decree on "Infringement Safeguard" – Electronic platforms

- Allows producers that place the same products on the domestic market through e-commerce platforms to fulfil the obligations established by the respective EPR scheme by using the services of the e-commerce platform.
- The obligations may be fulfilled in accordance with simplified procedures established by specific agreements between the e-commerce platform and the relevant EPR scheme.
- For packaging, the above option is only available to producers with registered office outside the country and through a written mandate.

Legislative Decree on the Environment

- Introduces a system for equalising the costs related to the universal service obligations guaranteed by the CONAI EPR Organisation.
- Allows CONAI to acquire data on packaging flows transferred within the country, including from non-member economic operators.
- Self-compliant EPR Organisations are required to bear the costs of collection and management of the quantity of waste from their products that ends up in municipal waste; coverage of these costs must also be guaranteed when C&I flow targets are met.

In line with the regulations, CONAI has already finalised the Agreement with some of the main e-commerce platform operators who have taken steps to adopt it.

Discussions are underway to define an agreement between CONAI, Packaging Material Consortia and Self-compliant EPR Organisations.

Communication of environmental, social and governance data: a constantly changing framework

The EU has consolidated the framework for communication of environmental, social and governance data with the CSRD, transposed in Italy by Legislative Decree 125/2024[95], which introduces the obligation to report according to the principle of double materiality, with external certification and publication in the Management Report. The content is defined by the ESRS of Delegated Regulation (EU) 2023/2772 (Set 1)[96], applicable from the 2024 financial year, while sectoral standards and those for certain third-country companies have been postponed to 30 June 2026 to allow more time for implementation[97]. For proportionality, there is a simplified standard for listed SMEs (ESRS LSME) operational from 2026 with the option to opt out until 2028, and the new voluntary standard for unlisted SMEs (VSME), recommended by the Commission in 2025 to standardise requirements along the value chain[98]. In parallel, the CSDDD (Directive (EU) 2024/1760) makes due diligence on human rights and the environment mandatory throughout the chain of activities, with a climate transition plan, entering into force on 25 July 2024 and transposed by 26 July 2026, with gradual application from 2027[99].

95

Legislative Decree 125 of 6 September 2024 (Official Journal 212, 10 September 2024): www.gazzettaufficiale.it/eli/id/2024/09/10/24G00145/sg

96

Delegated Regulation (EU) 2023/2772 – ESRS (EUR-Lex page): eur-lex.europa.eu/eli/reg_del/2023/2772/2023-12-22/eng

97

EU Council: postponement to 30 June 2026 of sectoral ESRS and standards for third-country companies: www.consilium.europa.eu/en/press/press-releases/2024/02/07/council-and-parliament-agree-to-delay-sustainability-reporting-for-certain-sectors-and-third-country-companies-by-two-years/

98

EFRAG – ESRS LSME (Listed SMEs): www.efrag.org/en/projects/esrs-lsme-esrs-for-listed-smes/concluded;

Recommendation (EU) 2025/1710 – Voluntary standard for SMEs (VSME): eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32025H1710;

99

Directive (EU) 2024/1760 – CSDDD (EUR-Lex consolidated text): eur-lex.europa.eu/eli/dir/2024/1760/2025-04-17/eng

New organisational structure

On 1 January 2025, a new organisational structure came into force, designed to improve operational efficiency, encourage and stimulate greater collaboration between the various departments, and update operational processes in order to give them a new identity and consistency with the activities currently carried out.

Every employee, to whom CONAI attributes a fundamental role within the organisation, has been invited to actively participate in this transition process and to share any questions or concerns with their line managers, as well as to communicate their needs and suggestions, in order to continue to grow and work together in a proactive and informed manner.

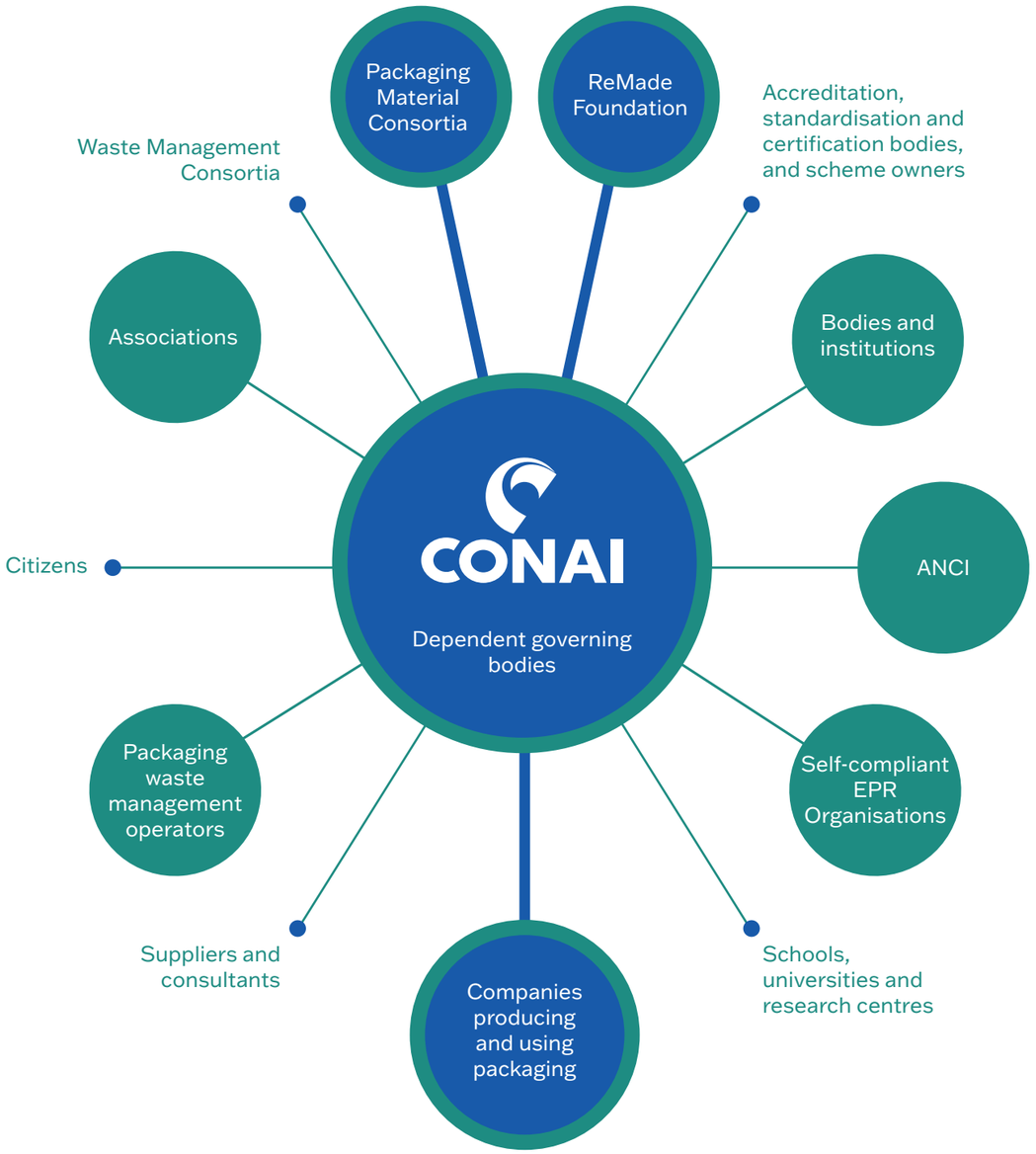
OBTAINING EQUAL OPPORTUNITIES CERTIFICATION

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.

D.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. The matrix, shown below, has been confirmed basis on the activities carried out in 2024, with the sole addition of the Remade Foundation in explicit form.

CONAI STAKEHOLDER STRUCTURE 2024



Companies producing and using packaging

Producers and users are required to ensure proper environmental management of packaging and waste resulting from the consumption of their products, in accordance with current legislation. As part of its governance function, CONAI 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[100].

Users include: purchasers/fillers of empty packaging, importers of "full packaging" (i.e. 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 purchase in Italy and resell the packaging without further processing)[101].

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

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.

100
www.conai.org/download/guida-al-contributo-ambientale-2025/?tmstv=1760432581

101
www.conai.org/download/guida-al-contributo-ambientale-2025/?tmstv=1760432581

The ReMade Foundation

In 2024, CONAI led and supported the transformation of ReMade in Italy into the ReMade Foundation, a key step in preserving and enhancing the heritage built by the recycling industry in Italy. The Foundation, strongly supported by CONAI, acts as a strategic hub for dialogue between companies involved in the production and promotion of goods made from recycled materials, contributing to the dissemination and implementation of institutional tools such as the Minimum Environmental Criteria (CAM) and Green Public Procurement (GPP). ReMade certification attests to the content of recycled material and/or by-products in materials, semi-finished or finished products: a distinctive element in the circular economy that requires companies to reconstruct traceability, ensuring maximum transparency for consumers (public or private) and accurately quantifying the amount of recovered material present in the product.

Self-compliant EPR Organisations

In accordance with current legislation, CONAI and the Self-compliant EPR Organisations promote a national framework programme agreement (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 required to send their institutional documentation, in preparation for 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 discussions to examine specific issues of interest to the various sectors.

Bodies and institutions

In line with its mandate, CONAI maintains ongoing relations with multiple bodies and offices at different levels of competence, from ministries such as MASE and MIMIT to regulatory authorities (ARERA), local government bodies and individual municipal administrations. It also has particularly close relations with national technical bodies (such as ISPRA) and European institutions. At international level, CONAI is a member of EXPRA, the Extended Producer Responsibility Alliance, a leading European organisation representing non-profit packaging and packaging waste management systems. Through EXPRA, CONAI engages in discussions with various European institutions and European Commission consultants in order to share the know-how and experience gained in over 20 years of operation of EPR systems participating in EXPRA. CONAI cooperates with various bodies through participation in Working Groups, mainly on technical and policy documents, as well as through technical support at the local level[102].

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. This collaboration, established in the very first years of the Consortium's foundation and consolidated over the years, 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 the CONAI EPR Organisation channel resources to municipalities, promoting efficient and widespread management of packaging waste and contributing to the achievement of national and European circular economy objectives, as well as acting as a driving force for correct management of municipal waste, only half of which is packaging.

Associations

The relationship between CONAI and business associations is based on close collaboration at various operational levels. The associations represent, for example, firms in specific packaging-related sectors and are actively involved in the definition of sectoral policies, tools and initiatives.
Their interaction with CONAI is ongoing through participation in decision-making bodies. These bodies include the Board of Directors, the Members' Assembly and the Working Groups.

Packaging waste management operators

The collaboration between CONAI and companies active in waste management, such as utilities, private operators, sorting and recycling plants, is structured as a systemic model.

These companies are involved throughout the entire process, from separate collection to treatment, to the recycling and recovery of packaging.
One of the main measures of the system is support for separate collection and the collection of packaging waste, through resources channelled within the ANCI-CONAI Framework Agreement via Packaging Material Consortia.

102
"The value of the CONAI system", pag. 48.

This support is provided in full compliance with the principles of effectiveness, efficiency, cost-effectiveness and transparency.

Waste management consortia

CONAI and the waste management consortia share common environmental objectives, such as reducing landfill waste, increasing recycling and promoting environmental sustainability.
Relations between CONAI and waste management consortia, within their respective areas of competence, are geared towards collaboration in order to ensure sustainable packaging management and correct collection and appropriate recycling of materials.

Accreditation, standardisation and certification bodies, and scheme owners

The relationships between CONAI, national and international accreditation bodies, standardisation and certification bodies and scheme owners are complex and interconnected, as all these entities are involved in ensuring the quality and compliance of packaging in Italy.

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, re-use and recovery/recycling of packaging, and is involved in the drafting of technical standards to support proposed EU Regulation.

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 to promote a more sustainable lifestyle. The main modes of engagement include raising awareness and providing information on the proper management of packaging, and supporting separate collection with local authorities.

Schools, universities and research centres

CONAI's relationship with schools, universities and research centres focuses primarily on promoting education, research and innovation in packaging management and environmental sustainability[103].

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.

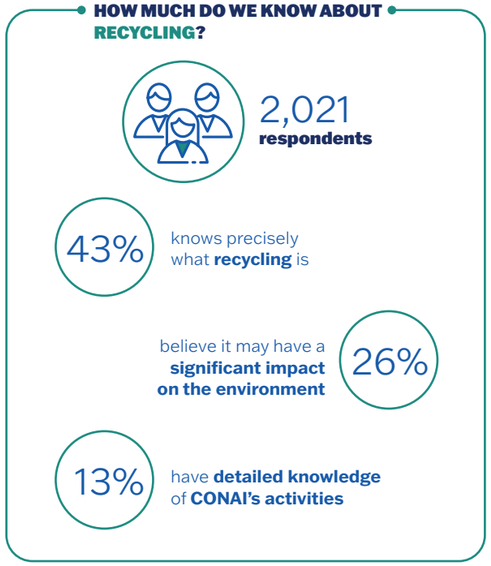
Governing bodies

As defined in CONAI's Statute and Rules of CONAI, these bodies are represented by the Members' Assembly, the Board of Directors, the President, the Deputy Presidents and the Board of Auditors. 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 stakeholder needs, while fulfilling its legally established competences. This document was presented and approved to the Board of Directors on 24 October 2025.

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.

103
More information in chapter "2.4.3 Contribution to research", pag. 73



Italian citizens are sensitive to environmental issues but poorly informed. More accessible and continuous communication is needed to bridge the gap between perception and knowledge.

D.3 | Materiality matrix

As part of its internal activities concerning maintenance of the Management System, CONAI conducted a survey on its stakeholders' perception of the Consortium through a study entrusted to SWG SpA. The activity was divided into two types of research: quantitative, aimed at the Italian population, and qualitative, aimed at the direct stakeholders of the CONAI EPR Organisation, specifically large companies and trade associations.

The quantitative survey, carried out by SWG between 12 and 30 March 2025, involved a representative sample of 2,021 Italian citizens of legal age, stratified according to ISTAT criteria (age, gender, geographical area, educational qualification).
The results highlighted a cultural context in which environmental awareness is widespread but still in the process of consolidation:

- over 77% of respondents said they associate the concept of recycling with turning materials into new products, while 82% have heard of the circular economy;
- however, only 43% say they know exactly what it is, and just 26% believe it could have a significant impact on the environment if it were to become widespread.

It is apparent is that environmental behaviour is often generational: Gen Z and Millennials show greater activism and willingness to change, while older people are attentive but more conservative. The willingness to take action for sustainability exists, but it still faces cultural and informational limitations.

Large companies appreciate the value of the operational support and dialogue promoted by CONAI, while SMEs would like to see more inclusive communication. Both groups recognise the leading role in managing the new Packaging Regulation.

It is significant, for example, that only 12% of the population knows the meaning and function of a sustainability report, while 55% have never heard of it. Once explained, the report is identified in most cases as an environmental communication tool, confirming the value that citizens attribute to transparency.

As regards the perception of CONAI in the strict sense, 54% of Italians say they have at least heard of it. However, only 13% have in-depth knowledge of its activities and its systemic function.

Listening to supply chain stakeholders: qualitative survey

To complement the quantitative survey, most of which was outlined in the previous paragraph, CONAI conducted a qualitative survey through interviews with representatives of large packaging manufacturers and users and representatives of trade associations representing small and medium-sized enterprises.
Large companies, in particular, appreciate the support provided in fulfilling extended producer responsibility (EPR) obligations, but also the ability to facilitate dialogue between different actors in the supply chain, promote good practices (e.g. tools for businesses) and create opportunities for discussion through webinars and technical round tables.
The perspective of SMEs is different, as they have a more detached relationship, often mediated by trade associations. Communication is perceived as one-way and opportunities for active participation appear limited.

The future prospects and expectations for CONAI certainly include the entry into force of the new packaging regulation, where CONAI is expected to play a leading management role.
These findings, in a nutshell, highlight the importance of diversifying engagement tools, making content more accessible and placing greater value on existing activities, particularly for smaller companies.

An approach to double materiality

In 2024, CONAI sought to strengthen its governance and materiality methodology to align with leading European practices, even though it does not fall directly within the scope of the CSRD. The process incorporates the European and national regulatory framework, in particular:

- Legislative Decree 125/2024, which implements the CSRD in Italy and establishes double materiality as the cornerstone principle of reporting;
- EFRAG's ESRS Implementation Guidance on materiality (*IG 1*), value chain (*IG 2*) and datapoints (*IG 3*), adopted as a non-binding technical reference for the process;
- the VSME standard (Voluntary Sustainability Reporting Standard for non-listed SMEs) to proportionately standardise information requests along the value chain, in line with the Commission's Recommendation and the "value chain cap" perspective set out in the *Omnibus I* package.

The method maintains the three-level structure – National System, CONAI System and Organisation – already adopted in the 2024 Report, ensuring consistency and continuity in impact analysis and value measurement.

CONAI applies double materiality according to the ESRS, distinguishing:

- **impact materiality**: assesses the effects of consortium and supply chain activities on the environment and society (e.g. effective recycling, quality of flows and traceability, availability of secondary raw materials, primary energy saved, emissions avoided, direct/induced employment).
- **financial materiality**: analyses how ESG issues (including PPWR developments) affect system costs and revenues (e.g. EPR Fee modulation, payments, investments and compliance costs, transition and reputational risks) over short-, medium-, and long-term horizons.

The results of the analysis feed into the 2025 Materiality Matrix, which jointly represents impact and financial materiality for each material topic.

Determination of significance

The complexity of the interactions and the different reporting boundaries made it necessary to develop a risk-based analysis methodology in order to determine the real degree of significance.
Each individual topic was assessed based on the related impacts, the degree of relevance as raised by the stakeholders, and the actual consistency with the planning and policy guidelines of Management, and in accordance with the latest expert recommendations. This allowed CONAI to develop a calculation matrix that considers the relationships among all the variables involved. Specifically, each significance value (S), calculated for each individual impact, is related and averaged within the material topic (which may include multiple different impacts).

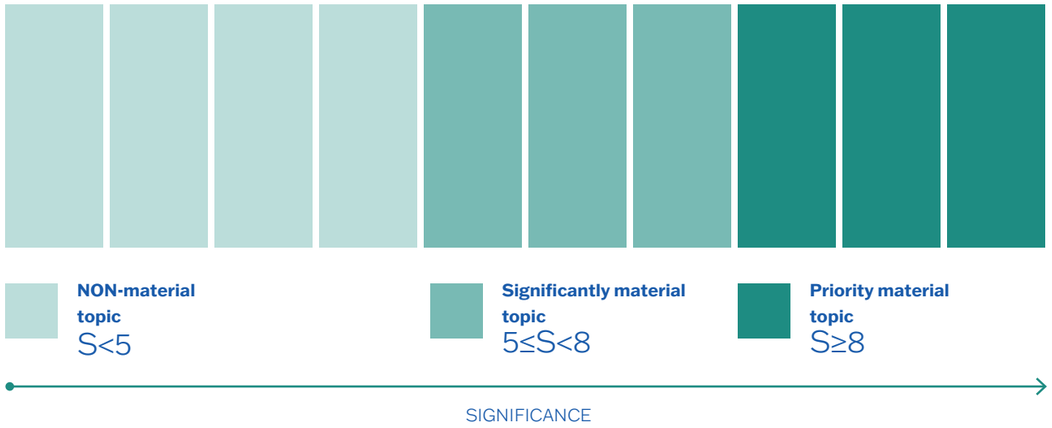
CALCULATION FOR DETERMINING THE SIGNIFICANCE FACTORS OF MATERIAL TOPICS

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

R	G	B	I	W	D	P
Relevance ascertained from SE Average value to 2 decimal places 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	**Qualitative/ quantitative SGW survey** Allocated according to the priorities of stakeholders	**Dissemination** Assigned according to boundary	**Probability** Related to mitigation measures and only applied to potential impacts
(1 to 4)	**(1)**	**(1;-1)**	**(1)**	**(2;1)** NEW	**(1;2;3)**	**(0.5)**

The resulting values, associated with each topic, are arranged on a scale to establish thresholds for defining materiality. For CONAI, materiality is a matrix of opportunities. Consequently, high S values should correspond to commitments and positive actions of support and promotion toward 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 topics of "anti-corruption", "respect for human rights" and "health and safety of workers" are exceptions to this, and were placed at an "overarching" level in relation to the standard classification. Although the analysis of the significance of the material topics did not identify them as significantly material to stakeholders, the Management deemed it appropriate to track them as priority areas for direction and protection, deeming them consistent with the current context.

Compared to the materiality assessment carried out in 2023, no new topics were added, but some variations 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
- Coordination and role in multi-level governance and stakeholder relations
- Support for qualitative and quantitative growth of separate collection
- Secondary raw materials, EoW and circular economy
- Skills development: training, education, awareness-raising of organisations, associations and citizens
- Achievement of national recycling targets
- Promotion of innovation and research
- 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 high-quality separate collection
3 Linking businesses and institutions for the circular economy
5 Compliance with requirements
6 Accountability

SIGNIFICANTLY MATERIAL

- 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 high-quality separate collection
3 Linking businesses and institutions for the circular economy
4 Promotion of culture for the circular economy
5 Compliance with requirements
6 Accountability

NON-MATERIAL

- Training, welfare and employee management policies
- Management of material and waste in offices
- Management of energy consumption and emissions in offices
- Consumption of water in offices

4 Promotion of culture for the circular economy
5 Compliance with requirements
7 Improvement of 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.

E System and organisation

Integrated Management System (IMS)

CONAI is a certified organisation in compliance with the requirements of Regulation (EC) 2009/1221 (EMAS III IT 001784), the UNI EN ISO 14001 reference standard and reference practice 125:2022.

In line with the functions assigned to CONAI under the applicable regulatory framework, the purpose and scope of the IMS can be defined as “Activities to support member companies and public administration (IAF 39, 24)”.

The key tools of CONAI’s IMS are: ESG Policy, Charter of Values, Environmental Analysis, Environmental Programme, Environmental Statement, Strategic Plan, management procedures, operating procedures and forms.

ESG policy

The ESG Policy[104] was updated and amended in October 2024, signed by President Ignazio Capuano, and is now fully implemented.
Priority topics include active support for the circular economy, services and tools for local authorities to ensure high-quality separate collection, liaison between businesses and institutions to promote the circular economy, promotion of culture, regulatory compliance, transparency (accountability), improvement of organisational processes, and commitment to social inclusivity and the promotion of diversity.

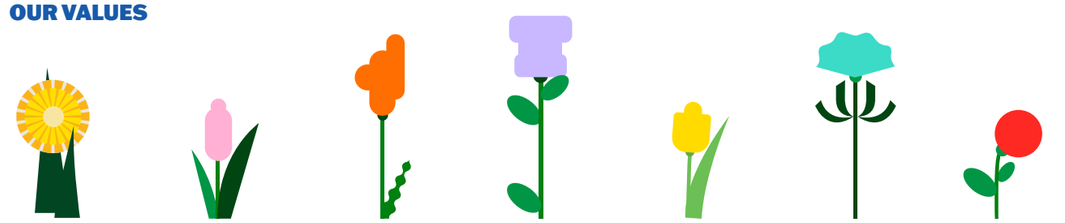
104
www.conai.org/wp-content/uploads/2023/05/4_Politica-ambientale-CONAI.pdf

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

Charter of Values

The Charter of Values was created to establish the criteria that define the Consortium’s identity and principles, and guide its daily actions. In 2024, CONAI launched a participatory drafting process involving all employees, to closely link individual ethics with corporate ethics.

OUR VALUES



Sustainable Development · Responsibility and Commitment · Merit and Fairness · Honesty and Transparency · Innovation and Professionalism · Diversity and Inclusion · Organisational Well-being

SUSTAINABLE DEVELOPMENT
Every small action contributes to the sustainable development of the entire ecosystem.

RESPONSIBILITY AND COMMITMENT
Our commitment to our work translates into professionalism, respect for deadlines, and consideration for the work of others.

MERIT AND FAIRNESS
We value everyone’s know-how and skills because we believe in the virtuous management of our resources.

HONESTY AND TRANSPARENCY
Clarity and honesty are the foundation of every solid relationship, both among colleagues and with stakeholders.

INNOVATION AND PROFESSIONALISM
We never stop learning and experimenting, because the future of our ecosystem is built with courage and creativity.

DIVERSITY AND INCLUSION
Only by embracing diverse perspectives and recognising each the uniqueness of each individual can we truly grow.

ORGANISATIONAL WELL-BEING
The well-being of each individual is the well-being of all; that’s why we support a healthy work-life balance.

Environmental Programme

The environmental objectives for the **three-year period 2024–2027** – some continuing from the previous three-year period – **were defined following the principles and guidelines defined in the ESG Policy**.
Details of the new programme are illustrated in the table blow.

ENVIRONMENTAL PROGRAMME 2024–2027

No.	Specific programme	Description	Goal	2024 indicator	2023 indicator	
1	**Call for Prevention Projects**	CONAI rewards the most innovative and environmentally friendly packaging solutions placed on the market.	Increase the number of projects compared to the previous year.	• **414** cases presented (+11%). • **248** cases incentivised (+13%).	• **373** cases presented. • **219** cases incentivised.	1
2	**Prevention instruments**	CONAI promotes tools aimed at businesses to assist with prevention.	Promote the development of eco-design projects aimed at associations and businesses in coordination with the “Prevention” Working Group and Packaging Material Consortia (potentially also EPR systems).	• **1,476** E-PACK requests handled (-64%). • **3,717** uses of the e-label tool (+66%).	• **4,148** E-PACK requests handled. • **6,178** uses of the e-label tool.	1 4
3	**Fee modulation**	Modulation of the EPR Fee, within individual packaging material chains, is a structural tool for promoting the reduction of packaging waste and increasing its reusability and recyclability.	Enhance modulation in terms of circular economy principles.	• Enhancements to modulation criteria for plastic packaging. • Annual % change in recyclable packaging trend: o **Band C plastic** 18.69% (-2.11%)[105]; o **Band D paper** 0.15% (-0.01%)[106].	• EPR Fee supplement for paper packaging other than containers for liquids. • Enhancements to modulation criteria for plastic packaging. • Annual % change in recyclable packaging trend: o **Band C plastic** 21.34%; o **Band D paper** 0.16%.	1 4
4	**Actions to support local authorities**	Within the Framework Agreement and with specific reference to packaging waste management, ANCI and CONAI have shared their intention to support the local development of the most effective and efficient methods for managing municipal waste, with 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, with individual municipalities or municipal associations.	• **22** authorities that requested support for local activities (-45%). • **40** projects realised (+21%). • Economic value generated: **€1,206,564 (-110%)**. • **9,836,951** inhabitants reached. (+204%)	• **40** authorities that requested support for local activities. • **33** projects realised. • Economic value generated: **€1,351,183**. • **8,208,000** inhabitants reached.	1 2
5	**Call for Local Communication Projects**[107]	Under the Call for Local Communication Projects, co-financed activities include communication, information, and education initiatives aimed at raising awareness among citizens, local authorities and economic operators, encouraging the participation of all stakeholders involved in proper local separate collection.	Promote the initiative and distribute the entirety of the allocated funds.	• **49** projects co-financed out of the total presented (+17%). • **7.2 million** inhabitants reached (-0.1%).	• **42** projects co-financed out of the total presented. • **€1,350,000** funds allocated. • **8 million** inhabitants reached.	1 2
7	**Academy and Community**	The CONAI Academy and its Community are a digital environment where people can access information, engage in discussions and get answers about CONAI, environmental labelling of packaging, eco-design tools, regulatory updates, the circular economy and much more.	Improve and promote stakeholder participation and involvement.	• **5,946** sign-ups on the platform (+4%). • **6** webinars (-45%). • **4,739** webinar sign-ups (44%).	• **5,726** sign-ups on the platform. • **11** webinar sign-ups. • **8,529** signed up.	1 4

105
Only ordinary EPR Fee net of compensation procedures: for 2023 the final figure is 20.81%, which amends the preliminary figure of 21.34%.

106
Only ordinary EPR Fee net of compensation procedures.

107
The indicator relating to the total resources used reported in 2023, with a value of €1,350,000, has been removed as no final figures were available at the time of preparing this statement. The funds for the year in question are reported in chapter "2.3 Local areas", pag. 61 of this document.

No.	Specific programme	Description	Goal	2024 indicator	2023 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:
				  ○ **+228,000** information sessions on various topics;
				  ○ **+49,000** telephone calls handled on the toll-free number (+6%).
				  ○ **+2,300** responses to written requests for clarification of consortium procedures (-53%).
				• Accounting audit figures requested by EPR Organisation members.
				3 voluntary certifications undertaken (-88%), in addition to:
				  ○ **22** accounting audits requested by EPR Organisation members in 2024 (+69%) (of which 6 already closed in 2024);
				  ○ **15** similar audits completed in 2024 but started in previous years (+20%).
				• **1** incentive/ simplification introduced.
					• Figures for communication through update, awareness-raising and information campaigns:
					  ○ **+600,000** information sessions on various topics;
					  ○ **+46,000** telephone calls handled on the toll-free number);
					  ○ **+4,900** responses to written requests for clarification of consortium procedures.
					• Accounting audit figures requested by EPR Organisation members.
					25 voluntary certifications carried out, as well as:
					  ○ **13** accounting audits requested by EPR Organisation members in 2023 (of which 6 already closed in 2023);
					  ○ **12** similar audits completed in 2023 but started in previous years.
					• **4** incentives/ simplifications introduced.
						1, 5

9	**Institutional relations**	CONAI promotes and supports opportunities for in-depth analysis and discussion with various institutional actors and trade associations in order to strengthen the efficiency, effectiveness, transparency and fitness of the CONAI system.	Proactive, constructive and transparent role towards institutions and trade associations in compliance with the obligations and tasks assigned by law, and promotion of senior management with regard to institutional events.	• **107** institutional meetings (+30%).	• **82** institutional meetings.	3, 5
10	**Education and skills**	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.	• **384** classes (participation in educational competitions) (-80%). • **218** schools (participation in educational competitions) (-35%). • **9,600** primary school participants (participation in educational competitions) (-44%). • **3** universities (-57%). • **410** university students (-90%). • **3** prizes and **+41** scientific article special mentions. • **5** weeks of training for new graduates (+10%). • **70** participants / new graduates (-0.7%).	• **692** classes (participation in educational competitions). • **339** schools (participation in educational competitions). • **17,300** primary school participants (participation in educational competitions). • **7** universities. • **560** university students. • **2** prizes and **2** special mentions. • **4** weeks of training for new graduates. • **75** participants / new graduates.	4
11	**Guidelines and participation**	Improve the participatory role in relation to institutions, public administration and companies, including through the promotion of support tools and/or guidelines.	Drafting of guidelines and tools to support companies and public administrations.	• Publication of Guidelines for Facilitating the Recycling of Steel Packaging. • Green Claims Guidelines: Obligations and Prohibitions – Summary Guide to the New European Directive 2024/825/EU.	• Guidelines for Facilitating the Recycling of Steel Packaging (published 2024).	5
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. • **6** open issues arising from the validation process. • **7** parties adhering to Life Cycle Costing. • **8** parties adhering to PNVD Focus Area.	• **9** parties adhering to the PNVD. • **9** open issues arising from the validation process. • **7** parties adhering to Life Cycle Costing. • **9** parties adhering to PNVD Focus Area. • Participation in national (SUP) and European (Eurostat) working groups and round tables on reporting.	6

→

No.	Specific programme	Description	Goal	2024 indicator	2023 indicator	
14	**Improvements 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 (review of environmental aspects also with respect to the updated context and new stakeholder structure). **in progress** • Maximum integration with the Environmental Management System (EMS) with consortium procedures and practices. • Integration of EMS with other management systems With UNI/PdR 125/2022. **in progress** • Implementation of GHG Protocol and Carbon Zero Strategies. **in progress**	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 (review of 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. • Integration of EMS with other management systems • Implementation of GHG Protocol and Carbon Zero Strategies.	7 8

Determination of significant indirect and direct environmental aspects

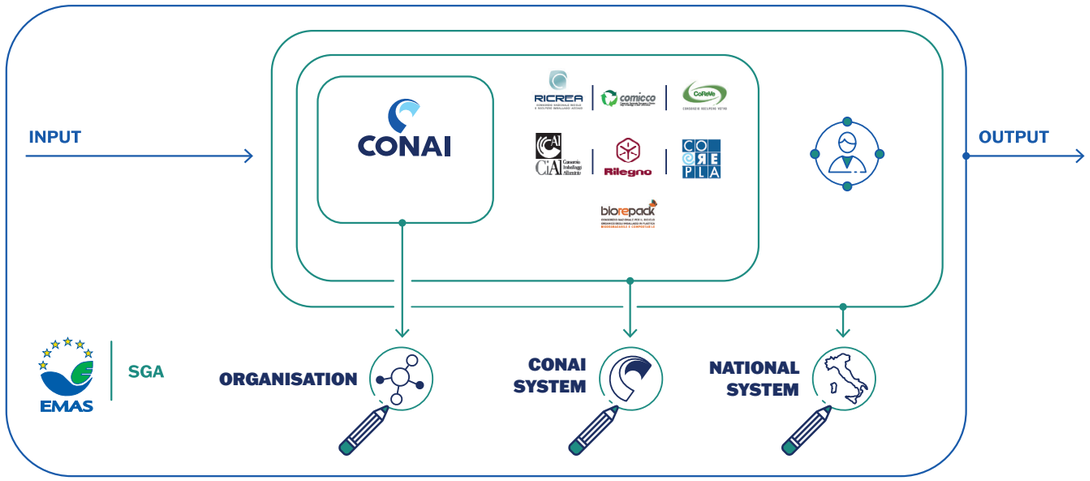
The application of CONAI's Integrated Management System requires a high degree of customisation given the particular structure and mandate of the organisation.
Impacts were therefore classified and analysed basis on various attributes, which are specific to consortium reporting and necessary for determining material topics according to a "risk-based" approach:

Boundary	Area	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 framework, grouping the different impacts by category allowed us to present them consistently in correlation with the same topic. Each topic can therefore be linked to many impacts, which in turn may relate to different boundaries (National System, CONAI System, Organisation).

REPORTING BOUNDARY



INDIRECT

The environmental aspects identified by CONAI and **related to coordination activities** – which are relevant and significant for the environment given the influence of the National System and the CONAI System – are considered **positive** and attributable 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

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 specific characteristics of the CONAI organisation:

1. the relevance of the environmental aspect (closely related to the boundary);
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 outcome of this analysis establishes the reporting priorities, which are summarised in the table below:

CONAI'S SIGNIFICANT INDIRECT ENVIRONMENTAL ASPECTS[108]

	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 boundary 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. In the Environmental Statement Requirements section, there is a matrix that provides exact references to the sections in accordance with Annex IV of EC Regulation 2009/1221.

108

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 is not related to CONAI's activities.

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 related to:

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

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[109].

There have been no further changes in the reporting boundary since the previous update of the Environmental Statement.

In relation to the significant environmental aspects defined above, relevant environmental performance indicators are set out in the following sections[110].

CONAI'S SIGNIFICANT DIRECT ENVIRONMENTAL ASPECTS

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

109

Extreme weather events can affect business operations and the management of operational sites. For example, heavy rainfall can cause flooding due to rivers bursting their banks or the sewerage system becoming saturated. The organisation monitors weather conditions as far as possible, assessing the costs and actions required to minimise environmental impact.

110

Environmental Statement requirements.

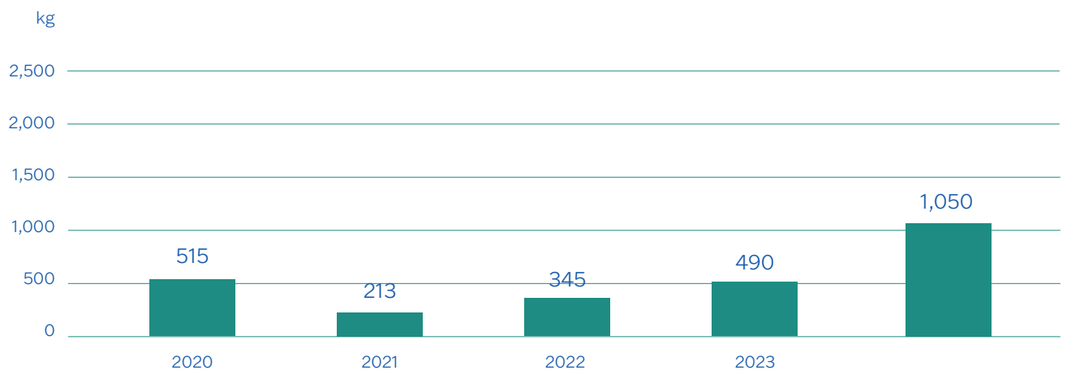
Management of material and waste in offices

111

In accordance with the requirements of Annex IV of the EMAS Regulation, the data reported in the previous Environmental Statement for the year 2023 are reported in Appendix "H.1", pag. 243 .

In the Milan and Rome offices, paper purchases have increased in recent years, mainly due to the gradual end of the health emergency and the greater presence of staff on site. Compared to the previous Environmental Statement, reporting methods have been further updated and corrected, also applied to the time series[111], and now take into account both actual changes in consumption and stock dynamics.

PAPER PURCHASED IN THE MILAN AND ROME OFFICES



Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

In 2024, the amount of paper purchased per employee stood at 15.4 kg, significantly lower than the pre-pandemic average (2008–2019) which was around 50 kg per employee. However, this figure represents a sharp increase compared to 2023 (+113%).

INDICES OF PAPER CONSUMPTION IN THE MILAN AND ROME OFFICES

	2020	2021	2022	2023	2024
kg of paper purchased / no. of employees	8.3	3.3	5.1	7.2	15.4
Employees	62	65	68	68	68
kg of paper purchased / kt of recycling by consortium management	0.10	0.04	0.07	0.11	0.41
Recycling by consortium management (kt)	4,975	5,143	4,826	4,460	4,742

Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

WASTE PRODUCED IN THE MILAN OFFICES

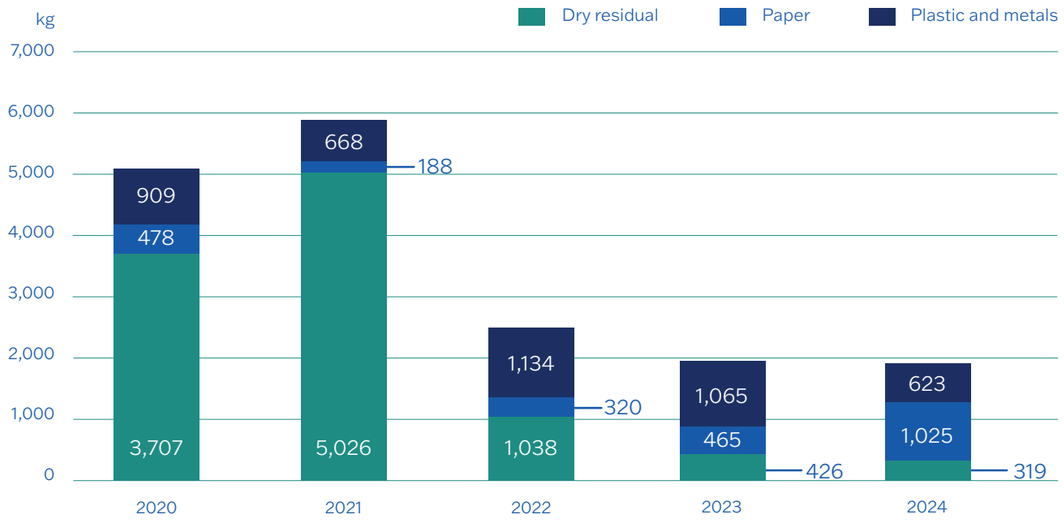
The 2024 figure for non-recyclable dry waste and plastic and metal waste was estimated from measurement of waste disposal from office bins. Meanwhile, for paper waste, the production figure is directly related to the figure for the supply of reams of paper, as illustrated and discussed above. For the Rome office, it is not possible to accurately calculate the amount of waste generated as it is accounted for within the condominium expenses, and therefore cannot be included in this analysis.

As can be seen in the graph below, the estimated total waste production in 2024 was once again less than the previous year (-25.1%). This result is attributable both to updated conversion factors and to accurate recording of bin emptying throughout the year. Specifically, the sample weight for multi-light plastic-metal decreased from 3.68 kg (2022) to 2.88 kg (2023) to 2.16 kg in 2024, while non-recyclable dry waste recorded a further reduction from 1.76 kg (2023) to 1.32 kg in 2024.

It is important to note that the degree to which the containers were filled, which cannot be directly measured, may influence the estimates presented here, meaning the actual waste generation may have been less.

CONAI is continuing its efforts to improve its methodology, adopting tools and solutions that make it possible to obtain ever more accurate and representative data, so as to guarantee an accurate estimate consistent with the actual trend of waste generation.

WASTE PRODUCED IN THE MILAN OFFICES



Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

INDICES OF WASTE PRODUCED IN THE MILAN OFFICES

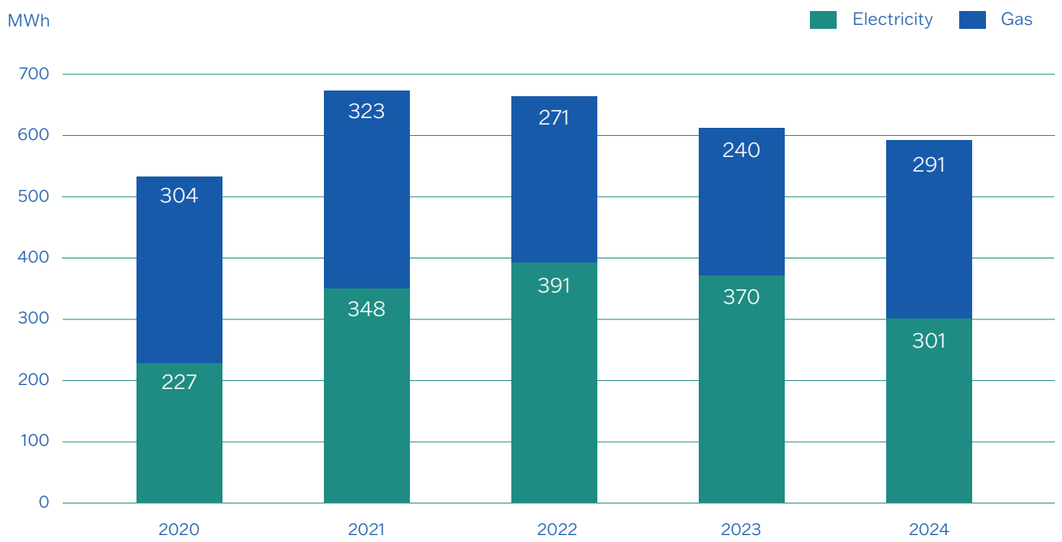
	2020	2021	2022	2023	2024
kg of waste / no. of employees	82.1	90.5	36.7	28.8	28.9
Employees	62	65	68	68	68
kg of waste / kt of recycling by consortium management	1.02	1.14	0.52	0.44	0.41
Recycling by consortium management (kt)	4,975	5,143	4,826	4,460	4,742

Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

Management of energy consumption and emissions[112] in offices

The final energy consumption of CONAI's offices in 2024 was about 592 MWh, of which 51% was electricity consumption and the remaining 49% was methane gas for heating[113]. Compared to the previous year, there was a 20% increase in methane gas, accompanied by an 18% reduction in electricity consumption.

FINAL ENERGY CONSUMPTION OF THE MILAN AND ROME OFFICES[114]



Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

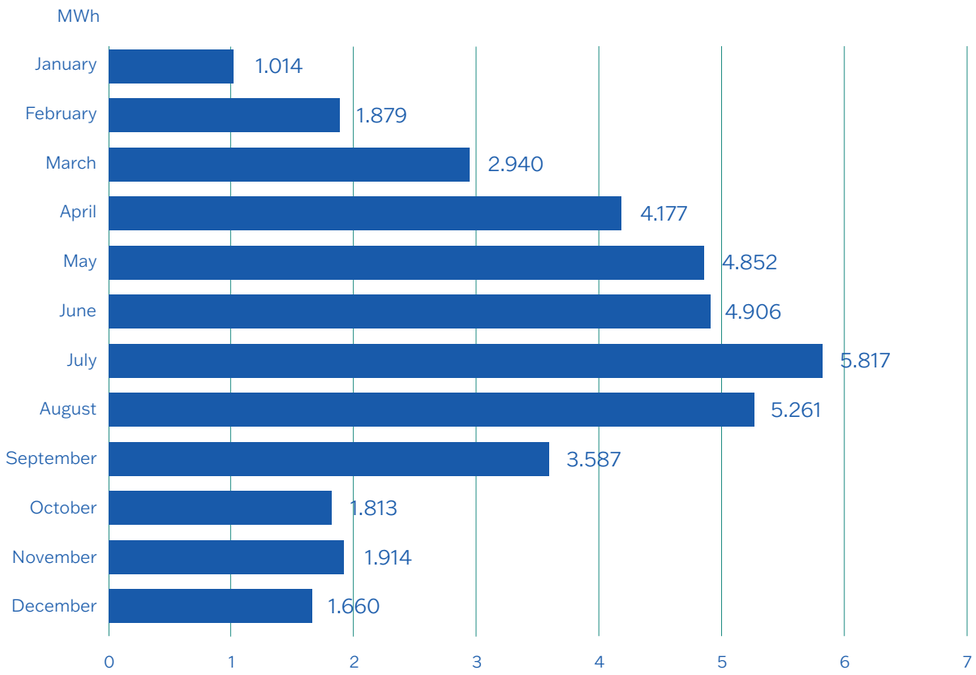
112
Greenhouse gas (GHG) emissions are reported according to Scope 1, Scope 2 and Scope 3 classification, in accordance with the principles of the GHG Protocol. Detailed values and an overall summary of emissions are provided in the dedicated table in Appendix "H.2.1", pag. 247 of this document.

113
The figure excludes the methane gas consumption of the Rome office.

114
Conventional calorific value ARERA P = 0.038576 GJ/Sm³, conversion factor 38.57 MJ/kWh ÷ 3.6 = 10.71 kWh/Sm³

The reduction and subsequent stabilisation of consumption over the years is mainly attributable to the efficiency measures carried out in the building, particularly concerning the plant systems.
2024 was also the first year of renewable energy production through the installation of a photovoltaic energy generation system set up in the Milan office in 2023.
The system has a nominal capacity of 40 kW, and in its first 12 months of operation it has already produced 39 MWh of electricity, saving 7.88 tonnes of CO_2eq[115].

MONTHLY RETURN 2024



Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

115
The saving of 7.88 t CO_2eq was calculated by applying the national average emission factor (0.202 t CO_2eq/MWh, source ISPRA) to the annual production of the photovoltaic plant of 39 MWh. The share is not deducted in the inventory.

Similarly, for electricity supplied from the national grid, the share of renewable energy is considered to be 51.83%[116], calculated based on the energy mix adopted by electricity suppliers according to data published by the Energy Services Manager (Gestore dei Servizi Energetici).
Starting in 2025, for the purposes of the Environmental Statement in accordance with EMAS regulations, it is no longer permitted to report the share of renewable energy without a specific guarantee of origin relating to the supply. Consequently, the energy mix data cannot be used in this update of the Statement, unlike what was reported in the previous document, while further investigations are underway on the correct reporting of photovoltaic energy production.

The following table shows the details broken down by source:

ENERGY CONSUMPTION BY SOURCE OF SUPPLY

	Renewable	Non-renewable	Total
	MWh	MWh	MWh
Electricity	-	301	301
Gas	-	291	291
Total	**-**	**397**	**592**

Source: Generated by CONAI.

GREENHOUSE GAS EMISSIONS OF THE MILAN AND ROME OFFICES (TCO_2EQ)

With regard to greenhouse gas emissions (tCO_2eq), CONAI has updated its emission factors based on data collected over the last five years. For gas supply, data from the Department for Energy Security and Net Zero (fuels section) were used[117]; for electricity, reference was made to the ISPRA Report *CO_2 emissions in the national and regional electricity sector*[118]. This update allowed a redefinition of historical trends[119], which show a peak in 2022 followed by a decrease in 2024. In 2024, the Milan and Rome offices generated around 115 tonnes of CO_2: 52% from electricity consumption (-30%) and the remaining 48% from the use of gas for heating (+21%). The progressive reduction in emissions is mainly attributable to updated emission factors, as illustrated above, as well as improvements in the energy efficiency of the Milan building.

116
www.gse.it/servizi-per-te/fonti-rinnovabili/fuel-mix/documenti

117
www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2024

118
emissioni.sina.isprambiente.it/wp-content/uploads/2025/05/Le-emissioni-di-CO2-nel-settore-elettrico_r413-2025_def.pdf

119
The 2019–2023 time series as published in the last Environmental Statement is available at www.conai.org/download/conai-sustainability-report-2024-english-version/

GREENHOUSE GAS EMISSIONS OF THE MILAN AND ROME OFFICES

Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

Like other indicators, the table below shows consumption and CO_2 emissions in relation to employees and recycled packaging waste.
Both indices show steady improvement over time.

INDICES OF ELECTRICITY AND HEAT CONSUMPTION IN THE MILAN AND ROME OFFICES

	2020	2021	2022	2023	2024
MWh / no. of employees	8.6	10.3	9.7	9.0	8.7
tCO_2eq / no. of employees	2.0	2.4	2.4	1.9	1.7
Employees	62	65	68	68	68
MWh/kt recycling by consortium management	0.11	0.13	0.14	0.14	0.12
$kgCO_2$/kt recycling by consortium management	0.02	0.03	0.03	0.03	0.02
Recycling by consortium management (kt)	4,975	5,143	4,826	4,460	4,742

Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

Energy consumption per employee decreased from 9.0 MWh in 2023 to 8.7 MWh in 2024, while emissions fell from 1.9 tCO_2eq to 1.7 tCO_2eq per employee. Energy consumption per tonne recycled also fell, from 0.14 MWh/kt in 2023 to 0.12 MWh/kt in 2024.

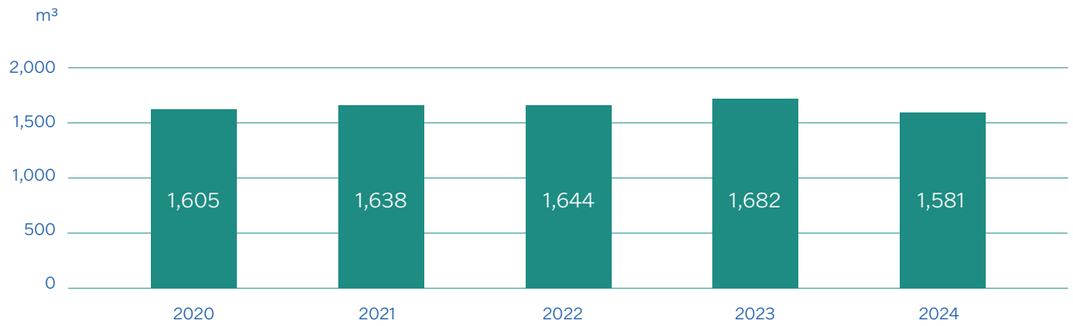
Regarding the gas heating at CONAI's Milan office, it does not generate significant emissions of atmospheric pollutants (SOx, PM10, PM2.5, NOx, NMVOC and CO) and the systems undergo annual inspections. At the Rome office, the heating system is not directly managed by CONAI, but careful monitoring is carried out to ensure compliance with current efficiency and maintenance requirements.

Water consumption in offices

Consumption at the Milan office covers the entire building, including areas occupied by Rilegno, CiAI and Comieco. Water is supplied via the aqueduct and wastewater is discharged into the municipal sewer system. The figure is stable compared to the previous year and relates exclusively to office use. For the Rome office, consumption cannot be determined from general condominium costs; therefore, these data are not included in this analysis.

120
The 2024 figure has not yet been finalised and is determined by the operator's average annual consumption calculated as established in article 10 of Annex A (TIMSII) of ARERA Resolution 218/2016/R/IDR.

WATER CONSUMPTION IN THE MILAN OFFICES[120]



Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

INDICES OF WATER CONSUMPTION IN THE MILAN OFFICES

	2020	2021	2022	2023	2024
m^3 / no. of employees	26	25	24	25	23
Employees	62	65	68	68	68
m^3 / kt of recycling	0.3	0.3	0.3	0.4	0.3
Recycling by consortium management (kt)	4,975	5,143	4,826	4,460	4,742

Source: Generated by the CONAI Research Centre based on data from the Environmental Management System.

Indicators for water consumption per employee and per tonne of packaging waste recycled through consortium management show a slight decrease. Water consumption per employee fell from 25 m³ in 2023 to 23 m³ in 2024, while the figure per tonne recycled decreased from 0.4 m³/kt to 0.3 m³/kt.

Employee transport

CONAI has calculated emissions[121] related to corporate mobility considering three main areas: **business travel**, **corporate fleet** and **employee commuting**. This chapter illustrates the results of the emissions generated by these activities for the reference period, using the "Carbon Footprint Mobility" tool, based on a methodology developed by Zucchetti and validated by Bureau Veritas Italia, in compliance with the GHG Protocol Corporate Standard and ISO 14064-1. The data presented include calculations for 2024 and an update of 2023 data, which are therefore considered final. These data update and replace those reported in the previous 2024 Environmental Statement[122].

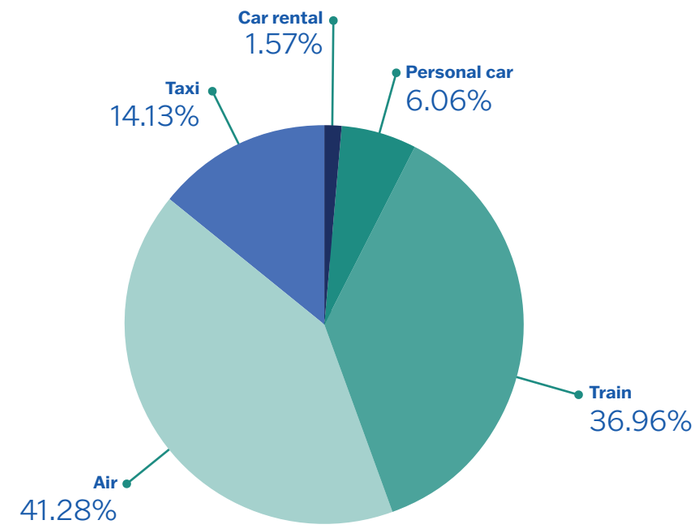
BUSINESS TRAVEL

Emissions from business travel include trips made by employees for work purposes, considering different modes of transport:

- **Air:** Departure and arrival airport data were entered into the application, which calculated the orthodromic distances of flights with an 8% correction factor 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 (2024). The methodology adopted excluded Radiative Forcing (RF) for this activity.
- **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 (2024).
- **Taxi and car rental:** A "spend-based" methodology was adopted, where total travel expenditure was converted into CO_2e emissions using 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 car:** 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 (2024).

TOTAL EMISSIONS FROM BUSINESS TRAVEL

Mode of transport	Total CO_2e 2023	Total CO_2e 2024
	kg	kg
Air	9,943	17,289
Train	731	15,485
Taxi	5,379	5,918
Car rental	368	657
Personal car	4,535	2,538
Overall total	**20,956**	**41,887**



Air travel emissions represent the most significant share, followed by the use of trains and taxis. This indicates the need for emission reduction policies for business travel, with a possible shift towards more sustainable transport modes, such as trains for medium-long distances and car sharing or electric mobility for local travel.

121
Carbon Footprint Mobility software was used to calculate emissions, combining data from business trips, company vehicle use and employees' commutes. The emission factors used for each type of transport come from the DEFRA database (2023, v1.2) and adjusted to the specific modes of transport and fuels 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 of CO_2 and 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 areas considered,

associated with specific GHG Protocol emission reporting areas:

- Business travel: Scope 3, Category 6;
- Corporate fleet: Scope 1 (direct combustion from mobile sources);
- Employee commuting: Scope 3, Category 7.

122
www.conai.org/download/conai-sustainability-report-2024-english-version/

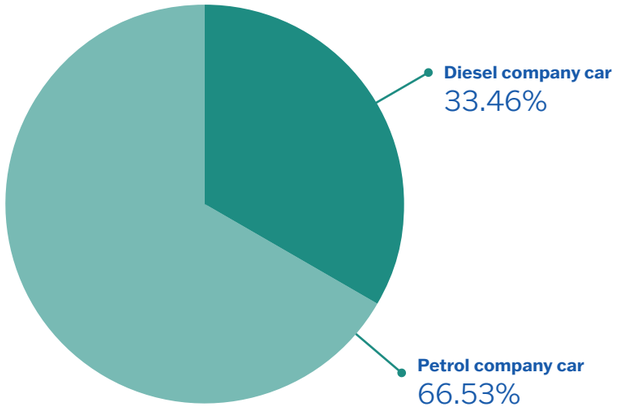
CORPORATE FLEET

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

Company car	Total CO_2e 2023	Total CO_2e 2024
	kg	kg
Diesel	9,792	8,781
Petrol	11,921	17,457
Hydrotreated vegetable oil	-	2
Overall total	**21,713**	**26,240**

Total emissions from the corporate fleet amount to 26,239.55 kg CO_2e. The methodology adopted excluded Well-to-Tank (WTT) emissions, focusing on Tank-to-Wheel (TTW) emissions from fuel combustion. For diesel-powered company cars, the amount of AdBlue was also included.



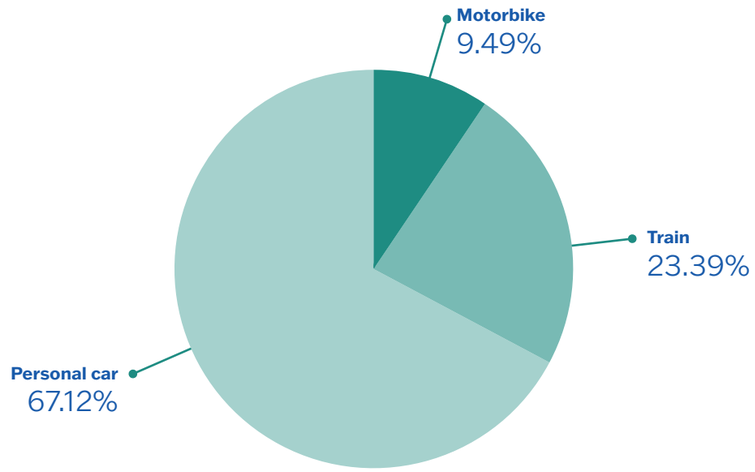
EMPLOYEE COMMUTING

Emissions[123] related to employee trips between home and work (employee commuting) were calculated using a combination of data provided by employees and standardised emission factors.

These tables show the total emissions for each means of transport used by employees for home-work journeys, with an overall total of 24,360.04 kgCO_2e.

TOTAL EMISSIONS FROM EMPLOYEE COMMUTING

Mode of transport	Total CO_2e 2023	Total CO_2e 2024
	kg	kg
Personal car	20,011	16,350
Motorbike	2,312	2,312
Train	5,699	5,699
Overall total	**28,022**	**24,361**



123

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 (2024)** database. The modes of transport considered include personal cars, trains and motorbikes, with emissions calculated in kg CO_2e/km.

Health and safety of workers

Health and safety protection at CONAI is managed in compliance with Legislative Decree 81/2008, based on the Risk Assessment Documents for the Milan and Rome offices and the related Emergency Plans, which are updated as necessary. The safety structure defines roles and responsibilities (Employer, Safety Delegates, Supervisors, RSPP, Medical Officer, RLS, First Aid and Firefighting Emergency Team) on which the respective training activities are planned and establishes the frequency of periodic drills. Monitoring is integrated into Model 231[124], whistleblowing channels[125] and the procedure for reporting harassment and bullying. The following table shows the main indicators for the workforce:

2024 KPIS

Indicator	2024 value
FTE staff within scope	68
Total hours worked	114,430.25
Workplace injuries	0
Commuting injuries	4
Reports of harassment and bullying	0
Fatalities	0
Days of absence due to workplace injury	0
Incidence rate	0
Severity rate	0
Hours of H&S training	112
% of people trained in H&S	66

124
www.conai.org/download/modello-di-organizzazione-gestione-e-controllo-2015/?tmstv=175664529960

125
www.conai.org/download/modello-di-organizzazione-gestione-e-controllo-2015/?tmstv=175664529960

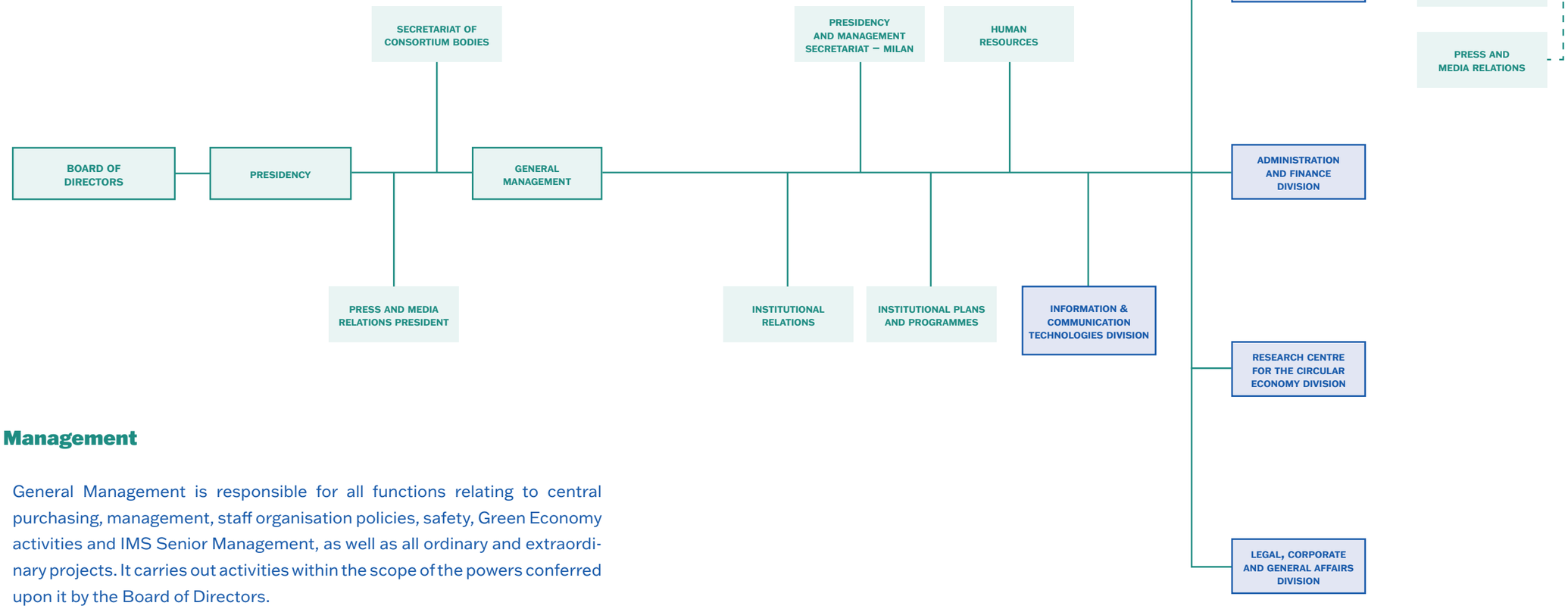
Main reference environmental legal provisions and declaration of conformity

CONAI maintains an up-to-date list of the applicable environmental regulations (both mandatory and voluntary) and periodically assesses its 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.

F Training, welfare and employee management policies

126
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.

The CONAI organisation[126] consists of various departments that report to the General Management on the following processes:



General Management

General Management is responsible for all functions relating to central purchasing, management, staff organisation policies, safety, Green Economy activities and IMS Senior Management, as well as all ordinary and extraordinary projects. It carries out activities within the scope of the powers conferred upon it by the Board of Directors.

Deputy General Management

Deputy General Management is responsible for 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 National Framework Programme Agreement, and manages associated relations with ANCI and local authorities.

Presidency and Management Secretariat – Milan

The Management and Presidency Secretariat is based at the operational office in Milan, where 94% of the entire CONAI organisation operates. In addition to its usual functions, it supports and coordinates top-level activities across the entire organisation.

Presidency and Management Secretariat – Rome

The registered office in Rome hosts the Institutional Relations area and the Deputy General Manager of the Consortium. The secretariat ensures operational efficiency by performing administrative management functions, while also being responsible for fire safety regulations and first aid.

Institutional Relations

Manages relations with national and European sector institutions, working with the International Department on relations with European institutions, and develops relationships with political and institutional decision-makers. It provides regular updates on political activities on issues of institutional interest.

Human Resources

Manages the administrative, organisational and procedural phases of employment relationships. It oversees staff development activities, compensation and benefits plans, recruitment processes, and part of the activities concerning workplace health and safety.

Communication, Press and Media

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. It provides support to the President and the organisational figures responsible for giving interviews and statements on media or social channels representing the Consortium.

Information & Communication Technologies

Manages, maintains and innovates CONAI's information systems. Identifies organisational and information management needs, plans and monitors projects to improve ICT systems. The division defines the technical and functional infrastructure assets, ensuring they are effective, efficient and continuously updated in order to guarantee maximum operation and flexibility for all users. It ensures data and information protection to safeguard the Consortium's information assets.

EPR Fee and Monitoring

Ensures constant monitoring of cases of evasion or avoidance of the EPR Fee. The division carries out information campaigns on the correct application of the consortium rules for packaging producers and users. It develops updates and simplification of consortium procedures for application, declaration, exemption and reimbursement of the EPR Fee. Oversees the flow of responses to queries concerning the interpretation of specific national and consortium regulations raised by companies, trade associations, consultants, etc.

Administration and Finance

Manages, analyses and plans processes related to the Consortium's financial, administrative and accounting activities. Drafts the Consortium's balance sheet, budget and annual financial statements. The division manages the accounts for 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 and investments in accordance with the Consortium's objectives.

Oversees 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.

Research Centre for the Circular Economy

Develops and governs the entire process for defining and consolidating the technical and regulatory content that characterises the Consortium's activities, through the promotion and coordination of strategic project and research initiatives related to the environmental sustainability of packaging and the implementation of the Extended Producer Responsibility principle. Particular focus is given to developing tools for businesses and associations on eco-design and innovation.

The division guides the process of collecting, analysing and monitoring system data on packaging placed on the market, recycling and recovery of packaging and packaging waste at national level. It ensures the annual validation process for procedures used to determine data for placement on the market and recycling/recovery. Develops actions aimed at preventing the generation of packaging waste,

and promotes projects for the advancement of environmental culture and education in cooperation with organisations, institutions, universities and schools of all levels.

The division monitors technical aspects of the evolution of European legislation on environmental issues and its application in Member States (EU 27+3), as well as the activities of EPR schemes and organisations similar to CONAI.

Legal, Corporate and General Affairs

Provides support, assistance and legal advice to the Statutory Bodies, the Presidency, the General Management and the other Divisions and Departments, and to the Packaging Material Consortia on all legal matters of interest to the CONAI EPR Organisation. It examines legal issues and any irregularities relating to all aspects and activities of the Consortium and makes the necessary reports. It also ensures that consortium activities are always carried out within the limits imposed by applicable legislation, eliminating or minimising areas of risk.

Communication and Marketing

Oversees the strategies defined in the Communication Plan and develops communication projects aimed at maximising the promotion and dissemination of CONAI's identity. Manages the technical organisation of national and local events related to sustainability, circular economy and packaging eco-design, whether organised by CONAI or external parties. Monitors and updates the content of the institutional website and the CONAI Community.

Local Relations – National Framework Programme Agreement

Ensures the functioning of local activities implemented in relation to the functions assigned to CONAI and as set out in the National Framework Programme Agreement, in agreement with the relevant public administrations and the optimal local areas where an integrated management system can operate. This system includes the collection, sorting and transport of packaging waste to achieve recovery and recycling targets. The division maintains and fosters coordination between public administrations, the Packaging Material Consortia and other economic operators.

THE CONAI OFFICES

Milan

The building, located in Via Pompeo Litta 5[127], is owned by the Consortium. It was built in 1948 (with an occupied surface area of 2,896 m² and a gross heated volume of 13,609 m³) and is connected to access roads, sewerage, low-voltage power lines and methane gas network, in accordance with municipal and regional regulations.

Part of the 1st floor and all of the 3rd, 4th and 5th floors are reserved for CONAI staff to carry out office duties.

Part of the 1st and 2nd floors are leased to Rilegno, CiAI and Comieco. The building obtained Class C and B energy performance certificates in 2024, based on the different sub-units.

Rome

The office in via Tomacelli 132[128] is an apartment owned by the Pontifical Croatian College of St Jerome, which is responsible for compliance with current regulations.

General information	
Website	www.conai.org
Legal form	Consortium with legal personality under private law, non-profit
Registered office **Rome**	Via Tomacelli, 132
Operational office **Milan**	Via Litta, 5
ATECO 2025 code	38.21.40.
NACE code 2.1	38.21
Telephone no.	+39 02 540441
Toll-free no. (within Italy)	800 337799
No. of employees	68
Surplus for the year	€1,319,799
Turnover	€14,055,141
Company size	Medium-sized company

127
45°31'00.6"N 9°09'35.9"E.

128
41°53'57"N 12°28'40"E.

Equal opportunities and workforce composition

The Consortium's activities are carried out by 68 employees[129].
The following data refer to the total number of employees as of 31 December 2024.
To perform its activities, CONAI also relied on the support of 50 external professionals holding VAT registration.

STAFF COMPOSITION BY CONTRACT TYPE

Permanent	68
Fixed term	0
Full-time	61
Part-time	7

STAFF COMPOSITION BY LEVEL AND GENDER

Level	Women	Men	Total
Executives	3	4	7
Managers	10	9	19
Level A	12	8	20
Level B	13	5	18
Level C	3		3
Level E	1		1
Total	**42**	**26**	**68**

NUMBER OF MANAGERS OF ONE OR MORE OPERATIONAL UNITS

Level/age	Women	Men	Total
Executives			
Age > 55 years	2	2	4
Age 36–55 years	1	2	3
Managers			
Age > 55 years	1	1	2
Age 36–55 years	3	3	6
Total	**7**	**8**	**15**

129
There are no external workers who are not employees and whose tasks are managed by the organisation.

PROMOTIONS ON ANNUAL BASIS

Grade level	Workforce as of 31 December 2023	Workforce as of 31 December 2024	Promotions	
			Women	Men
Executives	8	7		
Managers	17	19	1	1
Level A	21	20		
Level B	18	18		
Level C	3	3		
Level E	0	1		
Total	**67**	**68**		

GROSS ANNUAL SALARY

Grade level	Women	Men
Executives	2.17%	-1.63%
Managers	-4.36%	4.85%
Level A	-1.17%	1.75%
Level B	2.95%	-7.66%

Payments related to additional or miscellaneous services (e.g. overtime, allowances and reimbursements) are excluded from the calculation.

*The percentage values represent the deviations from the average remuneration for each level.

EMPLOYMENT CONTACTS TERMINATED IN 2024

Level/age	Region	Women	Men	Total	% turnover
Executives age > 55 years	Lombardy	0	1	1	
Level A age 36–55 years	Lombardy	0	1	1	
Total		**0**	**2**	**2**	**2.94%**

EMPLOYMENT CONTACTS BEGUN IN 2024

Level/age	Region	Women	Men	Total	% turnover
Level A, B, C, E age 26–35 years	Lombardy	1	1	2	
Level A, B, C, E age 36–55 years	Lombardy	1	0	1	
Total		**2**	**1**	**3**	**4.41%**

Source: Generated by CONAI Human Resources and Staff Administration Division.

Staff remuneration and development

CONAI applies a remuneration policy in line with the National Labour Collective Agreement (CCNL) for the Rubber and Plastics Industry for the Employee and Manager categories, and in line with the CCNL for Industry Executives for the Executive category, defining salaries according to the specific skills of each role. 100% of employees are covered by a CCNL. Personnel costs are duly reported in the Financial Statements and regulated through the Human Resources Management Procedure within the Organisation, Management and Control Model[130]. The organisation ensures that all employees receive a salary equal to or above the minimum levels established by the applicable National Labour Collective Agreement, in compliance with current legislation. This commitment reflects CONAI's intention to promote decent working conditions and safeguard fundamental workers' rights, contributing to the economic and social well-being of its people. Personnel costs for the reporting period amount to €5,972,000, unchanged from the previous year due to turnover and salary dynamics, which recorded a 3% increase on a per-capita basis[131]. Annual evaluations of employee performance and professional development are planned, leading to salary review interventions, with percentages authorised each year by the Board of Directors.
Currently, no evaluations are planned regarding employees' environmental performance.
There are no transition assistance plans to support employees approaching retirement or termination of employment. Severance pay (TFR) is settled at the end of employment for retirement and/or voluntary resignation, or upon documented request for advance payment.

CONAI strictly enforces the prohibition of child or forced labour and the principles of its Code of Ethics; therefore, no cases of child/forced labour or similar situations have been identified.

In 2024, no accidents were recorded within CONAI offices. However, four commuting accidents occurred: three during home-to-work travel and one during a business trip. No fatalities were reported.

Welfare and industrial relations

In 2024, CONAI expanded the offerings of its Welfare platform, leveraging regulatory opportunities such as reimbursement of energy expenses – initiatives that confirm the Consortium's commitment to ensuring care and well-being for its people.
Work continued on managing and implementing the company Welfare platform, financed "on top" by CONAI. The public Welfare service managed by BONOOS was also extended, complementing the plan with benefits linked to public offerings. This approach connects CONAI employees with Public Administration, mirroring the Consortium's role as a bridge between companies and institutions in environmental policy and proper waste management.

In the Rewards System, key initiatives include supplementary healthcare and insurance for non-work-related accidents.
In addition, all workers have access to a company mobile phone for mixed use, electronic meal vouchers benefiting from maximum tax exemption for the category, and paid leave in addition to the amount provided by the National Labour Collective Agreement.

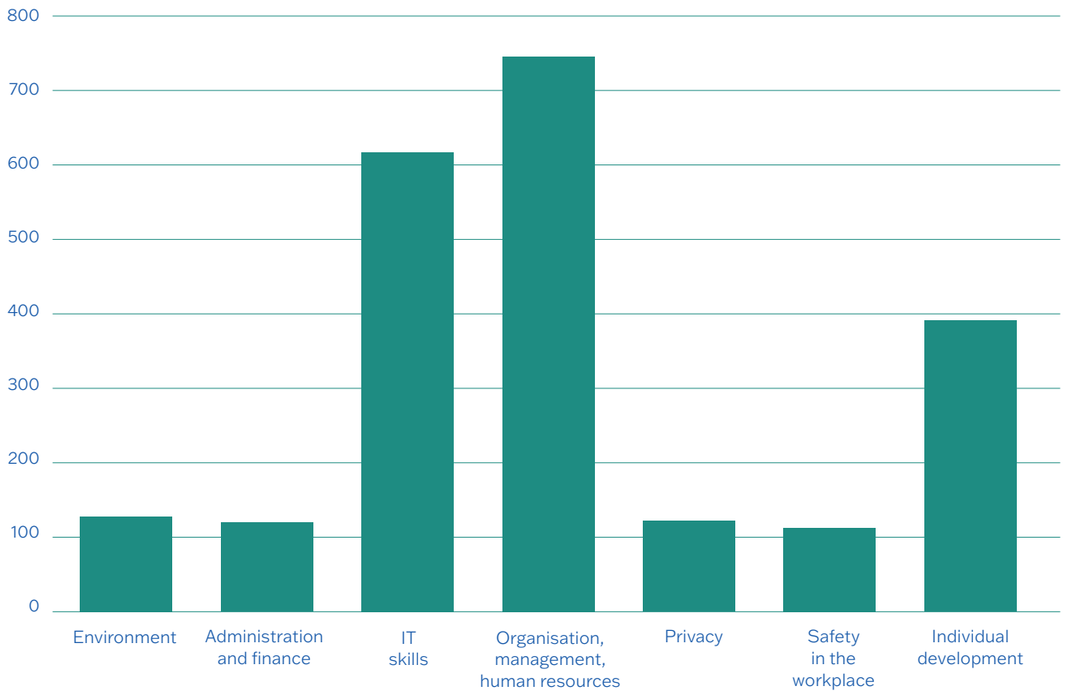
The choice to maintain alternating in-office and remote work proved successful, given the high quality standards guaranteed by employees. This resource management policy has enabled CONAI to remain attractive and competitive in recruiting processes, as confirmed during interviews with potential candidates.
In 2024, 98.51% of eligible employees adopted remote working.
Following positive results, in November 2024 CONAI Management announced its intention to continue remote working in 2025, introducing a new Regulation based on the previous agreement, except for the number of available days, which will decrease from 12 to 10 days per month.

Training hours more than doubled in 2024, reaching 2,228 compared to 938 in 2023.
The strong focus on professional development included highly technical topics, including through internal training sessions designed to share and leverage CONAI employees' considerable know-how.
Soft skills development was undoubtedly the highlight of the 2024 training plan. Almost 30% of total training hours were invested in developing relational skills, awareness and emotional agility, and strengthening managerial competencies.
Coaching and soft skills activities were mainly financed through interprofessional joint funds Fondimpresa and Fondirigenti.
There were 128 hours of training dedicated to environmental topics.
Additionally, 267 hours of training/information were organised by CONAI employees themselves, receiving highly positive feedback from internal participants.

130
Additional workforce information available in Appendix "H.2.2", pag. 248 – Table C2.

131
Management Report and Financial Statements 2025.

DISTRIBUTION OF TRAINING HOURS BY THEMATIC MACRO AREA[132]



Source: Generated by CONAI Human Resources and Staff Administration Division.

DISTRIBUTION OF TRAINING HOURS BY GENDER AND LEVEL

Source: Generated by CONAI Human Resources and Staff Administration Division.

132
Average hours of training by gender:
women 31.29 – men 33.85.

G Tables attached to the study “Business models in the recycling sector in EU countries”

→ Descriptive statistics for the entire sample show a higher median share price and larger size and indebtedness for companies operating under a Cooperative EPR scheme. Conversely, the investment efficiency indicator is significantly higher where a Competitive EPR scheme is adopted.

Table 4 illustrates the descriptive statistics for the entire sample. Specifically, in median terms, the share price is €5.20, while the return on total assets expressed as a percentage is around 3%. Regarding company size, the median value of total assets ranges between a maximum of €714 million and a minimum of €6.74 million, settling at around €125 million. As for the level of indebtedness and investment efficiency, the median values are 53.4% and 4.2%, respectively. Tables 4a and 4b report descriptive statistics for the sub-samples of companies adopting a Competitive or Cooperative EPR scheme at national level. Overall, the sample is evenly distributed (68 Competitive EPR companies vs 69 Cooperative EPR companies).

TABLE 4 – DESCRIPTIVE STATISTICS

	Average	Median	Max	Min	SD	Kurtosis
ROA	2.501	3.34	12.100	-13.55	6.193	3.621
Share price	12.864	5.185	63.330	.18	17.258	5.29
Total assets	202.369	125.73	714.050	6.74	209.754	3.313
Leverage	78.343	53.448	303.086	.342	79.625	4.552
Efficiency ratio	4.986	4.2	14.347	.268	3.81	3.193

Source: LSEG.

TABLE 4A – DESCRIPTIVE STATISTICS (COMPETITIVE EPR SCHEME)

No. 68	Average	Median	Max	Min	SD	Kurtosis
ROA	2.235	3.53	12.100	-13.55	6.804	3.347
Share price	11.462	4.52	63.330	.18	16.09	6.153
Total assets	164.466	104.94	714.050	6.74	188.633	5.154
Leverage	70.287	47.962	303.086	.342	72.747	5.305
Efficiency ratio	5.339	4.492	14.347	.268	3.902	3.033

Source: LSEG.

TABLE 4B – DESCRIPTIVE STATISTICS (COOPERATIVE EPR SCHEME)

No. 69	Average	Median	Max	Min	SD	Kurtosis
ROA	2.749	3.19	12.100	-13.55	5.553	3.581
Share price	14.088	5.87	63.330	.18	18.135	4.678
Total assets	235.45	154.35	714.050	6.74	221.429	2.484
Leverage	85.255	57.786	303.086	.342	84.506	3.986
Efficiency ratio	4.666	3.928	14.347	.268	3.698	3.325

Source: LSEG.

→ The results show a positive relationship between the packaging recycling rate and share price performance for companies with EPR schemes, both competitive and cooperative. However, only for companies with a Cooperative EPR scheme is the coefficient statistically significant (p-value < 0.001).

Table 5 presents the results of the empirical analysis for the entire sample for model (a). Specifically, four different specifications are reported for the respective models: i) FE model with firm-level fixed effects ($Y= R_{i,t}$); ii) FE model with firm-level fixed effects and interaction variables ($Y= R_{i,t}$); iii) FE model with firm-level fixed effects and time dummies ($Y= R_{i,t}$); iv) FE model with firm-level fixed effects, interaction variables, and time dummies ($Y= R_{i,t}$). Tables 5a and 5b report estimates separately for the sub-samples of companies operating under a Competitive or Cooperative EPR scheme.

TABLE 5 – RESULTS ($Y = R_{i,t}$)

	(i) $R_{i,t}$	(ii) $R_{i,t}$	(iii) $R_{i,t}$	(iv) $R_{i,t}$
$R_{i,t-1}$	-.002	-.005	.026	.023
	(.025)	(.026)	(.029)	(.03)
$Size_{i,t}$	**-.452*** **	-.419	**-.482*** **	-.336
	(.088)	(.266)	(.094)	(.267)
$Leverage_{i,t}$	.042	.166	.033	.126
	(.054)	(.318)	(.048)	(.299)
$Efficiency\ ratio_{i,t}$	-.056	**-.479** **	-.071	**-.58*** **
	(.045)	(.186)	(.044)	(.18)
$Market\ Volatility_{i,t}$	**.019*** **	**.019*** **	**-.502*** **	**-.501*** **
	(.003)	(.003)	(.115)	(.118)
$\Delta HICP_{i,t}$	-0.0003	-0.0003	-0.00001	-0.00001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)
$Recycling\ rate_{i,t}$	.008	.008	.005	.006
	(.005)	(.005)	(.006)	(.006)
$Size*Recycling\ rate_{i,t}$		-.001		-.003
		(.004)		(.004)
$Leverage*Recycling\ rate_{i,t}$		-.002		-.002
		(.005)		(.005)
$Efficiency*Recycling\ rate_{i,t}$		**.007** **		**.009*** **
		(.003)		(.003)
Constant	-.491	-.485	2.934***	2.865***
	(.307)	(.304)	(.876)	(.877)
Firm-fixed effects	YES	YES	YES	YES
Time dummies	NO	NO	YES	YES
Remarks	1249	1249	1249	1249
R-squared	.057	.061	.18	.186

The table reports the regression results using different specifications: i) FE model with firm-level fixed effects; ii) FE model with firm-level fixed effects and interaction variables; (iii) FE model with firm-level fixed effects and time dummies; iv) FE model with firm-level fixed effects, interaction variables and time dummies. Standard errors are in parentheses. Time series: 2000–2024. *** p<.01, ** p<.05, * p<1.

TABLE 5A – RESULTS ($Y = R_{i,t}$ COMPETITIVE EPR SCHEME)

	(i) $R_{i,t}$	(ii) $R_{i,t}$	(iii) $R_{i,t}$	(iv) $R_{i,t}$
$R_{i,t}$	-.008	-.014	.011	.003
	(.033)	(.034)	(.041)	(.043)
$Size_{i,t}$	**-.516*** **	-.644	**-.684*** **	**-.721** *
	(.169)	(.464)	(.142)	(.416)
$Leverage_{i,t}$	.116	**.702** *	.148**	.552
	(.075)	(.369)	(.065)	(.373)
$Efficiency\ ratio_{i,t}$	-.088	**-.819** **	-.086	**-.886** **
	(.062)	(.356)	(.057)	(.343)
$Market\ Volatility_{i,t}$	**.016*** **	**.017*** **	**-.493*** **	**-.494*** **
	(.005)	(.005)	(.179)	(.183)
$\Delta HICP_{i,t}$	**-.001** **	**-.001** **	-0.0002	-0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)
$Recycling\ rate_{i,t}$	-.001	-.002	-.004	-.003
	(.008)	(.007)	(.009)	(.008)
$Size*Recycling\ rate_{i,t}$		.002		.001
		(.008)		(.006)
$Leverage*Recycling\ rate_{i,t}$		-.01		-.007
		(.006)		(.006)
$Efficiency*Recycling\ rate_{i,t}$		**.012** **		**.013** **
		(.006)		(.006)
Constant	-.01	.085	3.493**	3.416**
	(.485)	(.455)	(1.345)	(1.341)
Firm-fixed effects	YES	YES	YES	YES
Time dummies	NO	NO	YES	YES
Remarks	598	598	598	598
R-squared	.06	.07	.212	.222

The table reports the regression results using different specifications: i) FE model with firm-level fixed effects; ii) FE model with firm-level fixed effects and interaction variables; (iii) FE model with firm-level fixed effects and time dummies; iv) FE model with firm-level fixed effects, interaction variables and time dummies. Standard errors are in parentheses. Time series: 2000–2024. *** p<.01, ** p<.05, * p<1.

TABLE 5B – RESULTS ($Y= R_{i,t}$ COOPERATIVE EPR SCHEME)

	(i) Ri,t	(ii) Ri,t	(iii) Ri,t	(iv) Ri,t
$R_{i,t}$	.01	.007	.012	.01
	(.038)	(.038)	(.048)	(.049)
$Size_{i,t}$	**-.422*** **	-.049	**-.221** **	-.05
	(.111)	(.315)	(.093)	(0.38)
$Leverage_{i,t}$	-.005	-.084	-.033	-.103
	(.067)	(.352)	(.056)	(.36)
$Efficiency\ ratio_{i,t}$	-.012	**-.341** **	-.017	**-.465*** **
	(.065)	(.169)	(.064)	(.17)
$Market\ volatility_{i,t}$	**.022*** **	**.022*** **	**-.532*** **	**-.531*** **
	(.004)	(.004)	(.157)	(.16)
$\Delta HICP_{i,t}$	-.00001	-.00002	-.00004	-.00002
	(.0002)	(.0002)	(.0004)	(.0003)
$Recycling\ rate_{i,t}$	**.014** **	**.015** **	**.029*** **	**.030*** **
	(.007)	(.006)	(.009)	(.011)
$Size*Recycling\ rate_{i,t}$		-.006		-.003
		(.005)		(.006)
$Leverage*Recycling\ rate_{i,t}$		.001		.001
		(.006)		(.006)
$Efficiency*Recycling\ rate_{i,t}$		**.006***		**.008*** **
		(.003)		(.003)
Constant	**-.783** **	**-.808** **	1.4917	1.465
	(.373)	(.35)	(1.12)	(1.23)
Firm-fixed effects	YES	YES	YES	YES
Time dummies	NO	NO	YES	YES
Remarks	651	651	651	651
R-squared	.072	.077	0.21	0.22

The table reports the regression results using different specifications: i) FE model with firm-level fixed effects; ii) FE model with firm-level fixed effects and interaction variables; (iii) FE model with firm-level fixed effects and time dummies; iv) FE model with firm-level fixed effects, interaction variables and time dummies. Standard errors are in parentheses. Time series: 2000–2024. *** p<.01, ** p<.05, * p<1.

→

→ The analysis shows a negative relationship between recycling rate and ROA in all models, but it is not significant. However, in the last specification, the interaction between recycling rate and financial leverage is significant (p < 0.001) only for companies with a Cooperative EPR scheme.

Table 6 presents the results of the empirical analysis for the entire sample for model (b). Specifically, four different specifications are reported for the respective models: i) FE model with firm-level fixed effects ($Y= ROA_{i,t}$); (ii) FE model with firm-level fixed effects and interaction variables ($Y= ROA_{i,t}$); (iii) FE model with firm-level fixed effects and time dummies ($Y= ROA_{i,t}$); iv) FE model with firm-level fixed effects, interaction variables and time dummies ($Y= ROA_{i,t}$).

Table 6a and 6b report estimates separately for the sub-samples of companies operating under a Competitive or Cooperative EPR scheme. The results highlight a negative relationship between the recycling rate of packaging waste and return on total assets, both for companies with a Competitive EPR scheme and those with a Cooperative EPR scheme. However, in the last specification of model (iv) in Table 4b, the coefficient for the recycling rate of packaging waste alone is not significant, while the interaction variable between recycling rate and financial leverage becomes significant at the 1% level (p-value < 0.001) for companies subject to a Cooperative EPR scheme.

TABLE 6 – RESULTS ($Y= ROA_{i,t}$)

	(i) $ROA_{i,t}$	(ii) $ROA_{i,t}$	(iii) $ROA_{i,t}$	(iv) $ROA_{i,t}$
$ROA_{i,t-1}$	**.316*** **	**.311*** **	**.308*** **	**.302*** **
	(.044)	(.045)	(.045)	(.046)
$Size_{i,t}$	.051	-.098	-.013	-.141
	(.09)	(.367)	(.088)	(.353)
$Leverage_{i,t}$	**-.091** *	.212	-.08	.239
	(.053)	(.222)	(.05)	(.239)
$Efficiency\ ratio_{i,t}$	.054	-.306	**.057** *	-.301
	(.035)	(.185)	(.034)	(.183)
$Market\ volatility_{i,t}$	-.002	-.002	-.099	-.106
	(.002)	(.002)	(.132)	(.131)
$\Delta HICP_{i,t}$	**0.0004** **	**0.0004*** **	-0.00001	-0.00001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)
$Recycling\ rate_{i,t}$	-.006	-.006	-.008	-.006
	(.004)	(.004)	(.005)	(.005)
$Size*Recycling\ rate_{i,t}$		.002		.002
		(.006)		(.005)

→

	(i) $ROA_{i,t}$	(ii) $ROA_{i,t}$	(iii) $ROA_{i,t}$	(iv) $ROA_{i,t}$
$Leverage*Recycling\ rate_{i,t}$		-.005		-.005
		(.003)		(.004)
$Efficiency*Recycling\ rate_{i,t}$		**.006****		**.006****
		(.003)		(.003)
Constant	.268	.278	1.189	1.14
	(.251)	(.247)	(.858)	(.864)
Firm-fixed effects	YES	YES	YES	YES
Time dummies	NO	NO	YES	YES
Remarks	1307	1307	1307	1307
R-squared	.154	.161	.218	.225

The table reports the regression results using different specifications: i) FE model with firm-level fixed effects; ii) FE model with firm-level fixed effects and interaction variables; (iii) FE model with firm-level fixed effects and time dummies; iv) FE model with firm-level fixed effects, interaction variables and time dummies. Standard errors are in parentheses. Time series: 2000–2024. *** p<.01, ** p<.05, * p<1.

TABLE 6A – RESULTS ($Y= ROA_{i,t}$ COMPETITIVE EPR SCHEME)

	(i) $ROA_{i,t}$	(ii) $ROA_{i,t}$	(iii) $ROA_{i,t}$	(iv) $ROA_{i,t}$
$ROA_{i,t-1}$	**.278*****	**.281*****	**.26*****	**.265*****
	(.06)	(.056)	(.064)	(.06)
$Size_{i,t}$	-.051	.021	**-.195***	-.168
	(.125)	(.566)	(.113)	(.505)
$Leverage_{i,t}$	-.006	**.797****	.004	**.809****
	(.094)	(.329)	(.092)	(.333)
$Efficiency\ ratio_{i,t}$	.035	-.189	.039	-.096
	(.042)	(.301)	(.046)	(.295)
$Market\ volatility_{i,t}$	.003	.004	-.204	-.206
	(.004)	(.003)	(.217)	(.216)
$\Delta HICP_{i,t}$	**.001****	**.001****	0.0001	0.0001
	(0.0003)	(0.0003)	(0.0003)	(0.0003)
$Recycling\ rate_{i,t}$	.004	.003	.009	.011
	(.008)	(.008)	(.009)	(.009)
$Size*Recycling\ rate_{i,t}$		0.0002		.001
		(.009)		(.008)

→

	(i) $ROA_{i,t}$	(ii) $ROA_{i,t}$	(iii) $ROA_{i,t}$	(iv) $ROA_{i,t}$
$Leverage*Recycling\ rate_{i,t}$		**-.013*****		**-.013*****
		(.005)		(.005)
$Efficiency*Recycling\ rate_{i,t}$		.004		.002
		(.005)		(.004)
Constant	-.408	-.309	.778	.663
	(.473)	(.474)	(1.448)	(1.436)
Firm-fixed effects	YES	YES	YES	YES
Time dummies	NO	NO	YES	YES
Remarks	654	654	654	654
R-squared	.104	.116	.163	.173

The table reports the regression results using different specifications: i) FE model with firm-level fixed effects; ii) FE model with firm-level fixed effects and interaction variables; (iii) FE model with firm-level fixed effects and time dummies; iv) FE model with firm-level fixed effects, interaction variables and time dummies. Standard errors are in parentheses. Time series: 2000–2024. *** p<.01, ** p<.05, * p<1.

TABLE 6B – RESULTS ($Y= ROA_{i,t}$ COOPERATIVE EPR SCHEME)

	(i) $ROA_{i,t}$	(ii) $ROA_{i,t}$	(iii) $ROA_{i,t}$	(iv) $ROA_{i,t}$
$ROA_{i,t-1}$	**.356*****	**.34*****	**.35*****	**0.265*****
	(.067)	(.072)	(.061)	(0.06)
$Size_{i,t}$	.189	-.096	.193	-.168
	(.118)	(.293)	(.124)	(.505)
$Leverage_{i,t}$	**-.131****	-.157	**-.111****	.809
	(.055)	(.249)	(.048)	(0.333)
$Efficiency\ ratio_{i,t}$	.079	-.329	.092	-.095
	(.063)	(.222)	(.055)	(0.295)
$Market\ volatility_{i,t}$	**-.006****	**-.006****	**.002****	-.206
	(.003)	(.003)	(.13)	(.216)
$\Delta HICP_{i,t}$	-.0002	-.0002	-.0002	.00002
	(0.0001)	(0.0001)	(0.0002)	(0.0003)
$Recycling\ rate_{i,t}$	**-.011****	**-.011*****	**-.010****	0.0109
	(.004)	(.004)	(.005)	(.009)
$Size*Recycling\ rate_{i,t}$		.004		.001
		(.004)		(.008)
$Leverage*Recycling\ rate_{i,t}$		0.0002		**-.013*****
		(.004)		(.005)

→

	(i) $ROA_{i,t}$	(ii) $ROA_{i,t}$	(iii) $ROA_{i,t}$	(iv) $ROA_{i,t}$
$Efficiency*Recycling\ rate_{i,t}$		**.007***		.002
		(.004)		(0.004)
Constant	**.588****	**.605*****	.719	
	(.23)	(.218)	(.943)	
Firm-fixed effects	YES	YES	YES	YES
Time dummies	NO	NO	YES	YES
Remarks	653	653	653	653
R-squared	.259	.269	0.369	0.173

The table reports the regression results using different specifications: i) FE model with firm-level fixed effects; ii) FE model with firm-level fixed effects and interaction variables; (iii) FE model with firm-level fixed effects and time dummies; iv) FE model with firm-level fixed effects, interaction variables and time dummies. Standard errors are in parentheses. Time series: 2000–2024. *** p<.01, ** p<.05, * p<1.

H Reconciliation tables

H.1 Environmental Statement requirements[133]

REGULATION (EC) 1221/2009	CONAI ENVIRONMENTAL STATEMENT – 2025 Update
Article 8, paragraph 3 All documents modified and updated pursuant to paragraph 2 are verified and validated within six months.	"The specific nature of institutional reporting entails: - Acquisition of consolidated data for the reference year (2024) starting from 31 May of the following year (2025). - Acquisition of preliminary data for the current year (2025) starting from 30 September 2025 (exclusively for quantitative data relating to the National System and the CONAI System). For these reasons, processing data for the current year would require excessive reliance on preliminary estimates, which would need systematic revision with each update of the Environmental Statement. This approach does not align with our desire to elevate the environmental statement to a consolidated level by integrating it with 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 at 31 December 2024."

Annex IV REGULATION (EC) 1221/2009	CONAI Environmental Statement – 2023	CONAI Environmental Statement – 2024
a. A summary of the organisation's activities, products and services, the organisation's relationship with any parent organisations as appropriate, and a clear, unambiguous description of the scope of EMAS registration, including a list of sites covered by the registration.	• The National Packaging Consortium	• 4.1 The National Packaging Consortium
b. The environmental policy and a brief overview of the governance structure underpinning the organisation's environmental management system.	• The National Packaging Consortium • Environmental policy	• 4.1 The National Packaging Consortium • E. System and organisation

133 In compliance with EC Regulation 2017/1505 and EU Regulation 2026/2018.

Annex IV REGULATION (EC) 1221/2009	CONAI Environmental Statement – 2023	CONAI Environmental Statement – 2024
c. A description of all significant environmental aspects, both direct and indirect, that generate significant environmental impacts for the organisation, a brief explanation of the approach used to determine their relevance, and an explanation of the nature of the impacts associated with these aspects.	• CONAI and its stakeholders • Determination of impacts • CONAI in figures • Environmental Management System • Determination of significant direct and indirect environmental aspects	• 3. The impacts of the system: figures for 2024 • D. CONAI and its stakeholders • E. System and organisation
d. A description of the environmental objectives and targets in relation to significant environmental aspects and impacts.	• Environmental Programme	• E. System and organisation
e. A description of 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	• 4.3 CONAI and its organisation • 3. The impacts of the system: figures for 2024 • E. System and organisation
f. A summary of available data on the organisation's environmental performance regarding its significant environmental aspects. **The report includes both key indicators and specific environmental performance indicators as set out in section C. Where environmental objectives and targets exist, the corresponding data must be indicated.**	• CONAI in figures	• 3. The impacts of the system: figures for 2024
Key indicators apply to all types of organisations. **They mainly concern the following fundamental environmental themes:** **i.** energy efficiency;	• National System – Energy consumption • CONAI System – Energy consumption • Organisation – Management of energy consumption and emissions in offices	• B.5 The environmental benefits of managing packaging and packaging waste • E. System and organisation
ii. material efficiency;	• National System – Consumption of raw materials • CONAI System – Consumption of raw materials • Organisation – Management of material and waste in offices	• B.5 The environmental benefits of managing packaging and packaging waste • E. System and organisation
iii. water;	• National System – Call for Eco-design Projects • Organisation – Water consumption in offices	• 2. Value for organisations and businesses • B.5 The environmental benefits of managing packaging and packaging waste • E. System and organisation
iv. waste;	• CONAI in figures • Organisation – Management of material and waste in offices	• 3. The impacts of the system: figures for 2024 • E. System and organisation
v. biodiversity;		
vi. emissions.	• CONAI System – Greenhouse gas emissions and climate change • Organisation – Management of energy consumption and emissions in offices	• B.5 The environmental benefits of managing packaging and packaging waste • E. System and organisation • H.2.1 Reduction and reporting of greenhouse gas (GHG) emissions

Annex IV REGULATION (EC) 1221/2009	CONAI Environmental Statement – 2023	CONAI Environmental Statement – 2024
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	• E. System and organisation
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		

H.2 | VSME matrix

Topic: Environment / Social / Governance	DR number and title	Chapter section
Basic Module		
General information	B1 – Basis for preparation	• Introduction • F. Training, welfare and employee management policies
	B2 – Practices, policies and future initiatives for transitioning towards a more sustainable economy	• 2.2 Businesses • 2.3 Local areas • 2.4 Culture • H. Reconciliation tables
Environment	B3 – Energy and greenhouse gas emissions	• Appendix • E. System and organisation • H. Reconciliation tables
	B4 – Pollution of air, water and soil	Not applicable
	B5 – Biodiversity	Not applicable
	B6 – Water	Not applicable
	B7 – Resource use, circular economy and waste management	• 3. The impacts of the system: figures for 2024 • B. Accountability: traceability, reliability and robustness of data
	B8 – Workforce – General characteristics	• F. Training, welfare and employee management policies
	B9 – Workforce – Health and safety	• F. Training, welfare and employee management policies
	B10 – Workforce – Remuneration, collective bargaining and training	• F. Training, welfare and employee management policies
	B11 – Convictions and fines for corruption and bribery	• 4.3.1 Organisation, Management and Control model • 4.3.3 Fight against corruption

Topic: Environment / Social / Governance	DR number and title	Chapter section
Comprehensive Module		
Environment	Consideration when reporting on GHG emissions under B3 (Basic Module)	
	C1 – Strategy: Business Model and Sustainability – Related Initiatives	• 2.2 Businesses • 2.3 Local areas • 2.4 Culture • H. Reconciliation tables
Environment	C2 – Description of practices, policies and future initiatives for transitioning towards a more sustainable economy	• 2.2 Businesses • 2.3 Local areas • 2.4 Culture • H. Reconciliation tables
	C3 – GHG emissions reduction target	• H. Reconciliation tables
	C4 – Climate risks	• H. Reconciliation tables
	C5 – Additional (general) workforce characteristics	• F. Training, welfare and employee management policies • E. System and organisation
	C6 – Additional own workforce information – Human rights policies and processes	• 4.3.1 Organisation, Management and Control model
	C7 – Severe human rights incidents	• F. Training, welfare and employee management policies • E. System and organisation
	C8 – Revenues from certain sectors and exclusion from EU reference benchmarks	• C.1 Financial statements of the CONAI System
	C9 – Gender diversity ratio in governance body	• 4.1 The National Packaging Consortium

H.2.1 Reduction and reporting of greenhouse gas (GHG) emissions

CONAI monitors and annually discloses its greenhouse gas emissions (Scope 1, Scope 2 and Scope 3) within the framework of its Environmental Management System, certified to ISO 14001 and registered under EMAS, ensuring traceability and data accuracy. Although quantitative targets have not yet been formalised, in 2024 the Consortium initiated a process to define medium-term objectives in line with the GHG Protocol[134], aimed at progressively reducing direct and indirect emissions.

The table below summarises emissions for each Scope, highlighting the main sources of emissions and their impact on the total.

CATEGORY (GHG PROTOCOL)

Category (GHG Protocol)	Source of emission	Description of activity	Emissions (tCO_2e)	% of total
Scope 1 – Direct emissions	Methane gas for office heating (Milan and Rome)	Combustion of natural gas for heating	55.2	27.66%
	Corporate fleet	Use of company vehicles (TTW)	26.2	13.13%
Total Scope 1			**81.4**	**40.78%**
Scope 2 – Indirect emissions from purchased energy	Electricity from the national grid	Office electricity consumption (Milan and Rome)	59.8	29.96%
Total Scope 2			**59.8**	**29.96%**
Scope 3 – Other indirect emissions	Business travel	Transfers (air, train, taxi, personal car, rental)	41.9	20.99%
	Employee commuting	Home-work journeys	24.4	12.22%
Total Scope 3[135]			**66.3**	**29.26%**
OVERALL TOTAL			**207.5**	**100%**

134

For CONAI, the GHG Intensity indicator (greenhouse gas emissions in relation to turnover) would be of limited significance. The emissions considered in this report relate exclusively to CONAI's offices and direct activities ("offices"), while the Consortium's turnover largely depends on the activities of the Packaging Material Consortia and Self-compliant EPR Organisations.

135

Scope 3 emissions include categories 6 (business travel) and 7 (employee commuting). Self-produced renewable energy fed into the grid is reported as an avoided emissions credit, calculated as a net reduction of indirect emissions, in line with GHG Protocol guidelines.

H.2.2 Practices, policies, initiatives and performance for a sustainable transition

In accordance with the requirements of the VSME standard, this section provides a comprehensive overview of the strategies, practices and policies adopted by CONAI to promote environmental, social and governance sustainability, aimed at supporting the transition towards sustainability.
The included tables:

- **B2 and C2** – existing practices and policies, future initiatives and targets under development, broken down by thematic area;
- **C6** – policies and processes related to human rights and workforce management.

B2 – FUTURE PRACTICES, POLICIES AND INITIATIVES FOR THE TRANSITION TO A MORE SUSTAINABLE ECONOMY

Topic	Practices /policies /existing initiatives?	Publicly available?	Do the policies have targets?	Descriptive notes / Source	Section of document
Climate change	YES	YES	NO	ISO 14001 Environmental Management System and EMAS registration; Documentation available on the www.conai.org website.	• E. System and organisation
Pollution	YES	YES	NO	Management and monitoring of emissions and special waste through ISO 14001 and EMAS; Landfill waste reduction programmes. Data and policies available in the Sustainability Report and on the website.	• E. System and organisation
Water and marine resources	NO	NO	NO	There are no specific policies; the topic is monitored indirectly within the Environmental Management System. The relevance of the topic is considered low for the type of activity carried out by the Consortium (offices).	• E. System and organisation
Biodiversity and ecosystems	NO	NO	NO	This topic is not relevant to CONAI's operational nature. Future collaborations for local protection projects are currently being evaluated.	
Circular economy	YES	YES	Definition of targets in progress	Strategic pillar for CONAI; activities promoting recycling and waste prevention, in line with European policies. Supply chain data and environmental reports are available on the www.conai.org website.	• 2. Value for organisations and businesses • 3. The impacts of the system: figures for 2024 • B. Accountability: traceability, reliability and robustness of data
Internal staff	YES	YES	YES	HR policies and Code of Ethics; UNI/PdR 125:2022 certification for gender equality; ongoing training on sustainability and inclusion. Public documents on the website and in the Sustainability Report.	• 4. Governance, compliance and transparency • F. Training, welfare and employee management policies
Workers in the value chain	NO	NO	NO	Topic currently not applicable: CONAI does not directly manage production supply chains; possible ESG monitoring initiatives for suppliers are being evaluated.	
Local communities involved	YES	YES	NO	Participation in educational and environmental projects with schools and local areas. The activities are described in the Sustainability Report and on the website.	• 2. Value for organisations and businesses • 2.4 Culture
Consumers and end users	YES	YES	NO	Transparent environmental communication (labelling, CONAI campaigns). The initiatives are published on the website and in the annual reports.	• 2. Value for organisations and businesses • A. Prevention measures in waste generation
Business conduct	YES	YES	NO	Transparent environmental communication (labelling, CONAI campaigns). The initiatives are published on the website and in the annual reports.	• 2. Value for organisations and businesses • A. Prevention measures in waste generation

→

C2 – DESCRIPTION OF PRACTICES, POLICIES AND FUTURE INITIATIVES FOR THE TRANSITION TO A MORE SUSTAINABLE ECONOMY

Topic	(1) Existing practices/ policies/initiatives and consequent actions	(2) Future initiatives / Targets	(3) Highest level of management
Climate change	ISO 14001 certified Environmental Management System and EMAS registration; monitoring of energy consumption and GHG emissions (Scope 1 and 2); generation of energy from renewable sources; involvement of energy suppliers in the emission reduction process.	Assessment of carbon footprint and definition of reduction targets.	Head of IMS reporting to Management
Pollution	Management of waste and emissions into the atmosphere as part of the ISO 14001 system; traceability and delivery to authorised facilities; raising awareness among environmental service providers.	Increase in the proportion of waste sent for recycling/ recovery and reduction in landfill disposal; adoption of specific environmental monitoring indicators.	Head of IMS reporting to Management
Water and marine resources	Water consumption limited to office requirements; periodic monitoring of consumption.	No dedicated initiatives planned, as the issue is marginal for the type of activity; continuous monitoring of consumption.	–
Biodiversity and ecosystems	No specific policies; indirect assessment of impacts through the ISO 14001 system.	Assessment of local projects for the protection and recovery of biodiversity.	Head of IMS reporting to Management
Circular economy	Institutional activities promoting the prevention and recycling of packaging; reduction of internal waste; use of photovoltaic energy. Involvement of member firms in eco-design projects.	Increase in the proportion of recycled/recyclable materials in processes and packaging.	Head of IMS reporting to Management
Internal staff	HR policies, Code of Ethics, welfare; ISO 14001 (environmental training); UNI/PdR 125 (gender equality).	Strengthening of training programmes on sustainability and inclusion.	Head of HR + IMS reporting to Management
Workers in the value chain	Currently no structured practices in place; ESG risk is low due to the non-productive nature of the Consortium.	The introduction of minimum ESG criteria for service and consultancy providers is currently being evaluated.	-
Business conduct	Participation in environmental and social initiatives; educational projects with schools/local areas.	Development of a structured programme for engaging with and listening to local communities; reporting on initiatives in the Sustainability Report.	Local Relations Department / Research Centre for the Circular Economy Communication + Management
Consumers and end users	Environmental labelling of packaging in accordance with CONAI; transparent communication on website and campaigns.	Greater transparency on the environmental performance of products.	Research Centre for the Circular Economy – Prevention Department
Business conduct	Code of Ethics, Model 231, anti-corruption policies.	Adoption of an integrated Sustainability Policy and updating of the Code of Ethics to explicitly include ESG issues.	IMS, HR + Management

→

C6 – HUMAN RIGHTS POLICIES AND PROCESSES

CONAI recognises the centrality of people and respect for fundamental rights as essential principles of its activities. The Consortium has adopted an Ethical Code and an Organisation, Management and Control Model pursuant to Legislative Decree 231/2001, instruments that regulate the conduct of employees and collaborators and promote behaviours based on integrity, respect, safety and equality. Furthermore, through UNI/PdR 125:2022 certification, CONAI has formalised its commitment to gender equality and inclusion, integrating these values into HR processes and internal management mechanisms.

Although the Code of Ethics does not yet contain sections specifically dedicated to topics such as child labour, forced labour or human trafficking, the regulatory and organisational framework in which CONAI operates excludes such risks. Employment relationships are based on free consent, mutual trust and compliance with national labour legislation, and the Consortium promotes a safe, dignified and inclusive working environment.

In terms of non-discrimination, CONAI adopts proactive policies to promote equal opportunities, including through training programmes and specific initiatives to enhance diversity. Protection of health and safety at work is guaranteed by the Risk Assessment Document (DVR) and emergency plans, in compliance with current legislation.

Additional principles safeguarded by the Consortium include the prevention of conflicts of interest and compliance with competition rules, supported by internal guidelines and procedures.

CONAI has also implemented a complaints and anonymous reporting mechanism, available both through the corporate whistleblowing channel and via the dedicated email address provided under UNI/PdR 125:2022, managed confidentially by the Head of HR. This system allows the collection and management of any reports of conduct contrary to ethical principles or violations of applicable legislation, ensuring whistleblower protection and transparency of procedures.

EMAS
GESTIONE
AMBIENTALE
VERIFICATA
IT - 001784

This Environmental Statement was verified on 14 November 2025 by RINA SERVICES SpA (accreditation number: IT-V-0002), the first update of the Environmental Statement valid for 2024–2027.

This Sustainability Report was shared with CONAI's main stakeholders.

The document is available on the official website **www.conai.org** in the **document downloads section**, Sustainability Report category.

For further information or clarifications, please contact us at:
reporting@conai.org