

Sustainability Report 2023



DEAR READERS,

We are pleased to present to you the fourth edition of the Irplast Sustainability Report, which offers an exhaustive overview on the management of the main sustainability impacts of our Company in 2023 and on the strategies implemented to promote the integration of sustainability in our business.

2023 was a year of significant challenges. We had to manage the repercussions of the geopolitical tensions resulting from the conflict between Russia and Ukraine, which caused an increase in raw material prices and a significant increase in energy prices. At the same time, we have faced a decrease in demand from end consumers, a consequence of the reduction in their purchasing power due to inflationary pressures. Despite international tensions affecting the global economy, shipping and supplies, Irplast has demonstrated remarkable **resilience**. Our strategy of internalizing production, guaranteeing the Empoli plant supplies of material made in the Abruzzo plant, has allowed us to reduce dependence on foreign suppliers and, at the same time, contribute to increasing **local employment in Italy**.

The current difficulties are added to the need to contribute to increasingly urgent environmental challenges, such as climate change, resource consumption and pollution, which make innovation from a sustainable perspective necessary in order to mitigate environmental impacts and align with evolution of society and the ongoing regulatory pressures. This transformation must include technological progress, considering that some of the tools available today, however advanced, do not offer sufficient reliability and safety guarantees, thus slowing down the implementation of virtuous projects with environmental benefits.

In this complex scenario, Irplast took the opportunity to dream big, and to invest vast resources to place the progressive reduction of the environmental impact of its products at the centre of its business strategy, laying solid foundations for an ecological transition for the benefit of all stakeholders in our value chain. The core of our strategy is to offer our customers products with a lower environmental impact without compromising the characteristics of the finished product in terms of **quality and shelf-life**, and without these negatively impacting the productivity of our customers' plants. The objective for the next few years is to maintain our position as technological leader on the market by

focusing **on products with high added value in terms of sustainability**.

We have adopted an approach to sustainability that emphasizes circularity, both in product design and in our production processes. Our Research and Development Department continually strives to optimize and enhance the inputs of the production cycle and to maximize the recyclability of our products. To achieve these objectives, we have adopted several innovative solutions. We have designed processes aimed at minimizing production waste and have focused on products that use less virgin plastic, favoring raw materials coming largely from mechanical and chemical recycling. Furthermore, in the future we will produce **mono-material products** that guarantee maximum recyclability levels, thanks to an investment of 55 million euros in a **unique tailor-made machine for recyclable packaging**.

In fact, recently, during the Interpack fair in Düsseldorf, we finalized the purchase of a new Brückner - LISIM line for the production of BOPP films, which will be installed in our factory in Atessa, Abruzzo. This investment will allow us to double our specialty production capacity, reaching 25,000 tons of specialty films by the end of 2025. The new line will be dedicated to the production of eco-sustainable single-material PP packaging, completely recyclable according to European directives.

The transition towards monomateriality represents a fundamental prerequisite which will give a strong boost to chemical recycling practices and which will allow greater use of non-virgin input materials.

In 2023, Irplast confirmed its presence on the list for the second consecutive year of the 100 Italian companies distinguished for their commitment to sustainability, as part of the 3rd edition of the Sustainability Award.

This recognition confirms the solidity of our path and strengthens Irplast's competitive positioning among the most virtuous companies on the market.

We are aware that people constitute a key success factor for a company that aims to achieve increasingly ambitious objectives in terms product quality and sustainability. For this reason, we intend to ensure that our collaborators have a stimulating and educational work environment, in which everyone's needs are listened to, and where talents are cultivated and valorised, with the aim of growing together.

Despite the progress achieved to date, we continue to have the ambition of wanting to make Irplast increasingly innovative, capable of emerging as a leader in rising to the challenges of the plastics sector thanks to the centrality of sustainability in the company strategy. The contents of the 2023 Sustainability Report highlight our efforts and our results in the research and application of solutions that produce a positive impact on the environment and on the community as a whole.

Fausto Cosi

Chief Executive Officer



INDEX

1

THE REALITY OF IRPLAST6

THE COMPANY'S IDENTITY	9
Company Profile	9
Sharing the generated and distributed value	22
The strategic approach to the challenges of the context	23
The most significant sustainability impacts	26
GOVERNANCE	28
ETHICS AND INTEGRITY: IRPLAST'S COMPASSES	30
THE CERTIFIED VALUE OF MANAGEMENT	32

2

THE SUSTAINABILITY OF IRPLAST'S PRODUCTS34

THE PILLARS OF PRODUCT SUSTAINABILITY	36
A circular approach at the base of the products	38
The sustainability of the raw material	46
CERTIFIED SAFETY AND SUSTAINABILITY OF PRODUCTS	
The certified sustainability of our products	50
Monitoring the quality and safety of products	54
Complaints management	55

3

BEYOND THE PRODUCT: A 360° APPROACH TO SUSTAINABILITY56

SUSTAINABILITY OF PROCESSES	59
Waste and refuse management	59
Resource management	62
Irplast's contribution to the fight against climate change	67
EXTENDED RESPONSIBILITY FOR OUR PRODUCTION ACTIVITIES	70
The role of Irplast for sustainability in the value chain	70
Sustainable logistics	73

4

THE PEOPLE OF IRPLAST80

THE COMPANY'S HUMAN CAPITAL	83
Training at the base of the growth of Irplast workers	87
Irplast for the well-being of its people	90
HEALTH AND SAFETY AS A PRIORITY	96

5

APPENDIX100

READING GUIDE	103
Methodological note	103
Principles for defining the contents and quality of the report	104
Stakeholders and their expectations	105
The material topics for the Company and the connection to the aspects of the GRI standards	108
GRI Content Index	110
DATA TABLES	120
Environmental data tables	120
Social data tables	138

THE REALITY OF IRPLAST



IRPLAST'S IDENTITY

COMPANY PROFILE

After having consolidated its leadership in the plastic film production sector for decades, today Irplast is among the most important producers of bioriented polypropylene (BOPP) films in the world. The Company offers quality products such as labels, adhesive tapes and plastic film, serving global markets such as food & beverage, dairy, personal & home care. The care taken in all phases of product creation, from research and development to the production of PP plastic film up to its use for adhesive tapes and labels has always characterized Irplast's corporate business. The company is divided into three business units: films, adhesive tapes and labels. The production of the film takes place in the two factories in Atesa, while the printing, coating and cutting phases take place in the Empoli plant. Thanks to the adoption of this vertical business model it is possible to create final products that are mainly marketed abroad. Always attentive to innovation, Irplast has developed cutting-edge skills in the design and production of sustainable BOPP films, created through advanced technologies and experimentation with bio-based materials. The Company has in fact worked in recent years to reduce the environmental impact of its products and activities, promoting the efficient use of resources and circular practices, based on the entire life cycle of the product, from the raw material to the end of life. Added to the attention for the environment are initiatives for the benefit of its people, promoting professional competence on the one hand and the well-being of the company's staff on the other.

The Irplast production centers

EMPOLI || HEADQUARTERS

At the Empoli headquarters, Irplast produces two main product categories that are exported all over the world: labels, intended for the food & beverage, dairy, personal & home care markets, and adhesive tapes, made for closing cardboard boxes, for special applications and for the construction industry. The products generated at the Empoli factory are exported all over the world.

ATESSA |

At the Atessa headquarters, where two of Irplast's three production plants are located, the company produces bi-oriented polypropylene film. 25% of the film produced is used as raw material in the production cycle of the Empoli plant, while 75% is destined for sale to external customers in the flexible packaging, innovation and bespoke material sectors.

75%

of its production is destined
for Export in 68 countries



Irplast's history

During the early 1950s, Irplast started its business activity producing heels for shoes. As time passed, the Company moved its investments towards the production of printed adhesive tapes and polypropylene films, creating an integrated and vertical operating model, localizing the entire production phase in Italy and then exporting excellent products around the world. Starting in 2018, Irplast establishes itself as a leader in the marketing of sustainable choices for films, tapes and labels, promoting the reduction of virgin plastic material used in favour of manufacturing waste from internal processes, plastic material from non-fossil sources and certified plastic material from recycling processes. The valorisation of the concepts of circularity, reuse of waste and the attention to research and innovation have led Irplast to consolidate itself as a central player driving sustainability in the polypropylene and plastic market in general.



The most important stages



IrplastNastri SpA was established, a manufacturer of printed adhesive tapes and in 1987 **Bimo Italia SpA** was founded for the production of polypropylene films (BOPP).

The company takes on a profile based on sustainability, launching a vast range of products on the market. The main focuses become the reduction of plastic, the reduction of CO₂eq emissions and the replacement of fossil fuels with alternative sources.



The Company publishes its **first Sustainability Report** on its 2020 performance and continues its efforts to bring more sustainable products to the market. Of particular note is the introduction of the NOPP+ film coming from UCO (Used Cooking Oil).

The company ranks no. 109 in the «**Export Champions 2023**» ranking of Il Sole24Ore, thanks to the excellent results achieved in terms of export volume. Furthermore, it acquires the role of official Ambassador of the **Packaging Ethics Charter**. **An important agreement was also signed** in Düsseldorf for the purchase of a **new industrial line** which will allow the production capacity of BOPP film to be doubled to satisfy the increase in demand for eco-sustainable packaging and to increase the export share of turnover.

ANNI '50

ANNI '80

2011

2018 – 2020

2020

2021

2022

2023

Irplast SpA started up as a company specialised in the shoe heel market.



The success of the two Italian companies in the plastics sector led to their merger by incorporation. This event represents the strength and success of Irplast over time. The company produces everything internally at Italian sites and exports its excellent products around the world.

Irplast becomes the first company in Europe to produce ISCC PLUS certified bio-based, **NOPP** and chemically recycled, **LOOPP** films on a large scale. The same year the **acquisition** of IRPLAST by the London fund Cheyne Svc was completed.

The Company's sustainability commitments are recognized through the receipt of numerous awards both relating to specific products and aimed at the entire organization and its commitment to sustainability such as the "Best Packaging 2022" Packaging Oscar Award.



The main awards of 2023

Irplast's commitment to integrating sustainability into its development strategy obtained important external recognition in 2023, highlighted by the various awards won during the year.

Irplast awarded for the second time among the 100 Italian companies at the Sustainability Awards

Irplast is confirmed for the second time in a row in the list of 100 Italian companies that have stood out for **sustainability**. The ranking was published as part of the 3rd edition of the Sustainability Award, promoted by Kon Group, specialized in business and financial consultancy and by Azimut, in partnership with Forbes Italia magazine where **the 100 Italian companies that achieved the highest ESG ratings were awarded**. The rating, issued by "Altis Università Cattolica" and subsequently reviewed by Reprisk, rewards the companies that have most distinguished themselves in the implementation of a sustainable strategy. The goal achieved by Irplast constitutes further confirmation of the solidity of the path undertaken by the Company which reinforces the Company's market positioning among the excellence of sustainability.

Irplast Export Champion 2023

Irplast was recognised as «**Export Champion 2023**» by "Il Sole 24 Ore", highlighting the international success and growth of its exports. This recognition testifies to the effectiveness of the internationalisation strategies and the company's ability to adapt to the needs of global markets.

Sustainability ratings

In addition to the Sustainability Report, Irplast is committed to communicating its efforts in the ESG area also through ratings, which independently evaluate companies' policies, processes, initiatives and results with respect to various sustainability issues. This allows the efforts made by the company to be summarised in a progressive evaluation, highlighting and confirming its commitment over time.



EcoVadis

Irplast underwent EcoVadis evaluation also in 2023, maintaining the prestigious **rating** based on an independent analysis of the company's policies, initiatives and results regarding the **environment, workplace safety, human rights, ethics and sustainable purchasing policies**. This evaluation allows you not only to standardize your results in ESG terms but also to benefit from the fruitful comparison with international companies, allowing you to identify potential areas for intervention and improvement. Consistent with the results of previous years, also in 2023 Irplast achieved the EcoVadis **"gold rating"**, confirming the solidity of its sustainable strategy and its leading role in the sector of manufacturing plastic products. This result confirms the company as superior to or equal to 96% of companies assessed by EcoVadis in its sector, with a sustainability performance classified as **"advanced"**; **particularly in the areas of environment, human rights and ethics**.



Carbon Disclosure Project

During 2023, Irplast confirmed its commitment to increasingly accurate and transparent reporting of the environmental impacts related to climate change and the use of water resources through participation in the Carbon Disclosure Project (CDP), and in particular the compilation of questionnaires relating to Climate Change and Water Security. Participation in the CDP represents a detailed analysis in these two critical areas, offering companies the opportunity to evaluate their management against different categories that influence the final score. This process also allows you to compare your performance with that of other players in the sector, as well as with averages at a European and global level. In 2023, Irplast obtained a score of 'C' for both the sections dedicated to climate change and that concerning the management of water resources, positioning itself in line with the world average for its sector.

Irplast's three production lines



ATESSA – BOPP FILM

This division deals with the production of **bi-oriented polypropylene** films. Alongside conventional technologies, this activity employs LISIM technology, which allows the creation of S-BOPP films with unique characteristics. These BOPP solutions feature balanced mechanical elongation properties that are difficult to achieve through other processes, and performance tailored to customer needs and preferences.



EMPOLI – ADHESIVE TAPE PRINTING (PRINT TAPE)

Adhesive tape printing forms the core of this division. The printed **adhesive tape** is made with bi-oriented polypropylene film and hot melt or water-based acrylic adhesive. Irplast's technology allows you to obtain high definition print quality, protecting the printed colours and logos from abrasion and aging, guaranteeing greater durability over time. The printing quality achievable on the tape also allows it to be used as a means of communication and as an advertising vehicle.



EMPOLI – LABELS PRINTING (LABEL TECH)

The core business of this division is the production of special films for **roll-fed labels**. Irplast technologies allow the production of roll-fed labels that reflect the current needs for flexibility and product customization. Two different printing technologies are used to create labels: rotogravure printing and the more modern flexographic printing. The latter, coupled with latest generation slitting systems, guarantee excellent results in terms of energy saving without sacrificing product quality.

Biaxially oriented polypropylene (BOPP) film: what its features are and why it is important

The characteristics of **transparency**, **heat shrinkability** and **thermostability** of the bi-oriented polypropylene (BOPP) produced by Irplast allow it to respect high quality standards, adapting to specific needs and making this material very **versatile**. For this reason, it represents approximately 30% of all plastic material in the world and is used in the packaging of countless products such as packaging for food products, labels, cigarette packets.

It is a "ready to be recycled"; material suitable for the creation of single-material multilayer structures compliant with the Packaging and Packaging Waste Regulation (PPWR) which guarantee barrier properties to both oxygen and water vapour such as to satisfy the safety of food products by prolonging their shelf-life, or by postponing the sell-by date expiration of packaged foods.



Irplast makes use of a modern **R&D organization**, made up of **2 departments**, equipped with modern instrumentation and composed of a team of qualified professionals in the field of material characterisation and testing. The company has launched a strategic initiative to harmonise its research and development process, extending it from the film production to its label and tape business divisions. This process has been centralised under the guidance of a single R&D manager, effective from 2024, who maintains continuous and coordinated communication with both production sites.



The company's mission

Irplast's priority is to provide customers with an application solution with high added value and low environmental impact. The objective is to offer innovative and sustainable solutions for the creation of flexible packaging, in which the reduction, reuse and recycling of the raw material are central in each production phase.

Irplast's value



Protecting the environment

Central to Irplast's business model is the strong focus on protecting the environment, ensuring the cost-effectiveness of company choices and at the same time the achievement of sustainable development objectives, as well as the mitigation of the impacts generated directly and indirectly by its activities.



The centrality of people

Irplast safeguards the well-being of the people who work in the company, guaranteeing respect for equal opportunities and meritocracy in professional development processes, with particular attention to health and safety in the workplace.



Quality, sustainability and innovation

Through investments in research and development, Irplast pursues the objectives of sustainable innovation, by optimising the use of raw materials for the creation of products with low environmental impact.

The value proposition

In Irplast, the design and production of films in line with market needs and on-site customer assistance are combined with a vertically integrated business model: from film production to printing of the finished product; these elements have allowed Irplast to establish itself as a **leading company in the sector**, offering a range of products with **high added value**.

At the basis of Irplast's industrial strategy there are four main elements that guarantee its competitive advantage:



Quality, safety and continuous improvement of processes and activities

Irplast guarantees the quality and safety of the items marketed by respecting the highest product and process standards. The vertical integration of the business model allows the Company to supervise all the preparatory steps for the creation of the final product, thus allowing the reduction of design and production times. At the two Research and Development departments of Empoli and Atessa, the Company conducts, simultaneously with the production line, analyses on the physical, optical and mechanical properties of the polymers used, thus having efficient quality and safety control along the entire supply chain.



Timeliness and promptness in relation to market needs

Irplast is able to respond promptly to market demands, thanks to total control of the raw material procurement process and the efficiency of the decision-making process, speeded up by the coordination of the two research and development centres, offering innovative solutions in line with new trends of the sector.



Sustainable innovation

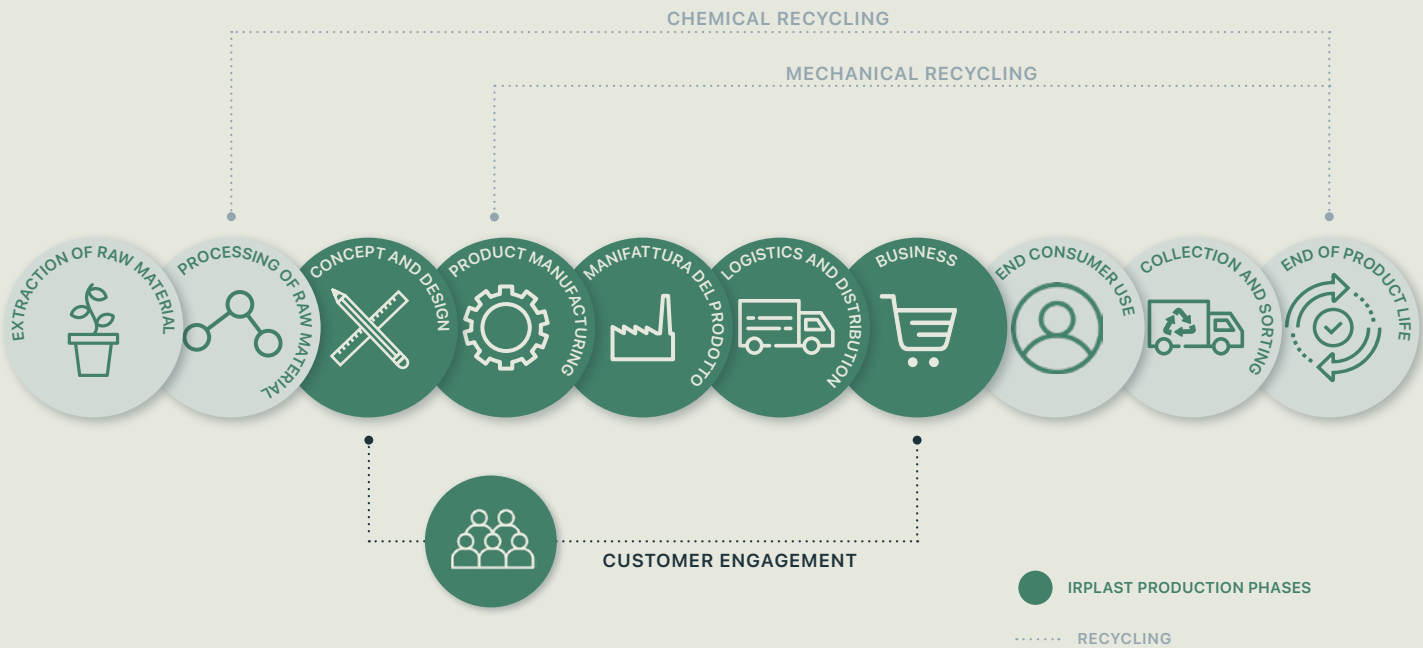
Irplast's research and development activity and distinctive skills allow the design and production of innovative and high added value solutions, guaranteeing competitiveness on the market and allowing it to anticipate the sustainability challenges of the sector. The valorisation of waste and the use of raw materials from renewable sources or recovery processes have allowed the development of products with low environmental impact, managing to preserve or improve the properties and characteristics of products deriving from fossil sources.



Customisation, assistance and customer satisfaction

The company's reliability is determined by the presence of a team of specialised technicians and consolidated experience in international projects. Irplast's constant attention to the market and efficient control of the production chain allow the adaptation of the final product to the needs and preferences of customers. The customisation of the solutions is also guaranteed by the use of the latest generation machinery, which allows the customisation of the product without compromising quality. Added to this is the on-site technical assistance service on machinery and products, in order to guarantee the best performance.

The Irplast value chain



Extraction of raw material

- Raw material from recycled sources (Pyroil from post consumer waste)
- Raw material from Used Cooking Oil (Exhausted oils)
- Raw material from biological sources from, scraps from the wood industry (Tall Oil)
- Raw material virgin from fossil source

Processing of the raw material

- Refining of raw material for the production of monomers
- Production of polymers via the chemical polymerization process

Concept and design

- Creation of products starting from alternative raw materials and/or virgin raw materials

Production of materials

- Production of BOPP polypropylene film at the Atessa plant
- Regranulation of a portion of the production scraps produced at the Atessa plant

Product manufacturing

- Involvement of customers in product design
- Production of polypropylene products: Labels and Ribbons at the Empoli factory

Logistics and distribution

- Quality control and labelling
- Goods packaging
- Shipping by sea and land
- Customer assistance for the correct performance of the product on the machinery

Business

- Selling according to the Business2Business (B2B) model
- Customer engagement

End consumer use

- Use of the goods by the final consumer
- If the plastic material used in the product has a single-use or packaging function: waste of the plastic material

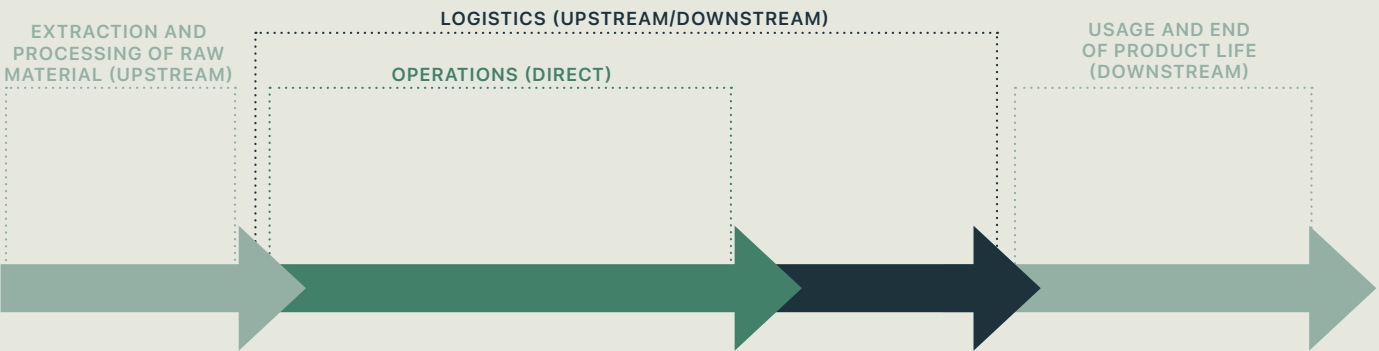
Collection and sorting

- External management and treatment of a portion of the waste entrusted to an authorised third-party company

End of product life

- Disposal of a portion of the unrecovered plastic material
- Through a chemical recycling process, recovery of the value of waste material from other production chains

The impacts along the Irplast value chain



- Material consumption
- Climate change
- Human rights violation

- Production of waste and scraps
- Climate change

- Climate change

- Post-consumer plastic waste
- Damage to consumer health

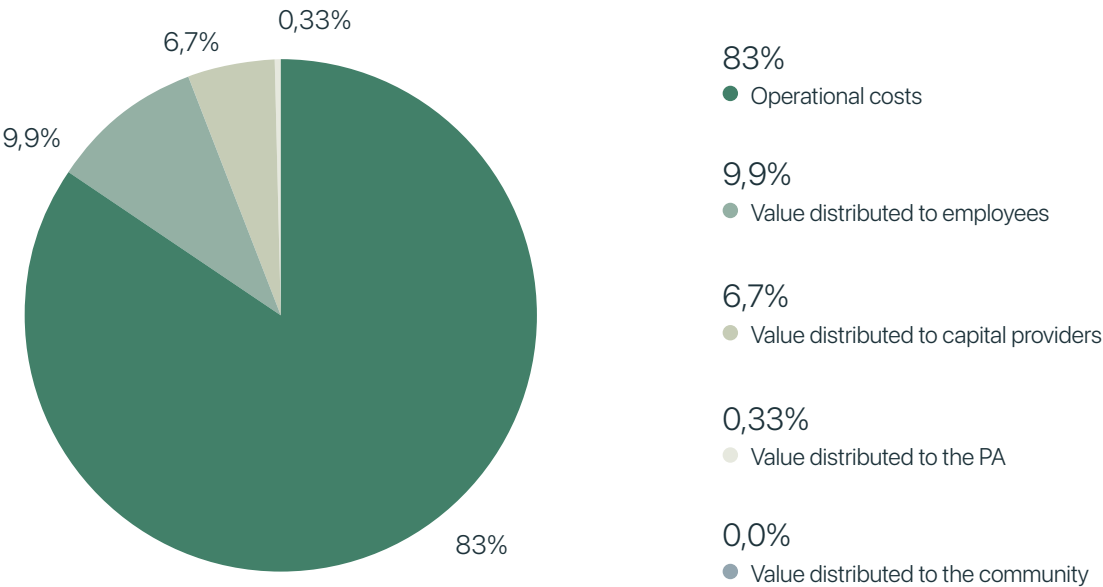
SHARING THE GENERATED AND DISTRIBUTED VALUE

The economic value generated and distributed

In 2023 the economic value generated by Irplast decreased by 25% compared to the previous year, generating a total of over 110 million euros, distributed to suppliers, in the form of operating costs, to employees, in the form of salaries, social security contributions and corporate benefits, to capital suppliers through the payment of interest, to the Public Administration through taxes, and finally to the community in the form of sponsorships and donations.



ECONOMIC VALUE GENERATED AND DISTRIBUTED (2023)



201-1 201-1 ECONOMIC VALUE DIRECTLY GENERATED AND DISTRIBUTED						
	2021	%	2022	%	2023	%
Economic value generated	110.779.742		147.392.036		110.685.568	
Distributed economic value	110.153.627		141.401.734		107.612.714	
Operational costs	93.284.808	85%	123.322.715	87,2%	89.353.860	83%
Value distributed to employees	10.904.335	10%	11.389.776	8,1%	10.679.120	9,9%
Value distributed to capital providers	5.556.806	5%	6.215.605	4,4%	7.199.694	6,7%
Value distributed to the PA	372.509	0,34%	468.711	0,33%	374.813	0,33%
Value distributed to the community	35.170	0,03%	4.927	-	5.227	-
Economic value retained	626.115		5.990.302		3.072.854	

The decrease in revenues in 2023 was influenced by various elements, with two main causes: (i) lower sales volumes, a consequence of the contraction in final consumption on large-scale consumer goods, recorded due to the global economic recession and high levels of inflation, and (ii) reduction in sales prices, attributable to the decrease in the costs of raw materials and energy compared to 2022. Despite this, the Company managed to achieve an EBITDA of 11.1 million euros, with a margin on sales of 10%, in improvement compared to 8.9% the previous year.

THE STRATEGIC APPROACH TO THE CHALLENGES OF THE CONTEXT

Organisations, civil society and institutions are increasingly aware of the need to promote a business idea capable of combining **the cost-effectiveness of choices** and **respect for the environment and people**. In a global vision, issues related to the circular economy, the mitigation of climate change, the protection of natural resources and biodiversity, respect for human rights and the ethical management of business have therefore become central.

Irplast has chosen to adopt an integrated management of environmental, social and economic impacts for a development that takes into account both the future challenges linked to the expectations and needs of the different categories of **stakeholders**, and **economic growth**.

The challenges of the future

The European pressure to stop plastic pollution and the dispersion of plastic waste into the environment

Faced with the tripling of plastic production expected by 2060, the European Union is pursuing actions aimed at obtaining legally binding provisions on primary plastic production. The objective is to ensure sustainable production and consumption. Governments, NGOs and industries estimate that additional regulations and policies related to plastic pollution will be passed by 2024. In particular, on 24 April 2024, the European Parliament adopted the Packaging and Packaging Waste Regulation (PPWR), which should contribute to the transition towards a circular economy and contains numerous provisions also impacting the production of plastic packaging. Once fully operational, the PPWR will replace the Packaging Directive 94/62/EC. The topic on which the greatest emphasis is placed concerns the dispersion of plastic material in terrestrial and marine environments, with consequent damage to biodiversity.

Dependence on non-renewable sources

Plastic is traditionally produced from fossil fuel sources, such as oil and natural gas, which are non-renewable resources. This contributes to the phenomenon known as fossil resource scarcity, since the use of raw materials from fossil sources contributes to the decrease in available supplies in the long term. Furthermore, the extraction and refining of oil and natural gas are complex and energy-intensive operations, which cause significant environmental impacts such as the emission of greenhouse gases, air and water pollution and the destruction of ecosystems. natural. The reliance on non-renewable sources for plastic production also has economic and safety implications. As global demand for plastic continues to increase, even greater pressure on existing fossil resources is expected. This could lead to price increases, market instability and conflicts related to natural resources.

Energy supply and efficiency

In 2021, unstable gas prices triggered an increase in energy costs that weighed on Italian industry. The situation worsened in 2022 with the Russian invasion of Ukraine, which further destabilized global energy markets, causing price increases and supply disruptions. Italy, in particular, being one of the countries most dependent on Russian energy, was strongly affected by these changes, with a direct impact on production costs that proved more marked than in other European countries. Although a certain stabilization is now perceived, energy security remains a crucial issue for the near future. It therefore becomes imperative for companies, especially those with high energy consumption, to pursue a reduction in consumption and an increase in production efficiency, as well as ensuring more stable supply channels.

Irplast's answer

Recycled plastic and reduction of waste intended for disposal

For years, Irplast has undertaken a path to integrate sustainability into its development strategy. Aware of the environmental impact of the plastic used in the packaging sector, but also of its potential and indispensability linked to its properties, the Company aims to develop solutions with all the advantages that this material can offer, increasing its sustainability in order to reduce its negative impacts on the environment. This is possible first and foremost thanks to the type of material adopted for Irplast's solutions: polypropylene, characterized by high recyclability. Furthermore, the Company has been focusing on circularity for years, ranging from the creation of solutions with a high percentage of **internally reganulated raw material**, to products from the LOOPP line, made from **plastic coming from chemically recycled post-consumer waste**. Furthermore, Irplast creates products that **reduce the quantity of plastic material**, offering polypropylene films of increasingly smaller thicknesses, while still managing to maintain high performance. These measures allow both a reduction in plastic waste destined for disposal, therefore a minimization of the possibility of dispersion of plastic material in the environment, and a reduction in atmospheric emissions with an impact on the environment.

Renewable and recycled products

To adequately respond to the challenges of the sector, Irplast is committed to progressively increasing the quantity of plastic material coming from alternative sources or chemical recycling, which reduce the dependence on conventional plastic derived from non-renewable sources and offer a more sustainable alternative. In fact, since 2020 the Company has been using ISCC PLUS certified polymers to create new plastic films. Irplast collaborates with brand owners and packaging producers by offering them the infrastructures and technologies needed to create more sustainable packaging solutions, which can be implemented without the need to make substantial changes to the shape of the packaging and without having to make investments for any adaptations in the transformation and converting. In 2022 this effort continued with the push of **NOPP**, **NOPP+** and **LOOPP** products, created from raw materials from renewable sources such as Tall Oil and UCO (Used Cooking Oil) and recycled plastic, ISCC PLUS certified, following the mass balance approach.

Energy efficiency measures and reduction of dependence on the grid

As a producer of plastic material, Irplast is an energy-intensive company. In order to reduce energy dependence on the grid and reduce its impact on the environment, Irplast has anticipated tensions on the energy markets by making several investments over the last few years, first in the Atessa plants and subsequently in the Empoli plant, installing trigeneration systems that allow the self-production of electrical, thermal and cooling energy. The efforts that began in 2022 with the implementation of various energy efficiency measures continued in 2023 with the intervention of revamping and the consolidation of an interdisciplinary analysis and study group responsible for analysing energy data and organizing periodic meetings to evaluate trends and identify possible improvements and also thanks to the timely analysis of production-related parameters. Irplast has also chosen to purchase gas directly from the electricity market and through GME, thus guaranteeing a reduction in the spread between supply prices.

THE MOST SIGNIFICANT SUSTAINABILITY IMPACTS

The materiality analysis is the first step in the reporting process and aims to promptly identify the main positive and negative, actual or potential impacts that the Company generates directly or indirectly on the environmental, social and economic sphere. During 2022, the analysis involved an assessment of the Company's context and its entire value chain. This part required the involvement of Irplast's operational figures in order to promptly identify the universe of impacts.

These were subsequently prioritized and merged into **9 material themes**.

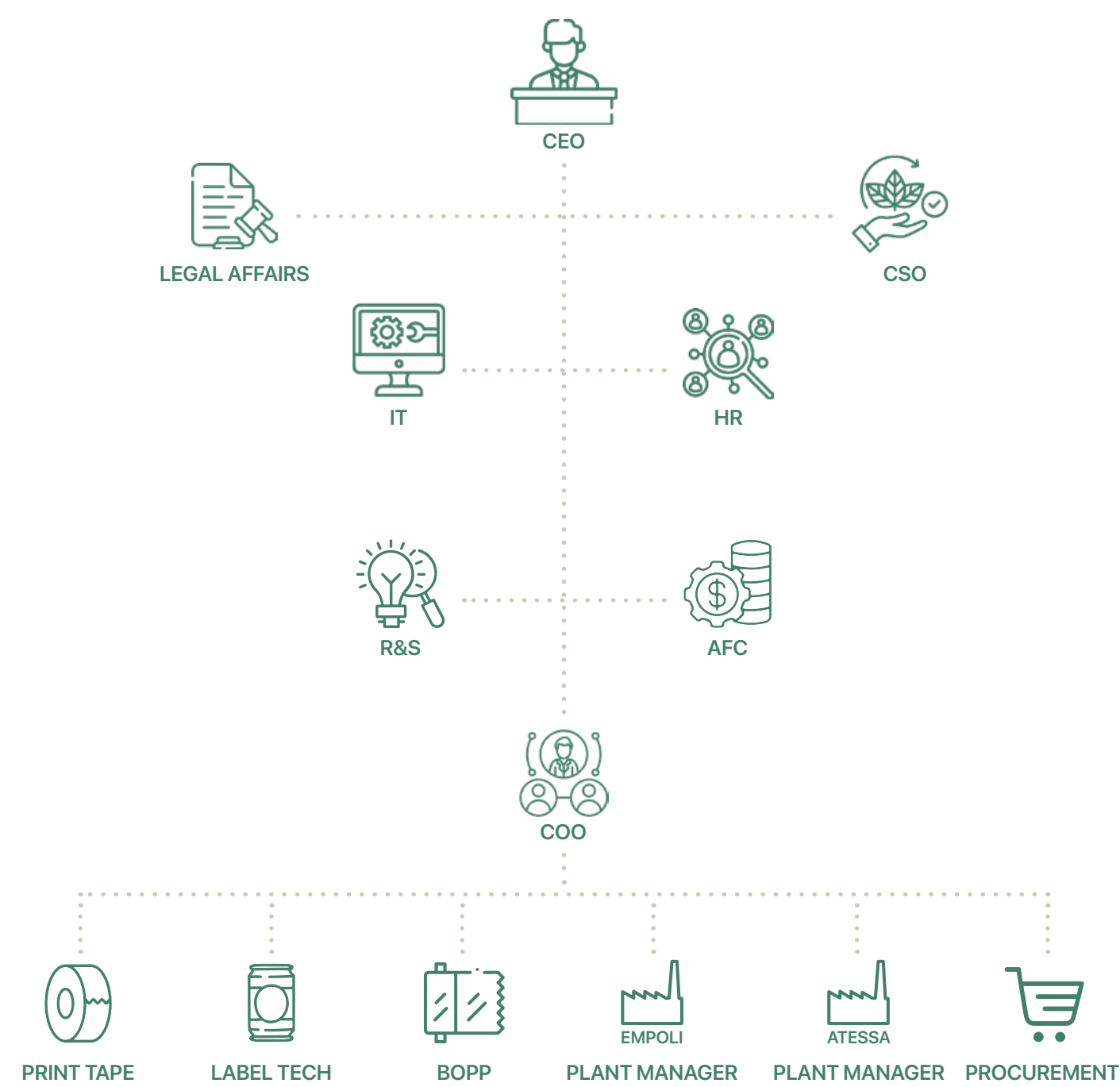


MATERIAL THEME	DESCRIPTION
Circularity and eco-sustainability of products	Promote the circularity and sustainability of products, encouraging their recyclability or reuse, using eco-compatible materials (recycled, renewable and recyclable) at input and creating, solutions that minimise production steps by the end user. These activities are also supported by a precise assessment of the environmental impact from an LCA (Life Cycle Assessment) perspective which allows for greater awareness of the environmental characteristics of the various products.
Product quality and safety	Create a final product with the highest quality and safety standards, simultaneously implementing transparent communication, so that the end user knows the characteristics of the product and its impacts.
Energy consumption and climate change	Promote the reduction of climate-changing gas emissions directly attributable to production activity, or indirectly generated by it, downstream and upstream of the value chain, also through the purchase of clean energy and the efficiency of energy consumption, achieved through careful monitoring and planning of activities.
Water resource management	Ensure efficient use of water resources, both during the production of plastic film and during the extraction and processing of the material. Ensure the monitoring of any water losses and evaluate the reuse and replenishment of the water flow in the production processes, otherwise ensuring that the necessary treatments are carried out on the outgoing water flows.
Process scrap and waste management	Minimise the quantity of waste exiting the production process through the application of circular practices, which guarantee the recovery and reuse of the physiological processing waste and of all the exiting material, both in the Irplast production cycle and in other supply chains, at in order to reduce the portion of waste destined for disposal.
Quality of the air	Reduce polluting gas emissions generated both in the raw material extraction and processing phase and in the production phase, for which Irplast is directly responsible. At the same time monitor air quality through periodic analyses, preparatory to the definition of initiatives aimed at mitigating its impact.
Wellbeing, health and safety at work	Ensure the healthiness of working environments and minimise accidents, through an efficient danger reporting system, as well as constant monitoring of the correct functioning of machinery. Furthermore, guarantee a positive and welcoming working environment, in order to ensure people's well-being.
Human capital management	Attract and retain qualified talent within the workforce through the promotion of a positive corporate culture, aimed at the absence of incidents of discrimination and by stimulating the professional development of employees through training courses. Retain resources with the aim of limiting turnover.
Respect for human rights	Guarantee respect for human rights, both in the production phase, but also and above all in the value chain.

GOVERNANCE

The Company's organizational structure is inspired by the principle of separation of tasks, roles and responsibilities between operational and control functions. For each production line there is a sales department and a customer service department.

The company organisation is represented in the following organisational chart:



The Board of Directors is the body at the top of the corporate Governance system and is invested with management powers for the ordinary and extraordinary administration of the Company. This is made up of 3 members: the President, the CEO and a Councilor. The members of the Board of Directors have transversal skills capable of outlining company orientations, including in matters of sustainability, which has become an integral part of the company strategy for years. The emoluments awarded to the members of the Board of Directors are approved by the Shareholders' Meeting;

The President of the Board of Directors has powers of direction and control over the general management of the Company, with power of representation before banks, credit institutions and financing bodies;

The CEO operates on the basis of the powers granted to him by the Board of Directors;

The Board of Statutory Auditors, made up of 3 effective members and 2 alternates, supervises compliance with the principles of correct administration in carrying out company activities and the adequacy of the organizational structure . Furthermore, it is responsible for verifying the effectiveness of the internal control system and the administrative system of the Company, ensuring the correctness of the methods of implementing the corporate governance rules;

Chief Sustainability Officer (CSO)

Since Irplast introduced the role of Chief Sustainability Officer (CSO) in 2020, promoted to a management role in 2021, the company has continued to strengthen its sustainability governance. With the aim of managing issues related to climate change in an increasingly structured way and promoting effective integration of ESG principles in decision-making processes and strategic supervision, in 2023, Irplast's sustainability governance saw a further evolution, enriching the team dedicated to sustainability and actively involving all operational and management figures in initiatives aimed at reducing environmental impact. Significant progress includes expanding strategies to reduce the use of fossil-based raw materials and developing new eco-friendly products.



These efforts are supported by regular, strategic discussions across business functions, ensuring that sustainability remains at the heart of our business strategy. Reports on safety and environmental management practices, in accordance with legislative decrees 81/2008 and 152/2006, are sent by managers every six months to the Board of Directors and the Board of Statutory Auditors, guaranteeing constant transparency and updating on our sustainability performance. Furthermore, 2023 marked the strengthening of our communication channel with the most relevant stakeholders, such as trade associations, customers and suppliers, facilitating the identification and rapid resolution of problems along the value chain and strengthening our commitment towards a greater corporate social responsibility.

ETHICS AND INTEGRITY: IRPLAST'S COMPASSES

In daily choices, Irplast's action is guided by the principles of ethics and integrity. These represent the pillars of the lasting success of the company's business and the solid relationships that the Company establishes with its main interlocutors. In this sense, the principles of correctness, transparency, fair competition, respect for the environment and protection of privacy constitute a priority for Irplast. In order to spread the founding values of the business to the main stakeholders, the Company carries out communication and awareness-raising activities on these issues among its partners and customers.



Ethical business conduct

In carrying out its activities, Irplast continues to pay careful attention to compliance with current legislation to ensure compliance with applicable provisions. Please note that in 2023, no violations or suspected violations of the rules governing activities at risk of crime were reported. The Supervisory Body informs the Directors and Auditors annually on the progress of Model 231 and on any risk areas that have emerged.

In 2023, Irplast SpA complied with the provisions of Legislative Decree no. 10 March 2023. 24, implementing the EU Directive 2019/1937 (so-called whistleblowing discipline) in Italian law, by equipping itself with an EQS Integrity Line digital platform, capable of guaranteeing the confidentiality of reports and the safe storage of data, accessible via the company website. The management of the reporting channel and the verification of the validity of the circumstances represented in the report is entrusted to the monocratic Supervisory Body appointed by the Company, which also carries out the function of Whistleblowing Manager.

At the same time, the Company: **i)** has adopted a procedure for the management of report "Whistleblowing Procedure", which constitutes an integral part of its Model 231, **ii)** has updated Model 231 as well as the Code of Ethics (Ed. 2 - December 2023), pursuant to the new whistleblowing regulations, and **iii)** provided adequate information to employees regarding the company's compliance with the whistleblowing regulations, as well as regarding the adoption of the internal reporting channel.

Model 231, the Code of Ethics and the Whistleblowing Procedure can be consulted by accessing the following link:
<https://www.irplast.com/model-231-code-of-ethics-whistleblowing/#ETHIC>

Furthermore, the company has planned to provide **specific training** on the topic addressed to all employees by 2024.

Code of Ethics

Irplast SpA has defined and adopted a Code of Ethics, approved by its Board of Directors on 29 May 2020, which constitutes an integral and substantial part of the Organisation, Management and Control Model adopted pursuant to Legislative Decree 8 June 2001 n. 231, the latest update of which was approved by the Administrative Body on 5 December 2023. The Code of Ethics, available on the institutional website, is shared with its collaborators and partners in order to spread the company values in the business network, indicating the clear and incontrovertible rules of conduct to follow. From this perspective, Irplast requires all people with whom it has commercial relationships to comply with the provisions of the Code of Ethics. The rules of conduct and values of the Company contained in the document touch on issues such as compliance with the law, personnel management, protection of health and safety at work, etc. The Code of Ethics also deals with the issue of **respect for human rights**, expressed by Irplast through principles such as the prohibition of discrimination based on sex, religion, nationality and the valorisation of people.

THE CERTIFIED VALUE OF MANAGEMENT

Irplast maintains a constant commitment to the management and optimization of its business processes, operating in compliance with international standards such as ISO 9001 for quality, ISO 14001 for the environment, and ISO 45001 for health and safety. In 2023, surveillance audits confirmed the effectiveness of these systems, suggesting some areas of improvement to further integrate the systems and simplify procedural documentation. This systematic approach, in addition to guaranteeing the quality and safety of operations, also promotes continuous improvement, creating value for customers and reducing the risk of dissatisfaction among stakeholders. Other certifications, such as the AIB, BRCGS and ISCC PLUS certifications, are described in detail in chapter 2 on the sustainability of Irplast products.



Process sustainability



All production plants have been certified ISO 9001:2015, the Quality Management system, for more than 20 years now. This system allows you to optimise business processes, increasing customer satisfaction with a view to continuous improvement. For both plants the certification was renewed during 2021 and is valid until 2024.



To adequately manage its responsibilities towards the environment, Irplast has chosen to implement the ISO 14001:2015 management system on the **Atessa site** for years now. This allows you to certify that the company keeps the environmental impacts of its activities under control while seeking improvement. This certification, obtained for the first time in 2000, was renewed in 2020 and will remain valid until 2024.



This international standard was implemented in the Atessa plant (BOPP Division) to monitor workplace health and safety aspects in the company. The certification, renewed in 2023, was obtained for the first time in 2017 to replace the certification relating to the previous workplace health and safety management system, OHSAS 18001.

Business continuity at the center

Irplast is committed to ensuring operational continuity and the protection of stakeholder interests through a resilient organizational model and certified management systems. The company is in fact implementing various initiatives to progressively integrate the existing management systems, in particular for the Atessa plant, through a simplification of procedural documentation, to make it more effective and streamlined, so that it can act as a reference for all management systems, making business operations more efficient. This model allows us to respond effectively to critical events and also sustainably manage the supply chain, a management that is strengthened every year by now evaluating suppliers not only for compliance but also for their impact on energy, environment and safety.

THE SUSTAINABILITY OF IRPLAST'S PRODUCTS



THE PILLARS OF PRODUCT SUSTAINABILITY

Irplast's sustainable development strategy is expressed in the offer of innovative products, created using cutting-edge technologies and characterized by a lower environmental impact. The offer of such solutions is made possible by the implementation of eco-compatible practices and processes, studied taking into account the product's life cycle, from raw material to end-of-life.

Irplast's circular and integrated approach is at the origin of the sustainability of its products and revolves around 4 fundamental, interconnected principles: Renewable, Recycle, Reduce and Reuse.



Renewable

Irplast counters *fossil resource scarcity* by offering films, labels and tapes made from raw materials from renewable sources, such as waste oils derived from other production processes (tall-oil and used cooking oil), or materials obtained from chemical recycling processes of post-consumer waste. In addition to reducing the use of fossil fuels, this process allows to minimize CO₂ emissions throughout the life cycle of the product.



Recycle

The company produces products characterized by high recyclability, to be proposed as an alternative with a lower environmental impact on the market. Polypropylene (BOPP), the material that Irplast products are made of, is in fact 100% recyclable. Irplast leverages the properties of BOPP to develop single-material solutions to replace products conventionally composed of multiple layers and different materials or polymers. Furthermore, the Company develops items that facilitate the sorting and recycling of packaging by the consumer, such as pre-adhesive labels in BOPP, easily removable from the rest of the packaging. The company internally recycles almost all of its physiological production waste, offering products derived from regranulated production waste .



Reduce

The negative environmental impact of packaging products is strictly related to the quantity of raw material used. In fact, the volumes of resources consumed, the environmental implications linked to industrial processes and the amount of post-consumer waste generated, all depend on this. For this reason, Irplast is committed to designing innovative products that allow a smaller quantity of plastic material to be used for the same performance. An example are products with reduced thicknesses, or those that replace complex conventional packaging, reducing it to the essential.

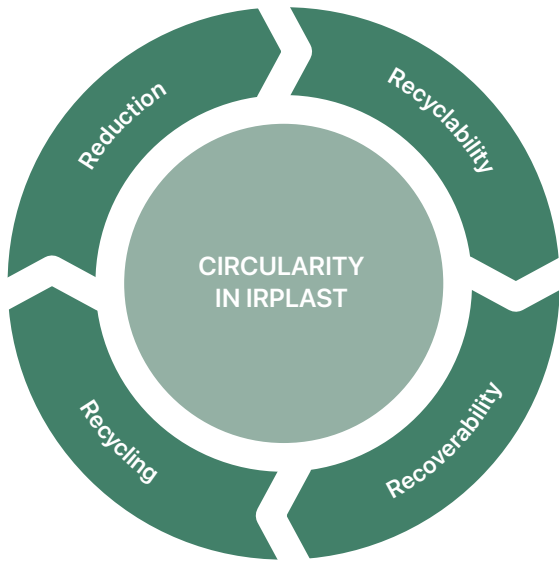


Reuse

Reusing packaging is at the top of good practices for a more eco-friendly management of business. Irplast promotes reuse by creating pre-adhesive labels , created to be easily removed from the rigid packaging without leaving residues, and which encourage the reuse of glass and plastic containers. For some types of products, anti- bleeding inks are also used to avoid contaminating PET bottles during recycling and/or reuse.

A CIRCULAR APPROACH AT THE BASE OF THE PRODUCTS

The circular economy is a development model based on the reduction of resource consumption, especially scarce ones, through the adoption of practices that maximize their efficient usage, while simultaneously promoting reuse and recycling. Circular practices represent a virtuous paradigm that contrasts with the vision of take, create and throw away, more commonly applied nowadays and at the origin of many negative environmental impacts. For this reason, a significant part of Irplast's research and development efforts has focused on the entire life cycle of the product, from the "cradle" , in order to ensure a more efficient use of natural resources, maximize the recyclability and reusability of products and the use of secondary raw materials to reduce waste production.



Reduction

Reducing waste and valorizing consumed resources starts with a **reduction in the raw material used** in the products. Irplast invests in research and development to design films with **reduced thickness**, which are able to maintain the same performance as conventional ones. Furthermore, it designs products intended to replace other materials and concepts, typically made with a greater quantity of resources.

Recyclability

Irplast also offers monomaterial products that **replace different materials with a single one, polypropylene, which is completely recyclable** (multilayer monomaterial) and which, thanks to its properties, is able to replicate the technical and qualitative characteristics of conventional products, maximizing the recyclability of the newly designed package.

Recoverability

Irplast realizza anche dei prodotti destinati a comporre una sola delle parti della soluzione di imballaggio finale. Pertanto, essi devono essere in grado di facilitare il corretto riciclo o riutilizzo anche delle altre parti del packaging, spesso più consistenti. In quest’ottica, sono state ideate delle soluzioni facilmente separabili dal resto dei componenti, che non lasciano residui e sono compatibili con eventuali processi di recupero o riciclo.

Recycling

Irplast produces bioriented polypropylene films starting from industrial physiological waste, regranulated internally in order to reintroduce a part of the **pre-consumer waste** into the production cycle. In addition to the solutions made with raw materials from mechanical recycling, Irplast has developed a line of products made from **post-consumer waste, chemically recycled**, capable of replicating the same properties of BOPP from virgin fossil sources.

To minimize environmental impacts and improve product sustainability, the first fundamental step is to reduce the use of raw materials. The efficient use of input resources guarantees a triple environmental benefit that can be found throughout the product life cycle.

First, by reducing the use of virgin raw material of fossil origin, which is a non-renewable and potentially limited resource, we contribute to preserving its reserves. This translates into less dependence on it and greater availability of this resource for future generations.

Furthermore, this process allows to avoid the environmental impacts associated with the extraction and processing activities of the raw material, with a consequent saving in terms of CO₂ emissions and polluting gases.

Finally, a reduction in the plastic used in products ensures a lower production of post-consumer waste, cutting the environmental impacts related to their management and preventing their dispersion in the environment.

Irplast has developed innovative solutions to reduce the use of virgin raw materials, applying this approach both to its traditional products and through the creation of new solutions capable of replacing classic products while ensure the same functionality.

Reduction of thicknesses

The first effort made by Irplast in the direction of product sustainability is to reduce the thickness of its films. For years now, the Company, thanks to its simultaneous film stretching technology, has been able to guarantee the same performance as the traditional product, significantly reducing the amount of plastic used to produce it and therefore also the same that will become waste at the end of the product's life. This practice allows for the implementation of a more sustainable solution without having to make any changes to the production methods and without losses in efficiency or product yield. The reduced thickness solutions also allow for a reduction in CO₂ emissions per m² of film and a lower consumption of fossil fuels.

Innovative solutions

Irplast offers alternatives to classic products, revolutionizing their design to make them more sustainable, while maintaining their functionality.

One example is **multi-packaging bands**, a practical and eco-friendly alternative to traditional heat-shrink packaging. This is a solution for creating *multipacks for the food, beverage and detergent sectors* that allows for a saving of up to 66% of plastic material compared to traditional packaging, if we consider for example the case of bundles of 6 bottles. The reduction of plastic material also leads to a reduction in the CO₂ emissions associated with it. Another sustainable proposal is **food contact tape**, an adhesive label tape, suitable for direct contact with all foods. Compared to conventional food packaging, this solution often reduces the packaging material used by 95%.

Propreties of PP

Polypropylene, unlike other polymer materials commonly used for the production of films, labels or tapes, has a lower "specific density". In fact, the support of a BOPP label has a density of 0.91 g/cm³, much lower than the support of a PET-G label which has a density of 1.38 g/cm³. This allows, for the same product and thickness, a considerable weight saving in virgin raw materials.

Highlights 2023

14,4 million

of products sold in Empoli, designed with a thickness between 16µm and 25µm

429,8 tons

of total raw material saved for Atessa products with thickness between 16µm and 25µm

65,5%

of products sold in Atessa with a thickness between 16µm and 25µm

1.252,5 t CO₂eq

save on Atessa products with thickness between 16µm and 25µm

One of the main problems associated with commercial packaging is related to the difficult recyclability and recoverability of its components. This phenomenon is the origin of a waste of precious resources that could be revalued as secondary raw materials in other production cycles and causes significant environmental impacts associated with the disposal process.

Packaging, to be in line with current sustainability pressures, must be recyclable and must promote reuse in order to have a lower impact on the environment and ecosystems, maintaining its fundamental utility in ensuring high product quality. The synergy between the R&D departments of Empoli and Atessa has allowed us to promote research on various products, focusing in particular on the **replacement of multilayer products in multi-material structures with multilayer products with monomaterial design**.

Monomateriality

In designing solutions, Irplast pays particular attention to the recyclability of the product, which allows the plastic to be reused in other production processes in a circular perspective. In fact, the Company offers products in **polypropylene , a material that is 100% recyclable** in itself, while aiming at the same time to create **single-material** products, which, unlike multi-material solutions, maximize the recyclability of the final product.

Thanks to its internal Research & Development departments, Irplast promotes the production of **single-material films, tapes and labels**, eliminating layers made of plastic materials other than polypropylene without compromising the performance of the final product. The single-material nature of the product guarantees the same **runnability** of the existing packaging systems, allowing the use of the same converters, and without need for new investments. Irplast is further strengthening its offer of single-material products, investing in research and development to replace the components made, to date, of multiple different materials, present inside the packaging, with plastic film, replicating their mechanical performance both in terms of final use of the product and runnability .



Recoverability

Although Irplast products, such as films and labels, constitute only a part of the customers' finished packaging, they are able to contribute significantly to the **sustainability of all their packaging by promoting its recyclability and recovery**.

In fact, the difficulty in separating the different components of packaging is the source of many obstacles in its recyclability. The solutions proposed by Irplast address this problem through, for example, polypropylene labels, easily removable from PET bottles, with adhesives that leave no residue and inks that do not pollute the bottles during the passage through the washing baths for reuse. The PP windowing of the envelopes is designed to easily detach from the paper.

Focus – The PreGlued4Cans Label

The pre-adhesive roll-fed label, made by Irplast, perfectly summarizes the Company's efforts to innovate eco-friendly, developing recyclable products, which at the same time promote the recoverability of all the packaging. It is a 100% BOPP solution, completely recyclable. Being pre-adhesivized with acrylic glue, it is easier to remove from the container than alternatives with hot-melt adhesives, both by the consumer and in recycling plants during the separation of materials. Furthermore, this product allows to significantly reduce the stock of pre-printed empty cans because, unlike what happens with screen-printed cans, it allows to label only the cans needed based on market demand, thus reducing potential waste and any excess warehouse stock to be disposed of.



Highlights 2023

40,2 tons

of raw material saved for packaging adhesive tapes produced with film containing regranulate

80%

max contente of regranulated raw material reused in the films

86 ton

of LOOPP products sold

3,6 million

quantity of products sold with film containing regranulate (ECO+ line)

In order to enhance the available resources and reduce dependence on virgin raw materials, Irplast has studied solutions made from recycled raw materials.

The physiological production waste is re-granulated internally by the company and allows the creation of a film containing up to **80% mechanically recycled post-production material**.

Furthermore, Irplast offers products with an ISCC PLUS certified raw material, coming from the **chemical recycling of post-consumer waste**, thus reducing the quantity of plastic waste in circulation downstream, removed from disposal processes and reintroduced into the production cycle.

Raw material regranulated internally

Regranulated production waste allows the input material to be valorized, reducing the quantity of waste destined for disposal thanks to the design of solutions with the same yield and the same qualitative-quantitative performances of traditional film. The synergy between the Research and Development departments of Atesa and Empoli has made it possible to create films containing a high percentage of regranulated material, subsequently also used for the production of tapes. Until 2023, two versions of tapes were available, containing 34% and 50% of post-production material in their raw material respectively. Following the research conducted in recent years, in 2023 Irplast marketed the Ecoplast 2.0 product based on a film containing 80% of regranulate from production waste, simultaneously reducing the use of virgin raw material to only 20% of the composition of the final product. Unlike mechanical recycling of post-consumer waste, the use of production waste within the plant allows us to trace its origin, making it potentially reusable even for products intended for the food industry, which is subject to numerous restrictions.

Chemically recycled raw material

LOOPP film line , characterized by the exclusive use of raw materials from chemical recycling, following the mass balance approach. These products offer the advantage of reusing plastic material in production processes that would otherwise end up in landfill, valorizing plastic waste and at the same time allowing to reduce the use of raw material deriving from fossil sources.

In fact, the eco-compatibility of these products does not consist exclusively in the implementation of circular practices, but also in the use of an alternative source to virgin fossil fuels, with the consequent environmental benefits detailed in the next chapter. The production of films from post-consumer waste has allowed the recycling of 86,000 kg of waste that would otherwise have been incinerated or left in landfill.

THE SUSTAINABILITY OF THE RAW MATERIAL

The resistance and versatility of plastic materials make them an indispensable resource for various industrial and commercial processes. However, the raw material from fossil sources, typically used to produce traditional films, involves the consumption of scarce natural resources, thus aggravating the phenomenon known as *fossil resource scarcity*. Aware of the importance of plastic and the need to convert it to models more aligned with the needs of the ongoing ecological transition, Irplast promotes the use of alternative sources to produce polypropylene films and products.



NOPP (Natural Oriented PolyPropylene) - Polypropylene film derived from renewable sources

The NOPP product line, first introduced to the market in 2020, is made from polypropylene polymers from SABIC's TRUCIRLE line, sourced from **renewable sources**, such as tall oil, a viscous fluid obtained as a by-product of the wood pulp processing process. In order to address the shortage of tall oil on the market and expand the range of products offered, in 2023 Irplast also added Used Cooking Oil (UCO) to the sources of the raw material used to make the products in the NOPP range. UCO, which is a waste product that does not compete with the food chain, allows for excellent performance, while reducing CO₂ emissions and avoiding the disposal of the oils themselves in wastewater. All the films and products in the NOPP line, ISCC PLUS certified, guarantee a significant reduction in the use of raw materials of fossil origin, while maintaining the same characteristics as traditional BOPP film, including suitability for food contact and recyclability of the material. The adoption of this type of film in place of the traditional one allowed a saving of 1,380 tons CO₂eq in 2023, an increase of 10% compared to the previous year due to the higher sales volumes in 2023.



LOOPP - The polypropylene film derived from recycled sources

In addition to bio-based raw materials, Irplast also offers a line derived from a raw material obtained from the **chemical recycling of post-consumer waste**, ISCC PLUS certified according to the mass balance approach. Also in this case, it is a response to the phenomenon known as *fossil resource scarcity*. Through the LOOPP product line, Irplast pursues the objective of improving the sustainability of its solutions, avoiding emissions and consumption associated with the extraction and processing of virgin raw materials, as well as any environmental impacts associated with the disposal of plastic waste or its dispersion in ecosystems. Furthermore, chemical recycling processes, unlike mechanical recycling processes, allow obtaining films with the same properties and characteristics as traditional ones, making it a more suitable alternative for certain specific functions and sectors. In fact, polymerization starting from pyrolysis oil as feedstock, obtained from post-consumer plastic waste, creates a product with the same chemical, physical and mechanical properties as a virgin fossil-based BOPP film, which can therefore also be used in the most stringently controlled industrial sectors, particularly for food contact. In continuity with 2021 and 2022, also in 2023 this film was used for the production of multipack pre-adhesive bands and adhesive tape at the Empoli plant.



Highlights 2023

Irplast is currently one of the main players in the world for sustainable, renewable or recycled BOPP, in order to promptly respond to the needs of customers and regulations aimed at reducing the impact of single-use plastic. For this reason, it has established a close collaboration relationship with its suppliers of sustainable raw materials and aims to satisfy the growing demand on the market by maximizing the supply levels of this material. The strong market demand is signaled by the fact that none of Irplast's customers has ever changed their choice after adopting one of the alternatives with the lowest environmental impact and demand is constantly growing. In 2023, Irplast further increased the quantities of "green film" sold (NOPP and LOOPP) from 1,441 tons in 2022 to 1,466 tons of the current year with a reduction in the incidence of LOOPP products in favor of the NOPP line due to a greater availability on the market of bio-based raw materials compared to raw materials from chemical recycling. Projected estimates for 2024 indicate further rapidly accelerating growth.

Focus – The analysis of the environmental impact of products: The Life-Cycle Assessment and other studies

Product sustainability is a crucial pillar that is based on the precise understanding and assessment of the environmental effects of company products at every stage of their life cycle. In this context, since 2020, Irplast has started analyzing the environmental impacts of various types of its films through the Life Cycle Assessment (LCA), an analytical method that examines the environmental impact of a product from the beginning to the end of its existence, focusing on key elements such as CO₂ emissions and the use of raw materials.

Continuing in this direction, in 2023 Irplast completed the LCA of the NOPP film derived from UCO (used cooking oil), representing the fourth study of this kind. Previously, the company had examined the reduced thickness film, the NOPP film obtained from tall oil and the LOOPP film. This research provided a precise and science-based assessment of the environmental impact of the green film category, also simplifying the comparison with conventional polypropylene films.

The Company has also planned to carry out peer-reviewed LCAs for both films produced from fossil raw materials and waste oils by 2024. Next year, it will also conduct a Life- Cycle Assessment on the tape, also in order to satisfy the information needs related to the environmental impacts of the product received from its commercial partners.

In 2023, Irplast also conducted significant research on the film made using, in part, regranulated material produced internally. The aim was to evaluate the environmental benefit compared to a conventional film. The analyses showed that the integration of regranulated material, obtained through mechanical recycling, led to an average reduction of approximately 39% of the environmental impact of the film in terms of CO₂ production, compared to a similar film produced without the use of recycled granulate.

% REGRANULATED	% REDUCTION COMPARED TO STANDARD
34	24
50	36
80	57

Focus – European Taxonomy Eligibility Analysis

In the context of a complex and diverse landscape of sustainability definitions, since 2020 the European Commission has launched an ambitious project to create a classification system based on scientific criteria. This system is aimed at identifying economic activities that make a significant contribution or have the potential to support the six environmental objectives outlined in the European Green Deal.

Irplast, attentive to comply with scientific regulations and with the aim of anticipating the requirements of the Non-Financial Reporting Directive (CSRD), which will be applicable starting from the 2025 financial year, has undertaken in 2023 **an admissibility analysis** of its operations in relation to the annexes of the European Taxonomy (EU Regulation 2020/852).

The analysis revealed that Irplast's core business falls within the scope of activity 1.1, i.e. the **Manufacture of plastic packaging**, thus demonstrating that it has the potential to significantly contribute to the transition towards a circular economy pursuant to Annex II of Delegated Regulation (EU) 2023/2486.

CERTIFIED SAFETY AND SUSTAINABILITY OF PRODUCTS

THE CERTIFIED SUSTAINABILITY OF OUR PRODUCTS

Irplast ensures accurate control of products and production processes, aimed at guaranteeing compliance with high standards of **safety, quality** and **reliability** for its customers. In order to guarantee structured and transparent management of all aspects related to sustainability, hygiene and safety, the Company complies with globally recognized certification schemes, which require periodic compliance verification through announced and unannounced third-party audits.



Product certifications



Irplast plants periodically undergo AIB International (American Institute of Bakery) audits and are BRCGS Packaging Materials (British Retail Consortium Global Standard) certified. These certifications ensure compliance with the highest quality, hygiene and safety standards in the production of packaging and film. Furthermore, these certifications guarantee the monitoring of packaging intended for food products and safety in the production of films in order to avoid the presence of contamination risks in the supply chain. Both plants confirmed the certifications in 2023. The Atessa plant, already certified for two decades, received two unannounced audits in 2023, synonymous with rigorous quality control, obtaining a score of 880/1000. As for the BRCGS certification, following an unannounced audit, the Empoli plant obtained an A+ rating in 2023 while the Atessa plant obtained an AA+ rating.



After obtaining the ISCC PLUS certification in 2019 for the Atessa plant, in 2020 the Empoli plant also obtained the ISCC PLUS (International Sustainability & Carbon Certification) certification for the first time, which allows the monitoring and demonstration of the sustainability of its products through the control of sustainability requirements and the mass balance of the entire system.



Irplast has also availed itself of the UNI 10667 – 1:2017 certification for polyethylene by-products and polypropylene by-products in the production plants in Atessa.



The Empoli plant is DPG (Deutsche Pfandsystem GMBH) certified, a certification required for labels intended for recyclable bottles sold on the German market. In addition, the Atessa site has obtained Deutsche Post AG and United States Postal Services certifications for the readability of the film for window envelopes on optical readers of European and US postal authorities.

ISCC PLUS certified products

Following the achievement of the ISCC PLUS certification in both its production plants in Empoli and Atesa, Irplast has become the first company in the sector to have launched products made with **certified sustainable raw materials on the market**. The certification scheme is not limited to verifying the activity for which Irplast is directly responsible, but extends the control and monitoring of the sustainability requirements **of the entire production chain**, both for the raw material from PCW and bio-based, for which the checks start at the "feedstock producer" and end at the "brand owner".

The integrated sustainability of the product is guaranteed by the traceability of the value chain, made possible thanks to the receipt and issuing of sustainability declarations for each batch of raw material purchased and product sold. The ISCC PLUS certified Irplast products make up the **NOPP**, **NOPP+** and **LOOPP** product lines.

The ISCC PLUS certification follows the mass-balance scheme which provides for a final mass balance at the end of the quarter. As regards the composition of the product, Irplast has chosen to include in the calculation of the percentage of sustainable raw material that can be used, the maximum quantity that can be replaced with the corresponding share of materials of fossil origin, unless otherwise requested by the customer, leaving unchanged the structure made up of raw materials that are not currently available from alternative sources. In this way, there is a more solid and credible reporting towards the final consumer.

ISCC PLUS 2023 MATERIAL VOLUMES FOR ATESSA			
	TOTAL	OF WHICH FROM CHEMICAL RECYCLING	OF WHICH FROM RENEWABLE SOURCES
Products shipped from Atesa (kg)	19.275.193	-	-
ISCC PLUS certified products shipped from Atesa (kg)	1.466.000	86.000	1.380.000
Incidence of ISCC PLUS certified products shipped from Atesa	7,6%	0,4%	7,2%

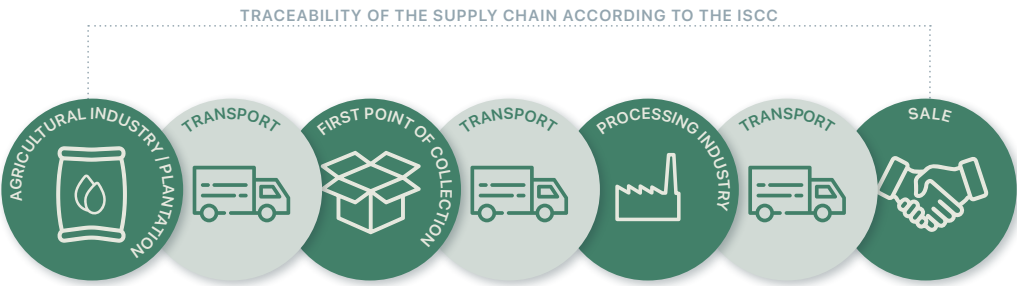
The Atesa plant produces ISCC PLUS certified NOPP, NOPP+ and LOOPP films, which are then partly sent to the Empoli plant for the tapes and labels business units, and partly marketed externally. Although 2023 saw a reduced availability of chemically recycled raw materials, due to technical restrictions in the production of upstream pyrolysis oil, the demand for sustainable BOPP continued to grow, confirming an upward trend that is expected to continue in 2024. In order to compensate for the shortage of films derived from chemically recycled raw materials, in fact, an increase in sales of films obtained from renewable sources was recorded, in particular from UCO (used cooking oil), which is widely available as a by-product valorized and reintegrated into the production cycle.

ISCC PLUS 2023 MATERIAL VOLUMES FOR EMPOLI			
	TOTAL	OF WHICH FROM CHEMICAL RECYCLING	OF WHICH FROM RENEWABLE SOURCES
Products shipped from Empoli (kg)	10.015.819	-	-
ISCC PLUS certified products shipped from Empoli (kg)	264.643	58.932	205.711
Sustainable material shipped within ISCC PLUS certified products from Empoli* (kg)	142.141	30.613	111.528
Incidence of ISCC PLUS certified products shipped from Empoli	2,6%	0,6%	2,1%
Products shipped from Empoli in the category multipack bands (kg)	556.268	-	-
Incidence of ISCC PLUS certified products shipped from Empoli in the multipack bands category	47,6%	10,6%	37%

*The value presented refers only to the fraction of ISCC certified material within the products sold, or to the weight of the item sold times the sustainability percentage of the product itself.

The main focus in Empoli is on multipack bands (multipack) with NOPP, NOPP+ and LOOPP films, ISCC PLUS certified. In 2023, the volume associated with this category of products recorded a further slight increase compared to the previous year, settling at around a value of 2.6%.

In 2022, a new product in the tape line was developed and marketed, namely a new version of adhesive tape made with sustainable and ISCC PLUS certified raw materials, bio-based, thus enriching the family of NOPP products offered. During 2023, the Company continued to consolidate the ISCC product range, focusing on the production of films from chemical recycling and waste materials. In 2023, a strategic collaboration was undertaken with an adhesives manufacturer to facilitate the acquisition of the ISCC PLUS certification. Obtaining this certification for the adhesives supplier would be a fundamental step towards the creation of a fully certified final product, based on an ethical, sustainable and carefully monitored supply chain.



MONITORING THE QUALITY AND SAFETY OF PRODUCTS

Irplast has developed a management and control system capable of always ensuring the highest quality and safety of its products.

For the two production sites in Atessa and Empoli, Irplast carries out **periodic internal audits** of its corporate management systems. In addition, «self inspections » are periodically carried out to verify compliance with the requirements of the BRCGS Packaging Materials and AIB International Standards. The aim of these checks is to ensure that the products comply with all safety and quality criteria.

As regards the Empoli plant, the product categories for which the impacts on health and safety are assessed can be divided into two macro groups: Label Division and Tape Division. Product verification can concern different parameters, such as adhesive weight, print quality, colour standards, and ink anchoring tests. As regards the products of these two divisions, in 2023 there were no cases of non-compliance regarding the health and safety of the products. With reference to the film produced in Atessa, both laboratory parameters (thickness, breaking load, elongation at break, elastic modulus, heat shrinkage, haze, gloss, sealing strength resistance, coefficient of friction and print treatment levels) and line parameters (thickness and visual appearance) are analysed. After the slitting phase, the checks also concern the parameters of flatness, winding and conformity of the reel, following which the material deemed unsuitable is classified as "second choice". The percentage of second choice on the total quantities produced is monitored so that it does not exceed the physiological processing threshold. The maximum quality of production at the Empoli and Atessa plants is achieved thanks to the analyses that are carried out on all products that do not comply with the expected standards, in order to investigate the causes of the problems that have arisen and, on the basis of these, undertake **corrective actions** aimed at minimize the occurrence of non-conformities.

Also in the Atessa plant, during 2023 no non-conformities were found regarding the impacts on the health and safety of the products, neither with regard to regulations that involve fines or sanctions, nor with regard to self-regulation codes.



COMPLAINTS MANAGEMENT

Irplast monitors and manages complaints and reports received from its customers, also taking into account the voluntary evaluations received from them. The evaluation by customers concerns elements including technical quality of the product, technical assistance, complaint management, post-delivery assistance, and delivery times.

Customer feedback is a key element in defining objectives and actions to be taken in order to improve the quality and efficiency of the service.

MONITORED PARAMETER*	2021	2022	2023	TARGET 2024
Average time to close a complaint (Empoli/Atessa)	30 days/ 58 days	32 days/ 43 days	34 days/ 68 days	35 days/ 25 days
Impact of customer credit notes on turnover (Empoli/Atessa)	0,41% / 0,27%	0,38% / 0,31%	0,58% / 0,40%	0,36% / 0,25%
Initial feedback following the report (Empoli)	13 days	10 days	9 days	6 days

*The average time to close complaints indicators are increasing compared to 2022, with an initial feedback time following the report instead decreasing. The incidence of customer credit notes on turnover is slightly increasing compared to 2022.



BEYOND THE PRODUCT: A 360° APPROACH TO SUSTAINABILITY



SUSTAINABILITY OF PROCESSES

WASTE AND SCRAP MANAGEMENT

Moving from product sustainability to process sustainability, the Company is constantly committed to minimizing the negative impacts of its activities on the environment, such as those attributable to waste production. In this context, Irplast adopts **circular economy practices** aimed at **enhancing input resources and reducing production waste** which, through recovery and reuse actions, acquire a second life in a new production cycle.

The production of bioriented polypropylene film generates physiological waste classified as a by-product (UNI 10667-1 2017), for a share equal to approximately 20% of the incoming plastic raw material. This waste is valorized, through a regranulation operation, and three quarters are reuse in the **internal production process**, creating films that have the same technical-mechanical characteristics as films made with virgin raw material. Over the last few years , this internal reuse of industrial waste has increased thanks to a better segregation of the types of waste and to the increase in the share coming from mechanical recycling in the final products, allowing, in films made with regranulated post-industrial waste, to go from a typical percentage of waste equal to 34% in 2020, to the current 80%. The Empoli plant uses this film, produced starting from the internal reuse of the mechanically recycled by-product, for its **Eco+ Tape line**.



The Company has set itself the goal of increasing the amount reused internally in the future, and therefore exploiting the incoming raw material even more. To date, almost all of the non-reusable part from Irplast is **sold to third parties** to be reused as raw material for different technologies and processes, such as injection molding. The efforts of recent years have therefore made it possible to almost completely eliminate the share of plastic waste produced, which corresponds to 0.2% of the purchased raw material. The majority of Empoli's waste is instead delivered to authorized **external companies** specialized in the collection, recycling, regranulation and manufacturing of boxes for the transport and storage of products for the agri-food, automotive and packaging industries, using waste from industrial processes, such as those delivered by Irplast, and post-consumer plastic.



In 2023, Irplast implemented a significant reorganization of its operational processes, aiming to drastically reduce waste generation. This initiative produced a tangible improvement in production efficiency, highlighted by a considerable increase in the yield indicator, which exceeded the values of previous years by several percentage points. This progress is the result of a more scrupulous management of waste, including print starts, and of an optimized production process, the fruit of the experience and expertise of Irplast technicians, experts in production processes.

With a view to reducing the raw material purchased and minimizing the waste produced, since 2020, Irplast has installed a second distiller as, given the increases in workloads, it was no longer sufficient to process the solvent used. This installation has made it possible to use the recovered solvent for the production process without having to purchase new quantities for activities marginal to the production activity (cleaning, etc.). Furthermore, this new configuration has made it possible to reduce the production of waste that is difficult to dispose of and has also made it possible to significantly reduce the solvent sludge generated: **in fact, it has halved compared to the levels prior to the purchase of the second distiller**. The machine has continued to operate effectively also in 2023, maintaining the efficiency in solvent recovery unchanged compared to 2022. Therefore, the recovery percentage has remained stable at **86%**. Irplast applies good practices for the **recovery and reuse of inks in production**, thus limiting the quantity of waste disposed of with the CER Code 08.03.12* (Ink waste containing hazardous substances). During 2023, ink recovery **stood at 13%**.

The waste produced in all sites, mainly attributable to production processes, is managed in compliance with the provisions of the law, in compliance with the hierarchy established by the European Community.

The waste generated by Irplast's activities , both urban and special, hazardous and non-hazardous, is delivered to third-party authorised companies that recycle or dispose of it based on the type of waste and the availability of the facilities. For waste management, the Company relies on environmental intermediaries who identify the waste recovery and transport companies and the destination facilities. For each of them, they provide environmental authorisations and, as required by current legislation, the waste is taken charge of and registered, with the relevant EER code, in the Loading and Unloading Register and then sent for recovery or disposal within the expected times, always through authorised companies.

During 2023, Irplast observed an overall decrease in the quantity of hazardous and non-hazardous waste, equal to 29% less than the previous year. Some categories of hazardous waste saw a significant reduction. For example, solvent sludge decreased from 84,064 kg in 2022 to 73,912 kg in 2023, while waste oil went from 2,160 kg in 2022 to 1,216 kg in 2023, marking a reduction of -44%.

Highlights

-12%

sludge generated compared to 2022

A sustainable coffee break!

In 2023, Irplast confirmed its participation in the *Rivending project*, involving the Empoli plant starting in April. The initiative aims to recover cups and coffee stirrers from the distributors present in its premises. The waste in question is deposited in specific containers and subsequently delivered to the body responsible for their collection, which is responsible for sorting the materials and sending them for recycling. This initiative allowed the avoidance of 538 kg of emissions in 2023 of CO₂ between the two plants.

RESOURCE MANAGEMENT

Process efficiency and new investments

During 2023, the Company continued to pursue a policy of new investments aimed at increasing efficiency and total production capacity. Since 2016, Irplast has continuously intervened on the machinery of its factories, introducing new machinery equipped with advanced technologies to replace older models or processes, generating a reduction in energy and resource consumption for the same production.

In 2023, the focus has been on planning a strategic investment regarding the implementation of a new extrusion line. This investment will position the company at the forefront of the industry in the production of BOPP (biaxially oriented polypropylene) films and will offer the possibility to explore new business lines to reach and serve different market segments. With an investment of 50 million euros, this cutting-edge technology will be installed at the site in Atesa, Abruzzo, and is expected to be fully operational by the end of 2025. The line is designed to produce 25,000 tons of specialty films per year, which means doubling the company's current production capacity.

The extrusion line is specialized in the creation of recyclable structures, made of **monomaterial polypropylene** (PP), which meet the specific needs of customers in terms of thermal and mechanical properties. This tailor-made approach allows to produce **fully recyclable packaging** in line with European directives, offering innovative and sustainable solutions for the packaging market.

Irplast's choice to invest in this technology is not a coincidence, but follows a tradition of pioneering in the adoption of simultaneous stretching lines, having been the first company in Europe to engineer and install such a line in 1999. After 25 years, the purchase of a second line confirms the confidence in the exclusivity and effectiveness of this technology, which is not matched by conventional lines.

Among the investments made, it is also worth highlighting the purchase of a **regranulator** to optimize the reuse of the incoming virgin raw material through the regranulation, or mechanical recycling, of physiological production waste. A study conducted on the film containing this new regranulated material has demonstrated the lower environmental impact in terms of CO₂ emitted during the production phase. These innovations not only improve production flexibility and increase efficiency in the options offered to the customer, but also reduce waste and consumption of materials and electricity associated with production processes, continuing to orientate production towards sustainable solutions. These environmental benefits are also supported by careful monitoring and planning of the procedural and organizational aspects of the departments, made possible by the inclusion of new technical figures in production management, partly dedicated to the analysis of production performance indicators and the reduction of inefficiencies.

Photo in the background: Signing of the agreement for the purchase of the new extrusion line with the supplier Bruckner Maschinenbau



Irplast places great emphasis on reducing the direct and indirect environmental impact of its production activities. The commitment to safeguarding natural resources guides the Company's choices in order to ensure compatibility between the pursuit of its commercial goals and the application of environmental sustainability principles.

Over the years, the Company has equipped itself with cutting-edge technologies and systems with the aim of reducing greenhouse gas emissions, ensuring efficient use of water resources, containing energy consumption and minimising the likelihood of environmental accidents.

Impact monitoring and regulatory compliance

Irplast annually prepares a **summary report** in order to present the progress of the environmental activities of the Atessa and Empoli plants . The document is particularly important as it also establishes a basis for determining interventions for further efficiency, and also allows compliance with the current legislation on environmental protection (Legislative Decree 152/2006) through rigorous monitoring and reporting of the main impacts.

The Annual Environmental Report contains environmental data and the quantity of products leaving the factories and is sent to the competent environmental bodies and authorities by April 30. The data contained in the environmental report are related to the following **environmental matrices**:

- Pollutants in the atmosphere and in water
- Waste leaving the plant destined for both disposal and recovery
- Noise emissions
- Water consumption
- Fuel and electricity consumption
- Use of raw materials
- Solvent Management Plan
- Outgoing products

The Empoli production site is **subject to the Integrated Environmental Authorization (AIA)**, and, as such, must pursue and respect the rules for the protection and conservation of the environment, contained in the sector Brefs, which the communication of the data reported above, together with the quantity of products leaving the plant, allows to verify. Compliance with the provisions of the AIA, as well as the sector Brefs, has the purpose of eliminating the causes that can create environmental accidents, reducing waste and consumption and optimizing the production cycle of the site. During 2023, a non-substantial change was made to the authorization following the installation of a new printing machine. During the year 2023, the ARPAT technicians did not carry out inspections at the plant. **However, the Company continued to pay maximum attention to verifying the parameters and compliance with the limits set.**

To better monitor the management of its environmental impacts, the Atessa plant has implemented for over 20 years an Environmental Management System certified in compliance with the UNI EN ISO 14001 standard, an international standard that establishes the requirements aimed at monitoring environmental issues in the company with a view to continuous improvement.

The Irplast plan for solvent management

To ensure sustainable management of the impacts deriving from the use of solvents, the Company has defined, as prescribed by its own Integrated Environmental Authorization, **the Solvent Management Plan**, i.e. an additional document which reports the company's performance relating to the emission of solvents deriving from activities involving the use of volatile organic compounds .

Focus – Legislative Decree 3 April 2006, n. 152

Legislative Decree 152/2006 aims to promote the quality of human life through the protection and improvement of environmental conditions and the rational use of natural resources.

The main fields of application of the decree concern:

- soil protection and the fight against desertification, the protection of water from pollution and the management of water resources;
- waste management and remediation of contaminated sites;
- air protection and reduction of emissions into the atmosphere;
- compensation for environmental damage.

Irplast for the reduction of its environmental impact

Air quality

Irplast, for both production sites, monitors emissions and uses the services of specialized and certified laboratories in chemical analysis for the control and monitoring of air quality.

Over the years, Irplast has implemented a series of technological improvements aimed at optimizing air quality in the printing departments and reducing environmental impact. These innovations include the adoption of advanced ventilation systems, which have helped limit the spread of volatile substances in the work environments. Furthermore, the introduction of specialized aspirated booths for the treatment of solvents and the cleaning of machine components has improved safety and efficiency in the management of printing residues. These interventions have allowed the creation of a closed circuit for air recirculation, significantly improving the quality of the internal environment and contributing to a more sustainable production process.



Water consumption

There are 2 wells in the Empoli site. The water drawn from the wells was used for:

- cleaning of acrylic spreaders and plates used in flexographic printing;
- irrigation of the company's green areas;
- feeding the evaporation tower of the trigeneration power plant;

The water extracted from the well is not immediately ready for use and for this reason, Irplast has installed a water softener. The water treated by the water softener is directed to the trigenerator while the waste water from the water softener, since it is salty, is considered waste, classified as CER 16.10.02, falling into the category of non-hazardous aqueous waste. This waste is stored in a silo and sent for disposal by an authorized company.

During 2023, the installation of an inspection well was completed, accompanied by a by-pass system for the safe collection of First Rain Rain Water (AMPP) in the paved yard used for external waste storage. The collection and decantation system implemented was specifically designed to treat water coming from paved areas, ensuring the filtration of pollutants such as oily residues before they can flow into natural waterways.

Water consumption related to the use of the trigenerator and the cogeneration system is significant, but the values are still less than half of what is authorized by the Region. Irplast's water consumption has seen a decreasing trend in 2023 mainly linked to a contraction in production that offset the greater use of the cogenerator during the year. In fact, considering the water consumption of both plants, a total reduction of 20% is observed, more marked at the Atessa plant.

IRPLAST'S CONTRIBUTION TO THE FIGHT AGAINST CLIMATE CHANGE

The fight against climate change is a priority for today's society, in the awareness that it is necessary to radically transform the modus operandi to limit climate-altering emissions and keep the increase in global temperature within 1.5 C° compared to pre-industrial levels. Irplast is increasingly attentive to this issue and addresses it by focusing both on its greatest source of direct impact, energy consumption, and, as regards indirect impacts, by focusing on more sustainable raw materials and more efficient logistics.

The production process of Irplast requires the consumption of large quantities of energy, classifying the Company among those most energy-intensive. For this reason, energy efficiency has always been a priority for the Company with a view to reducing not only the environmental but also the economic impacts of its activities.

The first intervention in this direction was the choice to install **trigeneration plants** first in Atessa, from 2016, and then in Empoli, from 2020, which allow for the simultaneous self-production of electrical, thermal and cooling energy, guaranteeing better energy yield compared to the three separate productions.

In 2023, the Company managed to make the most of its cogenerators. In particular, the Atessa cogenerator was used more intensively, increasing the production of cooling power, unlike the Empoli one, which was mostly used for the production of heat, both in cogeneration mode.

The company has also invested in energy efficiency, replacing the existing lighting system in one of its production sites with LED technology and preparing for the installation of photovoltaic panels.

Regarding the purchase of green energy, the company is in the strategic evaluation phase and, despite the increase in costs, is considering several options for sourcing from renewable sources.

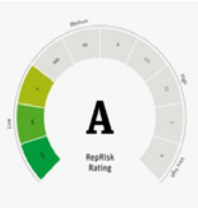
Interdisciplinary Synergy for Energy Optimization

Furthermore, in recent years a transversal working group has been established dedicated to improving the energy efficiency of production at the Atessa plant, involving the production, R&D and Energy Management functions in the analysis of the main sources of consumption and the study of the best available alternatives. The work conducted by the group, based on the energy management system, started from the punctual monitoring of consumption in order to examine in detail the information regarding energy consumption and production, as well as the possible actions to be taken. These regular meetings are dedicated to monitoring current energy trends, discussing the dynamics found and developing optimization strategies. The aim is to detect points of inefficiency and propose improvements that lead to a more sustainable and informed use of energy resources.

Energy consumption and GHG emissions

In 2023, Irplast consumed 475,835 GJ of energy (derived from the use of fuels and electricity), recording a value in line with the previous year. At the same time, in the reporting year the Company generated 16,724 tons of CO₂ in Scope 1 emissions and 9,777 tons of CO₂ in Scope 2 Location-Based emissions (14,189 tons of CO₂ of Scope 2 Market-based emissions), recording a decrease in overall emissions compared to 2022.

Irplast has continued its engagement process with its transport partners to map Scope 3 emissions related to the transport of its outgoing goods. This initiative is part of a program aimed at delivering part of its products through intermodal transport with the aim of reducing the impact in terms of greenhouse gas emissions. In 2023, the Company increased the scope of its effort, managing to obtain the required data on emissions generated by a **greater number of suppliers** in the context of its outgoing transports.



RepRisk ESG Rating

Irplast underwent a further ESG assessment tool: The RepRisk Rating (RRR), a letter rating (from AAA to D) that facilitates company benchmarking against a peer group and the reference sector, as well as measures the integration of risks related to ESG factors and corporate conduct into business processes. The Rating provides decision support in risk management, compliance, investment management and supplier risk assessment. The Company achieved an excellent result by receiving the highest rating A associated with a low risk profile.



The compilation of the CDP by Irplast

Also in 2023 Irplast has decided to extend the compilation of the CDP (Carbon Disclosure Project) to include water security, in addition to the usual management of carbon emissions. The company has paid particular attention to data collection and the description of its projects, aiming to obtain a rating for **water security as well**. This commitment has materialized with the achievement of a level C rating in both categories, a recognition that underlines the excellence of the work carried out by Irplast. These results are particularly significant as they exceed the average of the sector to which they belong and the global average.



The path to decarbonisation

Irplast has joined the Science Based Targets (SBTi) initiative, an international tool that encourages companies to set targets for reducing greenhouse gas emissions based on scientific data to combat climate change. In addition to promoting the definition of reduction targets, the SBTi also plays a verification role, certifying the accuracy of emissions reported by companies. Joining the SBTi means for Irplast **the commitment to set short-term emissions reduction targets**, in line with the latest scientific research to achieve carbon neutrality. This milestone was approved through a simplified validation process, reserved exclusively for small and medium-sized enterprises (SMEs). Specifically, Irplast is committed to reducing its scope 1 and 2 greenhouse gas emissions by **42%** by 2030, taking 2020 as the base year, and to measure and reduce its scope 3 emissions.

The Company is currently in the process of analyzing and identifying possible practices and actions to implement to achieve emissions reductions. In the coming months, Irplast plans to analyze a series of proposed actions and the estimated emissions reductions that each initiative could bring. Examples of proposed interventions include replacing existing machinery and equipment with more energy-efficient models and adopting energy-saving measures in factories, such as replacing lamps with less energy-intensive LED lighting, as well as industrial interventions to improve the efficiency of burners used in the plastic film stretching process.

EXTENDED RESPONSIBILITY FOR OUR PRODUCTION ACTIVITIES

THE ROLE OF IRPLAST FOR SUSTAINABILITY IN THE VALUE CHAIN

The achievement by Irplast of objectives related to environmental sustainability is necessarily linked to the involvement and collaboration of the actors in the value chain. In this sense, the Company plays, for example, a central and strategic role in intercepting the proposals of its suppliers to satisfy the needs of its customers, who are increasingly attentive to the environmental impact of their products, helping them to achieve their objectives in terms of sustainability through collaboration with specialized partners and the development of innovative and sustainable solutions.

Irplast establishes long-lasting relationships with its suppliers, based on transparency and collaboration. They are subjected every year to a quality-based evaluation process that is realized in the analysis of aspects such as the number of complaints, reaction times, punctuality of delivery and completeness of the documentation required by law. There is also a strong control over the economic sustainability of the supply.

The Company has introduced a new **questionnaire for suppliers** that is different from the model used in past years. This tool is designed to provide a more in-depth evaluation of suppliers through the vendor rating, which is an essential strategic tool for ensuring supply chain efficiency. The vendor rating allows us to create a detailed list of suppliers and accurately determine their suitability to provide specific goods or services.

The questionnaire does not limit itself to measuring consolidated parameters such as quality, geographical proximity, hygiene and safety but is enriched with new areas of investigation, such as sustainability and governance, reflecting the importance of these issues in the current business context. The questionnaire is currently being tested at the Empoli site, and has received a response rate of approximately 85% of suppliers. The results of this experimentation will guide the decision on whether to extend its application to the Atessa site and, subsequently, to the entire supplier network in 2024.

The questionnaire has been designed to be flexible, allowing the Company to modify the weighting of the different factors based on emerging needs. This approach ensures that the questionnaire remains an effective and up-to-date tool for monitoring sustainability practices within the Irplast supply chain, ensuring that suppliers are assessed in a holistic manner and in line with company objectives.

Irplast really partners with its suppliers by participating in joint projects to develop new products to be offered on the market and measuring their impact on the environment. In fact, the Company actively collaborates with suppliers of polypropylene granules to replace the virgin raw material with other types of raw material with a lower environmental impact, from non-fossil sources or derived from the chemical recycling of post-consumer waste, to expand the range of green products.

The same suppliers collaborate with the Company in calculating the Life Cycle Assessment (LCA) of films, useful for quantifying their impacts on the environment. Collaboration with these players is not limited to polymers; the tape and label divisions in Empoli are in fact active in seeking, from various suppliers, more sustainable materials for the printing and coating phase, such as adhesives, in order to increase the sustainability of the entire product range. The solutions developed in collaboration with suppliers aim to respond directly to customer needs. In fact, Irplast has a structure that facilitates the immediate reception of the needs of the latter and concretizes them in innovative solutions, conveying their needs along the internal and external production chain. The vertical integration of production, the constant communication between the two research and development hubs located in the two production sites and the flexibility of the Company, structured to offer tailor-made solutions to customers, allow the research process to be speeded up and specific products to be created that allow the sustainability of the customer's final products to be increased, reducing the impact based on the direct needs of the business.

In recent years, in fact, **Irplast customers have shown increasing demands and a greater sensitivity towards sustainability issues**, in particular towards the use of raw materials with a lower environmental impact, towards waste reduction and better recyclability of products. Consequently, the Company is concentrating its efforts to guarantee them the supply of materials that meet the specific requests, often benefiting from the close relationship to test them directly at the customer's production plants, where these materials will have to be used. The strength of some of the solutions proposed by Irplast lies in the fact that they allow improving the sustainability of the customer's products without necessarily having to request a change to the production process. In a context in which the regulations and pressures relating to the use of plastic in consumer goods are increasingly stringent, the sustainable business model adopted by Irplast is essential to guarantee **operational continuity**, reducing the impact on the environment and aligning itself with the ecological transition.



Finally, Irplast has been subject to periodic checks for years on sustainability issues such as consumption, work practices and food safety. These are expressly requested by customers who, thanks to contributions from Irplast, are able to monitor sustainability in their supply chain.

The project «One Health, One Welfare, One World»

Starting from October 2022, Irplast has launched a new thirty-month project in collaboration with the MUR, the Universities of Bari, Teramo and Molise and partner companies in the food and packaging industry, with the aim of creating products such as organic feed, meat and dairy products, whose life cycle has a reduced environmental impact. In this context, Irplast will develop part of the packaging, focusing on product preservation by increasing shelf life and ensuring adequate barrier performance.



SUSTAINABLE LOGISTICS

Sustainable transport management

Irplast is becoming increasingly aware that the impact on the environment is not limited exclusively to internal processes but can be traced back to all operations in the value chain. In this sense, the Company is pursuing a path to integrate new logistics solutions that allow for minimizing negative effects, mitigating, among other things, CO2 emissions along the supply chain and resource consumption.

Irplast continues its work aimed at understanding how to **optimize transport management** in order to reduce emissions related to its distribution activities, while at the same time prioritizing respecting commitments and deadlines set with customers. In this perspective, **it continues in greater shares the use – started in 2021 – of intermodal transport** to deliver to the customer the products coming from the Atessa plants, in larger quantities, and Empoli.

Intermodal transport is based on the combination of different modes of transport and the use of containers that are easily maneuverable from one vehicle to another and aims to optimize logistics by reducing emissions related to the activity. In practice, intermodal transport combines road transport with the movement of products by ship and rail. This practice determines a significant reduction in atmospheric emissions linked to the adoption of less impacting modes.

Irplast has decided to focus heavily on intermodal transport for the movement of goods, in particular from the Atessa plant where the type of products marketed, the characteristics of the customers and the location of the plants allow for the adoption of this type of transport. The Company is in fact planning to push this solution even further in the future.

In 2023, Irplast took significant steps towards integrated supply chain optimization, working closely with its carriers. A major milestone was the development of a file that provides up-to-date and accurate data on intermodal shipments in real time. This digital tool has become a reference standard for collecting and analyzing quantitative information on shipments, both domestic and international. Additionally, the number of carriers providing certified CO2 emissions data doubled from 5 in 2022 to 10 in 2023. These carriers handled 80% of the total weight of goods shipped, a significant increase from the 63% handled by the 5 carriers in the previous year. Additionally, these carriers handled 89% of the total weight of shipments made via intermodal.

In order to analyze and improve environmental impacts, Irplast has entered into specific agreements that provide, upon request, detailed information on emissions generated by the carriers with which it collaborates. This commitment is also reflected in the contractual documents, in which clauses have been introduced that require the provision of data relating to sustainability.

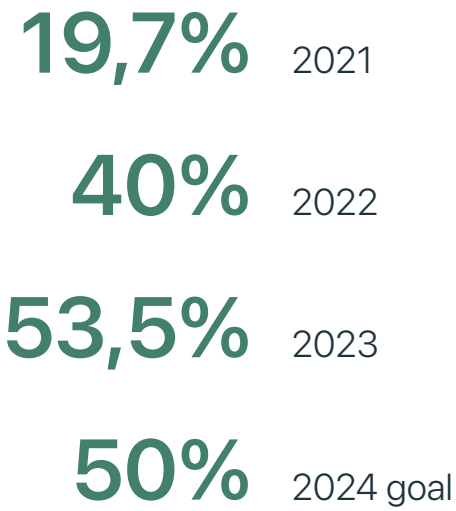
In addition to the progress made in the field of sustainable logistics at the Atessa plant, Irplast is evaluating the possibility of positively impacting the operations of handling goods departing from the Empoli plant. The Irplast headquarters in the area is located in a geographical context in which the intermodal transport solution is not easily achievable while maintaining the high levels of efficiency and timeliness that distinguish the Company in its relationship with customers. Consequently, Irplast is analyzing other levers to put into action in order to reduce its impact on the issue.

The first effect of this reasoning was the company's desire to understand its impacts related to site logistics. In this context, Irplast has started discussions with its logistics partners aimed at knowing the composition of their vehicle fleet, in order to understand to what extent it is made up of electric or latest-generation vehicles with reduced environmental impacts. From the responses received, it emerged that most partners largely use Euro 6 vehicles, with a small share of electric vehicles.

During 2023, there was a 13.5% increase in the volume of products transported using intermodal mode, perfectly in line with the objectives set the previous year. This growth contributed to reaching the milestone of 53.5% of the total goods shipped using this effective logistics solution by the end of the year.

53,5%
of goods shipped via
intermodal transport out
of the total goods handled
by the Atessa plant in 2023

Shipped intermodal (%)



Future goals

During 2024, a comparative analysis of shipping costs was conducted based on the price lists provided by carriers. This analysis compared, for each destination country, the costs associated with intermodal shipments compared to those of shipments exclusively by road. The analysis shows that, for the countries taken into consideration, intermodal shipments have higher costs than shipments by truck. This situation represents a significant challenge, as the countries with the highest cost increases are also those to which Irplast makes the majority of its shipments.

Factors contributing to this increase in costs include geopolitical dynamics such as conflicts, political tensions and attacks, as well as changes in electricity and fuel costs, and the introduction of new taxes, such as the motorway toll in Germany (Maut) and the carbon tax imposed by the European Union.

In light of these increases and in line with the principle of economic sustainability, it is not possible to foresee an increase in intermodal shipments. Consequently, the objective for 2024 remains to maintain the share of intermodal shipments at 50%.



The PE Recovery Project – RE.WIND

In 2023, Irplast confirmed its participation in the RE.WIND project, purchasing a 100% recycled flexible packaging film (stretch film used to wrap pallets of finished products), directly from suppliers who produce it starting from recycled material waste delivered by Irplast. The aim is to create a real virtuous circle in which Irplast delivers its polyethylene plastic waste to the partner company, which uses it in the creation of a new 100% recycled product. Subsequently, Irplast supplies the new polyethylene stretch film.

Focus – The recovery of PE bags as raw material

During 2023, Irplast continued the project started last year - in synergy with a partner company - linked to the recovery of PE bags (CER code 150102) in which it receives the raw material of its processes. In this context, the partner company deals with the recovery of packaging materials, their mechanical recycling and the production of new bags starting from the recycled material. Downstream of this process, the bags are reintroduced into the circuit.

In total, 25,020 kg of PE were sent to the partner company in 2023, **corresponding to 172 shipped bales that will be treated for reuse. This practice promotes the recycling of materials, transforming what would otherwise be considered waste into a new resource for our suppliers. In this virtuous cycle, the material is recovered and reintroduced into the market, thus reducing the need to use new fossil resources for the production of new bags.**

The pallet pooling

In 2023, a major initiative to recover and valorize pallets and other packaging materials was launched, which involved part of Irplast's suppliers in a significant reorganization. With the aim of extending these practices to all suppliers, the approach adopted had to take into account the specificities of each site, adopting tailor-made solutions for the different Irplast locations.

- **CHEP Project:** Thanks to the participation of customers linked to the Empoli plant, the project has seen considerable success; during the year 2023, **42% of CHEP pallets were recovered from customers who joined the project**, with a forecast of reaching 100% recovery in the future. A certificate was issued attesting to the reduction of CO₂ equal to 2612 kg, a reduction in waste equal to 209 kg and the wood saved equal to 2244 dm³, thanks to the implementation of this initiative.
- **«Packaging Recovery» Project:** Following the efforts to rationalize packaging undertaken in 2022, the Atessa plant launched a project in 2023 aimed at repurchasing used packaging in order to discourage excessive production and maximize its reuse in a virtuous circle. In 2023, the Atessa plant repurchased 1,339 pallets (4.3% of total pallets) and 2,720 flanges (4.6 % of total flanges). In total, **21% of CDS pallets recovered by customers who joined the project were used**, with a forecast of reaching 45% recovery in the future. In addition, 3,948 pieces of auxiliary material were reused and therefore repurchased (15.2% of the total pallets and flanges purchased during the year) avoiding purchases from the primary market.

Reusing pallets has reduced the need to produce new materials, conserving natural resources and reducing CO₂ emissions. In addition, the reorganization has allowed us to cut costs related to the purchase and disposal of pallets, with savings that are reflected in the entire supply chain and has simplified logistics management, improving the circulation of materials and the sustainability of operations.



THE PEOPLE OF IRPLAST

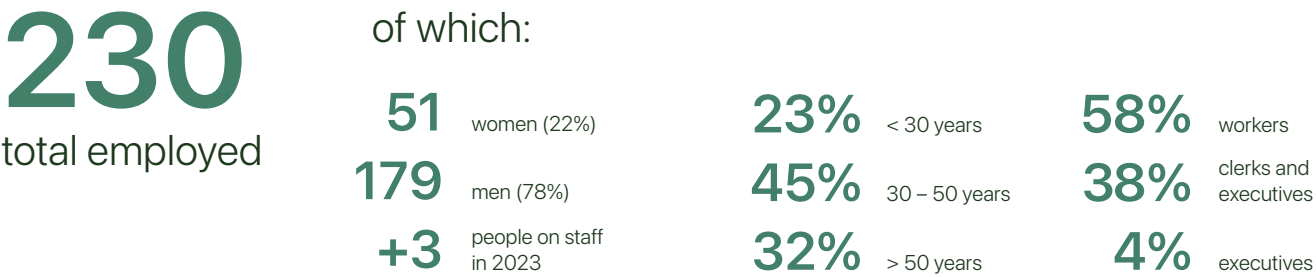




THE COMPANY'S HUMAN CAPITAL

Irplast considers its workers as a fundamental factor to achieve the company objectives and stand out on the market, innovating and systematically pursuing the highest quality in processes and products.

In this context, the Company pays great attention to the selection and management process of its workers, also taking care to guarantee all the elements necessary to create and maintain a positive work environment. This also occurs through the preparation of training courses that allow resources to grow and highlight their talent, exploiting and cultivating distinctive skills and competences.



In 2023, **almost all contractual relationships are permanent and full-time**. In administrative roles, the presence of women prevails, while operational roles are covered mainly by male personnel due to the specificity of the tasks performed.

During the year, the Company recorded an **increase in the number of employees** on its staff, going from 227 to 230 resources.

Employment relationships are governed by collective bargaining agreements that cover all staff in line with national legislation.

The selection of people

Irplast deals directly – through its HR office – with the search and selection of new talents, targeted and focused on company needs. Irplast's personnel selection process is codified in an internal procedure specifically designed to ensure effectiveness, transparency and meritocracy. The selection process outlined by the Company for a potential candidate includes two or three interviews. The first interview is aimed at getting to know the person, how they interact in a professional context, their character traits, and is aimed at discovering the candidate's soft skills useful for the position they could fill. The second is a technical interview that the candidate holds directly with the head of the function they could fill, useful for testing the possession of the knowledge and skills related to the open position. Finally, the third interview – planned only for figures deemed more strategic by the Company – sees the direct participation of the CEO.

What we look for: the three distinctive elements

Irplast places great importance on the candidate's possession of soft skills that can make the difference in pursuing company objectives. Specifically, the Company verifies in candidates the propensity for teamwork and sensitivity to the topic of sustainable innovation, which plays a fundamental role in the business strategy.

The positive outcome of the selection process for a candidate cannot ignore the presence of technical skills, necessary for the position that the candidate will fill.

- Technical skills
- Ability to work in a team
- Sensitivity to the theme of sustainable innovation



Listening to the staff

«One-to-one» interviews

In continuity with what has happened in the past 4 years, also in 2023 the HR office of Irplast has arranged listening moments for the staff through individual "one-to-one" interviews. This initiative, initially dedicated to new resources, was then extended over the years to the entire company staff in order to structure a mechanism aimed at measuring, not only the feelings of the individual worker, but also the company climate as a whole. The objective behind this project is to delve into the topic of job satisfaction from various points of view:

- job description;
- resource path within the company;
- workplace relationships.

The interviews are conducted by inviting the resources to adopt maximum transparency in their responses in order to identify any perceived critical issues or discomforts and to collect suggestions and requests that can improve the company environment. After the interviews, the HR office takes care of aggregating and valorizing the most relevant needs, highlighting the critical issues that have emerged and sharing the most interesting ideas by presenting them to the Company Management.

A moment of daily listening

In continuity with previous years, Irplast has maintained an active "help desk" at the HR office, dedicated to listening to staff. Specifically, the HR office is open to receive the Company's workers, one hour a day, to answer doubts or address any personal and operational problems that have emerged in relation to the employment relationship.

Trust and listening in the management of Irplast careers

Irplast places great trust and invests heavily in the professional profiles already included within the Company, trying to guarantee its workers growth opportunities within it, even in areas other than the one they entered, taking advantage of the benefits of internal job rotation to enhance their talents. In this context, it is particularly important to use the process of listening to workers to intercept their needs and aptitudes. In this sense, in fact, if the Company finds a coherence between the skills needed to fill an open position in Irplast and the interests, aptitude and personal characteristics of an internal resource, it could decide to allow them to move from one area to another to acquire new skills and experience. In 2023, two people benefited from this opportunity offered by the Company.



TRAINING AT THE BASE OF THE GROWTH OF IRPLAST WORKERS

Irplast workers must have cutting-edge and constantly updated knowledge and skills in order to respond to the challenges that the Company must face, determined by the sector in which it operates and by the leading role in the field of innovation and sustainability that it intends to cover.

To this end, the Company devotes great attention to the development of an annual training plan, drawn up considering both market pressures and the requests of its customers as well as the requests presented by its workers.

During 2023, Irplast provided **1524 hours of training** distributed as follows:

- 42% of the total training hours in 2023 to workers;
- 49% to employees;
- 4% to managers;
- 5% to executives.

The training courses provided by Irplast are divided into two main categories: on the one hand, there are mandatory courses related to health and safety issues, Model 231, international food safety standards, environmental, quality, safety and hygiene management systems, and refresher courses for members of the Prevention and Protection Service (RSPP/ASPP); on the other hand, there are courses aimed at refining more specific skills and knowledge. To meet the needs of certain sectors of the Company, training courses have been organised on technical topics relevant to the Company's current and future production, such as the new waste traceability and the use of innovative systems. Technical topics have been explored in depth, from the application of warning flags and traction bands, to retraining on important standards such as DPG, BRCG/ISCC PLUS/AIB/FOOD DEFENCE. To optimize and ensure the presence of the Emergency Team on three shifts, new members of both the First Aid and BLS (Defibrillator) Team and the Fire Team were trained. In addition, new managers were selected and adequately trained through specialized courses.

The Company demonstrates a constant commitment to strengthening the skills of its staff, translating into an investment in continuous and specialized training. In particular, importance is given to professional refresher courses that can promote the development of skills: this initiative is motivated by the desire to improve the professionalism of employees, promoting constant updating. In 2023, the training hours dedicated to the code of ethics and Model 231 have been reduced following a strategic choice shared with the supervisory body, which provides for the postponement of specific training to April 2024. The sessions will be recorded and made available to operators, with the aim of effectively integrating the details of the new whistleblowing legislation introduced during 2023. This postponement allows for the synchronization of training for all employees with the consolidation of the application of the legislation, ensuring better awareness and preparation of staff on the topic.

Focus – Language training

One of the outcomes of the "one-to-one" listening sessions dedicated to staff, Irplast has implemented a language training program that reflects the Company's commitment to the empowerment of its employees and their professional growth.

The language training program was structured to be in line with the levels of competence of our international collaborators, therefore, an English language course was introduced divided into two distinct sections: a basic level section, designed for those who wish to consolidate the foundations of the language, and an intermediate level section, ideal for those who wish to perfect their linguistic and communication skills. The lessons included a part of grammar study, a part of listening and comprehension, and a part of dialogue for conversation.

Recognizing the strategic importance of language skills in the global business environment, a two-level German course was also provided. This course was designed primarily for commercial areas, with the aim of enhancing employees' communication skills in an increasingly international and competitive market.

120 hours of language training:

2 courses of 30 hours delivered in **english**: **1 basic course** 7 employees participating; **1 intermediate course** 10 employees participants.

2 courses of 30 hours delivered in **german**: **1 basic course** 5 employees participating; **1 intermediate course** 3 employees participants.

Sustainable mobility questionnaire

As part of its commitment to sustainability, the Human Resources department joined forces with the Sustainability Department in May 2023 to develop and monitor over time a Home-Work Travel Plan. The goal of this plan is to optimize and reduce the impact of employee travel on the surrounding area. To do this, all workers were asked to participate in a survey.

The purpose of the survey was to collect information on the mobility habits and preferences of Irplast SpA staff, in particular regarding travel to and from the Empoli (FI) plant. This initiative is part of a broader corporate strategy that aims at sustainable and responsible management, trying to improve the environmental and social impact and employee well-being.

Participation in the survey was anonymous, ensuring the privacy of workers and encouraging them to freely express their travel experiences and preferences. This is an important step for the Company in promoting sustainable practices and making informed decisions that can benefit both the environment and the company community.

Corporate Welfare

Also in 2023, the company applied the framework agreement relating to the performance bonus to enhance the commitment of employees. The company also decided to introduce an additional measure in the form of a welfare package paid in advance to all employees, regardless of the results achieved.

The adoption of the "Welfare Hub" platform by Intesa San Paolo SpA therefore represents a concrete action to support workers' purchasing power, improve the corporate climate and optimize tax and contribution aspects. The Company has committed to providing this package of goods and services by 31 August 2023 to all employees who have joined the program, including those on fixed-term contracts, apprentices and temporary workers, provided they are employed for at least three months by 30 June 2023. For employees hired during 2023, the amount of the welfare was calculated proportionally to the months of work actually performed up to 30 June, provided it was not less than three months. For part-time workers, the value was adjusted based on the contractual hours.

IRPLAST FOR THE WELL-BEING OF ITS PEOPLE

«Irplast back to school!»: the initiative to complete studies

Updating skills and growing talents is a fundamental strategic element for Irplast. This reflection has pushed the Company to invest resources in their training and to confirm also for 2023 the initiative " Irplast back to school!", launched in 2016 to guarantee financial support to employees who have expressed the will to complete their studies. As part of this project, Irplast has provided the following incentives:

- **€1,000.00** to employees who obtain a high school diploma;
- **€1,000.00** per year for three years plus a bonus of **€500.00** following the thesis discussion for three-year degrees;
- **€1,200.00** per year for two years plus a bonus of **€500.00** following the discussion of the thesis for master's degrees.

Economic bonuses to support workers' expenses

Aware of the increase in the cost of living that has characterized recent years and willing to give concrete support to its resources, even in their personal sphere, Irplast has also provided, in 2023, specific bonuses to support its workers in certain types of expenses. In addition, the Company has not only kept active, but also increased the amounts of the "birth bonus" and the "wedding bonus", recognized as particularly useful for Irplast employees. In particular, for each birth or adoption of a child, the Company paid its employees a bonus of €1,000.00, while for a wedding an additional bonus of €500.00 was provided. These amounts were paid in the form of shopping vouchers, thus continuing to provide significant financial support to workers who find themselves going through these joyful and significant stages of their personal lives.

- 

1 Employee who took advantage of the "Irplast back to school bonus" for studying for a master's degree
- 

1 Employee who took advantage of the "Irplast back to school bonus" for the discussion of the Master's thesis
- 

2 Employees who have benefited from the "wedding bonus"
- 

5 Employees who have benefited from the "birth bonus"

The Technical Scientific Committee at the Ferraris Brunelleschi Institute in Empoli

Since November 2023, Irplast SpA has been actively involved in the establishment phase of the Technical Scientific Committee at the Ferraris Brunelleschi Institute in Empoli, in the province of Florence. The primary objective of this committee is to orient the institute's educational programs so that they effectively respond to the needs of the labor market, with particular attention to requests from local businesses. Irplast SpA contributes to this project with the contribution of two of its employees, both working at the Empoli site. Irplast aims to contribute not only to the development of skills in the area, but also to train those who can represent a future resource for the Company capable of responding to the growing demand for increasingly specific technical skills, thus generating a virtuous circle through training.

Furthermore, in 2023, in collaboration with the same institute, the Company gave the opportunity to 3 young people to continue their school-work alternation process in the slitting, printing and Environment and Safety departments of the Empoli plant.

The Professional Training Program at the Higher Technological Institute-Academy-Mechanical and Computer Science System of Lanciano (CH)

Irplast has undertaken a professional training program at the **Istituto Tecnologico Superiore-Academy-Sistema Meccanica e Informatica**. This project represents a direct bridge between the academic world and the industrial sector, offering students a unique training experience that integrates theoretical learning with practical application. The course, focused on the production process, is led by Irplast experts and culminates with a practical internship, allowing students to fully immerse themselves in the work context.

Classes began in 2023 at the Institute, and starting from April 2024, training sessions will take place directly inside the Irplast plants . This transfer not only strengthens the bond between the Company and the educational fabric of the territory, but offers students an even more authentic and in-depth internal vision of the production world.

The «solidarity holidays»

In continuity with previous years, the Company has renewed its commitment to the institution of solidarity holidays, extending the conditions for the free transfer of holidays to the family members of employees suffering from serious illnesses or who require continuous assistance following sudden and unforeseeable events, such as accidents or injuries. The beneficiaries of this solidarity initiative include:

- The spouse of the worker;
- The cohabitant, provided that stable cohabitation is certified by registry office certification;
- Relatives within the second degree, including adult children.

In addition, the Company has recognized the need to extend the scope of solidarity leave to include employees who, due to unforeseen circumstances beyond their control, are unable to perform their work duties. This may include situations in which the employee temporarily finds himself in personal conditions that make it impossible to continue his work commitments.

«Agile working» available to Irplast people

Irplast has renewed its smart working agreement, confirming its effectiveness in improving employee well-being and contributing to environmental sustainability. After a 12-month experimental period that began in January 2023, the Company opened a dialogue with workers' representatives to assess the adaptability of this modality to the specificities of the production sector. The negotiations led to the signing of a new agreement in December 2023, which extends the adoption of smart working for a further year starting from January 1, 2024, demonstrating Irplast's commitment to solutions aimed at the well-being of its employees and the optimization of productivity.

MBO and sustainability

As a demonstration of the Company's concrete commitment to pursuing a sustainability strategy, the MBOs for specific roles have been reconfirmed. At the Chief Sustainability Officer, directly responsible for promoting a sustainable innovation strategy in Irplast, has been assigned specific ESG objectives.

Irplast demonstrates a constant commitment to improving the quality of life of its employees through the stipulation of advantageous agreements. These initiatives are designed to support the personal and family well-being of employees, offering significant benefits in various areas. Thanks to collaborations with Ottica Sostegni, Vittoria Assicurazioni and Uniwellness Società Sportiva Dilettantistica A RL, Irplast guarantees concrete benefits that range from eye health care to economic security, up to the promotion of a healthy and active lifestyle.

Agreement with Ottica Sostegni

Irplast has signed an agreement with Ottica Sostegni, reserving for its employees and their families a 20% discount on eyeglasses and sunglasses. This benefit includes a wide range of frames from the best brands in the eyewear sector, both Italian and international, thus guaranteeing high-quality products at more advantageous prices . Furthermore, Ottica Sostegni has an internal laboratory for the creation of personalized lenses and offers specialized contact lens services, making this agreement a significant benefit for the visual health of employees and their families.

Agreement with Vittoria Insurance

To reduce the burden of insurance policies on employees, Irplast has activated an agreement with Vittoria Assicurazioni, which offers a complete range of insurance products with discounts of up to 40%. This benefit is reserved for employees and their cohabiting family members, making access to insurance solutions more convenient. The agreement allows beneficiaries to choose between different policies, facilitating personal and family protection in an accessible and advantageous way, thus demonstrating the company's commitment to ensuring greater economic security for its employees.

Uniwellness Amateur Sports Society A R.L.

Irplast promotes a healthy lifestyle through its agreement with Uniwellness, which offers discounts of up to 25% on gym memberships. Employees can benefit from 10% discounts for 1 to 3-month memberships and 25% for 6, 12 and 24-month memberships, upon presentation of a document certifying their membership in the company. This initiative not only promotes the physical and mental well-being of employees, but also encourages socialization and cohesion among colleagues, helping to create a healthier and more positive work environment.



Irplast for its community

Sustainability lessons for the initiative “PACKAGING, WHAT A FANTASTIC ADVENTURE!”

IRPLAST supports the educational project "Packaging: what a fantastic adventure!" promoted by the Fondazione Carta Etica del Packaging, of which IRPLAST is a partner as an Ambassador of Packaging. The aim of the initiative, reserved for primary school students, is to illustrate the importance of packaging, from its primary function to its disposal, thus contributing to spreading a positive culture of packaging and promoting virtuous behavior.

Participation in our educational project is completely free for schools and is intended as an educational enrichment for classrooms. The material provided, which includes detailed slides with texts, insights and practical activities, is designed to integrate harmoniously with the environmental education programs already provided for by the ministerial curriculum.

Through this project, Irplast strengthens its commitment to promoting environmental awareness, demonstrating that sustainability is at the heart of our corporate philosophy, not only in production processes but also in social and educational commitment . Our initiative aims to equip young generations with the knowledge and skills needed to address current and future environmental challenges.

IRPLAST participated in 2023, with Naomi Lunadei, Chief Sustainability Officer of the Company, in some remote lessons, interacting with the children and teachers present in the classroom and answering questions on the topics of sustainability, recycling and correct recovery of materials. IRPLAST has already joined the continuation of the project also for 2024.

Over 200 schools, with approximately 1,000 classes and 23,000 students, participated in the first edition of the project "Packaging: what a fantastic adventure!".



A donation for the neurology department of the Ospedale San Giuseppe in Empoli

In February 2023, Irplast demonstrated its social commitment through the initiative "The heart of Empoli for Neurology", with a significant donation to the San Giuseppe Hospital in support of the neurology department. Irplast's contribution, a latest-generation ultrasound scanner, has become a fundamental asset for the department, being a high-precision diagnostic tool, crucial for the detailed examination of the cerebral vessels. This cutting-edge equipment is vital for the accurate diagnosis and evaluation of patients affected by ischemic strokes and plays a decisive role in the prevention of cerebrovascular diseases, effectively contributing to both primary and secondary prophylaxis.

HEALTH AND SAFETY AS A PRIORITY

Irplast pays the utmost attention to issues related to the protection of the health and safety of its workers. To this end, over the years, it has prepared all necessary measures to reduce the risk of injury, promote healthy environments and spread the culture of safety among its collaborators. Although no substantial changes have occurred from an organizational point of view during 2023, Irplast continues to plan and implement improvement actions at both production sites.

The Company is constantly committed to pursuing objectives related to ESG and workplace safety issues, placing particular emphasis on updating and reviewing the Risk Assessment Document (DVR). This process is crucial to ensure that company operations reflect the latest innovations in terms of machinery and technologies, as well as guaranteeing a safe working environment in the plants. The annual update of the DVR in 2023 represented a key moment, allowing the Company to identify and manage the main risks.

To improve accident rates and to raise awareness among workers regarding health and safety at work, the Prevention and Protection Service has prepared new operating procedures and provided specific Personal Protective Equipment (PPE) for each department. These measures have been supported by targeted training for workers, with the aim of increasing awareness and adoption of safety practices.

In relation to chemical risk, the Company has carried out periodic updates of the risk assessment and has intensified environmental and personal monitoring. Continuous training of personnel and the conscious use of PPE have become fundamental elements of the corporate culture. The Project for the Reduction of Diffused Emissions within the printing departments has been completed, which has brought benefits to both the health of employees and the external environment.



In relation to the risks related to cuts, explosions, falls from heights, forklift collisions, electrocutions and fires, the Company has adopted a series of proactive measures. These include reviewing and updating job-specific risk assessments, implementing updated operating procedures, promoting the use of appropriate PPE, and identifying risk areas. Periodic checks have been carried out on plant and machinery and new solutions have been introduced, such as the installation of new guardrails and lifelines, specific training for workers and further improvements to the fire prevention system. In addition, the Company has increased the number of fire extinguishers available within the plant and on the roof.

Update for private vehicles to access the plant

In October 2023, the HR office worked in synergy with the Environment and Safety area to update the data relating to private vehicles used by workers to access the plant. This initiative, focused on safety, ensures that in emergency situations the Company is able to quickly and accurately identify which vehicles to move, thanks to the detailed list that includes the model, color and license plate of each vehicle.

Furthermore, the company has an active **prevention and protection service** composed of the management representative, the Head of the Prevention and Protection Service (RSPP), the competent doctor and the workers' safety representatives. These figures meet periodically to carry out a risk reassessment, also through inspections of the departments, and to propose improvement actions aimed at eliminating situations of actual and potential danger to ensure a safe working environment. Workers can report any potential dangerous conditions to their manager who, in collaboration with the Prevention and Protection Service, takes the necessary actionsto mitigate the possible effects.

After completing the **fire prevention system upgrade** at the Empoli plant in 2022, Irplast continued to optimize the system in 2023. The fire detection system was expanded to increase the prevention and response capacity in the event of emergencies, thus ensuring greater protection for personnel and company facilities.

During 2023, the Company also made a significant infrastructural improvement for the safety of its employees with the installation of a pedestrian crossing. This intervention has significantly increased safety for those who must cross a regional road to reach the refreshment areas, resolving a situation previously recognized as highly risky. These measures, implemented following the concession obtained in November 2022, represent a concrete step forward in ensuring a safer and more accessible work environment.

Training in health and safety at work

Irplast provides training in health and safety at work to all employees. Among the various topics covered, it deals with in-depth knowledge of the plant, machines and equipment used and the specific risks to which workers are exposed. The RSPP and the Human Resources Office work together to define the methods of designing and delivering training. This It is structured in various theoretical and practical training courses and is managed directly by the RSPP. A **technical training**, together with **specific training and related updates** (Fire Prevention, First Aid, PLE, BLSD), through external training agencies. Irplast also takes care of the evaluation of the effectiveness of training through the compilation of **evaluation** tests by the personnel involved. The objective of this procedure is to establish the level of awareness and preparation of employees with respect to health and safety issues at work and consequently to improve and adapt training to emerging needs.

In 2023, training mainly covered the following topics:

- course for new First Aid and BLSD team members;
- training course for new forklift drivers;
- workers course (State - Regions Agreement December 2012);
- training and refresher courses for electrical workers PES PAV;
- training courses for firefighting team members;
- training courses for new Supervisors;
- advanced training courses on the use of Dissociants;
- ADR training courses.

During the year, an advanced training program was developed and expanded, enriched with new training modules specifically oriented to the management of high-risk substances. In parallel, particular emphasis was placed on the continuous updating of safety managers, ensuring that they remain constantly informed about the latest regulations and the most effective strategies for accident prevention and emergency management.



The ISO 45001 Management System

The Atessa site has had a **Management System for health and safety at work** compliant with the **ISO 45001:2018 standard for years**. This is an international standard developed by the International Organization for Standardization (ISO) with the contribution of experts from over 70 countries around the world and adopted at national level by the Italian Standardization Body (UNI). The standard prescribes the methods for implementing a management system with the objective of guaranteeing safety, reducing risks in the workplace, protecting health and improving the well-being of workers. This System has been implemented, in compliance with current regulations, taking into account the nature and size of the risks of the production site, as well as the specificity of the organizational structure and covers all employees and non-employees of the Atessa production center.

Health surveillance

The Competent Doctor carries out periodic annual visits for both production department workers and video terminal operators, visits requested by workers and pre-employment visits, collaborates with the RSPP/ASPP in drafting safety documents and participates in the Annual Meeting and on-site inspections. As required by current regulations, the competent doctor independently manages health records and discloses pertinent information (Fitness to Work to the employer/ RSPP).

The competent doctor conducted biological monitoring during the year **2023**, as required by the latest updated Health Protocol. The visits and biological monitoring did not highlight any health problems related to work activities.

The 184 medical visits carried out were divided as follows:

- 165 periodic visits;**
- pre-employment preventive visits ;**
- 14 preventive visits;**
- 2 visits for return after 60 days of illness;**
- 1 visit at the worker's request.**

8
Irplast employee
injuries ⁽¹⁾

24,46
injury frequency index

3,42
injury severity index



100%
workers at the Atessa
plants are covered by
a certified management
system for health and
safety at work

14
average injury
duration (days)

0
accidents with
serious consequences

⁽¹⁾ During 2023, **no injuries occurred** to Irplast SpA employees at the Atessa site. During 2023, the contractor's personnel suffered 5 injuries.

APPENDIX



READING GUIDE

METHODOLOGICAL NOTE

The 2023 Sustainability Report, now in its third edition, presents the environmental, social and economic results achieved in the 2023 financial year (from 1 January to 31 December). In order to facilitate comparability over time and to illustrate the main trends, where possible a comparison of data with 2021 and 2022 has been proposed.

The Sustainability Report, drawn up annually, aims to illustrate the strategic sustainability approach of Irplast SpA in managing the environmental, social and economic impacts resulting from its business activities and relationships and the performance achieved in the production sites of Empoli and Atesa. The reporting perimeter considers the sustainability impacts generated by Irplast SpA, whose administrative headquarters are located in Empoli in Via Alcide De Gasperi 10.

In 2023, it is reported that there were no significant changes in the size, ownership structure and supply chain of the Company.

The 2023 Report was prepared in accordance with the new GRI Standards defined in 2021 by the Global Reporting Initiative, according to the "in accordance" option.

The contents and indicators to be reported were defined starting from the results of the materiality analysis relating to the contextual elements that emerged in 2022, and also confirmed for 2023, which led to the identification of the most significant impacts linked to the activities of Irplast SpA, which were then associated with the material topics. The qualitative and quantitative information illustrated in the report was collected through interviews and the compilation of data collection sheets, with the collaboration of the company representatives involved in the process. Furthermore, the information relating to the "GRI 1 - Fundamental Principles 2021" was taken into account in drafting the document and the material sustainability topics were reported in compliance with the criteria indicated in "GRI 3 - Material Topics 2021". No significant changes in the nature of the business were reported in the reporting year.

Within the document it is appropriately indicated if the reported data was generated through estimates.

Contacts

For further information and suggestions you can write to the email address: **info@irplast.com** or visit the website **www.irplast.it**



PRINCIPLES FOR DEFINING THE CONTENTS AND QUALITY OF THE REPORT

The Sustainability Report of Irplast SpA aims to account for the positive and negative impacts that affect (actual) or that could affect (potential) the Company along its value chain.

To ensure the quality of the information reported, the following principles, indicated by the GRI, were followed in drafting the report:

- **Accuracy:** the level of detail of the contents reported in this Sustainability Report has been established to facilitate the understanding and evaluation of Irplast's sustainability performance in the reporting period;
- **Balance:** the contents of this document report in a balanced manner the performance of Irplast SpA in the reporting period, representing both the goals achieved and the margins for improvement of the organization;
- **Clarity:** to make the contents accessible and easy to understand for everyone, a clear and accessible language and the use of graphs and tables in which the company performances are represented were preferred;
- **Comparability:** the data presented in the report are reported, as far as possible, for the three-year period 2021-2023 in order to allow comparison of Irplast's performance over time. Furthermore, the information representation methods (classification, units of measurement, etc.) indicated by the GRI Standards were used to allow comparison with other realities as much as possible;
- **Completeness:** the impacts covered in the report are described in their entirety and represent the most relevant environmental, social and economic aspects for the activity of Irplast SpA, in order to allow a complete evaluation of the Company's performance in the reporting year;
- **Sustainability context:** Irplast's performance is presented in the broader context of sustainable development;
- **Timeliness:** this document was published in the second half of 2024;
- **Verifiability:** Irplast SpA has collected and analyzed the data in such a way that the information can be examined to establish its veracity.



STAKEHOLDERS AND THEIR EXPECTATIONS

The identification and prioritization of Irplast SpA stakeholders represents a substantial step towards identifying the most relevant sustainability issues on which to focus the contents of the report .

The different stakeholders of Irplast SpA have been mapped on the basis of the analysis of the corporate structure, business activities, value chain and network of relationships existing around the Company. Subsequently, through the involvement of top management, the identified stakeholders have been validated according to the following criteria:

- **influence on Irplast SpA:** the stakeholder's ability to influence the company's strategic or operational decisions;
- **dependence on Irplast SpA:** level of dependence of the stakeholder on the choices, products and activities of the company.

This analysis allowed us to assign a priority level to the different categories of stakeholders and to identify the macro-categories to which they belong.



In Irplast SpA each category of stakeholders is involved in different ways. The following table shows the main engagement activities carried out in 2023, detailed on the basis of the different channels of dialogue and comparison used, the frequency of involvement, any issues raised and the related responses from Irplast SpA.



STAKEHOLDER	TYPE OF COMMUNICATION	AVERAGE ENGAGEMENT RATE	MAIN SUSTAINABILITY THEMES THAT EMERGED FROM THE COMPARISON
Strategic suppliers	Direct contacts Dedicated meetings	Daily Weekly	• Circularity and eco-sustainability of products • Product quality and safety • Respect for human rights
Non-strategic suppliers	Direct contacts Dedicated meetings	Daily Weekly	• Product quality and safety • Respect for human rights
Employees	Intranet Internal Communications Suggestion Box - Improvement Proposal Company Meetings	Continuous Continuous Continuous Continuous Continuous	• Wellbeing, health and safety at work • Respect for human rights • Human Capital Management
Collaborators and external companies	Direct contacts	Frequent	• Wellbeing, health and safety at work • Respect for human rights • Human Capital Management
Trade unions	Direct contacts Company press releases	Frequent Frequent	• Wellbeing, health and safety at work • Respect for human rights • Human Capital Management
Financial institutions	Direct contacts Web channel	Daily Continuous	
Investors	Direct contacts Company press releases	Continuous Continuous	
Finished product trade associations	Direct contacts Dedicated meetings	Continuous Continuous	• Product quality and safety
University institutes	Direct contacts Web channel	Frequent Frequent	• Circularity and eco-sustainability of products
Media	Press releases Direct contacts Dedicated meetings	Weekly Daily Daily	• Wellbeing, health and safety at work
Local associations and non-profit organizations	Press releases	Frequent	• Air quality
Regulatory oversight bodies	Press releases Direct contacts	Continuous Continuous	• Consumi energetici e cambiamenti climatici • Gestione della risorsa idrica • Qualità dell'aria • Benessere, salute e sicurezza sul lavoro • Gestione degli scarti di processo dei rifiuti
Local and national administration	Press releases Direct contacts	Continuous Continuous	• Climate change • Water consumption • Air quality • Wellbeing, health and safety at work • Waste Management
BOPP division customers	Social network Web channel Agents	Continuous Continuous Daily	• Energy consumption and climate change • Circularity and eco-sustainability of products • Product quality and safety

THE MATERIAL TOPICS FOR THE COMPANY AND THE CONNECTION TO THE ASPECTS OF THE GRI STANDARDS

THEME MATERIAL	IMPACTS IDENTIFIED	IMPACT TYPE	RELATED GRI STANDARDS TOPIC	IMPACT PERIMETER	COMPANY INVOLVEMENT
Circularity and eco-sustainability of products	Raw material consumption Post-consumer plastic waste production Improving the sustainability of customer products	Negative – Effective Negative – Effective Positive – Effective	Waste Materials	Irplast SpA and strategic suppliers	Caused by the Company and directly connected through business relationships
Product quality and safety	Damage to consumers' health	Negative - Potential	Customer Health and Safety	Irplast SpA	Caused by the Company
Energy consumption and climate change	Climate change	Negative – Effective	Emissions Energy	Irplast SpA	Caused by the Company
Water resource management	Consumption of water resources	Negative – Effective	Water and waste water	Irplast SpA	Caused by the Company
Process waste and waste management	Waste and scrap production	Negative – Effective	Waste	Irplast S.p.A.	Caused by the Company
Air quality	Air pollution	Negative – Effective	Emissions	Irplast SpA	Caused by the Company
Wellbeing, health and safety at work	Health and safety of workers	Negative – Effective	Health and safety at work	Irplast SpA and contractors	Caused by the Company and directly connected through business relationships
Respect for human rights	Human rights violation	Negative - Potential	Social evaluation of suppliers	Irplast SpA, contractors and suppliers	Caused by the Company and directly connected through business relationships
Human Capital Management	Discrimination	Negative - Potential	Employment Diversity and equal opportunities Training and education	Irplast SpA	Caused by the Company

GRI CONTENT INDEX

GRI STANDARD	INFORMATION	REFERENCES, LINKS AND NOTES	PAGE	OMISSIONS
GRI 2 GENERAL INFORMATION 2021	2-1 Organizational details	Methodological note	105	-
	2-2 Entities included in the organization's sustainability reporting	Methodological note	105	-
	2-3 Reporting period, frequency and point of contact	Methodological note	105	-
	2-4 Reviewing information	Methodological note	105	-
	2-5 External Assurance	Methodological note	105	-
	2-6 Activities, value chain and other business relationships	1.1.1 Company Profile 3.2.1 The role of Irplast for sustainability in the value chain 5.3 Stakeholders and their expectations	11 72 107	-
	2-7 Employees	4.1 The company's human capital Social data tables	85 142	-
	2-8 Non-employee workers	4.1 The company's human capital Social data tables	85 142	-
	2-9 Structure and composition of governance	1.2 Governance	30	-
	2-10 Appointment and selection of the highest governing body	1.2 Governance	30	-
	2-11 President of the highest governing body	1.2 Governance	30	-
	2-12 Role of the highest governance body in monitoring impact management	1.2 Governance	30	-
	2-13 Delegation of responsibility for impact management	1.2 Governance	30	-
	2-14 Role of the highest governance body in sustainability reporting	1.2 Governance	30	-
	2-15 Conflicts of interest	1.2 Governance	30	-
	2-16 Communication of critical issues	1.2 Governance	30	-
	2-17 Collective knowledge of the highest governing body	1.2 Governance	30	-
	2-18 Performance evaluation of the highest governing body	1.2 Governance	30	-

GRI STANDARD	INFORMATION	REFERENCES, LINKS AND NOTES	PAGE	OMISSIONS
GRI 2 GENERAL INFORMATION 2021	2-19 Rules concerning remuneration	4.1 The company's human capital	85	-
	2-20 Procedure for determining remuneration	4.1 The company's human capital	85	-
	2-21 Total Annual Compensation Report	4.1 The company's human capital	85	-
	2-22 Declaration on the sustainable development strategy	Letter to stakeholders	4	-
	2-23 Policy commitment	1.3 Ethics and integrity: Irplast's compasses	32	-
	2-24 Integration of policy commitments	1.3 Ethics and integrity: Irplast's compasses	32	-
	2-25 Processes to remedy negative impacts	1.3 Ethics and integrity: Irplast's compasses	32	-
	2-26 Mechanisms for requesting clarification and raising concerns	1.3 Ethics and integrity: Irplast's compasses 2.2.3 Complaints management	32 57	-
	2-27 Compliance with laws and regulations	During 2023 there were no cases of non-compliance with laws and regulation	-	-
	2-28 Membership in associations	Irplast belongs to the following associations: Confindustria Firenze - Confindustria Chieti Pescara - Fondazione Carta Etica del packaging	-	-
	2-29 Approach to stakeholder engagement	3.2.1 The role of Irplast for sustainability in the value chain 5.3 Stakeholders and their expectations	72 107	-
	2-30 Collective Agreements	4.1 The company's human capital	85	-

GRI STANDARD	INDICATORS	REFERENCES, LINKS AND NOTES	PAGE	OMISSIONS
CIRCULARITY AND ECO-SUSTAINABILITY OF PRODUCTS				
GRI 3: Material Topics 2021	3-3 Management of material themes	2.1.1 A circular approach at the base of the products	40	-
		2.1.2 The sustainability of the raw material	48	
		2.2.1 The certified sustainability of our products	52	
GRI 3: Materials 2016	301-1 Materials used by weight or volume	Environmental data tables	124	-
	301-2 Recycled input materials used	2.1.1 A circular approach at the base of the products	40	-
		2.1.2 The sustainability of the raw material	48	
		Environmental data tables	124	
ENERGY CONSUMPTION AND CLIMATE CHANGE				
GRI 3: Material Topics 2021	3-3 Management of material themes	3.1.3 Irplast's contribution to the fight against climate change	69	-
		3.2.2 Sustainable logistics	75	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	3.1.3 Irplast's contribution to the fight against climate change	69	-
		Environmental data tables	124	
GRI 305: Emissions 2016	305-1 Direct greenhouse gas (GHG) emissions (Scope 1)	3.1.3 Irplast's contribution to the fight against climate change	69	-
		Environmental data tables	124	
	305-2 Indirect greenhouse gas (GHG) emissions from energy use (Scope 2)	3.1.3 Irplast's contribution to the fight against climate change	69	
		Environmental data tables	124	
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that have been selected using environmental criteria	3.2.1 The role of Irplast for sustainability in the value chain	72	-
WATER RESOURCE MANAGEMENT				
GRI 3: Material Topics 2021	3-3 Management of material themes	3.1.2 Resource management	64	-
GRI 303: Water 2016	303-1 Interactions with water as a shared resource	3.1.2 Resource management	64	-
	303-2 Management of impacts related to water discharge	3.1.2 Resource management	64	
	303-3 Water withdrawal	Environmental data tables	124	
	303-4 Water discharge	Environmental data tables	124	
	303-5 Water consumption	Environmental data tables	124	

GRI STANDARD	INDICATORS	REFERENCES, LINKS AND NOTES	PAGE	OMISSIONS
AIR QUALITY				
GRI 3: Material Topics 2021	3-3 Management of material themes	3.1.2 Resource management	64	-
GRI 305: Emissions 2016	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant emissions	Environmental data tables	124	-
PROCESS WASTE AND WASTE MANAGEMENT				
GRI 3: Material Topics 2021	3-3 Management of material themes	3.1.1 Waste and refuse management	61	-
GRI 306: Waste 2016	306-1 Waste generation and significant waste-related impacts	2.1.1 A circular approach at the base of the products	40	-
	306-2 Management of significant waste-related impacts	3.1.1 Waste and refuse management	61	-
	306-3 Waste generated 306-4 Waste not sent to landfill 306-5 Waste sent to landfill	Environmental data tables	124	-
HUMAN CAPITAL MANAGEMENT				
GRI 3: Material Topics 2021	3-3 Management of material themes	4.1 The company's human capital	85	-
GRI 401: Employment 2016	401-1 Hiring of new employees and employee turnover	4.1 The company's human capital Social data tables	85 142	-
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governing bodies and employees	Social data tables	142	-
GRI 404: Training and Education 2016	404-1 Employee Upskilling and Transition Assistance Programs	Social data tables	142	-
PRODUCT QUALITY AND SAFETY				
GRI 3: Material Topics 2021	3-3 Management of material themes	2.2.2 Monitoring the quality and safety of products	56	-
GRI 416: Customer Health and Safety 2016	416-1 Assessment of health and safety impacts for product and service categories 416-2 Incidents of non-conformity regarding health and safety impacts of products and services	2.2.2 Monitoring the quality and safety of products	56	-
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance with information and product and service labelling	No incidents of non-compliance with regulations were found during the year. The only non-compliances found concerned self-regulatory codes which were promptly corrected.	-	-

GRI STANDARD	INDICATORS	REFERENCES, LINKS AND NOTES	PAGE	OMISSIONS
WELLBEING, HEALTH AND SAFETY AT WORK				
GRI 3: Material Topics 2021	3-3 Management of material themes	4.2 Health and safety as a priority	98	-
GRI 403: Occupational Health and Safety (2018)	403-1 Occupational health and safety management system 403-2 Hazard identification, risk assessment and accident investigation 403-3 Occupational health services 403-4 Participation, consultation and communication of workers in matters of health and safety at work 403-5 Training of workers in health and safety at work 403-6 Promotion of workers' health 403-7 Prevention and mitigation of health and safety impacts at work within business relationships 403-8 Workers covered by an occupational health and safety management system	4.2 Health and safety as a priority	98	-
	403-9 Accidents at work	Social data tables	142	-
RESPECT FOR HUMAN RIGHTS				
GRI 3: Material topics 2021	3-3 Management of material themes	1.3 Ethics and integrity: Irplast's compasses 3.2.1 The role of Irplast for sustainability in the value chain	32 72	-
GRI 416: Supplier Social Assessment (2016)	414-1 Social assessment of suppliers	3.2.1 The role of Irplast for sustainability in the value chain	72	-
NON-MATERIAL GRI DISCLOSURES				
GRI 201: Economic Performance	201-1 Direct economic value generated and distributed	1.1.2 Sharing the value generated and distributed	24	-
GRI 205: Anti-corruption	205-3 Confirmed incidents of corruption and measures taken	1.3 Ethics and integrity: Irplast's compasses 3.2.1 The role of Irplast for sustainability in the value chain	32 72	-

DATA TABLES

ENVIRONMENTAL DATA TABLES

PRODUCT SUSTAINABILITY – EMPOLI				
	UNIT OF MEASUREMENT	2020	2021	2023
Amount of ink recovered vs total ink used	%	15%	14%	13%
Total amount of ink used	tone	752	724	645
Amount of ink recovered	tone	111	98,00	87,00
Amount of solvent recovered vs the total solvents used	%	85%	86%	86%
Total amount of solvent used	tone	945	901	725
Amount of solvent recovered	tone	803	775	623
% of products sold with reduced thickness or with film containing regranulate (alternative with reduced environmental impact compared to the market standard)	%	7,61%	6,66%	8,30%
Quantity of products sold with reduced thickness or with film containing regranulate (alternative with reduced environmental impact compared to the market standard)	m²	23.040.511	18.825.614	17.966.097
% of products sold designed with a thickness between 16-25 µm - TOTAL EMPOLI PLANT	%	7,08%	5,69%	6,64%
Quantity of products sold designed with a thickness between 16-25 µm	m²	21.447.229	16.097.277	14.362.631
Total quantity of products sold	m²	302.717.106	282.868.393	216.444.160
% of products sold designed with a thickness between 16-25 µm - BU LABEL TECH	%	6,30%	6,52%	7,74%
Quantity of products sold designed with a thickness between 16-25 µm	m²	7.365.171	7.516.588	7.347.333
Total quantity of products sold	m²	116.847.756	115.221.633	94.909.255
% of products sold designed with a thickness between 16-25 µm - BU PRINT TAPE	%	7,58%	5,12%	5,77%

PRODUCT SUSTAINABILITY – EMPOLI				
	UNIT OF MEASUREMENT	2020	2021	2023
Quantity of products sold designed with a thickness between 16-25 µm	m²	14.082.058	8.580.688	7.015.298
% of products sold with film containing regranulate (ECO+ line) - BU PRINT TAPE	%	0,86%	1,63%	2,96%
Quantity of products sold with film containing regranulate (ECO+ line) - BU PRINT TAPE	m²	1.593.282	2.728.337	3.603.466
% of products sold with reduced thickness or with film containing regranulate (alternative with reduced environmental impact compared to the market standard) - BU PRINT TAPE	%	8,43%	6,75%	9%
Total quantity of products sold	m²	185.869.350	167.503.778	121.534.904
Total amount of raw material saved for products with a reduced environmental impact compared to the market standard (sold with reduced thickness or with film containing regranulate)	kg	142.729	139.075	137.388
Total amount of raw material saved for products of all three categories with thickness between 16-25 µm	kg	128.575	113.938	97.227
Quantity of raw material saved for category X products with thickness between Quantity of raw material saved for category X products with thickness between 16-25 µm¹ – BU LABEL TECH	kg	67.409	69.300	66.390
Amount of raw material saved for category Y products with thickness between 16-25 µm² – BU PRINT TECH	kg	61.166	44.638	30.837
Amount of raw material saved for category R products with film containing regranulate³ – BU PRINT TAPE	kg	14.154	25.137	40.161
Amount of packaging material saved for products with thickness between 16-25 µm - TOTAL EMPOLI PLANT	kg	16.519,40	16.234	9.567
PAPER AND CARDBOARD PACKAGING saved	kg	9.309,73	8.988	3.913
PLASTIC PACKAGING saved	kg	555,67	533	299
WOOD PACKAGING saved	kg	6.654,00	6.714	5.354
Amount of packaging material saved for products with thickness between 16-25 µm - LABEL CATEGORY	kg	5.614,46	5.845	5.500

PRODUCT SUSTAINABILITY – EMPOLI				
	UNIT OF MEASUREMENT	2020	2021	2023
WOOD PACKAGING saved	kg	1.145,06	1.204	1.145
WOOD PACKAGING saved	kg	101,40	105	99
WOOD PACKAGING saved	kg	4.368,00	4.536	4.256
Amount of packaging material saved for products with thickness between 16-25 µm - TAPE CATEGORY FOR BOX CLOSING	kg	10.904,94	10.389	4.067
WOOD PACKAGING	kg	8.164,68	7.784	2.768
WOOD PACKAGING	kg	454,27	427	200
WOOD PACKAGING	kg	2.286,00	2.178	1.098

¹Category X= labels (BU LABEL TECH) includes transparent BOPP labels with thicknesses of 19, 20 and 25 microns, the comparison was made with respect to the market standard with a thickness of 30 microns.

²Category Y = adhesive tapes for closing boxes (BU PRINT TAPE): includes transparent BOPP adhesive tapes with thicknesses of 19 and 25 microns. The comparison was made with respect to the market standard of 28 microns.

³Category R = adhesive tapes for closing boxes (BU PRINT TAPE): includes transparent BOPP adhesive tapes containing a certain quantity of regranelate

PRODUCT SUSTAINABILITY – ATESSA				
	UNIT OF MEASUREMENT	2021	2022	2023
Energy consumption per kg of extruded material	TOE/tonne	0,350	0,345	0,368
Energy consumption per kg of product at primary slitting	TOE/tonne	0,439	0,431	0,469
% of products sold designed with a thickness between 16-25 µm	%	49%	59,8%	65,5%
Quantity of products sold designed with a thickness between 16-25 µm	kg	11.843.646	13.353.356	12.630.080
Total quantity of products sold	kg	24.151.178	22.330.300	19.275.193
Total amount of raw material saved for products of all three categories with thickness between 16-25 µm	kg	447.341	497.936	429.810,84
Amount of raw material saved for category X products with a thickness between 16-25 µm ¹	kg	314.247	349.788	301.932,27

PRODUCT SUSTAINABILITY – ATESSA				
	UNIT OF MEASUREMENT	2021	2022	2023
Amount of raw material saved for category Y products with a thickness between 16-25 µm ²	kg	133.094	148.147	127.878,56
Tons of CO ₂ saved for products with thickness between 16-25 µm	tons CO ₂ eq	1.304	1.451	1.252,50
Number of days that prolong the shelf life of the final packaged food product compared to a traditional product	n.	56	56	56
Total quantity of NOPP products sold	kg	266.749,52	1.259.281,00	1.380.000,00
Quantity of NOPP products sold of category Y ⁴	kg	112.495,61	376.252,00	200.100,00
Quantity of NOPP products sold of category Y ⁴	kg	154.253,91	883.029,00	1.179.900,00
% of NOPP products sold on total products sold	kg	95.808,00	181.972,00	86.000,00
Total quantity of LOOPP products sold	kg	40.404,87	1.951,00	18.232,00
Quantity of LOOPP products sold in category Y ⁴	kg	55.403,13	180.021,00	67.768,00
Quantity of LOOPP products sold in category Y ⁴	%	1%	5,6%	7,2%
% of LOOPP products sold on total products sold	%	0,4%	0,8%	0,4%
Total quantity of products sold	kg	26.904.868,17	22.330.300,00	19.275.192,77
Amount of fossil raw material avoided thanks to the NOPP product line	m ²	232.072,08	972.112,66	1.200.600,00
CO ₂ avoided thanks to the production of NOPP	tons CO ₂ eq	933,62	1.259,28	1.380,00
Amount of waste recycled thanks to LOOPP products	kg	266.749,52	173.534,71	86.000,00

¹Raw materialsavings in producing a 16µm tobacco film compared to the previous standard of 20µm

²Raw materialsavings in producing a 20µm label film compared to the previous standard of 30µm. In the last year, the number of customers choosing this path has increased

³CATEGORY X = metallized film for lamination

⁴CATEGORY Y = transparent film for snack packaging

GRI 301-1: MATERIALS USED BY WEIGHT OR VOLUME					
MATERIALS USED BY WEIGHT OR VOLUME	UNIT OF MEASUREMENT	RENEWABILITY	2021	2022	2023
Raw materials (primary resources converted into products or services) - Granular products			36.837	32.761	31.281
Resins	tons	No	876	578	506
Tires	tons	No	457	518	414
Polypropylene film	tons	No	9.320	7.500	6.813
Polyester film	tons	No	230	175	151
Additives	tons	No	978	750	862
Copolymer	tons	No	2.238	1.691	2.494
Fossil homopolymer	tons	No	22.078	20.453	18.297
Renewable homopolymer	tons	No	502	1.017	1.584
PCW homopolymer	tons	No	158	79	160
Raw materials (primary resources converted into products or services) - Water-soluble products			6.787	6.232	4.647
Inks	tons	No	752	688	645
Acrylic Stickers	tons	No	5.006	4.585	3.190
Additives/solvents	tons	No	1.029	959	812
Process-associated materials (materials that are required for manufacturing processes but are not part of the final product, such as lubricants for machinery)					
Wood (pallets)	tons	Yes	593	532	432
Lubricating oils	lt	No	3.820	1.810	2.460
Special fats	kg	No	132	130	124
Diathermic oils	kg	No	2.291	1.700	2.944
Krytox HTX-500 OIL	kg	No	90	-	-
Anticorrosive	kg	No	800	600	7.660
Molykote HSC PLUS	kg	No	10	-	1
Spray adhesive grease	lt	No	-	12	3

GRI 301-1: MATERIALS USED BY WEIGHT OR VOLUME					
MATERIALS USED BY WEIGHT OR VOLUME	UNIT OF MEASUREMENT	RENEWABILITY	2021	2022	2023
Teflon lubricant	kg	No	3,6	1,2	4
Interglon paste HT1200 (aerosol)	lt	No	-	-	-
Incoming semi-finished products coming from third parties, if applicable			106	87	86
EVA Movie	kg	No	106	87	86
Packaging materials, which include paper, cardboard and plastic					
Paper and cardboard	tons	Yes	1.237	1.157	916
Chipboard lids	pieces	No	30.459	19.053	232.620
Cardboard discs	pieces	No	923.356	822.195	804.606
PET Discs	pieces	No	5.000	10.770	6.000
Extensible in PE	pieces	No	-	224	11.874
Flange	pieces	No	19.170	19.730	331.954
Cardboard sheets	pieces	No	109.993	67.927	49.250
Wooden strips	pieces	No	57.420	40.950	18.726
Cardboard mandrels	pieces	No	1.205.797	1.205.797	963.778
Tape	pieces	No	4.813	-	-
Treated wooden pallets	pieces	No	35.341	35.341	422.180
Royal Palace	pieces	No	-	403.200	684.768
Caps	pieces	No	35.454	38.724	15.088
Chassis	pieces	No	78	-	-
Cardboard boxes	pieces	No	-	-	11

GRI 301-2: MATERIALS USED THAT ORIGINATE FROM RECYCLING				
RECYCLED MATERIALS	UNIT OF MEASUREMENT	2021	2022	2023
Cardboard cores	%	100%	100%	100%
Cardboard boxes (FSC certified)	%	50%	70%	70%
Homopolymer	%	0,04%	0,37%	0,80%

GRI 302-1: ENERGY CONSUMED WITHIN THE ORGANIZATION*				
ENERGY CONSUMED	UNIT OF MEASUREMENT	2021	2022	2023
Energy consumption from non-renewable sources				
Total energy consumed**	GJ	436.397	415.102	404.972
Methane	GJ	307.882	280.143	293.235
Electricity purchased from the grid	GJ	128.515	134.959	111.737
Self-produced electricity from non-renewable sources	GJ	65.707	60.347	70.864
Energy sold				
Self-produced electricity sold	GJ	552,7	982	820

*Source of conversion factors: DEFRA (Department for Environment, Food & Rural Affairs).

** The value does not take into account self-produced energy as it is produced from methane, already included in the calculation.

GRI 305-1: DIRECT GHG EMISSIONS (Scope 1)*				
	UNIT OF MEASUREMENT	2021	2022	2023
Fuel consumption	tCO _{2eq}	17.364	15.774	16.696
Refrigerant gases	tCO _{2eq}	12	9	28
Total purpose 1	tCO _{2eq}	17.376	15.782	16.724

*Source of emission factors: DEFRA (Department for Environment, Food & Rural Affairs) for natural gas and IPCC (Intergovernmental Panel on Climate Change) for refrigerant gases.

GRI 305-2: INDIRECT GHG EMISSIONS FROM ENERGY USE (Scope 2)*				
	UNIT OF MEASUREMENT	2021	2022	2023
Emissions from electricity consumption – Location based	tCO ₂	11.245	11.809	9.777
Emissions from electricity consumption – Market based	tCO ₂	16.299	17.116	14.189

*The GRI Sustainability Reporting Standards provide for two methodologies for calculating Scope 2 emissions: the "Location- Based method " and the "Market- Based method ". The Market- Based is based on the CO₂ emissionsemitted by energy suppliers from which the organization purchases, through a contract, electricity and can be calculated considering: energy Guarantee of Origin certificates and direct contracts with suppliers, supplier-specific emission factors, emission factors relating to the " residual mix", i.e. energy and emissions that are not monitored or not claimed (methodology used, 2023 emission factor: 457.517g CO₂/kWh - source AIB 2023 - European Commission Residual mixes 2021/2022). The Location- Based method , on the other hand, is based on the average emission factors relating to energy generation at regional, sub-national or national level (emission factor Italy 2023: 315 grams CO₂/kWh, source: Terna Confronti Internazionali (2019)).

GRI DISCLOSURE 305-7: NITROGEN OXIDES (NOX), SULFUR OXIDES (SOX) AND OTHER SIGNIFICANT EMISSIONS							
SIGNIFICANT EMISSION	TYPE OF BUSINESS	SOURCE TYPE	BUSINESS UNIT OR STRUCTURE	UNIT OF MEASUREMENT	2021	2022	2023
NOx	Extrusion	Combustion	Ironing oven	tone	31,1	18,1	20,9
CO	Extrusion	Combustion	Ironing oven	tone	8,5	10,3	13,5
Ozone O3	Treatment	Electric Arc Discharges	Towing bench	tone	0,001	-	0,348
Powders	Extrusion	Transport of granular material	Power supply - ironing	tone	0,9	0,5	0,3
SOx	Extrusion	Combustion	Extrusion - ironing	tone	2,5	3,5	3,7
Volatile Organic Compounds (VOC)	Press	Environmental Reports	-	tone	4,8	3,8	4,8

GRI 303-3: WATER WITHDRAWAL *				
WATER WITHDRAWAL BY SOURCE	UNIT OF MEASUREMENT	2021	2022	2023
		TOTAL WATER WITHDRAWAL	TOTAL WATER WITHDRAWAL	TOTAL WATER WITHDRAWAL
Total withdrawal from third parties (e.g. aqueducts)	mc	134.452	124.391	106.793
Total withdrawal from groundwater (e.g. wells)	mc	13.101	9.507	6.338
Total water withdrawal**	mc	147.553	133.898	113.131

DISCLOSURE GRI 303-4: WATER DISCHARGE				
WATER DISCHARGE (DESTINATION)	UNIT OF MEASUREMENT	2021	2022	2023
Water discharge to surface waters	mc	-	18,9	26,1
Water discharge to groundwater	mc	-	112,5	94,92
Water discharge to sea water	mc	-	466,3	253,55
Water discharge to third party waters (Public sewerage)	mc	64.291	50.005	46.019
Total water discharge	mc	64.291	83.295	66.737

GRI INDICATOR 303-5: WATER CONSUMPTION**				
WATER CONSUMPTION	UNIT OF MEASUREMENT	2021	2022	2023
Total water withdrawal in all areas	mc	147.553	133.898	113.131
Total water discharge in all areas	mc	64.291	50.603	46.394
Total water consumption in all areas	mc	83.262	83.295	66.737

*Allsamples are taken from fresh water (<= 1,000 mg/L total dissolved solids)

**All water withdrawals and consumption come from areas of extremely highwater stress (Source: World Resources Institute, Aqueduct Water Risk Atlas, Atlas, www.wri.org/our-work/project/aqueduct/).

GRI INDICATOR 306-3: WASTE GENERATED						
COMPOSITION OF WASTE	CER CODE	UNIT OF MEASUREMENT	TOTAL WASTE PRODUCED			HAZARDOUS / NON-HAZARDOUS WASTE
			2021	2022	2023	
Plastic waste*	07.02.13	tone	-	-	1.075	Not dangerous
Polypropylene waste	12.01.05	tone	254	289	309	Not dangerous
Aqueous NP solution	16.10.02	tone	359,79	466,28	253,34	Not dangerous
Paper and cardboard packaging	15.01.01	tone	245,03	250,54	239,7	Not dangerous
Mixed packaging	15.01.06	tone	232,31	231,96	198,14	Not dangerous
Wooden packaging	15.01.03	tone	104,38	140,3	106,38	Not dangerous
Solvent sludge		tone	118,14	102,11	84,064	Dangerous
Aqueous liquid waste, containing adhesives, NP	08.04.16	tone	30,22	49,28	46,9	Not dangerous
Contaminated absorbents, rags, clothing	15.02.02*	tone	32,74	30,51	39,369	Dangerous
Aqueous sludge containing adhesives, NP		tone	63,08	61,37	37,3	Not dangerous
Plastic packaging and waste	15.01.02	tone	1.398,44	1.320,12	28	Not dangerous
Iron and steel	17.04.05	tone	15,76	9,88	27,36	Not dangerous
Solvent-based inks	08.03.12*	tone	29,26	34,11	26,824	Dangerous
Aqueous waste solutions, containing hazardous substances	16.10.01*	tone	-	2,01	26,349	Dangerous
Slab washer	08.03.08	tone	-	18,94	26,08	Not dangerous
Ferrous scrap	12.01.02	tone	6	5	18	Not dangerous
Waste adhesives and sealants, NP	08.04.10	tone	22,64	28,54	17,36	Not dangerous
Degreasing waste	11.01.14	tone	19	28	17	Not dangerous
Contaminated packaging	15.01.10*	tone	15,32	15,27	13,78	Dangerous
Floor sweeping	16.03.06	tone	2	-	8	Not dangerous
Non-hazardous WEEE	16.02.14	tone	4,82	2,27	5,65	Not dangerous
Lead acid batteries	16.06.01*	tone	0,82	2,01	3,35	Dangerous
NP Insulating Materials	17.06.04	tone	0,56	0,96	3,04	Not dangerous

GRI INDICATOR 306-3: WASTE GENERATED						
COMPOSITION OF WASTE	CER CODE	UNIT OF MEASUREMENT	TOTAL WASTE PRODUCED			HAZARDOUS / NON-HAZARDOUS WASTE
			2021	2022	2023	
Waste oil	13.02.05*	ton	4	4	3	Dangerous
Oils	13.02.08*	ton	1,18	1,1	2,16	Dangerous
Rock wool	17.06.03*	ton	-	1,4	1,2	Dangerous
Waste stickers containing hazardous substances	08.04.09*	ton	2,52	4,29	0,699	Dangerous
Electric Caci	17.04.11	ton	0,1	0,59	0,24	Not dangerous
Hazardous WEEE	16.02.13*	ton	-	0,44	-	Dangerous
Engines	16.02.16	ton	1,25	-	-	Not dangerous
NEON	20.01.21*	ton	-	0,08	-	Dangerous
Septic tank sludge	20.03.04	ton	7,49	-	-	Not dangerous
Demolition waste	16.09.03*	ton	-	0,63	-	Dangerous
Laboratory chemicals		ton	-	0,02	-	Dangerous

*The significant reduction in the quantities of plastic packaging and waste (CER 15.01.02) in favor of the CER code category 07.02.13 is linked exclusively to a change in the CER code that identifies the polypropylene waste from the Empoli plant, which occurred following a prescription from ARPAT in 2023.

GRI 306-4: WASTE RECOVERED AND NOT DESTINED FOR DISPOSAL USING ENVIRONMENTAL CRITERIA ¹					
WASTE		UNIT OF MEASUREMENT	2021	2022	2023
TOTAL HAZARDOUS WASTE		tone	136	122	102
of which sent for recycling		tone	4	-	3
Other recovery operations	RECOVERY	tone	132	122	99
TOTAL NON-HAZARDOUS WASTE		tone	2.263	2.250	2.008
of which sent for recycling		tone	-	1.682	1.393
Other recovery operations	RECOVERY	tone	2.263	568	615

¹ All waste is managed and recovered off-site.

GRI 306-5: WASTE FOR DISPOSAL USING ENVIRONMENTAL CRITERIA ²					
WASTE		UNIT OF MEASUREMENT	2021	2022	2023
TOTAL HAZARDOUS WASTE		tone	68	77	69
of which sent for incineration (with energy recovery)		tone	-	4	3
of which sent to landfill		tone	2	-	-
Other recovery operations	Disposal D14 D15	tone	66	73	66
TOTAL NON-HAZARDOUS WASTE		tone	490	655	418
of which sent to landfill		tone	22	28	25
Other recovery operations	Disposal D14 D15	tone	468	627	393

² All waste is managed off-site.

SOCIAL DATA TABLES

GRI 2-7: EMPLOYEE INFORMATION					
EMPLOYEES	CONTRACT TYPE	TYPE	2021	2022	2023
Employees by employment contract as of December 31st	Permanent contract	Women	46	45	51
		Men	172	173	176
		Total	218	218	227
	Fixed-term contract	Women	1	1	0
		Men	6	8	3
		Total	7	9	3
TOTAL employees with fixed-term and permanent contracts			225	227	230
Breakdown of employees by type of employment and gender	Full-time	Women	44	42	47
		Men	177	180	178
		Total	221	222	225
	Part-time	Women	3	4	4
		Men	1	1	1
		Total	4	5	5
TOTAL employees with full-time and part-time contracts			225	227	230
GRI 2-8: INFORMATION ON OTHER WORKERS					
WORKERS AS OF DECEMBER 31ST			2021	2022	2023
Interns			11	17	8
Workers from external companies			-	-	12
Contractor workers			140	142	142
TOTAL			151	159	162

GRI 401-1: NEW HIRES AND TURNOVER					
INDICATOR	TYPE	AGE	2021	2022	2023
			NUMBER OF HIRES		
New employees hired from January 1st to December 31st	Female	< 30 years	1	4	9
		Between 30 and 50 years old	2	3	-
		> 50 years	-	-	-
	TOTAL number of women hired		3	7	9
	Male	< 30 years	16	20	15
		Between 30 and 50 years old	10	7	4
		> 50 years	3	2	2
TOTAL number of men hired		29	29	21	
TOTAL NUMBER OF HIRES		32	36	30	
NUMBER OF INTERRUPTIONS					
Termination of employment relationship from 1st January to 31st December	Female	< 30 years	1	3	1
		Between 30 and 50 years old	3	3	3
		> 50 years	1	1	-
	TOTAL number of women		5	7	4
	Male	< 30 years	6	16	6
		Between 30 and 50 years old	8	7	8
		> 50 years	2	5	7
TOTAL number of men		16	28	21	
TOTAL NUMBER OF TERMINATIONS		21	35	25	
NUMBER OF EMPLOYEES					
Number of employees as of December 31st	Female	< 30 years	4	5	12
		Between 30 and 50 years old	27	26	23
		> 50 years	16	15	16
	TOTAL number of women		47	46	51
	Male	< 30 years	32	38	41
		Between 30 and 50 years old	85	85	80
		> 50 years	61	58	58
TOTAL number of men		178	181	179	
TOTAL NUMBER OF EMPLOYEES		225	227	230	

404-1: AVERAGE HOURS OF ANNUAL TRAINING PER EMPLOYEE										
AVERAGE HOURS OF TRAINING	AVERAGE HOURS OF TRAINING	2021			2022			2023		
		FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL
Average hours of training provided to executives	h	-	3	3	16	64	80	16	56	72
Average hours of training provided to managers	h	4	67	159	64	34	98	-	60	60
Average hours of training provided to employees	h	3	5	318	954	340	1.294	370	373	743
Average hours of training provided to workers	h	-	8	1.050	-	632	632	-	649	649
TOTAL HOURS OF TRAINING PROVIDED TO EMPLOYEES	h	7	83	1.530	1.034	1.070	2.104	386	1.138	1.524

405-1: DIVERSITY IN GOVERNANCE BODIES AND AMONG EMPLOYEES										
BOARD OF DIRECTORS BY GENDER AND AGE GROUP		2021			2022			2023		
		WOMEN	MEN		WOMEN	MEN		WOMEN	MEN	
Administrators as of December 31st, by age*	Between 30 and 50 years old	0	0		0	0		1	0	
	> 50 years	0	3		0	3		0	3	
BOARD OF AUDITORS BY GENDER AND AGE GROUP		2021			2022			2023		
		WOMEN	MEN		WOMEN	MEN		WOMEN	MEN	
Members as of December 31st	Between 30 and 50 years old	0	0		0	0		1	0	
	> 50 years	0	0		0	0		0	2	
SUPERVISORY BODY BY GENDER AND AGE GROUP		2021			2022			2023		
		WOMEN	MEN		WOMEN	MEN		WOMEN	MEN	
Members as of December 31st	Between 30 and 50 years old	0	0		0	0		0	1	
EMPLOYEES BY JOB CATEGORY AND AGE GROUP		< 30 YEARS	BETWEEN 30 AND 50 YEARS OLD	> 50 YEARS	< 30 YEARS	BETWEEN 30 AND 50 YEARS OLD	> 50 YEARS	< 30 YEARS	BETWEEN 30 AND 50 YEARS OLD	> 50 YEARS
Employees with employment contract as of December 31st	Executives	-	1	8	-	2	7	-	2	6
	Managers	-	3	5	-	2	6	-	5	6
	Employees	7	42	28	9	39	27	18	33	26
	Workers	29	66	36	34	68	33	35	63	36
TOTAL		36	112	77	43	111	73	53	103	74
EMPLOYEES BY JOB CATEGORY AND GENDER		WOMEN	MEN	TOTAL	WOMEN	MEN	TOTAL	WOMEN	MEN	TOTAL
Employees with employment contract as of December 31st	Executives	-	9	9	1	8	9	1	7	8
	Managers	6	2	8	4	4	8	7	4	11
	Employees	41	36	77	41	34	75	43	34	77
	Workers	-	131	131	-	135	135	-	134	134
TOTAL		47	178	225	46	181	227	51	179	230

*Starting in 2023, a female administrator has been added to the 3 male administrators.

403-9: ACCIDENTS AT WORK				
EMPLOYEES	UNIT OF MEASUREMENT	2021	2022	2023
Hours worked	n.	368.333	364.428	361.987
Total number of recordable work-related injuries, including fatalities	n.	4	6	8
of which accidents on the way to work (only if the transport was organised by the company and the journeys took place within working hours)	n.	-	-	1
Total number of accidents at work with serious consequences (>6 months absence), excluding deaths	n.	-	-	-
of which the number of deaths	n.	-	-	-
Recordable work-related injury rate	n.	10,9	16,5	24,46
Rate of accidents at work with serious consequences	n.	-	-	-
Death rate	n.	-	-	-
WORKERS WHO ARE NOT EMPLOYEES, BUT WHOSE WORK AND/OR WORKPLACE IS UNDER THE CONTROL OF THE COMPANY	UNIT OF MEASUREMENT	2021	2022	2023
Hours worked	n.	234.717	222.460	222.910
Total number of recordable work-related injuries, including fatalities	n.	9	6	5
of which accidents on the way to work (only if the transport was organised by the company and the journeys took place within working hours)	n.	1	-	-
Total number of accidents at work with serious consequences (>6 months absence), excluding deaths	n.	-	-	-
of which the number of deaths	n.	-	-	-
Recordable work-related injury rate	n.	38,34	26,97	22,43
Rate of accidents at work with serious consequences	n.	-	-	-
Death rate	n.	-	-	-

