SETTING A STANDARD FOR PRESENT & FUTURE GENERATIONS



sustainability report 2023

arper

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1

A RESPONSIBLE BUSINESS

Letter to the stakeholders



Claudio Feltrin
Chairman of
the Board



Roberto Monti
CEO

With the Sustainability Report 2023, we are in the second year of our path in reporting on our responsibility ambitions and tracking our results. From this perspective, 2023 was a very significant year for Arper.

The ambition to become a leading example of responsible business drives our progress across three sustainability pillars: improving the quality and well-being of people, transitioning to a circular economy, and reducing our environmental impact.

Regarding the latter, we can report a particularly successful result. While the 2022 baseline remains our reference data, we have expanded the scope of our analysis to include the entire Arper group (Arper USA and Iride were not included in the 2022 analysis). Despite an increase in figures due to the inclusion of waste generated and energy consumed by these two new entities, the total Scope 1, 2, and 3 emissions have decreased by 4%. This demonstrates our commitment to improving our practices and reflects a growing culture of sustainability within the organization.

In 2023, we also improved our people's well-being rankings: while maintaining a zero-incident rate related to safety, we dedicated over 50% more time to training our employees.

Our transition to a circular economy took a significant step forward: the use of recycled materials increased by 15%, while waste intensity decreased by more than 24%.

Most importantly, the 2023 Sustainability Report introduces a brand-new perspective on our impact, measured using the impact valuation methodology. This method assigns a monetary value to social and environmental impacts—assets traditionally assessed in qualitative, descriptive terms—that can now be measured in a direct and tangible way.

Due to its complexity, impact valuation is typically better suited to the needs of large corporations, making it more challenging for small and medium-sized companies, common in the design industry. However, we believe this is a powerful tool for sustainability-oriented decision-making. To make it accessible to everyone, we created and tested a simplified version of the Value Balancing Alliance methodology. To our knowledge, we are the first furniture company to do this, and we are confident that many medium-to-large companies will be eager to adopt this assessment, enabling a collective step forward.

Our commitment remains unwavering and grows stronger along the way. It is reinforced by the results we are achieving with projects that set new benchmarks in sustainability and is further enriched by the challenges we face. Our commitment also includes the courage to experiment—not only with new methods and materials, but also with new mindsets, both individually and as an organization.

This approach led us to pave the way for the development of Catifa Carta, launched in 2024. With this product, we've reimagined Catifa 53, one of our iconic designs, using PaperShell, a fully circular material made from 29 layers of paper derived from wood residues. At the end of its lifecycle, PaperShell can be transformed into biochar, effectively closing the loop.

This unprecedented innovation, which will be fully detailed in next year's report, is the result of close collaboration with the Swedish startup PaperShell. This transparent and mutually open approach highlights the importance of investing in the value chain by creating valuable partnerships.

In line with this purpose, the Arper District project continues to be a key focus for us now and in the future. When we say, 'Join us in designing the world we live in,' we truly mean it and remain dedicated to making it a reality.



We are a global design brand, family-owned, independently run and driven by a deep sensitivity to those who use our products. We approach design through the project of living, a dialogue that embraces change, whether it concerns the world as a whole or people as they evolve. We care. And this means we want to face the challenges of the present time with a long-term vision and with planned actions able to positively impact the world. When discussing the topic within the company, we collectively feel that the word sustainability, although filled with meaning, somehow does not seem to suffice.
That is why we prefer to talk about responsibility.
As an organization, we are responsible for creating a culture of knowledge and care. As a design brand, we have the responsibility to contribute to defining new codes of beauty that also include the values of respect towards people and the planet.
As manufacturers, we are responsible for continually challenging ourselves for better innovation on processes and products.
Our goal is to turn Arper into a leading example of responsible business.

1.2
Disclaimer

For the purposes of this report, the review period runs between January 1, 2023 and December 31, 2023 which coincides with the company's calendar year accounting period.

Given the fact that there is currently no legal obligation to produce an external third-party audit, and that we plan to transition to the new European Sustainability Reporting Standards (ESRS) in 2025 (reporting year 2024) – one year ahead of its planned implementation – we decided not to seek limited assurance.

Nonetheless, carbon data for 2022 and 2023 have been verified by proxy, while the group carbon footprint for 2021 has been certified by CSQA.

Moving forward, the carbon footprint for 2024 and beyond will include third party validation, while future reports will be submitted for limited assurance, as requested by the Corporate Sustainability Reporting Directive (CSRD).

All indicators that are not represented in this report have been omitted due to lack of source data or for confidentiality reasons.





1.3
Our company

Arper is a global design brand that envisions products for the ways we live. Founded in 1989 as an evolution of a leather artisan enterprise launched by the Feltrin family in the 1980s, the company was created by the father Luigi (President of Honor until his passing in 2020), together with his sons Mauro and Claudio Feltrin, current Chairman of the Board.
A family-owned and independent company driven by a deep sensitivity to those who use its products, Arper offers, through empathetic and enduring solutions, a perspective on the contemporary way of life that expresses needs for fluidity and versatility.

We approach design through the project of living, a dialogue that embraces change, whether it concerns the world as a whole or people as they evolve.
Underlying everything we do is a sensitivity towards the communities, relationships, environments, and individuals for whom we design. We base our activities on our core values:

Responsibility

To act with ambition and accountability to one another and to our planet

Care

To bring sensitivity and attention to detail in everything we do

Openness

A curiosity for new inspiration, new ideas, and new perspectives

Imagination

Delight in creativity, playfulness and joyful expression

Courage

Daring to take on bold challenges

Our vision is that of a beautiful, vital world, while our mission is to create spaces and solutions that shape the project of living.
At Arper, we offer insights into the ways we live, expressed through responsive, enduring products and solutions.



The strong drive to succeed in the international markets has distinguished the company since its inception. Arper develops about 90 percent of its sales in international markets: in addition to Europe, the U.S., the Middle and Far East contribute to the total turnover of 60 million in 2023. Arper is distributed in 90 countries.

Arper employs a total of 265 people in Italy and abroad.



Arper owns 15 spaces around the world.

1. Of these, six are the headquarters of the Group's subsidiaries: New York (Arper USA), Dubai (Arp Middle East), London (Arper UK), Tokyo (Arper Japan), Shanghai (Arper China) and Mexico City (Arper LATAM).

2. The showrooms in Milan, Cologne, Amsterdam, Oslo, Chicago and Los Angeles are used as exhibition spaces and meeting points for Arper's clients and the local design community to experience the full expression of the brand.

3. There is also an in-house showroom at the Treviso Headquarters.

4. Lastly the meeting hub in Munich (Germany) and the branch in Singapore complete the list.





The company is 100% owned by and operates under at the sole direction of Marco's S.r.l.

In January 2023, Corium – previously an independent entity belonging to the Arper Group and dealing mainly with the upholstery of furniture goods – was incorporated into Arper Spa, and therefore ceased to exist. All data related to our activities and operations connected to Corium are now included under Arper Spa.

As of 31 December 2023, Arper SPA directly and/or indirectly controls the following companies including all related activities that are functional to the group's core business.

Arper UK LTD
with registered office in London – 11 Clerkenwell Road, London, United Kingdom, EC1M 5PA: 100% owned, share capital of 5,000,000.00 GBP, incorporated in 2016 for the purpose of distributing Arper products in the British market.

Arper USA Inc.
with registered office in New York, 476 Broadway, Suite 2F, 100% owned, share capital of 3,300,002 USD, company active mainly in the distribution of Arper products for the US and Canadian markets.

Arper Japan K.K.
with registered office in Tokyo – HT Jingu Gaien Building, 8th Floor 2-7-22 Kita Aoyama, Minato-Ku, Tokyo 107-0061: 100% owned, share capital of 100,000,000.00 JPY, incorporated in 2016 for the purpose of distributing Arper products in the Japanese market.

Arper Latam Sociedad De R.L. De C.V.
with a registered office in Ciudad de México – Av. Paseo De La Reforma 404, Juarez, Ciudad de México: owned at 99%, share capital of 4,200,000 MXN, established in 2019 as an Arper products distributor in the Central and South American market.

Arp Middle East Furniture Trading L.L.C.
with registered office in Dubai – Business Bay - U-Bora Tower, office 1901: 49% owned, share capital of 300,000 AED, company incorporated in 2010 for the purpose of becoming distributor of Arper products; since 2014 it has been active as exclusive agent for the CCG and MENA markets (as above). The company Arp Middle East Furniture Trading L.L.C., although officially owned at 49%, is in fact a wholly owned subsidiary by virtue of the existing shareholders agreements.

Arper (Shanghai) Furniture Design Co. Ltd
with registered office in Shanghai – Room A016, East Side, 4th Floor, No. 999 Changning Road, Changning District: owned at 100%, share capital of Euro 300,000 CNY, established in 2019 as an agent for the Chinese market.

Iride S.r.l.
with registered office in Oderzo (TV), Via Callalta 55, 100% owned, share capital of 1,000,000 Euros, manufactures nautical furniture and wood and carpentry work.

Branches
Arper SPA also operates branches in the following countries: Singapore.

Arper and sustainability



Our core values shape our approach to sustainability. Our brand ethos revolves around durable, timeless furnishings, intended to transcend trends and serve diverse purposes over their extended lifetime. We value lightness and simplicity, aiming to reduce materials to a minimum. We have a modular approach to construction that reduces production complexity and creates opportunities for disassembly and component recycling. Finally, we weave soft technology, the subtle integration of intuitive ergonomic features, into every design, emphasizing natural interaction and improved functionality. Each of these is evocative in their own right of the minimal impact and intelligent design strategies essential to sustainability.

In 2005, we established an internal Arper Environmental Department. Since then, we've focused on attaining the industry's top certifications, continually measuring our impact and sharing our successes and challenges along the way. We committed to apply directly to our designs every insight we learn, always searching for better ways to reduce our impact.

We believe that, as manufacturers, we have a great responsibility in building an accessible and inclusive present and future. At the same time, we are aware that sustainability is a complex issue, with articulated economic, intellectual and practical implications. An effective change requires sustainability to be integrated at the core of our brand and become one of the foundations for the future growth of our company. We are therefore investing to shift from a proactive approach to a more strategic vision, moving from Corporate Social Responsibility (CSR) to Corporate Shared Value (CSV). Sustainability is part of our vision for the future.

Significant events occurred during the financial year

In 2023, we continued to experience the unstable situation of the contract market, which accounts for a significant portion of Arper's business. In general, we did not experience cancelations, but rather postponements of larger projects, which explain the small difference in overall turnover compared to the previous year. On top of this, the medium- and long-term measures that have been implemented following the appointment of Roberto Monti as a CEO of the company need some more time to bring about the sought-after results.

In July 2022, it was decided to merge the subsidiary Corium S.r.l. into Arper SPA. The deed of merger was signed at the beginning of 2023 and the merger was implemented as part of the rationalization program of the corporate group, to streamline operating structures and technical and human resources, with a subsequent reduction in fixed, general and organizational costs.

In addition, the "Atelier" team was further developed. The aim of this department is to provide customers with dedicated tailor-made products and services, still in keeping with the Arper's aesthetic standards as an addition to the standard catalog offer.

Financial situation

In 2023, the Arper Group recorded a total turnover of 60.1 million euros, registering a slight decrease in sales of -2.7% over 2022.

Despite the growth rather stable in turnover, however, the Group was negatively impacted by the postponement of major projects.

The new governances measures are focused on the medium and long term, anticipating short-term financial challenges.

The Group made a concerted effort to further offset cost increases by containing fixed expenses, while maintaining the commitment to safeguard employees and prioritize investments for future growth.
We expanded our sales team to support this expected growth and went ahead with other previously planned sales and marketing initiatives which had a negative impact on overall margins in the early part of the year.

Our 2023 EBITDA was 3.3 million Euros equivalent to 5% of net revenue, down from 3.7 million Euros in the prior year (equal to 6% of sales).

We recorded a decline in operating income (EBIT) of -0.3 million Euros (-0.65 million in 2022), corresponding to –0.5% of net revenue. (-1.1% in 2022).

The net result for the full year registered an increase, but unfortunately remained negative: from -1.2 million in 2022 to -0.6 million in 2023, setting the conditions to go back to positivity in 2024.

1.4
10 Jobs
in 5 Years

“10 Jobs in 5 Years” is a change management program, launched at Arper in 2022. It aims to unite everyone in the company under the same agenda to generate transformation - a tangible development that will lead to the “Arper of the future”. The program consists of annual action plans to be activated to support the desired change. It is measured by specific KPIs and is used to ensure extensive involvement along the value chain.

The 10 Jobs to be deployed over the next 5 years are:



Job 1 | To secure a strong company culture, with People at the center

Our company culture springs from the way we act upon our wished company values, and how we place people in the center of what we do. Great challenges require great mobilizations, thus leading us to forge a strong alliance with our people, promoting the development of a people-centric culture that places them at the center of all company initiatives and making the company gain a great competitive advantage: their engagement and their active contribution to our success and to build a solid culture for the future.



Job 2 | To secure customer centricity throughout the organization

Arper needs to become a truly user- and customer-centric company, building insights from people’s needs along their whole experience. This means working with a customer decision journey that addresses the right questions along the way, allowing us to mature relevant solutions to those needs, while being consistent and truthful to our own identity.



Job 3 | To place design at the center of everything we do

We want to create beautiful design for better living.
And we want Arper to act as a true design company; the way we act, insight-led and research-based, is human centered. The way we work in problem-solving represents empathy, surprise, delight and beauty.



Job 4 | To turn Arper into a leading example of responsible business

To develop the ability to understand and measure Arper's impact on the environment and on people’s lives, to share it openly, and to act in ways that improve it, with the declared goal to set the standard for future generations and to be an inspiring example.



Job 5 | To embrace innovation and attention to details, building high perceived value

To secure brand personality, strategic positioning and high perceived value, but also to meet sustainability requirements and new technological opportunities, we want to embrace our build in attention to details along with innovation thus creating a highly qualitative and tactile experience that require and allow for both artisan and industrial features to be part of our offer.



Job 6 | To enhance and develop the Arper offer

There is a need to decide what to offer, to whom and how to offer it, in order to create a distinctive value proposition, in line with our wished identity. This means we must build our offer starting from a clear style direction that is open to wider inclusiveness, along with a clear range and pricing direction that will allow us to meet the market with a relevant (and cultural) fit to who we decide to target.



Job 7 | To nurture and grow the Arper brand value

Arper has built a strong brand over the years but will now need to build new spark into the brand and to build a common ground for a mid-long term brand strategy. Desired outcome should also compass a process to build brand culture and competences across the organization. The job foresees a global marketing strategy and a relevant activation at local level, with clear identification of the main touchpoints, as well as the definition of related metrics/KPI. Within the identification of the new brand positioning and architecture, a focus shall be placed on the customers segmentation and needs - and on how to respond to these with a strong value proposition and market relevant plan.



Job 8 | To secure digital transformation to meet today’s and tomorrow’s needs

The digital transformation of Arper will be vital to drive the strategic movement of our business and represents a cultural change that does not only consider the digital tool in itself, but the complex environment which includes everything from people and organizational set up, to business processes and technologies. It will require our organization to challenge the status quo and get used to change.



Job 9 | To create operational excellence throughout the whole value chain

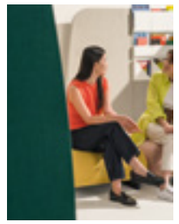
By doing the right things we know that Arper will grow significantly, but in order to grow in a sustainable way and with high quality standards we will have to build processes and engineer our value chain in such a way that everything is connected and allows for aware choices upstream and strong implementation downstream.



Job 10 | To secure a healthy business over time

We want to build a strong Arper and steady results over time, both from a monetary and non-monetary point of view, creating value and satisfaction across stakeholders. And it should all build on a solid interpretation of the Arper values, in order to foster a strong culture and to generate a widespread wellbeing in line with our company vision.

The jobs are assessed through the use of metrics that will be tracked and concrete changes will be incentivized. The main KPIs are:



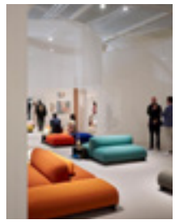
People Satisfaction & Corporate Culture

We aim to measure the satisfaction of our co-workers and the presence of our corporate values in the company's culture.



Key Partner Satisfaction

Our most important partners, such as suppliers, upstream and downstream in our value chain, are key to our success, and we want to measure their satisfaction rate.



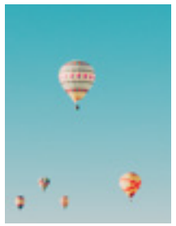
Brand Awareness and Reputation

We want to analyze and measure the level of awareness and perceptions around our brand.



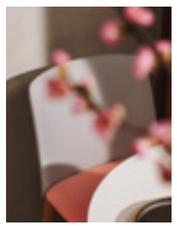
Customer Satisfaction

We intend to become customer-centric and consequently plan to measure satisfaction.



Turnover

By doing the right thing, we anticipate a direct correlation to an increase in turnover.



Responsible Business

We want to act responsibly, in order to become a leader and example for others – with the aim of measuring our progress over time, both through a social and environmental report and by evaluating the perception of our brand.



Economic Performance

In order to ensure a healthy business, we need to drive value creation and commit financial resources that will enable a continued business development.

1.5 Our material topics

Stakeholder engagement

A sustainability report aims to determine what KPIs and goals are relevant for a company to measure, in order to inform its stakeholders. In fact, not all aspects of a manufacturing activity are necessarily negatively impacting people and the planet. This is why, the below-mentioned material topics reflect only Arper's most relevant economic, environmental and social impacts.

Material topics have been identified by Arper's senior management and most strategic employees during three internal workshops and focus groups, whose goals were as follows:

- To identify the main strategic key impacts, risks and opportunities of the Arper Group in terms of sustainability and link them to United Nations Sustainable Development Goals (SDGs)

- To concretely contribute to the definition of a set of material topics to be used for benchmarking and reporting

In order to validate our material topics, we identified and categorized a list of stakeholders. The number of stakeholders chosen is enough to cover the broadest possible spectrum without exceeding the number normally found in the sector literature.
The selected interviewees were engaged by online survey. In some specific cases, we carried out a meeting to explain and anticipate the content of the incoming survey.
Online survey was chosen as the preferred method in order to have a clearer and more consistent data collection. The total redemption rate was 44.8%.

The list of stakeholders was compiled by including the following departments in the identification and selection process:

- Purchasing (suppliers and consultants)
- Sales (dealers and architects)
- Marketing (media)
- HR (owners, managers, workers, talents and members of the Board of Directors)

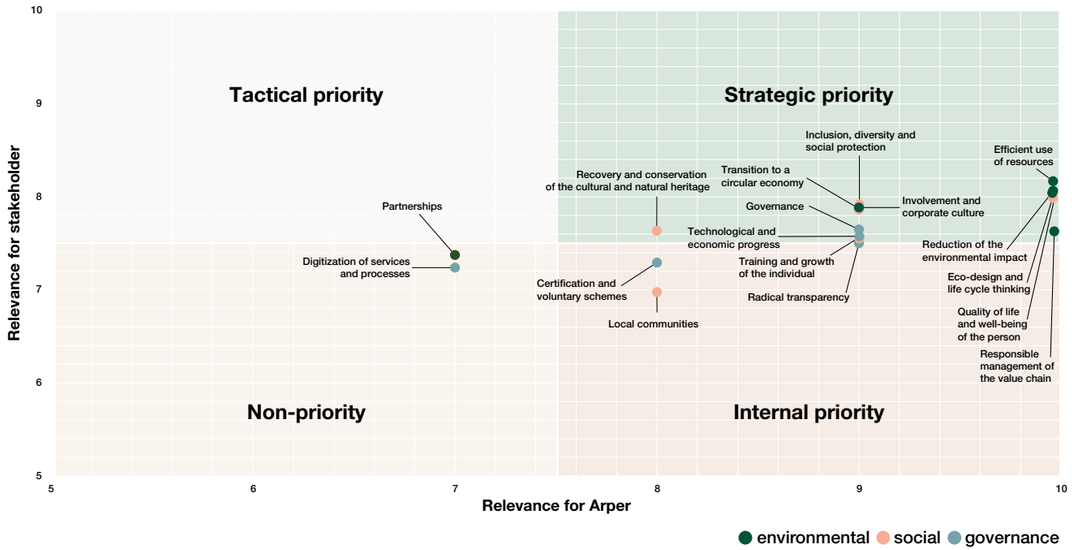
The last stage involved an external market-leading consultancy that specializes in sustainability issues, whose job was to verify that the material topic selection process and the impact assessment were appropriate.

The next revision/update of the stakeholder list and the corresponding weighting scores is planned for 2024, when we will apply a stricter double materiality approach, as prescribed by the ESRS.

A more detailed description of the stakeholders involved can be found in the methodology section.

Materiality matrix

Arper's commitment to continuous improvement in sustainability reporting is reflected in a comprehensive analysis. This considers a range of factors that have a significant impact on the company's performance and the concerns of its stakeholders. The analysis takes into account various environmental, social and governance (ESG) issues.
The following materiality matrix provides a visual representation of the key findings of this analysis and enables us to identify and prioritize the topics that are most relevant for both the company (X axis) and the stakeholders (Y axis).
The matrix is designed to illustrate the alignment between the company's strategic priorities and the expectations and interests of its stakeholders.



In the upper right quadrant, the one where the priorities of the company and its stakeholders converge, we felt the need to insert a further level of definition, with the aim of better qualifying the various types of priorities:

- **Strategic priority**
  the topics that have received the highest scores from both the company and the stakeholders are positioned here
- **Internal priority**
  high score from the company, but less high from the stakeholders
- **Tactical priority**
  high interest from stakeholders, less from the company
- **Non-priority**
  issue considered to be of average importance for both the company and the stakeholders

In fact, while the matrix includes all topics originally selected during the workshop sessions, the feedback by the stakeholders helped us define a much better classification of importance.

At this stage, we established a link with the United Nations' Sustainable Development Goals (SDGs), in order to confirm that our sustainability vision and strategy is aligned with the worldwide community working towards a more sustainable society.

Selected Topic	SDG
Quality of life and wellbeing of the person	
Training and growth of the individual	
Technological and economic progress	
Digitization of services and processes	
Inclusion, diversity and social protection	
Recovery and conservation of the cultural and natural heritage	
Local communities	
Transition to a circular economy	
Involvement and corporate culture	
Efficient use of resources	
Radical transparency	
Certification and voluntary schemes	
Responsible management of the value chain	
Eco-design and life cycle thinking	
Reduction of the environmental impact	
Partnerships	
Governance	

A complete description of the materiality matrix definition process is available in the methodology section.

1.6
Our impacts, risks and opportunities

Job n. 4 aims at turning Arper into a leading example of a responsible business. But how do we become more responsible? Looking at the issue in a more holistic manner, we can say that there are four forces that drive change:

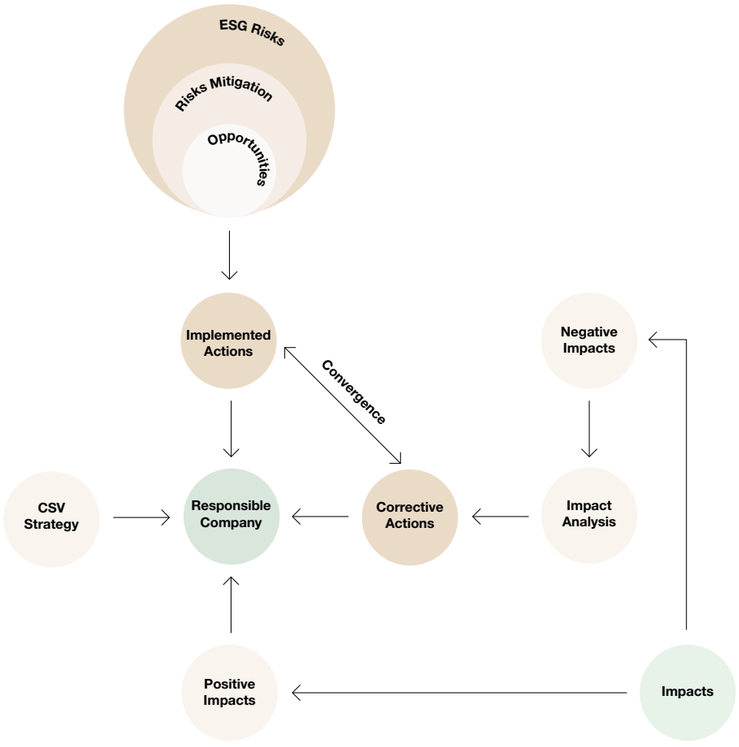
A
The Company's Corporate Shared Value strategy (compared to CSR only)

B
A risk/opportunity scenario and the actions that such a scenario generates

C
The positive impacts of its activities

D
The corrective actions generated by the impact analysis

Another aspect to consider is that there needs to be some sort of convergence between B and D in order to optimize implementation. We believe that this kind of alignment speaks for the consistency of the model, and therefore represents a core aspect of the model itself. See picture below for a clearer description.



This concept led us to develop a risk/opportunity matrix, showcasing Arper's efforts in terms of sustainability.
In the table on the left, the focus over the last few years has been on risk mitigation, mainly in terms of compliance with existing programs and models.
On a few occasions activities were developed (and implemented) starting from opportunities. This is mainly due to HR restrictions (over the last 15 years, only one person was in charge of environmental constraints within the HSE Department) and to a strategy that, over the years, focused mainly on compliance.
We are aware that more needs to be done, and are continuously working to increase our efforts. In the last three years, we shifted our focus from compliance to a more proactive approach that will invest time and financial resources towards the development of actions derived from opportunities.
In order to facilitate this, two fundamental steps have been taken:

- The team was transformed into a Department, reporting directly to the CEO
- The dedicated team was expanded, with the addition of one more person



In this regard, it's worth noting that the primary activities of the recently established Sustainability Department are to guide and assist in the transition, while the overall decision-making authority remains with the entire organization.
The risk analysis provided was developed by using valuable information, obtained from our main stakeholders, and drawing upon our internal knowledge of company processes and their associated impacts.
This approach was chosen to ensure a complete assessment within the available time frame. Future developments entail expanding the analysis to encompass all stakeholders identified in the materiality matrix, with a particular emphasis on climate change. A dedicated survey will be developed for this purpose.

Furthermore, anticipating the forthcoming requirements of the upcoming Corporate Sustainability Reporting Directive (CSRD), we have begun developing a double materiality impact matrix.
As we know, the CSRD is a regulatory framework that aims to enhance the transparency and consistency of sustainability reporting across European Union member states. It will introduce new guidelines and standards for reporting on environmental, social and governance (ESG) matters.
Initial findings indicate the growing prominence of climate change impacts within our sustainability considerations.
For further details on this topic, please refer to the information presented the following pages.

Risk management matrix

In 2023 we integrated our previous ESG risk assessment with the ESG and standard risk assessment required by the ISO 9001 and ISO 14001 certifications, with the final goal of having a single document covering all possible impacts, risks and opportunities (IROs). We have highlighted in green the impacts and risks we added in 2023.

Material Topics	Risks (Internal and External)	Risk Reduction Actions (Implemented)	Opportunities	Actions Derived From Opportunities (implemented)
Quality of life and well-being of the person	Work-related injuries	Health & Safety Policy	Good work environment	
	Chemicals exposure	Training to Health&Safety coordinators	Being considered a leader in the field	
	Customer satisfaction	Health&Safety included in the induction program	Safe products	
	Bad reputation	Internal assessments	Good reputation	
		Certification policy (Greenguard Gold on all seating items)	No claims	
		Customer satisfaction survey	Talent retention	
		Adoption of D.Lgs. 231/01	Talent attraction	
		ISO 45001	Low sick leave	
		Integrated Audit (HSE)		
Transition to a circular economy	Material scarcity	Product brief based on ecodesign principles	Anticipate legislative obligations	Refurbishment project
	High price of raw material	Product Life Cycle Assessments	New business models	
	Bad reputation	Use of post-consumer polypropylene	New kind of partnership (e.g. recyclying partners)	
	Internal barriers to full implementation of circular business models (e.g. refurbishment)		Global markets (e.g. market pressure for improvement)	
	Turnover loss due to changing perception of customers			
	Global markets (e.g. material compliance)			
Reduction of the environmental impact	Global warming produced by GHG emissions	Global footprint evaluation	Investment in new materials, including post-consumer polypropylene	Structuring of a detailed emission reduction plan
	Wasted energy	Environmental impact reduction strategy	Transformation of innovation-bound investments into applied research and development	Digital product presentations
	Fossil-based energy used by suppliers	Implementation of a company Code of Conduct (best practices)	Development of a new (circular) business models	
	Emissions generated by transportation (including milk-run)	ISO 14001 (ISO 50001 planned for 2025)	Reduction of emissions through the use of electric and/or low impact vehicles	Cost projection of electric vehicles service with one major logistics supplier
	Emissions generated by business travel	Environmental & Energy Aspect Analysis	Impact-conscious business travel policy	
	Unbearable air pollution	Supply Chain		
	Accidental spillage of substances and gases	Development of an emergency plan (procedures and simulations)	Better ovierview of scheduled maintenance, which leads to a higher efficiency of systems and tools	A mapping of all existing systems has been carried out
	Exceeding of authorized limits for production and assembly	Periodic maintenance of equipment, third-party audit of chemical substances management	Reduction of solvent-based glues	Evaluation under way to reduce the usage of solvent-based glues on legacy collection
	Sanctions generated by the exceeding of permitted atmospheric emission limits	Maintenance and control of atmospheric emissions treatment systems		
	Deterioration of plant efficiency (i.e. heating system)	Periodic maintenance and energy efficiency reporting. Monitoring of plant efficiency.	Improved efficiency and air quality generated by a more stringent efficiency monitoring	
	Emissions due to improper use of VOC reduction machinery in the prototyping and production departments	Maintenance and control of systems for conveying and treating atmospheric emissions		
	Pollution of the aquifer	Development of an emergency plan (procedures and simulations)		
	Interruption of energy/water supply due to failure to comply with compliance regulations	Development of an emergency plan (procedures and simulations)		

Material Topics	Risks (Internal and External)	Risk Reduction Actions (Implemented)	Opportunities	Actions Derived From Opportunities (implemented)
Engagement and corporate culture	Missing implementation signals	Development of a mixed-term strategy (long AND short term action plan)	Extension of training/information sessions to external entities (suppliers)	Creation of a sustainability ambassadors team
	Climate crisis denial	Internal sustainability training to all Arper People		
	Missing perception of the sense of urgency			
Efficient use of resources	Overconsumption	Introduction of post-consumer PP into new products and product revisions	Sale over product environmental performance rather than price	
	Material scarcity	Waste management policy		
	Waste generation	Scaling up of current refurbishment partnerships	Transition from a linear to a circular thinking (lifecycle thinking)	
	Biodiversity depletion	Arper District project		
	Consumption limitations due to increase in supply costs (energy/fuel shortage and/or socio/economic situation)	Raising of awareness among staff in order to reduce waste	Increase of the percentage of own renewable sources for partial energy autonomy	Ongoing discussion with the CEO/COO about the opportunity to implement targeted actions (i.e. implementation of photovoltaic or solar thermal systems)
	Excessive energy consumption for production, warehousing and prototyping	Intensification of consumption monitoring to every quarter	Resource savings	
	Waste of resources	Calculation of a corporate carbon footprint (Scope 1-2-3) in order to produce an impact reduction strategy	Limitation of the number of materials used in products	Development of a in internal "Ecodesign Guide", which will be applied to all future product developments
	Consumption of natural resources	Increased usage of recovered materials, design for disassembly	Incorporatation of primary data, experience and good practices into a single document which should align brief, design and production to the most important circular economy concepts	Development of a in internal "Ecodesign Guide", which will be applied to all future product developments
	Limitations in withdrawals due to shortage of water resources	Development of an emergency plan	Reduction of water consumption for irrigation purposes using more efficient dispersion systems	
	Waste of water resources in general due to production and services (also due to breakdowns in the aqueduct network)	Recurring environmental audits, consumption monitoring, awareness raising among staff		
Recovery and conservation of the cultural and natural heritage	Biodiversity loss	Sponsoring of cultural projects (museums)	Nature regeneration	Culture development program (Museum partnerships)
	Loss of artistic heritage		Wellbeing of people working in the nearby environment	
			Direct engagement with the local community	
Inclusion, diversity and social protection	Negligence of terms of employment	Code of Conduct	Development of a D&I conscience	
	Discrimination	Supplier's code of conduct	Improvement of working environment conditions	
	Harassment	Diversity Policy	Improvement of talent retention	
	Diversity	Employee surveys	Talent attraction	
		ESG rating for suppliers		
		ESG rating for Arper		
Radical transparency	Reduction of brand equity	Issue of Arper's (first) sustainability report	Enlargement of the client base	
	Credibility loss	Public talks about Arper's strategy and long-term view		
	Greenwashing			
	Non-compliance to EU reporting regulations			

Risk management matrix

Material Topics	Risks (Internal and External)	Risk Reduction Actions (Implemented)	Opportunities	Actions Derived From Opportunities (implemented)
Certification and voluntary schemes	National/regional regulatory obligations	Compliance to external market requirements	Access to new market sectors	Own test procedures tailored on specific product needs
	New market compliance	Internal pre-audits	Being perceived as a serious company	Brief based on ecodesign principles
	Manage certifications (updates, follow-ups, extensions, etc.)	Internal strenght tests extended over standard settings	Being perceived as a compliance leader	
	Reduced process flexibility (internal)	ISO 14001, ISO45001, ISO9001 certifications	Brand equity increase	
	Trade protectionism schemes	Implementation of an internal testing lab	Integration of more ecodesign tenets into product development	
		Ecodesign		
		Acquisition of competence/knowledge		
Training and growth of the individual	Decrease in productivity	Training sessions on different subjects	Discovery of new talents within the current population	
	Loss of (new and older) talents			
	New (more flexible) labor market peculiarities			
	Deficient induction training in case of short-term stays or initially poor knowledge of operations premises	A specific ad-hoc induction training program is currently being developed in order to cover longer occasional stays and/or short-term collaborations	Gathering of ideas for improvement of standardized health and safety practices as seen from an outsider	
Responsible management of the value chain	Moral integrity of the supply chain	Code of conduct for suppliers	Development of a dedicated excellence cluster	Arper District project - partnership development
	Lack of acceptance of Arper's code of conduct	ESG requirements for suppliers (ESG rating)		
	Material scarcity	Supplier performance monitoring & supplier audits		
	Reliability of the supply chain	IT platform for supplier's management (JUNGO)		
	Restrictions due to D.Lgs. 231/01	Focus on local suppliers		
	Geopolitical situation	Arper District project - company/supplier integration		
	Interruption of product supply due to failure by the supply chain to comply with legal obligations	Regular environmental audits of the supply chain		
Partnerships	Bad reputation due to wrong partnerships	Investment in long-term strategic partnerships	Enhanced visibility	
	Funds draining		Sales growth	
			Opening to new sales segments	
			Leverage investiments on specific projects	
Governance	Insufficient investments	Enterprise risk management	Increase of client confidence	
	Wrong investments	Finance Policy	Sales growth	
	Negative reputation	Quality Policy	Good reputation	
	Lack of adequate risk management policies	Health & Safety Policy	Integrated reporting	
	Unwanted indirect involvement in legally or ethically questionable practices (e.g. supplier's side)	Environmental & Energy Policy	Implementation of best practices about policies and processes	
		Adoption of D.Lgs. 231/01	Responsible investment	
		Code of conduct (internal and external)	Company stability in the long term	
		ISO 9001, ISO 14001 and ISO 45001 compliance	EU Taxonomy compliance	
		Internal audits	Enhanced stakeholder engagement	

Material Topics	Risks (Internal and External)	Risk Reduction Actions (Implemented)	Opportunities	Actions Derived From Opportunities (implemented)
Digitization of services and processes	Different softwares used by different entities	Elimination of data management procedures developed by individual departments/entities		
	ERP update due	Technical evaluation of the latest release (ongoing)		
	Cyberattacks	Attack prevention procedures in place	Optimization of backup infrastructure	Implementation of a more performing and energy-saving offsite backup system
Technological and economic progress	Low level of sector-specific innovation	Collaboration with material databanks	Development of own R&D research lab	Refurbishment project
	Scarse use of new low-impact materials	Detailed new material test process	Implementation of new business models	
	Implementation of technically incompatible new materials	New market segments		
	Challenges from competitors	new product segments		
	Geopolitical situation			
Local communities	Difficulty to find appropriate local management	Pursue of radical transparency on issues generating an impact (material topics)	Connection to the local administration	Partnership with the local school system
	Misalignment with local administration about local community development plans	Generation of opportunities to seek and find dialogue with the company about impacts	Creation of social value	
	Demonstrations from local groups		Pre-recruit future talents	
	Frictions on issues related to GHG emissions			
Eco-design and life cycle thinking	Waste generation	Frugal design approach (sobriety in the number of raw materials used)	Reduction of GHG emissions	Internal ecodesiogn workshops (first-step implementation planned for 2023)
	Increase of end-of-life impact	Development of ecodesign best practices (Disassembly, Durability, Sourcing, etc.)	Better materials management (e.g. through frugality)	
	Higher cost of production		Lower cost of materials	
	Higher expenditure for raw materials			
	Increase of allocated warehouse space			

Impacts

As previously stated, in alignment with the new CSRD, it will be mandatory for companies such as Arper to adopt a double materiality approach. Regardless of regulatory deadlines, we believe that conducting a thorough impact analysis is essential for any sustainable long-term strategy. Therefore, we have promptly initiated the review process.

Internally, we will assess and disclose issues that significantly impact our operational and financial performance, strategic decision-making, and long-term viability. This involves evaluating risks and opportunities related to financial performance, operational efficiency, regulatory compliance, and other internal factors.

We will analyze and disclose the impacts of our activities on the external environment, society and the broader economy, materiality. This approach ensures that we consider both the financial implications for our organization and the social and environmental consequences.
By adopting a double materiality approach, Arper aims to provide a comprehensive understanding of our sustainability performance, capturing the interdependencies between our internal operations and the external context.
This includes evaluating our environmental footprint, social contributions and adherence to governance principles, considering stakeholder expectations, climate change, human rights, supply chain sustainability, and community engagement.

A fundamental decision we made early on in our reporting attempt was to ensure the compliance of our report in relation to the new GRI standards of 2021, even before their anticipated implementation. These updated standards introduced a revised concept of materiality, encompassing a comprehensive analysis of both positive and negative impacts associated with material topics.

In this report, the impacts of each theme have been identified through focus groups consisting of the CEO, the Sustainability Team, and a selected group of managers with a strong interest in sustainability.
The process of identifying these impacts involved regular discussions and dedicated meetings. Our objective for the upcoming year is to extend the impact analysis to all stakeholders, enabling us to update the risk/opportunity matrix in greater detail.

The scope of the impact analysis in this report encompasses all entities within the Arper Group, including Arper SPA with its legal entities and branches (HQ), Arper USA, Arper LATAM, Arper Shanghai, Arper Japan, Arper Middle East and India, Arper UK, Corium (upholstery facility), and Iride (naval furniture production).
The analysis considered both short-term and medium-to-long-term effects.

The significance of an actual positive or negative impact is determined by the severity of the impact in terms of scale, scope, and irreversibility.
Similarly, the significance of a potential positive or negative impact is determined by both its severity and likelihood. In the case of potential negative human rights impacts, the severity of the impact takes precedence over its likelihood, although we do not anticipate any risk of human rights infringements.
We prioritized impacts based on severity, with likelihood playing a secondary role.
As this document represents Arper's first sustainability report, we deemed it essential to consider all potential implications of our activities.

Therefore, we have not established a formal threshold. The severity of our perceived impacts can be inferred from the various actions and approaches outlined in the impact assessment.
We did not formally consult with key stakeholders regarding the selection of material topics since virtually all topics were evaluated, including the Digitalization of services and processes, which had been excluded from the evaluation in the Sustainability Report 2022.

For each material topic, the table on the following pages reports the following information:

- Positive impacts (in brackets E for Environment, S for Social, G for Governance, F for Financial)
- Negative impacts (in brackets E for Environment, S for Social, G for Governance, F for Financial)
- Actual vs. Potential
- Short vs. Long-term
- Systemic vs. Accidental
- Caused by own activities vs. Result of business relationships (in brackets a description of the impact source)
- Policies and/or commitments related to a specific impact
- Actions taken for actual impacts or approaches adopted for systemic impacts
- Status of the action (green for "implemented or in due course", yellow for "delayed", red for "aborted or suspended")
- Lessons learned together with an explanation of the project's status

Material Topics	IMPACTS		Actual vs. Potential	Short vs. Long-term	Systemic vs. Accidental	Caused by own activities vs. Result of business relationships (description)	Policies / Committments	Actions taken for actual / Approaches adopted for systemic	Status	Lessons learned / Explanation
	Positive	Negative		3-3-a		3-3-b	3-3-c	3-3-d		3-3-e
Quality of life and well-being of the person	Reputation as a good workplace (G)	Reputation as a bad workplace (G)	Actual	Long-term	Systemic	Own activities (Arper's way of managing its human resources contributes to its appeal as a good/bad employer)	Development of a structured stakeholder engagement policy			Need for a new way to engage customers.
	Talent retention (S)	Talent loss (S)	Actual	Long-term	Systemic	Own activities (see "Reputation as a good workplae")		Internal job postings		
	More engaged collaborators (S)		Potential	Long-term	Systemic	Own activities (see "Reputation as a good workplae")				
		Work-related injuries (S)	Actual	Short-term	Accidental	Own activities (Health&Safety policies allow to mitigate the risk for work-related injuries)	Incidents close to zero / Regulatory compliance	ISO 45001 Certification		
		Possible exposure to chemicals in products (E)	Potential	Long-term	Accidental	Result of business relationships (usage of solvents in the supply chain could expose workers to VOCs if not treated according to mandatory requirements)		Greenguard Gold certification on all seatings		
Transition to a circular economy		Older collections (cannot be completely redesigned) (E)	Actual	Short-term	Systemic	Result of business relationships (old collections cannot always be reengineered due to time and cost constraints)	Development of an increasing number of circular products	Product brief based on ecodesign principles		Project has started in 2023 and will be completed in 2024.
		Plastic pollution due to not yet implemented take-back systems (E)	Potential	Long-term	Systemic	Own activities (Arper's own take-back program is planned for implementation in 2026)		Use of post-consumer polypropylene		First product in PC polypropylene produced in 2023. Extention to other collections is currently under way.
								Refurbishment project has been implemented in the Benelux area		Ramp-up phase. A quick deployment over DACH and Nordic countries is expected.
		Higher investments in R&D and materials (G)	Actual	Short-term	Systemic	Own activities (circular products require a continuous, cost-intensive testing of new materials)		Several investigations and collaborations have started with start-ups focused on the development circular materials		
		Reassessment of current supply chain (G)	Actual	Long-term	Systemic	Result of business relationships (Arper's Scope 3 carbon footprint in 2022 accounts for 95% of total emissions)	Inclusion of ESG factors in the supplier's selection process	Product Life Cycle Assessments		LCAs are time and money intensive, therefore a detailed certification strategy is needed.
								ESG rating for all strategic suppliers		Meeting in person when explaining goals is a big boost.
Reduction of the environmental impact		Air pollution (E)	Actual	Short-term	Systemic	Result of business relationships (see "Reassessment of current supply chain")	42% reduction of Scope 1-2 and between 25%-42% reduction of Scope 3 compared to 2022 baseline	Corporate carbon footprint evaluation		
		Energetic waste (E)	Actual	Short-term	Systemic	Result of business relationships (see "Reassessment of current supply chain")		Environmental impact reduction strategy		Full development is scheduled for the end of 2024, implementation from 2025 onwards.
		Fossil-based energy used by suppliers (E)	Actual	Short-term	Systemic	Result of business relationships (see "Reassessment of current supply chain")		Implementation of a company Code of Conduct (best practices)		
		Emissions generated by transportation (E)	Actual	Short-term	Systemic	Result of business relationships (see "Reassessment of current supply chain")		ISO 14001 certification		ISO 50001 planned for 2025.
								Cost-benefit analysis of electric vehicles for the milk-run		
		Emissions generated by business travel (E)	Actual	Short-term	Systemic	Own activities (Arper has a worldwide client network)				
		Spillages of substances and gases (E)	Potential	Short-term	Accidental	Own activities (incidents could happen anytime)		Development of an emergency plan (processes and simulations)		Better overview of scheduled maintenance, which leads to a higher efficiency of systems and tools.
								Mapping of all existing systems has been carried out		
Engagement and corporate culture	Creation of a sense of urgency (S)		Actual	Short-term	Systemic	Own activities (training to all employees)	Aligment on the strategic role of sustainability throughout the whole group	Internal sustainability training to all Arper People		Annual training has to be established as a routine procedure.
		Difficulty in acknowledging and envisioning long-term priorities (G)	Potential	Short-term	Systemic	Own activities (the agreed 5-year strategic plan is very challenging)		Development of a mixed-term strategy (long AND short term action plan)		
Efficient use of resources		Current business model naturally leads to overconsumption (E)	Actual	Short-term	Systemic	Own activities (current business model needs to switch to a more circular/no waste approach)	Switch to a more circular/no waste approach	Introduction of post-consumer PP into new products and product revisions		Not yet ready, but instrumental in order to implement a circular business model.
		Reduction of available raw material and other resources (E)	Potential	Long-term	Systemic	Result of business relationships (the switch to a more circular design is a strategic pillar)		Waste management policy		
		Increase in waste generation (E)	Potential	Long-term	Systemic	Result of business relationships (the switch to a more circular design is a strategic pillar)		Scaling up of current refurbishment partnerships		Geographical implementation needs to be clearly outlined.
		Biodiversity depletion at supplier's sites (E)	Potential	Long-term	Systemic	Result of business relationships (the switch to a more circular design is a strategic pillar)		Arper District project		Currently limited to 32 suppliers. Focus in 2024 will be on how to expand the project to a larger target.
		Increase in energy consumption (E)	Potential	Long-term	Systemic	Own activities (in the beginning new technologies are often connected to resource inefficiencies)		Intensification of consumption monitoring (now quarterly) of the group entities.		Resource savings are always possible.
								Evaluation of options to increase consumption from own renewable sources (i.e. implementation of photovoltaic or solar thermal systems).		
		Waste of water resources (E)	Potential	Long-term	Systemic	Result of business relationships (the switch to a more circular design is a strategic pillar)		Recurring environmental audits/consumption monitoring		
								Change to a more efficient dispersion system for property irrigation		
	Raising of awareness about finiteness of resources (E)		Actual	Long-term	Systemic	Own activities (staff training and other awareness raising events)		Awareness raising events and trainings for all staff are planned on a yearly basis		Internal awareness plays a huge role and requires constant focus.
Recovery and conservation of the cultural and natural heritage	Opportunities of "new heritage" creation (S)		Potential	Long-term	Accidental	Own activities (scouting of new opportunities to support cultural projects, e.g. A Lot With Little)	Continued investment in cultural projects	Sponsoring of cultural projects (museums, A Lot With Little Exhibition)		
		Plastic pollution due to product typology (E)	Potential	Short-term	Systemic	Result of business relationships (a take-back system is still under development)	Development of a fully fletched take-back system in 2026	Refurbishment project has been implemented for the Benelux area		European markets are not yet fully ready for this business model.
		Missing of extended End-of-Life management (E)	Actual	Long-term	Systemic	Own activities (a take-back system is still under development)	Tracking of entire product life-cycle			
Inclusion, diversity and social protection	Variety of knowledge, skills and experience (S)		Actual	Short-term	Systemic	Own activities (possible development of any hiring policy focused on a D&I approach)	Strict vigilance on the adoption of both the internal Code of Conduct and the supplier's Code of Conduct	Development of an internal Code of Conduct		
		Reduced social cohesion (S)	Potential	Long-term	Systemic	Own activities (possible development of any hiring policy focused on a D&I approach)		Supplier's Code of Conduct		
		Poor communication (S)	Potential	Short-term	Systemic	Own activities (possible development of any hiring policy focused on a D&I approach)		ESG rating for suppliers		Knowlege about ESG topics boosts awareness about social aspects.
		Increased conflicts (S)	Potential	Long-term	Systemic	Own activities (possible development of any hiring policy focused on a D&I approach)		ESG rating for Arper		
Radical transparency		Higher investments in communication practices (G)	Actual	Long-term	Systemic	Own activities (reinforcement of the digital marketing team)	Structuring of an environmentally savvy communication policy	Issue of a thorough and transparent sustainability report		
		Expectations mismatch (G)	Potential	Short-term	Accidental	Own activities (information spill-out could possibly lead to less clear statements)		Hiring of an Internal Communication Manager		Internal communication is key when spreading the sense of urgency thoughout the whole organisation.
		Greenwashing (E)	Potential	Short-term	Accidental	Own activities (information spill-out could possibly lead to less clear statements)		Training to the marketing department on environmental issues		
		Impossibility to retrieve product data from suppliers	Actual	Long-term	Systemic	Own activities (not all suppliers are willing to share additional information needed for full product traceability)		Implementation of a product information management software		
Certification and voluntary schemes	Compliance wih environmental and social standards (E, S)		Actual	Long-term	Systemic	Own activities (certification policy in place)	Recurring revision/implementation of certification policy at Group level	Compliance to external market requirements		Each market calls for its own certification scheme, therefore a certification policy at group level is highly desirable.
	Human rights protection (S)		Actual	Long-term	Systemic	Own activities (supplier's audit in place)		Internal pre-audits		
	Impact on design decisions (E)		Actual	Short-term	Systemic	Own activities (inclusion of ecodesign principles in design brief)		Implementation of an internal testing lab		
		High cost of compliance (G)	Actual	Short-term	Systemic	Own activities (certification policy in place)		Internal strenght tests extended over standards' compliance		
Training and growth of the individual		Decrease in productivity (G)	Actual	Short-term	Systemic	Own activities (training requires people to leave their daily tasks behind)	Increase training sessions about sustainability-related topics (currently 1 session per year to all employees)	(Sustainability) training sessions on different subjects		Trainings are foundamental to recruit Sustainability Ambassadors
		Loss of (new and older) talents (S)	Potential	Long-term	Accidental	Own activities (current business structure might not allow for professional upgrade)				
Responsible management of the value chain		Unethical conduct of the supply chain (G)	Potential	Short-term	Accidental	Result of business relationships (in some cases no full disclosure about subsuppliers available)	Improvement of ESG standards for all strategic suppliers	Supplier's Code of Conduct		
		Material scarcity (E)	Potential	Long-term	Systemic	Result of business relationships (core materials could become scarse when sustainable development will gain real traction)		ESG requirements for all major suppliers (ESG rating)		Knowlege about ESG topics boosts awareness about social aspects.
		Emissions generated by the supply chain (E)	Actual	Short-term	Systemic	Result of business relationships (Still low impact on some suppliers concerning their emissions policy)		Supplier performance monitoring & supplier audits		
								IT platform for supplier's management (JUNGO)		
								Focus on local suppliers		
								Arper District project (company/supplier integration)		Currently limited to 32 suppliers. Focus in 2024 will be on how to expand the project to a larger target.

Material Topics	Impacts		Actual vs. Potential	Short vs. Long-term	Systemic vs. Accidental	Caused by own activities vs. Result of business relationships (description)	Policies / Committments	Actions taken for actual / Approaches adopted for systemic	Status	Lessons learned / Explanation
	Positive	Negative		3-3-a		3-3-b	3-3-c	3-3-d		3-3-e
Partnerships	Mutual development of best practices (G)		Actual	Short-term	Systemic	Own activities (partnership with local sustainability-led company groups for experience exchange)	Development of a set of best practices to be shared with the industry	Engagement with the local furniture Industry association Sustainability Group		
	Development of shared innovative projects (G)		Actual	Long-term	Systemic	Own Activities (partnership with innovative start-ups that could shape the way we will do business in the future)		Partnership with Papershell AB		
		Bad reputation due to wrong partnerships (G)	Potential	Long-term	Systemic	Own activities (choice about how to engage with is on Arper)				
Governance		Negative reputation (G)	Potential	Long-term	Systemic	Own activities (bad governance impacts on daily business decision processes)	Pursue of ethical and transparent governance thoughout the Group	Enterprise risk management		ERM matrices need to be updated to include ESG risk.
		Business fragility (G)	Potential	Long-term	Systemic	Result of business relationships (a lack of adeguate risk management policies can lead do financial fragility)		Quality Policy		
		Service level not up to the request of the market (G)	Potential	Long-term	Systemic	Own activities (inconsistent organisation impacts on customer support processes)		Health & Safety Policy		
								Environmental & Energy Policy		Energy policy will immediately follow the ISO 50001.
								Adoption of D.Lgs. 231/01		
								Code of conduct (internal and external)		
								Compliance to ISO 9001, ISO 14001 and ISO 45001		
								Internal audits		
Digitalization of services and processes	Semplification of information flow and availability (E)		Potential	Long-term	Systemic	Own activities (digital product passport and product life tracking)	Digitalization of product materials and product life tracking througout the supply chain (upstream and downstream) to enable correct EPR compliance			
	Compliance with European regulations (E)		Potential	Long-term	Systemic	Result of business relationships (compliance required by the EU in terms of product information availability)				
		Software redundancy (G)				Own activities (different softwares used by different group entities to perform the same task)		Implementation of a software policy at group level (used to be at entity level)		Current situation is consolidated and responding to the market needs. Nonetheless, since EU legislation on product data digitalization has been approved, the topic becomes now material. Implementation phase of the product passport has been set to 2025. In 2023 we started to evaluate scale and scope like all other impacts, where likelihood has been set to 100%.
		Large efforts to collect and manage data (E)	Potential	Long-term	Systemic	Own activities (information not always directly available)				
		Cyberattacks (G)	Potential	Short-term	Accidental	Own activities (possible exposure to attacks to the group entities IT infrastructure)		Attack prevention procedures/Emergency plan in place		
								Implementation of an off-site (energy-saving) backup infrastructure		
		Efficiency loss due to missing software tools (G)	Potential	Long-term	Systemic	Own activities (difficulty to implement software tools at group level when needed only by specific departments)		Dedicated software implementation requests always connected to a specific cost-benefit analysis		
Technological and economic progress		Scarse use of new low-impact materials (E)	Actual	Long-term	Systemic	Result of business relationships (new materials properties are foundamental to reduce CO2 impact)	Put innovation in the centre of future development	Collaboration with material databanks		Collaboration needs to be improved in the next years.
		Less resources to invest into the local community (S)	Actual	Long-term	Accidental	Own activities (investments on R&D might divert financial support on social aspects)		Detailed new material test process		When new materials enter the product development perimeter, a detailed testing process needs to be defined in detail.
Local communities		Difficulty to find appropriate local management (S)	Actual	Long-term	Systemic	Result of business relationships (geographic location of Arper HQ could represent a hurdle)	Engage with the local community to produce shared value			
		Misalignment with local administration about local community development plans (G)	Potential	Short-term	Accidental	Result of business relationships (disagreement with local administration on specific issues could arise unexpectedly)		Generation of opportunities to seek and find dialogue with the company about impacts		Implementation started in the local school system.
		Frictions on issues related to GHG emissions (E)	Potential	Long-term	Accidental	Result of business relationships (exponential attention to GHG emissions could not match the company's long-term reduction plan)		Pursue of radical transparency on all issues generating an impact (material topics)		Following to this impact analysis, a consistent communication strategy will need to be implemented.
Eco-design and life cycle thinking		Waste generation (E)	Potential	Long-term	Systemic	Own activities (focus on no-waste design practices should be prioritized)	Apply ecodesign tenets in order to facilitate the transition to a design-for-circularity approach	Frugal design approach (sobriety in the number of raw materials used)		Less materials = less waste
	Decrease of life cycle impact of products (E)		Actual	Long-term	Systemic	Result of business relationships (focus on end-of-life management should be prioritized)		Development of an ecodesign guide featuring best practices (Disassembly, Durability, Sourcing, etc.) aligned with ESPR/CAM/Ecolabel and which will be applied to all future product developments		Crucial activity for the decrease of GHG impact.
								Where possible, revisit older collections to lower their GHG emissions		Very difficult task to implement, due to the large number of legacy collections and the impact of the activity in itself.

The key take-outs of this impact mitigation analysis are as follows:

- A special focus needs to be given to **technological and economic progress**, since innovation is a key factor for companies like Arper
- **Eco-design** is a core competency that we want to expand on. Although our new products are already being developed following circular principles (e.g., 3D-knitting to avoid waste, no glues to allow separability of materials, etc.), we can still improve on several other aspects
- A **waste management policy** will become instrumental for the development of circular business models, therefore we need to improve our waste-related processes
- With our 2030 goal fast approaching, we need to focus on finding new and effective ways to **reduce our CO^2 emissions**
- **LCAs** will become crucial in product development, which means that we need to anticipate its implementation and incorporate it in an earlier phase

The reported information has been reviewed and approved by the highest governance body within the company, the Group CEO.

1.7
The economic Valuation of Impacts

The economic valuation of impacts (impact valuation) is a methodology that assigns a monetary value to a social or environmental impact which has traditionally been assessed in qualitative, descriptive terms.
Although it can still be considered as a new science, impact assessment is gaining popularity in the economic world, even though it's practical application of this role is not yet fully understood.
Specifically, while the impact of the company's economic activities has a direct and tangible impact on the organization itself, the same activities produce often a much less evident effect outside of the company perimeter. These types of impacts – known as externalities – are particularly significant because they often lack a clearly identifiable responsible party, frequently leaving the issues unaddressed.

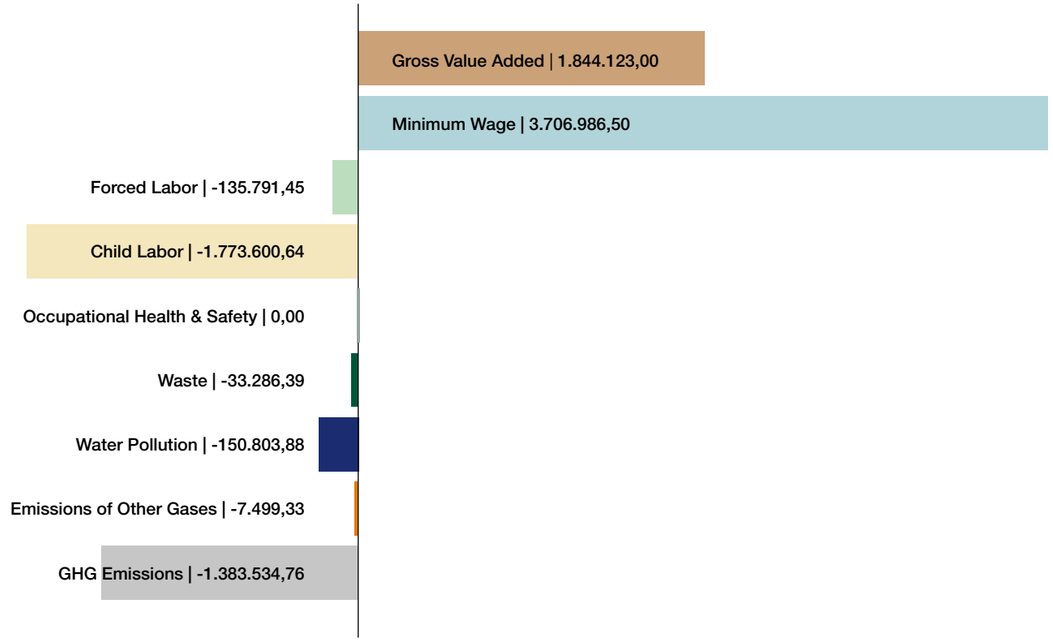
The evaluation of the impact of the internal and external consequences of an entrepreneurial activity therefore leads to two important outcomes:

- it helps organizations broaden their perspective, leveraging the responsibility of each of them in relation to their entrepreneurial activities;
- it eliminates the excuses caused by the declared impossibility of quantifying the extent of the generated consequences.

Since impact valuation is not included in the current financial and legislative system, this practice is mainly used to support the internal decision-making process.
Nonetheless, it is quite evident that in the future – thanks to the increasing transparency requested by the market on sustainability issues – this type of approach will become an important lever for long-term value creation.
A more detailed description of both the standard and revised approach suggested for medium-to-large companies is delivered in the Methodology section. Below, we will share a short summary of the initial results of our first impact valuation attempt, together with some of our findings and acknowledgments. This practice will be reiterated every year, with the recurring goal of fine-tuning results and discernments.
In fact, we believe that impact valuation uniquely and effectively complements our ESG risk management. It shifts discussions from mere qualitative evaluations to an in-depth quantification of risks and opportunities in monetary terms, aligning with the discussions we engage in during our daily management routines.

Assessment Results and Comments

The impact valuation has been performed following a revised version of the Value Balancing Alliance[1] methodology. We opted for a simplified version mainly because of the extreme complexity of the calculations and the free availability of some secondary data (i.e. databases and other external sources).
Consequently, the final result might be less accurate than the one produced by the original methodology, but it will still enable medium-to-large organizations to initiate the assessment without diminishing their enthusiasm. A highly detailed explanation of how the original 12 parameters were adjusted and re-examined is provided in the Methodology section.
The results of the impact valuation analysis performed over the year 2023 are summarized in the following graphical representation:



[1] See www.value-balancing.com for more details on the original methodology and its latest developments.

The graph clearly shows that we generate a significant positive impact on people and society, primarily due to the added value generated by our production and our average wage, which exceeds the national average. The negative impacts are predominantly associated with greenhouse gas emissions, highlighting the need for an intensified focus on implementing a CO2 emission reduction plan in the immediate future.

An unexpected and noteworthy aspect that emerged is the issue related to child labor. Despite the fact that almost 60% of suppliers are located within 100 km from the headquarters in Monastier di Treviso (TV) – and can therefore be monitored quite easily –, data is being heavily impacted by the current situation in Vietnam, where a tier 2 supplier is located: in 2021 the average percentage of children aged 5-17 years engaged in child labor in economic activities has been estimated in 5.693%[2]. The data suggests two targeted actions:

- A | an extension of the supplier network monitoring to tier 2 manufacturers
- B | an in-depth assessment of the tier 1 supplier which is responsible for the sourcing in the south-eastern part of Asia.

Literature clearly shows that the identification and valuation of an environmental and social impact is a rather complex undertaking. The exercise turns out to be even more complex when the metrics used by Sustainability and Finance diverge: to translate complex topic-specific evaluation metrics into more practical financials helps increase the perception of a sense of urgency when tackling climate change and addressing the externalities connected to it.

Finally, undertaking a sustainability assessment compels the organization to address the efficiency puzzle. Companies tend to procrastinate issues related to innovation and development, due to higher costs, favoring short-term tactical actions instead. However, investing in sustainable development should be viewed not only as an incentive to assume responsibility for the environment and the society, but also as an opportunity to foster internal growth. Impact valuation serves as the common denominator that enables the implementation of a broader and more forward-thinking vision for the organization.

[2] Data Source: MICS 2020-21, UNICEF and ILO calculations.



1.8
Our sustainability strategy: a responsible way forward

The values that guide our choices shape our identity. They define us as people and as a company. They justify our tireless commitment to give meaning to what we do. Far from producing as an end in itself, at Arper, we are guided rather by the desire to transform the values in which we have always believed into objects.

When we design, we first of all think of people. We take care of them anticipating their needs and their aspirations; listening to them, we imagine and design objects that speak of the people who will use them, as well as us.

“Put people at the center” is our deepest core.

When people feel that they "inhabit" a space, when they perceive that it corresponds to their needs, we feel that we have instilled value in an object.
When a place allows those who live there to work better or to relax, prepares for dialogue or induces calm and concentration, we feel we have given meaning to our design.
We do it with courage and awareness.
A courage that drives us to open up to new creative languages and to explore all of our potential, an awareness that roots us in our strong and unique identity.

In relation to the environment: Designing the world we live in

We have always explored design through relationships with people, objects and places. Today, we are aware that the most important relationship we need to take care of is the one with the planet.
“Designing the world we live in” means planning sustainable growth, for people and communities, through a business activity guided by principles of honesty and transparency: environmental, social and economic.

From this perspective, "putting people at the center" acquires new meanings: it makes us aware that, as manufacturers, we have a great responsibility in building an accessible and inclusive present and future, but it also gives us the great privilege of being able to concretely influence the scenario that we will draw. Design plays a central role in this process, because it can help us to evolve by intervening at all levels:

Through processes and services, which allow us to implement new models, taking into consideration the potential offered by end-of-life, reuse and recycling management solutions and involving the entire value chain in a collective and shared growth process.

Through creativity, as the sustainable vocation of design is defined above all in the conception phase. Together with designers, we can create products in which sustainability becomes an explicit and shared requirement of the creative path that leads to the (re)birth of an object.



Through the product, because in its best sense, that of "great design", a product is designed to last, to go beyond trends and to take, precisely through its duration, the first basic step towards environmental, social and economic. "Great design" becomes "design for sustainability".

By incorporating these principles into our work, applying them widely and continuously, and sharing them with our partners, we can contribute to the establishment of new aesthetic standards and redefine the concept of "beauty", including the value of respect towards the planet.







Our sustainability plan

Achieving the objectives that we set ourselves implies implementing profound and important transformations at different levels: organizational, productive and cultural, establishing priorities for intervention.

This is why we approach this path by moving simultaneously in the short and long term: we plan long-term intervention strategies, while we also work on concrete short-term actions, which can both be preparatory to the achievement of more complex objectives and constitute interventions that give an immediate result.

Our sustainability plan is based on three **Pillars**, the foundations of our strategy: on these we have chosen to invest all our energies in the years to come.

We will implement it through some **levers of change**, which we consider able to guide us in our evolution, enabling us to progressively implement concrete projects, to transform Arper into a leading example of responsible leadership.

Finally, we will focus on practical endeavors, which we will take over from our past experiences and project into the next future through **acted and actionable** activities.

The pillars of our responsibility



We want to put people at the center, whether they are employees, customers, or partners, integrating wellbeing into the company's development aims.
We encourage the balance between work and private life, striving to increasingly meet individual needs. We provide tools and technologies that support flexibility.
We apply our skills to the creation of products designed to improve individual and collective wellbeing, in people's projects of living, wherever they happen.



We support the transition from linear to circular economy, through the design of technologically innovative products and use of materials with low environmental impact. The activation of services based on reuse and recycling policies, end-of-life management, and collaborations with research centers will help us implement innovative solutions to improve our sustainability performance.
We limit the production of waste whenever possible, through a policy of prevention, reduction and reuse of the product and its packaging.



We formally take steps to identify the critical issues connected to our activities, at every stage of the company's processes.
We introduce analysis and measurement processes that allow us to know and understand the improvement areas on which to intervene.
We research and are looking for solutions aimed at mitigating our environmental impact, seeking the continuous improvement of our performance.

Social

Quality of life and wellbeing of the person



Economic

Transition to a circular economy



Environmental

Reduction of the Environmental impact



The levers of change

The pillars of sustainability are built through fundamental levers, capable of enabling change, in which people are at the center.

Engagement and corporate culture

We consider sustainability a priority in building the present and the future.
We work to create this awareness within the company and build a shared culture of sustainability that gives space and prominence to this commitment and creates the conditions for the Arper of tomorrow. To do this, we organize meetings and training sessions, stimulating active participation in building a corporate sustainability strategy that is integrated with the brand values at the foundation of our company. We also promote the concrete applicability of these principles with virtuous examples.

Inclusion, *diversity* and social protection

We promote open and democratic dialogue as a tool for finding shared solutions on issues that can have significant impacts on the organization and, in particular, on people and their wellbeing.
We consider diversity a value that brings mutual benefits: to people, valued in their uniqueness, and to the company, nourished by everyone's individuality. We guarantee the promotion of non-discriminatory behavior within the Group and the enhancement of elements of diversity such as age, gender, sexual orientation, disability, nationality, political opinions and religious beliefs, which favor the development of an inclusive culture.

Recovery and conservation of cultural and natural heritage

We are committed to the conservation of the natural heritage, embracing and applying global guidelines, with particular attention on the responsible sourcing of the materials we use and with an ethical approach in our production.
We undertake initiatives that also guarantee respect for the cultural heritage, by actively participating and promoting projects and collaborations aimed at the protection, recovery and enhancement of works of artistic, cultural and collective importance.
Our approach is global, but also focuses on local, on the people who share the land and culture with us.

Efficient use of resources

We are committed to implementing initiatives that allow us to reduce our consumption and use resources more efficiently, using renewable resources wherever possible, with the ultimate goal of greater levels of eco-efficiency and the reduction of pollutants, emissions and greenhouse gases.
We aim to apply the 5 R strategy (Refuse, Reduce, Reuse, Repair, Recycle) wherever possible in order to eliminate waste in all its forms.

Radical transparency

We aim to manage knowledge and information in an open manner, making objectives and processes visible at all levels, both to us and to our customers and other external stakeholders, in order to increase the perception of fairness, of involvement in company management and the responsibility of everyone's role, through transparency itself.

We are committed to achieving the goal of making Arper an example of responsible leadership, towards people and the environment as a whole.

A **continuous commitment**, which will be implemented through concrete actions and interventions that will involve the entire company over time.

An **inclusive commitment**, in which the participation of each of us is necessary and fundamental, and represents the foundation on which to build the Arper of the future.

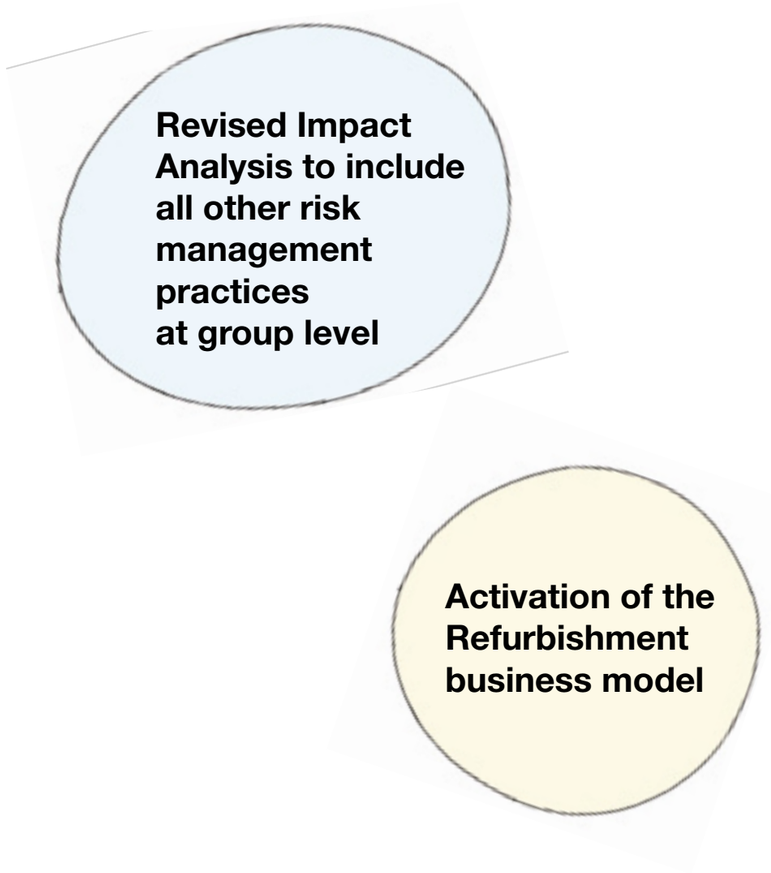
1.9
Key highlights for 2023

Arper's concept of responsibility has evolved considerably over time. We began with an approach based primarily on compliance, closer to the idea of a strategic Corporate Social Responsibility approach to sustainability as a whole, to a more strategic approach which translates into the concept of Corporate Shared Value.

Arper realizes that good governance has a fundamental impact on the achievement of sustainability goals, and therefore in 2021 has decided to formalize the department dedicated to the sustainable development of the company.

The Sustainability Office is in charge of defining the sustainability strategy of the group and implementing it, once approved by the Board of Directors and the CEO.

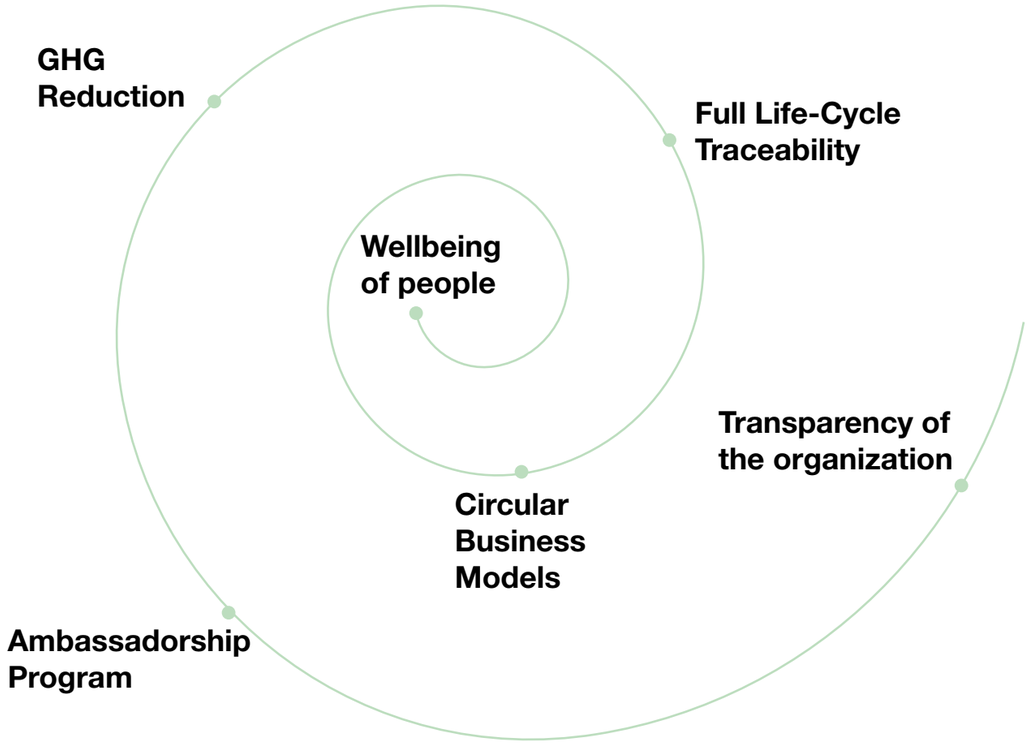
2023 highlights include:



1.10
Our goals for the future

Our objective is to transform Arper into a leading example of responsible business. To achieve this, we need to carefully select goals that will drive positive change. While Arper has been addressing environmental issues strategically for several years, we have recently shifted our focus from retrospective measures such as product compliance, to forward-looking initiatives like eco design.

Our primary focus areas include:



1

Wellbeing of people, communities and company

In our pursuit of fostering the wellbeing of our people, communities and company, we have undertaken various projects aimed at creating a sustainable and supportive environment. These projects include: the “Give-And-Take” initiative; the “Sustainability Cashback” program; the cultivation of a “Sustainability culture”; the establishment of an “Information Exchange Bank”; “Green Area Repurposing”; “Local community Support”; “Partnerships with local schools”; “Benefits/BCorp” and “Social Certification”.
We also place a significant focus on mobility through various projects: our “Carpooling initiative” encourages shared rides with a reward system for both drivers and passengers. For employees coming from the local area, we offer “Bike Sharing” options with e-bikes to promote eco-friendly and slow mobility. Moreover, our “Electric product shuttle and company cars” facilitates transportation between locations using electric vehicles, gradually transitioning to an electric corporate fleet.

2

Circular Business Models

We are committed to supporting the transition from a linear economy to a circular economy. This involves incorporating circular principles into our products, services and collaborations, while also adopting policies to prevent, reduce and reuse waste generated by our products and packaging. By embracing circular business models, we actively facilitate the “Implementation of enhanced Eco-Design Principles”. In fact, we have organized practical “Eco-design workshops” to apply sustainability in product development. Additionally, we are involved in “Circular Startup” initiatives, and we foster “Industrial Symbiosis” by creating virtuous circles within the Arper supply chain, recovering waste materials from other productions and integrating secondary raw materials into our products. Furthermore, we emphasize the importance of sustainability by integrating specific information related to sustainable aspects into our materials database.

3

Full Life-Cycle Traceability

With each product, we aim to provide comprehensive information about the materials and producers involved throughout its life cycle. This information will facilitate reuse, repurpose, recycle and proper disposal of the product. One initiative worth mentioning is the development of a “Product Passport”, which establishes a comprehensive database with sustainability data for each product. Additionally, we are implementing a “Product Traceability” system and a “Product LCA Databank”, which will generate internal LCAs for our key products and production processes, including new developments. Through Full Life-Cycle Traceability, our objective is to achieve “Enhanced Transparency”: we will develop a consistent and transparent information structure to communicate our goals and achievements. This transparency will help stakeholders understand our progress and foster accountability.

4

GHG Reduction

We have developed a GHG Reduction Plan with the goal to reduce CO2 absolute emissions by 42% for Scope 1 and 2, and between 25% and 42% for Scope 3 by 2030 compared to our 2022 baseline. Projects such as Energy Manager establishment, Energy management plans, ISO50001 certification, Energy Independence through photovoltaic systems, and a Packaging 2.0 initiative focus on sustainability and contribute to lowering our carbon footprint and fighting climate change.

5

Ambassadorship Program

Internal and external ambassadors will play a crucial role in transforming our business into a low-intensity activity. They will also help create a sense of urgency among our stakeholders regarding sustainability practices. Through projects such as “Responsible Partnerships”, we aim to create an extended sustainability network, forging partnerships with organizations like the Venisia Project, Assindustria, and schools. The “Widespread Ambassadorship” initiative seeks to establish a network of sustainability ambassadors, including main suppliers, to drive a movement throughout the entire supply chain, encompassing the Arper District. Additionally, to ensure commitment at the highest level, “Sustainability Key Performance Indicators (KPIs)” will be included in management's MBOs, further reinforcing our dedication to sustainability practices and creating a sense of urgency among stakeholders.

6

Transparency of the organization

Our commitment to transparency is reflected in our reporting efforts, which include the drafting of a comprehensive sustainability report. Through this report, we aim to provide clear insights into our sustainability initiatives, progress, and impact on the environment and society.
By openly sharing our efforts and challenges, we demonstrate accountability and foster trust among stakeholders, while contributing to a more sustainable future.

For a comprehensive understanding of these projects and their detailed implementations, please refer to the end of this report, where all initiatives are thoroughly explained.

In practical terms, these six areas of responsible development will be translated into a project map that aligns with our three pillars. We will also leverage focus areas to optimize project implementation in terms of human capital and financial resources.
At the beginning of each year, the Sustainability Team will create an action plan for the year ahead, outlining practical steps to implement projects.

Additionally, a roadmap will be developed to guide the long-term goals and projects. However, the roadmap will remain flexible, subject to changes based on external factors and evolving priorities.
The plan developed in 2022 and confirmed in 2023 follows the approach reported in the table on the following pages. In here, you will also find an outline of all other departments involved, showcasing how sustainability really is an integrated and cross-functional topic that touches all employees.

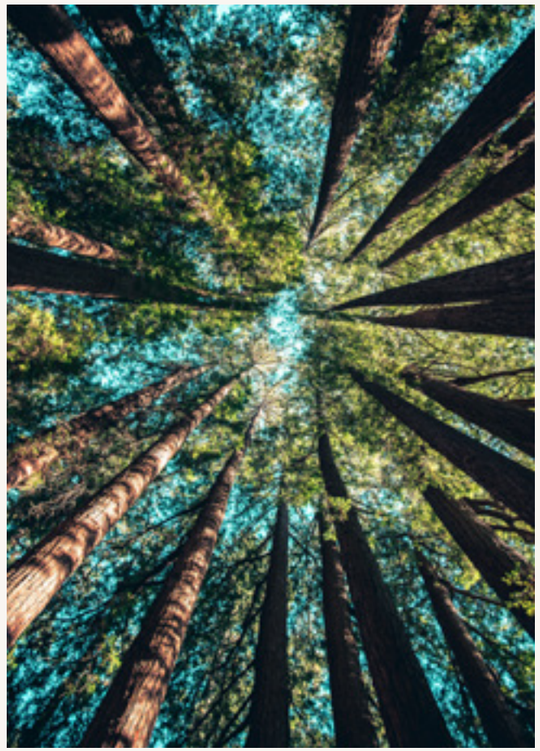
Area of Interest	Dept. Involved	Action Plan 2023	2024	2025	2026	2027
Improve the quality of life and the wellbeing of People						
Wellbeing of the People	HR		The Pact			
	HR / Operations				Sustainability Cashback	
	HR / Brand	Sustainability Culture				
				Information Exchange Bank		
	Operations	Green Area Repurposing Arper Fitness	Green Area Repurposing Arper Fitness			
Wellbeing of the Community	HR / Operations	Local Community Support				
	HR / Operations	Partnership with local secondary school				
	Finance		Benefit Corp.	Bcorp Certification		
	HR			Social certification (SMETA/SEDEX)		
Foster the contamination between Arper's business model and that of the circular economy						
Circular offer	Product / Range Sales Finance Operations	Ecodesign workshop 1	Ecodesign workshop 2		Circular Startup	
		Circular business models (Refurbishment)	Circular business models (Renting)		Circular business models (take-back)	
			Industrial Symbiosis			
	IT / R&D	Use of secondary raw materials in products				
Transparency of the product	IT / R&D		Environmental product passport			
	IT / Operations	Upstream traceability		Downstream traceability		
	IT / R&D	LCA software training		LCA calculation model for all major products		
			LCA Database Development			
Progressive reduction of impact on the environment						
Building the foundations	Marketing / All	Development of “responsible” partnerships				
	–	Ambassadorship (Arper)				
			Ambassadorship (supply chain)			
	All	Sustainability KPIs for top management				
Reduction of energy consumption and generation of GHG	All	Reduction of absolute CO2 values of products (tCO2eq/Kg): 42% (Scope 1 and 2) and between 25% and 42% (Scope 3) compared to 2022 (baseline)				
	Operations	Energy Manager				
		Energy Plan				
				ISO50001 Certification		
				Energy independence (Scope 2)		
				Packaging redevelopment		
Transparency of the organization	–	Sustainability reporting				
Mobility	HR / Operations	Carpooling				
		Bike2Work				
			Electric shuttling for products			
		Switch to electric mobility of the company cars				

projects to be activated | Ongoing project | Completed project



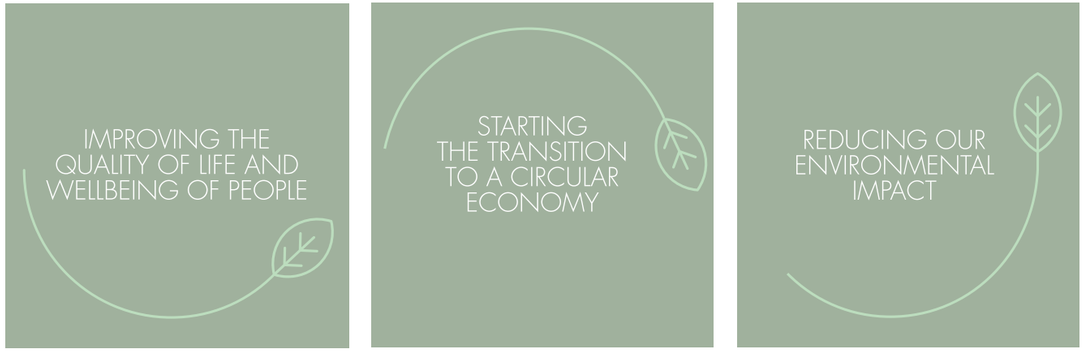
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WHY WE DO THIS: OUR PILLARS



Introduction

The pillars are the foundation of Arper's sustainability strategy, representing the company's three main goals in achieving responsible practices. We are aware that becoming 100% sustainable is not realistic for any company, but we hold the responsibility to make every possible effort to reduce the environmental impact of our activities. This responsibility prompts us to question the necessity of producing new items and explore alternative approaches to our long-standing practices. We recognize the importance of taking a proactive approach even before legislation comes into play.
At Arper, responsibility means a proactive approach that shifts our focus from self-interest to the wellbeing of everyone, including the planet. This responsibility is reflected in our pillars:



These pillars are closely aligned with our core values and represent the milestones of our sustainability path into the future.

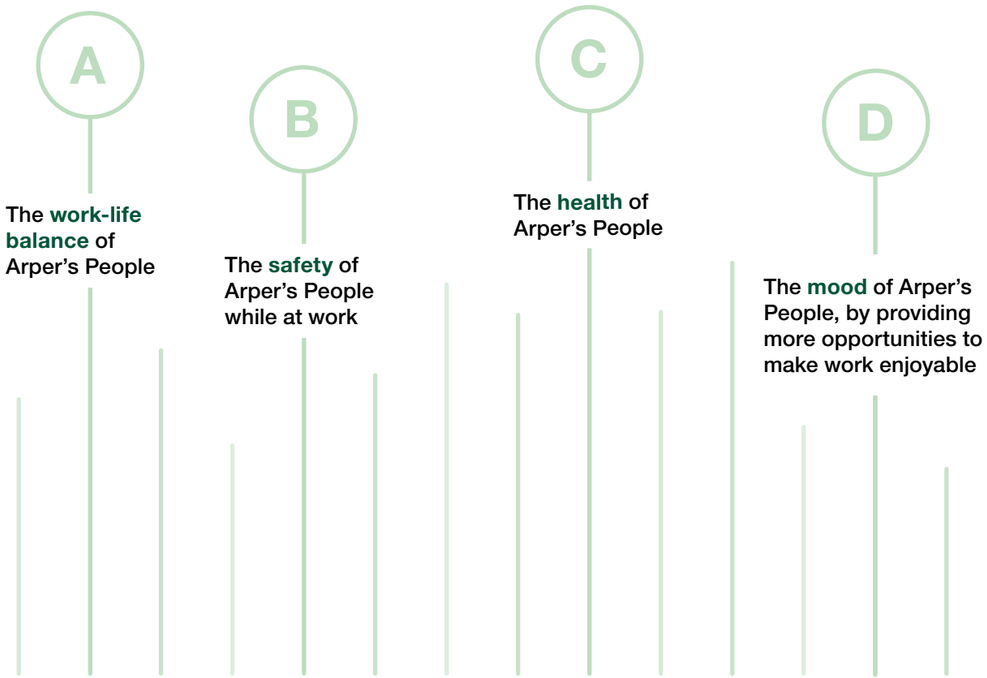
We are committed to investing our energies in these areas in the coming years.

2.1
Quality of life and wellbeing of people

At Arper, our aim is to provide tools and work models that prioritize the expectations and needs of our employees, suppliers, customers and end users.
We strive to align these initiatives with the company's objectives while fostering a healthy work-life balance.
By doing so, we enable people to lead a well-rounded lifestyle through design.

Main goals

We strive to improve:



Indicators

KPI Employee turnover

GRI Indicator 401-1 | New employee hires and employee turnover

Total number of employees 2023

	Under 30	30-50	Over 50	Total
Male	12	70	60	142
Female	13	91	19	123
Total	25	161	79	265

Terminations 2023

	Under 30	30-50	Over 50	Total
Male	1	6	4	11
Female	0	18	2	20
Total	1	24	6	31

New hires 2023

	Under 30	30-50	Over 50	Total
Male	7	12	6	25
Female	6	16	2	24
Total	13	28	8	49

Negative employee turnover (terminations)

	Under 30	30-50	Over 50	Total
Male	8.3%	8.6%	6.7%	7.7%
Female	0.0%	19.8%	10.5%	16.3%
Total	4.0%	14.9%	7.6%	11.7%

Positive employee turnover (new hires)

	Under 30	30-50	Over 50	Total
Male	58.3%	17.1%	10.0%	17.6%
Female	46.2%	17.6%	10.0%	19.5%
Total	52.0%	17.4%	10.1%	18.5%

KPI Benefits

GRI Indicator | 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employee

All Employees are granted a health insurance, while Executives are granted extra benefits such as life insurance and accident insurance. Executives are employees who have a role in the company characterised by a high degree of professionalism, autonomy and power and carry out their functions in order to promote, coordinate and manage the achievement of the objectives of the enterprise.

KPI Parental Leave

GRI Indicator | 401-3 | Parental Leave

Total number of employees that took parental leave

	Units	Return to work	Retention rate
Male	4	4	100.0%
Female	3	3	100.0%

KPI Health and safety

GRI Indicator |416-2 | Incidents of non-compliance concerning the health and safety impacts of products and services

Incidents of non-compliance with regulations and/or voluntary codes

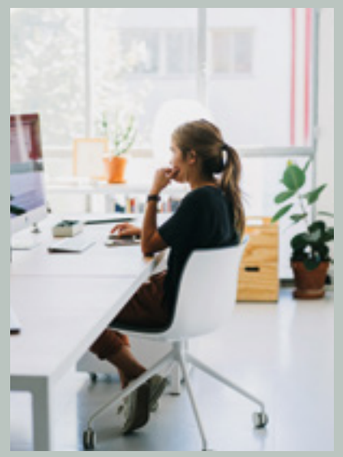
	2023	2022	2021
Incidents of non-compliance with regulations resulting in a fine or penalty	0	0	0
Incidents of non-compliance with regulations resulting in a warning	0	0	0
Incidents of non-compliance with voluntary codes	0	0	0
Total	0	0	0

Targets

KPI	GRI Disclosure	Description	Target	Year
Employee turnover	401-1	Negative employee turnover (terminations)	< 15%	2023
		Positive employee turnover (new hires)	Pos > Neg	2023
Health and Safety	416-2	Incidents of non-compliance with regulations and/or voluntary codes	0	2023







Our approach

The measurement of people's wellbeing encompasses various aspects, and we have chosen to use five key performance indicators (KPIs) to assess it. Four of these KPIs are related to the working environment, and include turnover, wage, benefits, and parental leave, while the other focuses on working conditions, specifically health and safety.
Negative employee turnover tracks the number of people who have left the company, while positive employee turnover accounts for new hires. These quantitative data points must be complemented with qualitative data for a comprehensive analysis. Quantitative data, therefore, serves as an indication and acts as a threshold that triggers a warning signal.

When such a signal is raised, the matter is escalated for thorough analysis in collaboration with top management. Although we couldn't identify an ideal GRI (Global Reporting Initiative) indicator that adequately represents work-life balance in its entirety, we decided to allow our employees to be evaluated based on the goals achieved rather than on the hours they work. This guiding principle forms the basis of an innovative smart working project called Arper Flow, which has been fully implemented in 2023, and is now and integral part of the company's employee well-being toolbox.

Progress and activities in 2023

Arper Flow, Arper's remote working universe

Arper Flow, Arper's innovative smart working program, represents a significant step forward in implementing an organizational culture that is increasingly focused on people centricity. It is in line with Arper's "10 jobs in 5 years" strategy and serves as one of our main responses to value and prioritize people within our company. Arper Flow is centered around the concept of free smart working, meaning its aim is to empower our teams by providing them with the freedom to adapt their work methods to the evolving business landscape. The essence of Arper Flow lies in the ability to build a customized work approach that serves the specific needs of each team. By doing so, we can ensure that our work is aligned with the ever-changing demands of our business in a more efficient and responsible manner. Trust, responsibility, and autonomy are the key drivers of Arper Flow.



Slow mobility project (carpooling)

The "Sustainable Mobility On the Go" (S.M.O.G.) project is an innovative initiative aimed at promoting sustainable transportation and at reducing carbon emissions. This project, launched in 2022 and extended to 2023, currently consists of a carpooling platform, which offers incentives to the employees that share their car when commuting to work.

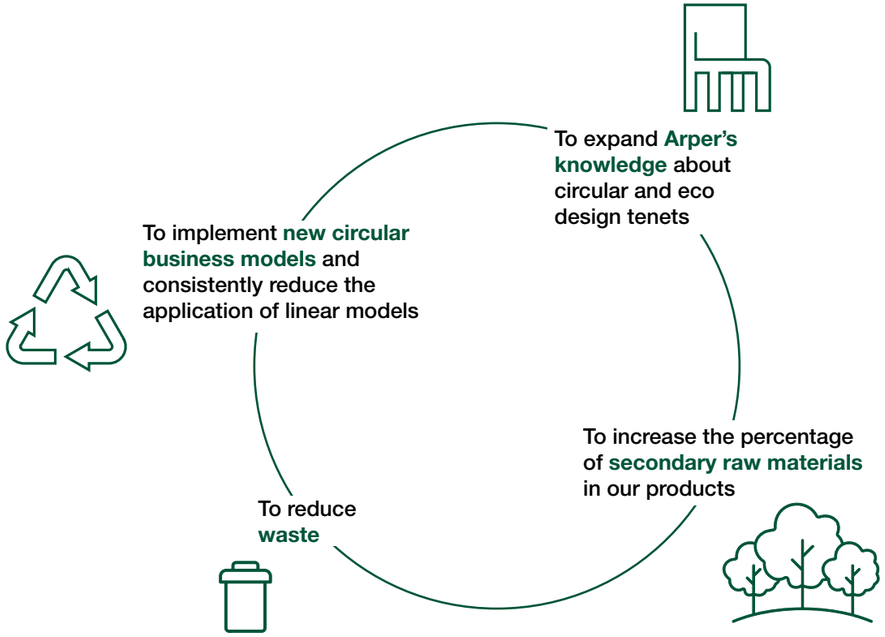
Beyond the financial benefits, we were pleased to see how this project sparkled new friendships among employees who did not interact often, creating a much healthier atmosphere at work.

Actions	Status	Lessons Learned and/or Explanation
Greenguard Gold certification on all seatings	●	
ISO 45001 certification	●	
Sustainable Mobility on the Go (S.M.O.G.) projects on all seatings	●	

2.2 Transition to a circular economy

At Arper, our objective is to actively contribute to the shift from a linear economy to a circular economy. We achieve this by developing products, services, and collaborations that prioritize biodiversity and the preservation of the global ecosystem.
Additionally, we are committed to minimizing waste generation through a comprehensive approach focused on prevention, reduction and reuse of both products and packaging materials.

Main goals



Indicators

KPI Secondary raw materials used

GRI Indicator 301-1 | Materials used by weight or volume

Total weight of materials used to produce and package the organisation's primary products and services

		2023			2022			2021		
	U.m.	Non-Renewable	Renewable	Total	Non-Renewable	Renewable	Total	Non-Renewable	Renewable	Total
Raw materials	ton	0	0	0	0	0	0	0	0	0
Associated process materials	ton	0	0	0	0	0	0	0	0	0
Semi-manufactured goods or parts	ton	1,560.34	287.07	1,847.41	1,412.65	557.94	1,970.59	3,001.12	101.50	3,102.62
Materials for packaging purposes	ton	16.04	703.62	719.66	7.23	378.13	385.36	27.04	566.40	593.44
Total	ton	1,576.38	990.69	2,567.07	1,419.88	936.07	2,355.95	3,028.16	380.16	3,696.06

GRI Indicator | 301-2 | Recycled input materials used

Percentage of recycled input materials used to manufacture the organization's primary products and services

		2023	2022
	U.m.		
Total recycled input materials used (packaging excluded)	t	298.24	275.95
Total input materials used (packaging excluded)	t	1,847.41	1970,59
Percentage of recycled input materials used (packaging excluded)	%	16.14%	14.00%

GRI Indicator| 301-3 | Reclaimed products and their packaging materials

Reclaimed products and their packaging materials

		2023 (including Iride)	2022 (including Iride)	2021 (including Iride)
	U.m.			
Products and their packaging materials reclaimed within the reporting period	n	0	0	0
Products sold within the reporting period	n	198,425	228,975	219,704
Percentage of reclaimed products and their packaging materials	%	0.0%	0.0%	0.0%

KPI Waste

GRI Indicator | 306-3 | Waste generated

Waste produced / Waste intensity

		2023		2022		2021	
	U.m.	Quantity	%	Quantity	%	Quantity	%
Paper/Cardboard	ton	58.58	14.6%	77.36	42.0%	84.32	39.7%
Metal	ton	7.61	1.9%	2.75	1.5%	6.69	3.1%
Plastics	ton	44.01	10.9%	10.92	5.9%	16.72	7.9%
Fabric & Leather	ton	0.12	0.0%	2.80	1.5%	6.98	3.3%
Wood	ton	81.40	20.2%	33.68	18.3%	45.46	21.4%
Effluents	ton	4.10	1.0%	6.84	3.7%	11.05	5.2%
Hazardous waste	ton	0.95	0.2%	1.25	0.7%	1.16	0.5%
Other	ton	205.27	51.1%	48.75	26.4%	40.22	18.9%
Total	ton	402.04	100.0%	184.35	100.0%	212.60	100.0%
Waste intensity (Waste produced/Materials used)			**15.66%**		**7.8%**		**5.8%**

KPI |Circularity index

GRI Indicator| ARP-1 | Circularity index

TECLA Score

	2023	2022
	%	%
TECLA circularity score	55.0	43.0

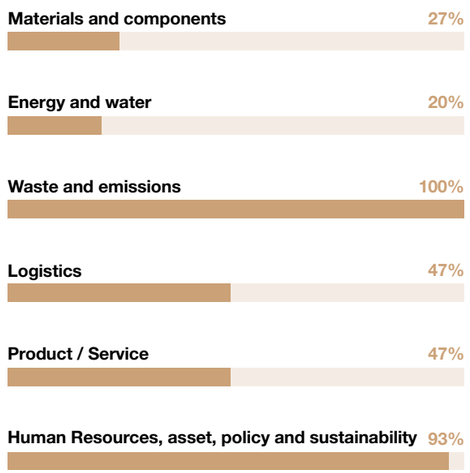
Targets

KPI	GRI Disclosure	Description	Target	Year
Secondary raw materials used	301-2	Percentage of recycled input materials used to manufacture the organisations's primary products and services	> 20%	2027
	301-3	Reclaimed products and their packaging materials	5%	2027
Waste	306-3	Waste produced/Waste intensity	-10%	2027
Circularity index	ARP-1	TECLA score by Federlegnoarredo	45%	2025

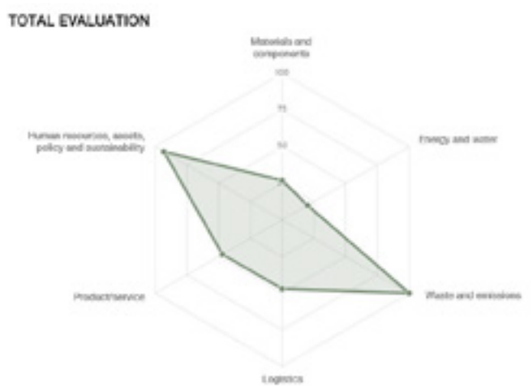
The TECLA (Tool Economia Circolare Legno-Arredo) tool - developed by FederlegnoArredo (federlegnoarredo.it) - measures the circularity of the processes of an organization based on the UNI/TS 11820 technical specification: "Measurement of circularity. Methods and indicators for measuring circular processes in organizations". The UNI/TS 11820 technical specification, which entered into force on 30 November 2022, defines a set of indicators to evaluate, through a rating system, the level of circularity of an organization.
This system does not provide minimum levels of circularity but gives an assessment of the level achieved.
The circularity indicators are divided into six categories:

Material Resources and Components	**Energy and water resources**	**Waste and emissions**
Logistics	**Product/Service**	**Human resources, assets, policies and sustainability**

By completing a survey, companies can identify a level of circularity and the most suitable path for improvement towards the circular economy transition.
Upon the survey, TECLA returns a numerical percentage value which certifies the level of circularity of the organization, in accordance with UNI/TS 11820, through a first-party assessment activity, i.e., a self-assessment (type II environmental label). In addition, for each category of circularity indicator, a score with related feedback and possible improvement solutions is assigned.
In 2023 we were able to increase the overall score compared to 2022, which is clear signal that we are moving in the right direction. Product development will play a pivotal role here, and it is evident how this topic is inherently connected to the development of an internal eco-design guide (see topic "Ecodesign and Life Cycle Thinking" for further details).



Tecla (Tool per l'Economia Circolare nel LegnoArredo)



Tool available only in Italian language at www.fla-plus.it. Translation has been provided internally.

Details for 2023

Total sent to recovery
251.14 tons
62.47%

categories: leather scraps, textiles, plastics, paper and cardboard packaging, wood packaging, mixed material packaging, organic waste, aluminum, iron and steel, insulation materials, mixed recyclables, cardboard

Total sent to disposal
150.90 tons

categories: septic tank sludge, industrial waste, landfill waste

2023 data include Iride Srl and Arper USA

Source: Corporate Carbon Footprint 2023

Details for 2022

Total sent to recovery
60.76 tons
30.6%

categories: leather scraps, textiles, plastics, paper and cardboard packaging, wood packaging, mixed material packaging, organic waste, aluminum, iron and steel, insulation materials, mixed recyclables, cardboard

Total sent to disposal
138.06 tons

categories: septic tank sludge, industrial waste, landfill waste

2022 data do not include Iride Srl and Arper USA

Source: Corporate Carbon Footprint 2022



Our approach

The company has developed a policy aimed at establishing a comprehensive system to ensure the quality of input materials and facilitate their regranulation and reinjection for the production of new chairs. To achieve this goal, the company will implement various intermediate steps with a primary emphasis on adopting circular business models.
In 2023, the company's primary focus has been to design a scalable refurbishment system in two pilot markets (The Netherlands and the Nordics), which will enable the efficient and effective refurbishment of chairs, ensuring their extended lifespan and reducing waste.
In 2024, the company plans to formalize and implement a more sophisticated business model, such as the take-back system.

This is a process in which a company retrieves or collects its products or materials from customers after their use or at the end of life. The purpose of the take-back system is to ensure proper handling and end-of-life management of these products or materials, allowing the circularity of materials.
By implementing the take-back system and promoting circularity, the company aims to limit waste and maximize the use of existing materials, thereby contributing to a more sustainable approach to product manufacturing. Furthermore, the take-back system will be instrumental in the development of one of the most challenging and responsible projects that Arper ever started: the Catifa Carta project will see the light in 2024, but relies heavily on the groundwork delivered throughout 2023.

Progress and activities in 2023



Increase of Post-Industrial PP and First Tests with Post-Consumer PP

As part of our ongoing commitment to sustainability, we have made significant strides in optimizing our material usage. We have successfully increased the utilization of post-industrial polypropylene (PP) in our production processes:
in 2023 we introduced both new products and revised versions of our legacy collection with post-consumer PP, which, represents a significant step towards a circular economy. Our goal is to launch new versions of products featuring post-consumer PP in 2024, contributing to the reduction of plastic waste and promoting resource conservation.

Focus Group on Extended Producer Responsibility Scheme

In line with our commitment to responsible product stewardship, we have joined forces with a focus group dedicated to the development of a collective extended producer responsibility (EPR) scheme.
This scheme aims to extend the producer's responsibility for a product or service throughout its entire lifecycle, including its end-of-life phase.
Through collaboration with Federlegno Arredo, the project owner, we actively contribute to shaping the future of sustainable product management.
By participating in this focus group, we share our expertise, perspectives, and best practices, fostering the adoption of comprehensive EPR policies and driving industry-wide change.

Collaboration for Refurbishment Services

Recognizing the importance of product lifecycle management, we have established a collaboration with a major partner based in the Netherlands. This partnership enables us to provide a refurbishment service for our products, extending their lifespan and reducing waste.
By refurbishing and repairing our items, we contribute to a circular economy model that prioritizes resource conservation over disposal. This initiative also helps us meet the evolving demands of our customers, who increasingly value sustainable and durable products.



Arper District Project

In 2022 we have launched the Arper District project to promote awareness and collaboration within our supply chain.
This initiative aims to communicate our sustainability targets, as well as the processes we have implemented to achieve them. By engaging our suppliers, we encourage them to align their practices with our sustainability goals.
Through knowledge sharing and cooperation, we strive to create a more sustainable value chain.
In 2023 we expected a feedback from the supply chain, which has been in fact rather weak. Therefore, we decided to focus on the redefinition of the main goals of the initiative, aiming at creating the foundations for a stronger partnership with our supply chain. Practical implementation of this new approach will see the light in 2024.

Actions	Status	Lessons Learned and/or Explanation
Product brief based on eco-design principles	🟡	2023 Project has been officially launched in 2024, but 2023 was instrumental in setting the standards.
Product Life Cycle Assessments	🟡	LCAs are time and money intensive, therefore a detailed certification strategy is needed.
Use of post-consumer polypropylene (PCP)	🟢	First product in PC polypropylene delivered in 2023.
Refurbishment project has been implemented for the Benelux area	🟢	Ramp-up phase. Future deployment over Nordics is expected.
ESG rating for all strategic suppliers	🟢	Meeting in person when explaining goals is a big boost.
Arper District	🟡	Tailoring of the offered services is instrumental for success

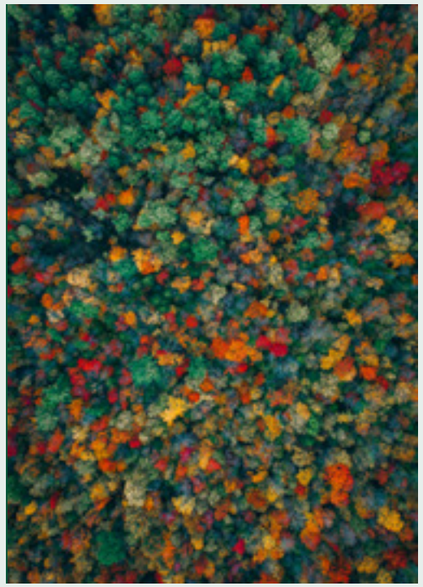
2.3
Reduction of the environmental impact

Every production activity has a significant environmental impact. In addition to adhering to legal and regulatory requirements, we proactively engage in identifying the significant concerns associated with these activities and implement mitigation strategies to ensure continuous improvement. Our efforts are dedicated to identifying and organizing specific areas for development, with the aim of defining objectives and optimizing outcomes.

Main goals

To **reduce** the environmental impact of our products

To **review** our manufacturing and logistical setup to reduce the environmental impact of our organization





Indicators

KPI Corporate carbon footprint					
GRI Indicator | 305-1/2/3 | GHG Emissions (Direct / Energy indirect / Other indirect)					
GHG Emissions (Scope 1-2-3)					
			2023	2022	2021
	Value	Unit		Baseline	
Scope 1	Category 1	t CO2eq	155.60	196.43	290.80
Scope 2	Category 2	t CO2eq	507.53	454.85	449.46
Scope 3	Category 3	t CO2eq	1,940.30	2,151.58	2,225.54
	Category 4	t CO2eq	9,330.59	9,720.19	9,077.10
	Category 5	t CO2eq	306.79	306.67	253.11
	Category 6	t CO2eq	57.07	28.19	45.17
Total		**t CO2eq**	**12,297.88**	**12,857.91**	**12,341.19**
CO2 biogenic		**t CO2eq**	**1,685.62**	**1,925.54**	

GRI Indicator | 305-4 | GHG emissions intensity			
GHG emissions intensity			
	2023	2022	2021
Value	Unit	Baseline	
Total emissions (Scope 1-2-3)	kg CO2eq	12,297,884	12,857,914	12,341,189
Total number of finished products	n.	198,425	228,975	214,545
Sales turnover	€	60,070.70	61,720.82	51,662,433
Total weight of finished products	kg	2,567.07	2,355.95	3,696,064
Emission intensity ratio (units)	kg CO2eq/unit	61.98	56.15	57.52
Emission intensity ratio (turnover)	kg CO2eq/€	0.20	0.21	0.24
Emission intensity ratio (weight)	**kg CO2eq/kg**	**4.79**	**5.46**	**3.34**

KPI Energy								
GRI Indicator | 302-1 | Energy consumption within the organisation								
Total company vehicles								
			2023		2022		2021	
					Baseline			
		Unit	Total	Total GJ	Total	Total GJ	Total	Total GJ
Diesel	Renewable	liter	0	0	0	0	0	0
	Non-renewable	liter	59,606	2,128.96	77,451	2,766.33	61,664	2,644.16
Gasoline	Renewable	liter	0	0	0	0	0	0
	Non-renewable	liter	27,441	910.55	4,891	162.00	795	35.47
Electricity	Renewable	kWh	12,843	46.23	970	3.49	328	1.18
	Non-renewable	kWh	0	0	0	0	0	0
Total fuel consumption	**Renewable**	**GJ**		**46.23**		**3.49**		**1.18**
	Non-renewable	**GJ**		**3,039.51**		**2,928.33**		**2,679.63**

Total energy consumption								
			2023		2022		2021	
					Baseline			
		Unit	Total	Total GJ	Total	Total GJ	Total	Total GJ
Eletricity	Renewable	kWh	748,208	2,694	839,512	3,022	852,982	3,071
	Non-renewable	kWh	467,286	1,682	287,297	1,034	274,592	989
Natural gas	Renewable	smc	0	0	0	0	0	0
	Non-renewable	smc	52,276	1,904	62,409	2,459	126,581	4,987
Total energy consumption	**Renewable**	**GJ**		**2,694**		**3,022**		**3,071**
	Non-renewable	**GJ**		**3,586**		**3,493**		**5,976**

GRI Indicator |302-3 | Energy intensity				
Intensity of energy within the organisation				
		2023	2022	2021
Value	Unit	Baseline	Baseline	
Total Energy consumption	GJ	4,376	4,056	4,060
Total number of finished products	n.	198,425	228,975	219,704
Sales turnover	m€	60,070.70	61,720.82	53,962.55
Total weight of finished products	t	2,567.07	2,355.95	3,696.06
Energy intensity ratio (units)	GJ/unit	0.022	0.018	0.018
Energy intensity ratio (turnover)	GJ/m€	0.073	0.066	0.075
Energy intensity ratio (weight)	**GJ/t**	**1.705**	**1.722**	**1.098**

KPI Water							
GRI Indicator | 303-3 | Water withdrawal							
Water withdrawal sources							
		2023		2022		2021	
				Baseline			
	Unit	Freshwater	Other water	Freshwater	Other water	Freshwater	Other water
Surface water	ML	0	0	0	0	0	0
Ground water	ML	0	0	0	0	0	0
Third-party water	ML	3.903	0	5.273	0	5.164	0
Total freshwater	ML	**3.903**	**0**	**5.273**	**0**	**5.164**	**0**
Total other water	ML	**0**	**0**	**0**	**0**	**0**	**0**

Targets				
KPI	**GRI Disclosure**	**Description**	**Target**	**Year**
Corporate carbon footprint	305-1/2/3	GHG emissions	-42% (Scope 1/2) and between -25% and -42% (Scope 3)	2030
Energy	302-1	Total energy consumption	100% electricity from renewable s	2027
Water	303-3	Water withdrawal sources	-20%	2027

Our approach

In 2023, total GHG emissions have been 12,297,884 kg CO2eq., which corresponds to a -4.37% reduction compared to 2022.
The categories that contribute the most to the Carbon Footprint are:

Category 3 — the transport of goods and people accounts for 15.8% of total emissions (-9.84% vs. 2022)

Category 4 — specifically, emissions due to the purchase of raw materials (75.9%, -4.01% vs. 2022)

The materials that contribute the most are:

Steel ⟶ 16% Aluminium ⟶ 10% Leather ⟶ 7%

Compared to 2022, a significant increase in emissions from Category 2 and Category 6 was recorded.

Category 2
Compared to 2022, the impact of this category increased by 11.57%.
The reason for this change can be attributed to the following factors:

- the presence of electricity consumption by Iride: in 2022 Iride Srl was not included in the calculation, while its electricity consumption has a significant impact on the total count.
- High Point: electricity consumption is similar to 2022, the difference lies in the regionality of the chosen process. Last year, a generic process relating to the entire USA was used, while this year an electricity mix specific to the High Point geographical area was chosen. While the resulting data is certainly more precise, it also corresponds to a greater impact than the generic US mix.

Category 6
Compared to 2022, the impact of this category increased by approximately 102%.
The reason for this significant change is the inclusion in Category 6 of indirect emissions from vehicles owned by Arper Spa (Monastier) and Arper Sweden, previously modelled in Category 1.
The emissions relating to these vehicles were therefore divided into two parts:
- direct emissions from fuel combustion were included in Category 1
- indirect emissions (e.g. relating to the production of fuel and vehicle) were inserted in Category 6.

Category 4
On the sunny side, Category 4 – the most problematic one – has recorded a solid decrease in absolute values: compared to 2022, the impact of this category has decreased by 4%.

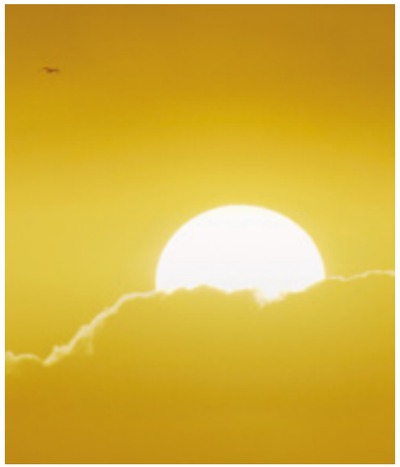


The reason for this change is the decrease in material purchases from main suppliers. Both in 2022 and 2023 the main materials used by Arper have been aluminium and steel:
Aluminium: in 2022, 158 t of aluminium were purchased, while in 2023 only 73.5 t were acquired.
Steel: in 2022, 657 t of steel were purchased, while in 2023 282 t were acquired.

Nonetheless, the emission ratio remained quite stable, which is probably due to the shift in product range towards upholstered furniture that we have been driving in the last couple of years, and that we will need to analyse in more detail in order to plan activities related to the implementation of alternative solutions to polyurethanes.

Still, our main objective remains the development of low impact products and to encourage our supplier network to make a transition towards a more responsible production process, particularly in critical external operations such as leather production, aluminium processing, and steel working.
Last but not least, we firmly believe that the collective effort of the entire Arper community is fundamental to achieve our ambitious targets. Consequently, we have initiated a series of company-wide workshops, lined up to produce results in 2024, with the aim of identifying carbon reduction opportunities within individual departments. Each team will contribute practical ideas derived from their day-to-day activities.

Progress and activities in 2023



Corporate Carbon Footprint 2022

As part of our sustainability project, we have conducted a comprehensive assessment of our corporate carbon footprint for the year 2022. This evaluation provides us with a clear understanding of the greenhouse gas emissions generated by our operations, including manufacturing, transportation, and office activities.
By quantifying our carbon footprint, we can identify the primary sources of emissions and develop targeted strategies to reduce our environmental impact.
This assessment serves as a vital baseline for tracking our progress towards achieving carbon neutrality and supports our commitment to combat climate change.

Workshop with Arper SPA for Impact Reduction

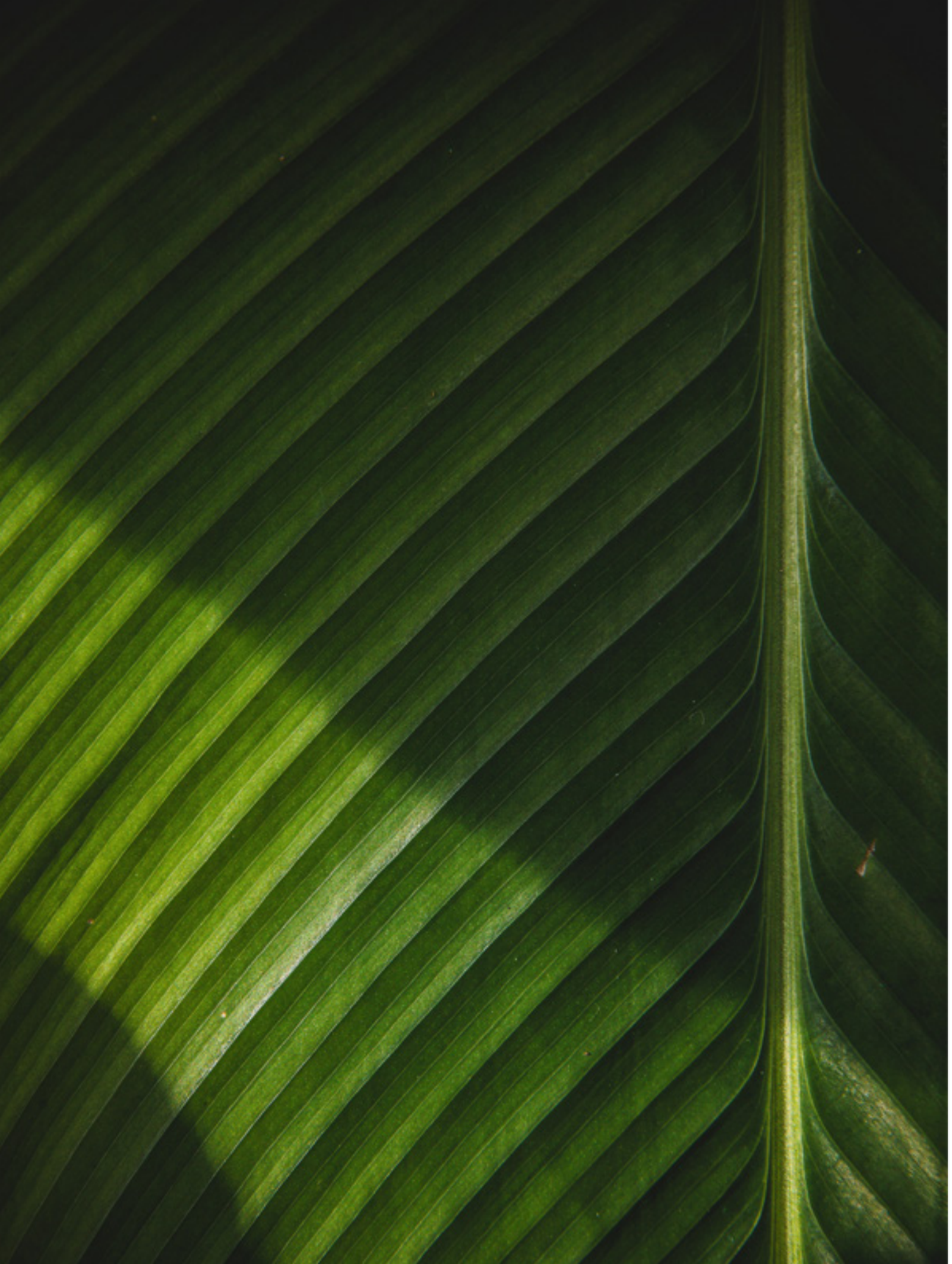
We have concluded the second part of a workshop with Arper SPA, to identify practical opportunities to reduce our environmental impact.
Through this ongoing workshop, which extended into 2023, we analyzed various aspects of our operations, such as energy consumption, waste management, and supply chain logistics, with the goal of implementing effective measures that align with our sustainability objectives.
With this project we aim to enhance our collective knowledge and strengthen our commitment to sustainable business practices.
We expected to draft a more detailed reduction plan within the year, but we realized that, to produce a solid strategy, we needed to include our supply chain in the process. We have not been able to start this process in 2023, but it remains a strong focus for 2024 when we will create a direct connection to the Arper District project.



Life Cycle Assessment (LCA) Training

As part of our dedication to integrating sustainability into all aspects of product development, we have invested in training our team members on Life Cycle Assessment (LCA). LCA is a systematic method that evaluates the environmental impacts of a product throughout its entire life cycle, from raw material extraction to end-of-life disposal.
By equipping our staff with LCA skills, we empower them to assess and optimize the environmental performance of our products during intermediate phases of development.

Actions	Status	Lessons Learned and/or Explanation
Corporate carbon footprint evaluation	●	
Environmental impact reduction strategy	●	Developed towards the end of 2023, implementation from 2024, implementation from 2025
ISO 14001 certification	●	ISO 50001 planned for 2024



3

HOW WE DO THIS: THE LEVERS OF CHANGE



Introduction

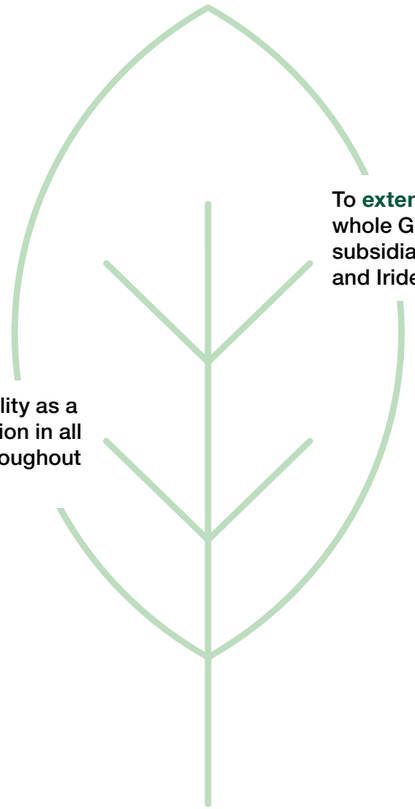
To achieve the three main goals of our strategy — which we named “the pillars” — we need to create a suitable infrastructure made of processes — but also mindsets — that allow projects and plans to be developed and executed. The levers of change, which in this report are being accounted for in terms of materiality topic, contribute to create the necessary ground for things to grow and settle.

Each one of them will be treated in a similar way, with a definition that will introduce our policy and targets, which will be tracked by specific indicators.
Finally, a recap of the activities finalized and/or started in 2023 will be produced.

3.2 Engagement and corporate culture

Sustainability must become the driving force behind our daily actions, raising awareness at every level. Corporate culture should prioritize and highlight this commitment, building on our existing values to align the Arper people with our sustainability goals.

Main goals



To **extend** the training sessions to the whole Group, with special focus on subsidiaries (especially USA, Corium and Iride)

To **include** sustainability as a main topic of discussion in all training packages throughout the organization

Indicators

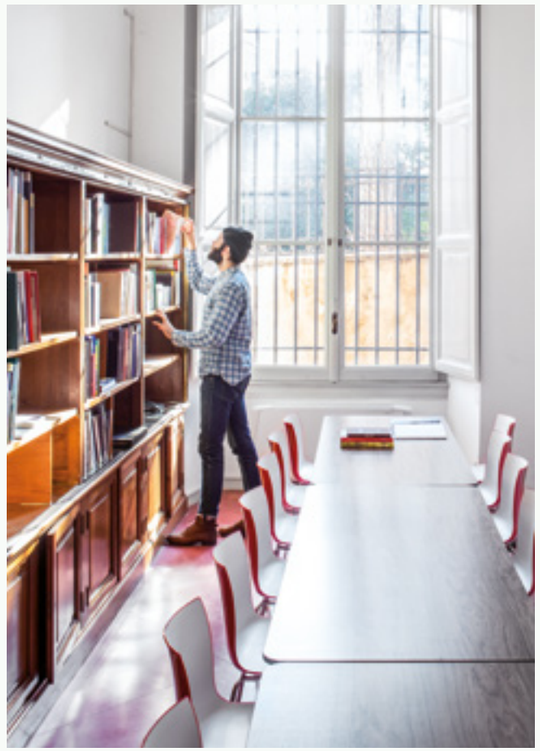
Internal training (including sustainability)							
404-1 | Average hours of training per year per employee							
		Total hours of training					
		2023			**2022**		
	Unit	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Senior Management	Hours	461	240	701	172	108	280
Middle Management	Hours	435	685	1,120	342	284	626
Specialized Workers	Hours	1,040	1,380	2,420	260	236	496
Other Workers	Hours	203	190	393	558	632	1,190
Total	**Hours**	**2,139**	**2,495**	**4,634**	**1,332**	**1260**	**2,592**

		2023		2022	
	Unit	**Male**	**Female**	**Male**	**Female**
Senior management	hours	22.94	26.97	3.25	5.60
Middle management	hours	22.31	24.12	9.47	6.83
Specialised workers	hours	10.47	18.18	1.47	3.12
Other workers	hours	33.83	19.00	10.35	8.35
Total	hours	14.76	20.25	4.36	5.29
Total	**hours**	**17.50**		**11.57**	

404-2 | Programs for upgrading employee skills and transition assistance programs

The human resources office organises and executes training courses for the different categories of employees to improve technical and transversal skills. Major blocks include onboarding for new hires, leadership courses, sustainability initiatives and role-specific courses.

Targets				
KPI	**GRI Disclosure**	**Description**	**Target**	**Year**
Internal training on sustainability issues	404-1	Annual training hours per capita	Training on sustainability topics +10%	2023
			Extend to all subsidiaries	2023



Our approach

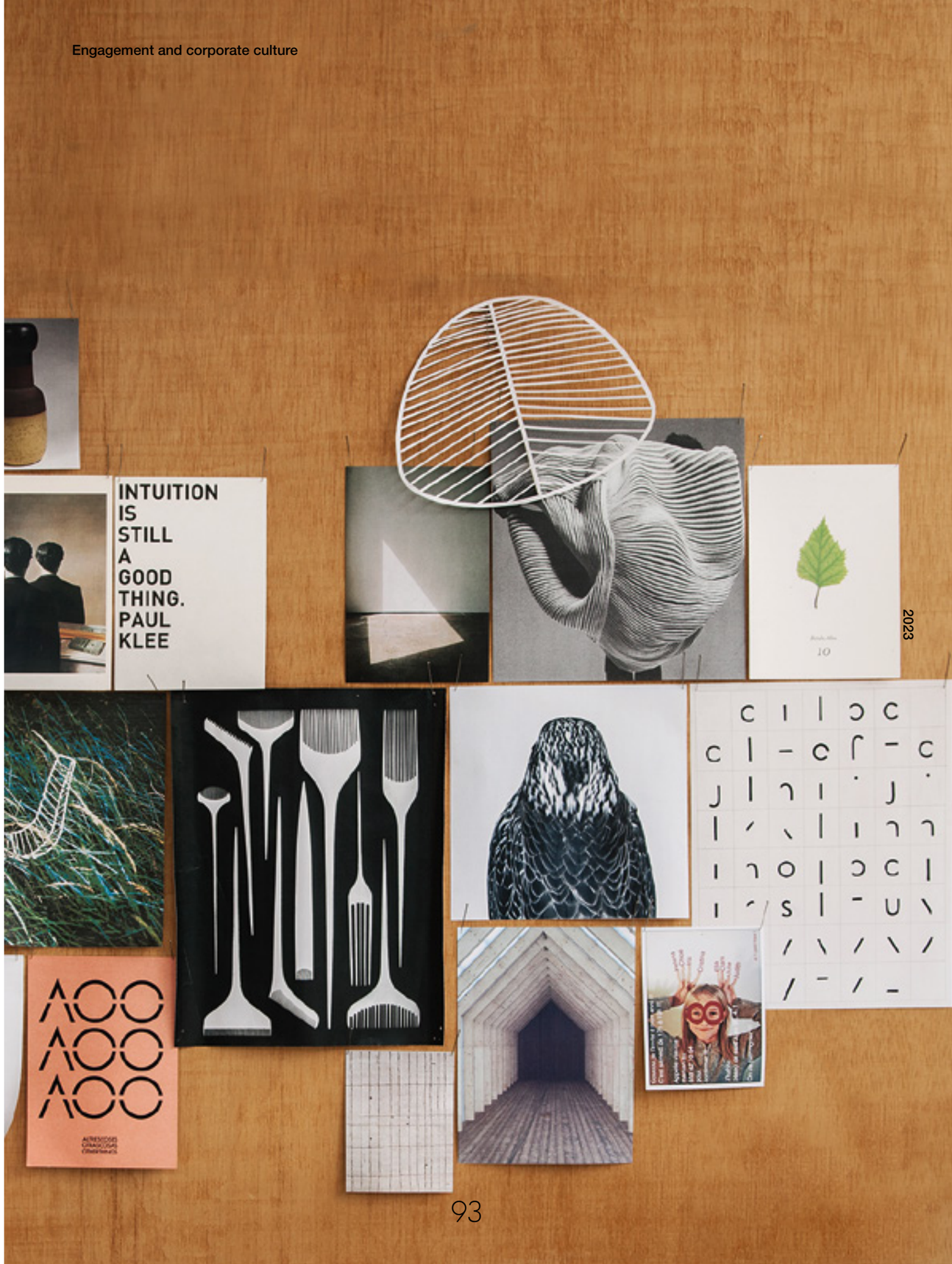
Arper is strongly committed to fostering opportunities for all employees to develop their skills. We believe that a skilled workforce enhance job performance and sustains the company's competitiveness and leadership, which is one of the main objectives of Job n. 4 (refer to chapter "10 Jobs in 5 Years" for the complete list).
Training should be accessible to all employees, regardless of their position or contract. Due to the particular structure of our business, prioritizing specific training initiatives is essential.
Sustainability is a cross-department training topic offered company-wide.

Sustainability training activities aim to create a comprehensive corporate culture of sustainability, fostering a sense of urgency, engagement and belonging.
It is only through the collaboration of all parties that a company can truly pursue environmental and social responsibility and accelerate the transition to a better world. Furthermore, cross-department training allows us to create a more inclusive and open working community, providing opportunities for employees to connect and understand each other better.

Progress and activities in 2023

- The number of people engaged in environmental and social topics reached 150, indicating a growing awareness and interest within the company
- The focus of sustainability training in 2023 was twofold: creating a sense of urgency among employees and providing an in-depth understanding of Arper's compliance strategy and emissions reduction plan
- The Corporate Sustainability Ambassadors Team (currently made of 18 members) will be at the center of the new sustainability governance setup that will be implemented in 2024
- The scope of sustainability training was expanded to include strategic suppliers, with a particular emphasis on fostering a sense of urgency, teaching sustainability fundamentals and explaining ESG ratings. This initiative was part of the larger Arper District Project
- We launched Arper TV, our internal channel full of videos made by Arper people presenting new projects and initiatives to the whole group

Actions	Status	Lessons Learned and/or Explanation
Internal sustainability training to all Arper People	●	Annual training needs to be established as a routine procedure
Expansion of the Corporate Sustainability Ambassadors Team	●	



3.3 Efficient use of resources

We are committed to implementing initiatives aimed at improving efficiency and limiting our consumption, using renewable resources wherever possible, with the ultimate goal of pursuing higher levels of eco-efficiency and reducing pollution and greenhouse gas emissions. We want to apply the 5 R strategy (Refuse, Reduce, Reuse, Repair, Recycle) wherever possible and we aim to eliminate waste in all its forms.

Main goals

To **reduce** the waste generated by our own processes and those of our supply chain

To **increase** the percentage of secondary raw materials used

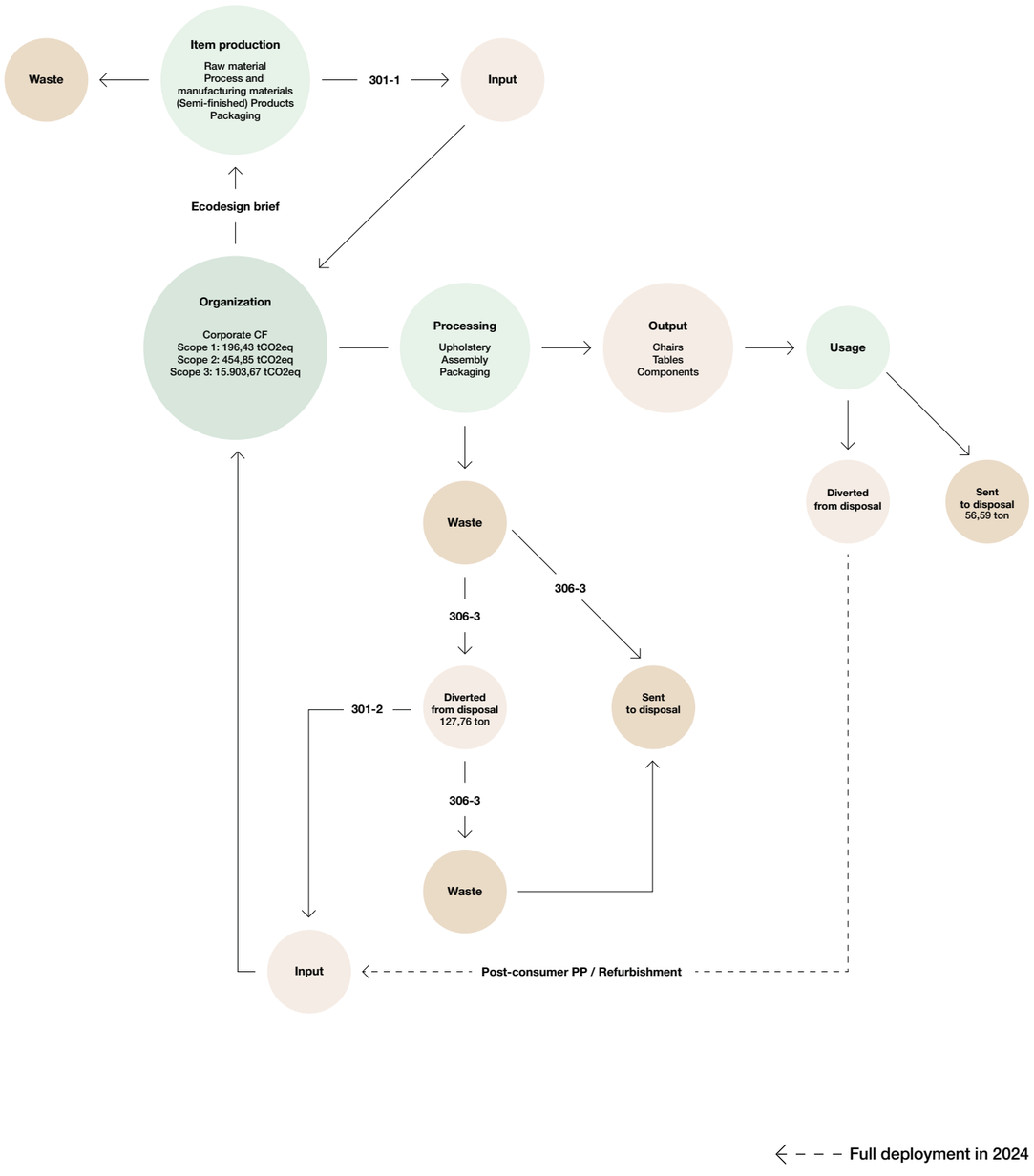
Indicators

Secondary raw materials used										
301-1 | Materials used by weight or volume										
Total weight of materials used to produce and package the organisation's primary products and services										
		2023			2022			2021		
	U.m.	Non Renewable	Renewable	Total	Non Renewable	Renewable	Total	Non Renewable	Renewable	Total
Raw materials	tons	0	0	0	0	0	0	0	0	0
Associated process materials	tons	0	0	0	0	0	0	0	0	0
Semi-manufactured goods or parts	tons	1,560.34	287.07	1,847.41	1,412.65	557.94	1,970.59	3,001.12	101.50	3,102.62
Materials for packaging purposes	tons	16.04	703.62	719.66	7.23	378.13	385.36	27.04	566.40	593.44
Total	tons	1,576.38	990.69	2,567.07	1,419.88	936.07	2,355.95	3,028.16	380.16	3,696.06

Waste							
306-3 | Waste generated							
Waste produced / Waste intensity							
		2023		2022		2021	
	U.m.	Tons disposed	%	Tons disposed	%	Tons disposed	%
Paper/Cardboard	tons	58.58	14.6%	77.36	42.0%	84.32	39.7%
Metal	tons	7.61	1.9%	2.75	1.5%	6.69	3.1%
Plastic	tons	44.01	10.9%	10.92	5.9%	16.72	7.9%
Fabric & Leather	tons	0.12	0.0%	2.80	1.5%	6.98	3.3%
Wood	tons	81.40	20.2%	33.68	18.3%	45.46	21.4%
Effluents	tons	4.10	1.0%	6.84	3.7%	11.05	5.2%
Hazoardous waste	tons	0.95	0.2%	1.25	0.7%	1.16	0.5%
Other	tons	205.27	51.1%	48.75	26.4%	40.22	18.9%
Total	**tons**	402.04	100.0%	**184.35**	**100.0%**	**212.60**	**100.0%**
Waste intensity (Waste produced/Materials used)			**15.66%**		**4.8%**		**5.8%**
306-1 | Waste generation and significant waste-related impacts							
The following graphics explains Arper's production model. Black boxes represent waste outputs. This process modelling allows us to clearly identify the points where we have to take action.							

Targets				
KPI	**GRI Disclosure**	**Description**	**Target**	**Year**
Waste	306-3	Waste produced/Waste intensity	-10%	2027

Arper's Process Flow 2023 (GRI 306-1)



Our approach

Our approach focuses on two main tasks: (a) using secondary raw materials and (b) reducing waste. While we believe these steps are crucial for reducing emissions, in 2023 we had to prioritize other activities (e.g. our first-ever sustainability report, the annual corporate carbon footprint, and the development of strategic action plan deployment over the next five years).
In the near future, alongside the two tasks mentioned above, we will also concentrate on increasing resource efficiency by extending the lifespan of our products, limiting energy consumption, and reducing the materials used in packaging.

We will use a checklist divided into four macro-areas ranging from services, to design, to marketing tools and the use of materials. The key elements with respect to the latter are:

- The search for new materials that can push Arper toward the development of a circular economy
- The increased use of secondary raw materials
- The focus on product quality and durability aimed at guaranteeing the extension of the product life cycle, as well as ease of repair and remanufacturing
- The prioritization of aspects such as the disassembly and separability of the finished product in order to allow the recovery, reuse and recycling of raw materials
- The careful analysis aimed at minimizing the use of materials and resources, with the ultimate goal of avoiding waste
- The correct management of non-secondary raw materials, avoiding the use of substances harmful to the environment during the processing or use of the product, prioritizing compliance with international standards such as REACH and GECA
- The use of wood and paper from controlled and certified sources, aimed at guaranteeing the chain of custody
- Providing transparency and information to users regarding the management of the end of life of products

The checklist is constantly updated and aims to include additional aspects that support the evolution of the sustainability strategy outlined by the company.

Progress and Activities in 2023

- Arper conducted internal assessments on specific collection items made from post-consumer polypropylene, aiming to evaluate their viability and sustainability
- Arper focused on strengthening its partnership with a producer of post-consumer polypropylene, emphasizing the importance of sourcing sustainable materials for their products
- The initial version of a waste management policy was developed, intending to analyze waste outlets and implement strategies to reduce waste across the company
- Arper's first refurbishment partnership was developed and launched in the Netherlands

Action	Status	Lessons Learned and/or Explanation
Introduction of post-consumer PP into new products and product revisions	●	
Waste management policy	●	Not ready yet, but instrumental in order to implement a circular business model
Scaling up of current refurbishment partnerships	●	Geographical implementation needs to be clearly outlined
Arper District project	●	Will be on the redefinition of the services offered an on how to expand the project to a larger target

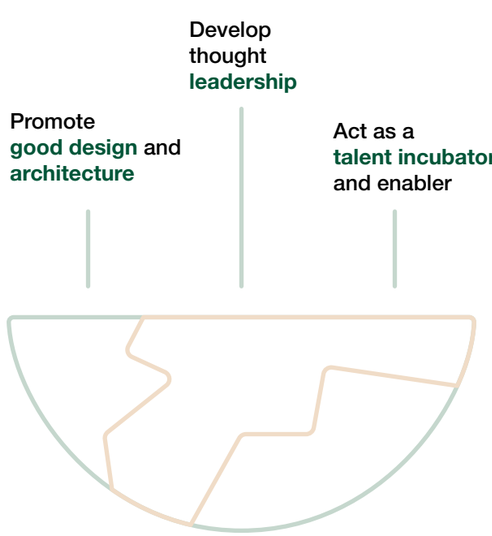


3.4
Recovery and conservation of the cultural and natural heritage

Taking care of our natural heritage is essential, and it requires the implementation of global guidelines that consider the origin of the materials and the impact of production choices. At the same time, Arper must commit to preserve and share the existing cultural initiatives and heritage through projects that benefit communities.

Main Goals

Aligned with the long-term priority “Enhancing Arper’s cultural identity”, Arper's cultural initiatives and projects are focused on three main objectives:



Within the framework of corporate social responsibility, Arper supports the local stakeholders’ network and generates appreciation for cultural initiatives, using them as a tool to foster inclusion and social cohesion.

Indicators

Cultural Heritage		
Internal Indicator - ARP-1 | Cultural projects		
	2023	**2022**
Projects and initiatives	4	3
Website - Visualizations of pages dedicated to cultural projects	2,522	9,768
Website - Unique visitors of pages dedicated to cultural projects	1,416	not tracked
Social Networks - Contents dedicated to cultural topics	52 (2.6%)	not tracked
Social Networks - Visualizations related to cultural topics	79,360 (4.0%)	not tracked
Social Networks - Interactions related to cultural topics	3,084 (3.0%)	not tracked
Benefits offered and used by Arper’s People *	325	279

* Benefits in 2023 include 50 visits to events in Villa Filanda Antonini and 275 visits to Peggy Guggenheim Museums worldwide. It is worth noting that data about 2022 refer to Arper Spa only, therefore not including Iride Srl (15 employees). Arper People are also entitled to a city museums card, which has not been included in the calculation, since it is technically impossible to confirm that benefits have been claimed.

Projects and initiatives launched

Première of the “A Lot With Little” Project

9 Artists in Residence

Benefits offered and used by Arper’s People

195 Entrance cards to the City Museums of Treviso (“Musei Civici di Treviso”)

3 Guided tours of the Bailo Museum in Treviso (46 visitors in total)

275 Entrance tickets to the Peggy Guggenheim Collection in Venice

50 Visits to the exhibition held in Villa Filanda Antonini (“Residenze d’artista – Alessandro Calabrese”)



Our approach

'Culture' is a strategic resource for the development of organizations, especially in situations where significant changes in the environmental, economic, and social structures occur.
Arper ‘produces culture' as a way of being and engaging in the marketplace: it offers not only solutions to functional problems, but also perspectives, meanings and symbols.

Arper believes that:

- Culture is the 'intangible capital' driving innovation and differentiation by identifying and interpreting the things that matter in the world in which we live
- Culture heritage is a lever in developing identity, reinforcing its pillars (values, beliefs, and behaviors), and striking a balance between stability and change

In addition to this strategic approach, the philanthropic orientation of the Feltrin family further supports cultural endeavors. The cultural goal of the Feltrin family is expressed in a few key-points:

- Desire to 'go beyond the goals of the business’
- Project identity outward, at the meeting point between people and beauty
- Give concrete form to an inclusive need that is part of Arper's DNA; positively influencing the economic and social context in which it operates
- Promote design in its intangible aspects as well; "presenting ourselves as producers of ideas that embody both vision and meanings"

From this, The Arper Feltrin Foundation was established at the end of 2021.

The Arper Feltrin Foundation
The Arper Feltrin Foundation's mission is to explore the culture of the territory to which Arper belongs, through contemporary art languages, providing renewed perspectives. Disciplines like art, design, and architecture are regarded as tools to better comprehend the present and ourselves.

Villa Filanda Antonini
Villa Filanda Antonini is a space dedicated to artists, conceived and directed by Giulio Feltrin and supported by the Arper Feltrin Foundation. Cultural outcomes produced by VFA are shared with the local community through exhibitions, meetings, and debate events.

Natural Heritage
As our impacts on biodiversity are minimal, we have yet to fully address this topic. However, we aim to keep an eye on this important issue to align with the new ESRS (Environmental and Social Responsibility Strategy). E3 will delve into biodiversity, enabling us to analyze our activities and supply chain's impact more carefully.

Progress and activities in 2023



Sponsorship of the production of the exhibition “A Lot With Little”

Arper sponsored the production of the exhibition "A Lot With Little".
This exhibition will feature the works of international architects dedicated to sustainable solutions for homes, schools, the transformation of existing buildings, and disaster relief. The projects emphasize the social impact they have on communities, showcasing how creative ingenuity can overcome resource limitations.
The exhibition will be presented through film installations, capturing selected projects in their current settings.

It aims to offer visitors a fully immersive experience, drawing them into each individual building or complex to understand the design challenges and feel what it's like to inhabit these spaces.
The exhibition adheres to its principles of sustainability by avoiding the need to transport physical objects, thus generating no waste.
Officially launched in 2023, the exhibition 2023, the exhibition will be hosted internationally by cultural institutions and will be accessible to visitors free of charge.
www.alotwithlittle.com

Partnership with Guggenheim Intrapresae

Arper became a member of Guggenheim Intrapresae in 2017, a corporate membership initiative that brings together companies sharing a passion for art. This collaboration offers a platform to strengthen social and cultural engagements alongside one of Italy's premier museums.
In 2023, Arper participated in the "Art 4 a Better Future" event organized by Guggenheim Intrapresae, contributing a speech that underscored its commitment to integrating art with societal advancement.

Villa Filanda Antonini
(a project sponsored by the Arper Feltrin Foundation)

In its inaugural Open Call, Villa Filanda Antonini received 486 applications from around the globe. The residency program hosted nine multidisciplinary artists, providing them with a total of nine months to work on their projects. The culmination of their efforts resulted in eight unique site-specific installations and one personal exhibition showcasing their creative endeavors.

Specifically, 2023 saw the following activities taking place:

Creation of the Arper Archive
(Arper’s company history, in collaboration with Arper Feltrin Foundation)

This initiative included several key components:

• Development of an evolutionary timeline detailing Arper's journey through the years.

• Conducting 14 interviews with current and former Arper employees to gather personal insights and anecdotes.

• Creation of 3 critical and analytical infographics to visually represent important aspects of Arper's growth and impact.

Together, these efforts will contribuite to preserving and presenting Arper's legacy for future generations.

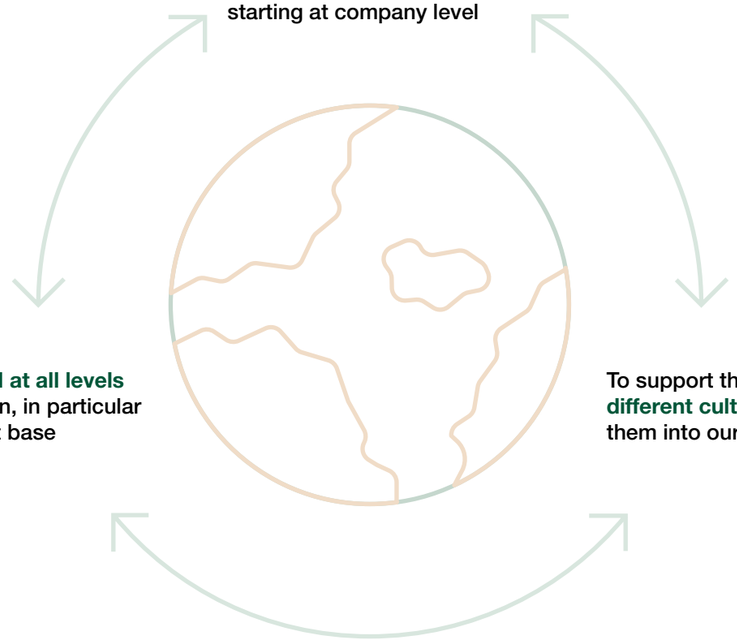
Action	Status	Lessons Learned and/or Explanation
Sponsoring of cultural projects (museums, exhibitions)	●	

3.5
Inclusion, diversity and social protection

We engage with everyone to find shared solutions to issues that significantly impact the organization, especially human capital. We promote non-discriminatory behaviors within the Group and embrace diversity across age, gender, sexual orientation, disability, nationality, political opinions, and religious beliefs, fostering an inclusive culture.

Main goals

To contribute to the creation of a more **inclusive society**, starting at company level



To **approach D&I at all levels** of our value chain, in particular among our client base

To support the knowledge of **different cultures** and weave them into our own



Indicators

Category and gender									
405-1 | Diversity of governance bodies and employees									
Total number of employees by professional category and gender									
		2023				2022			
	U.m.	Male	Female	Total by category	Percentage by category	Male	Female	Total by category	Percentage by category
Senior management	n.	20	8	28	10.6%	18	7	25	9.6%
	%	71.4%	28.6%			72.0%	28.0%		
Middle management	n.	20	28	48	18.1%	20	26	46	17.6%
	%	41.7%	58.3%			43.5%	56.5%		
Specialised workers	n.	98	75	173	65.3%	73	52	125	47.9%
	%	56.6%	43.4%			58.4%	41.6%		
Other workers	n.	6	10	16	6.0%	31	34	65	24.9%
	%	37.5%	62.5%			47.7%	52.3%		
Total by gender	**n.**	**144**	**121**	**265**		**142**	**119**	**261**	
Percentage by gender	**%**	**54.3%**	**45.7%**		**100.0%**	**54.3%**	**45.7%**		**100.0%**

Vulnerable groups									
405-1 | Diversity of governance bodies and employees									
Total number of employees belonging to vulnerable groups by gender									
		2023				2022			
	U.m.	Male	Female	Total by category	Percentage by category	Male	Female	Total by category	Percentage by category
Senior management	n.	1	0	1	8.1%	0	2	2	7.7%
	%	100.0%	0.0%			0.0%	100.0%		
Middle management	n.	2	2	4	16.2%	0	3	3	11.5%
	%	50.0%	50.0%			0.0%	100.0%		
Specialised workers	n.	6	10	16	46.0%	2	4	6	23.1%
	%	37.5%	62.5%			33.3%	66.7%		
Other workers	n.	2	2	4	29.7%	1	14	15	57.7%
	%	50.0%	50.0%			6.7%	93.3%		
Total by gender	**n.**	**11**	**14**	**25**		**3**	**23**	**26**	
Percentage by gender	**%**	**44.0%**	**56.0%**		**100.0%**	**11.5%**	**88.5%**		**100.0%**
Vulnerable group ratio	**%**			**9.4%**					**10.0%**

Salary and remuneration*							
405-2 | Ratio of basic salary and remuneration of women to men							
Remuneration ratio women to men							
		2023			2022		
	U.m.	Male (average)	Female (average)	Ratio women to men	Male (average)	Female (average)	Ratio women to men
Senior management	€	133,672.00	95,050.00	71.1%	99,350.00	92,200.00	92.8%
Middle management	€	43,365.78	43,943.53	101.3%	35,200.00	48,033.33	136.5%
Specialised workers	€	25,619.81	28,060.00	109.5%	29,900.00	24,824.00	83.0%
Other workers	€	22,094.17	15,882.67	71.9%	32,000.00	26,000.00	81.3%
Total (average)	**€**	**56,187.94**	**45,734.05**	**81,40%**	**49,112.50**	**47,764.00**	**97.3%**

* Significant locations of operation: Arper Spa (HQ and production site), Arper USA (production site).
Senior management do not include the President of the Group, the CEO of the Group, and the CEO Americas.
This allows for a more transparent and fairer comparison to the previous year.

Targets				
KPI	**GRI Disclosure**	**Description**	**Target**	**Year**
Vulnerable Groups	405-1	Number of employees velonging to vulnerable groups by gender	Vulnerable group ratio >= 10%	2024
Salary and remuneration	405-2	Remuneration ratio Women to Men	100% in all categories	2027



Our approach

The need to reflect on the issues of diversity and inclusion arises from the knowledge that more inclusive economies can greatly benefit companies, providing access to new markets, the release of more innovation and greater social stability. Business has much to lose from an economy that fails to fully leverage human capital. Diversity and inclusion are in fact two closely related and interdependent concepts: the first is an expression of the characteristics that shape people, the second is a corporate choice to adequately keep these characteristics in mind and value them. Diversity refers to the differences between groups and individuals and configures people as distinct identities from one another. In this sense, everything that makes us unique falls within the definition of diversity, including ethnicity, age, style, gender, personality, religious and political beliefs, experiences, sexual orientation, psychological, emotional, cognitive, physical, social differences and more. The corporate policies and practices for the management of diversity offer guidelines on how to eliminate discrimination and ensure fairness of opportunity and treatment for all workers. As a result, conscious inclusion creates concrete value. Creating an inclusive working environment, meant as both corporate culture and physical space, offers the opportunity for all employees to feel empowered and influence company performance.

The key principles and values that strengthen the culture of Diversity & Inclusion within the company, inspired by and related to human rights, take the form of:

Equality

Enhancement of human resources

Inclusive internal culture

Value creation for the company

Diversity and inclusion in Arper is not an area of expertise relegated to Human Resources, but it is part of a broader corporate strategy, promoted by the senior management. In fact, companies that embrace diversity and participation and that respect and recognize what makes people different, whether it be age, gender, ethnic background, religion, disability, sexual orientation, education or national origin, perform better, and therefore generate greater value.

Progress and activities in 2023

- There were no discrimination incidents, and therefore no corrective actions undertaken (GRI 406-1)
- We extended our code of conduct to all our suppliers
- We continued working on an ESG rating for our strategic suppliers, which includes also social parameters and KPIs

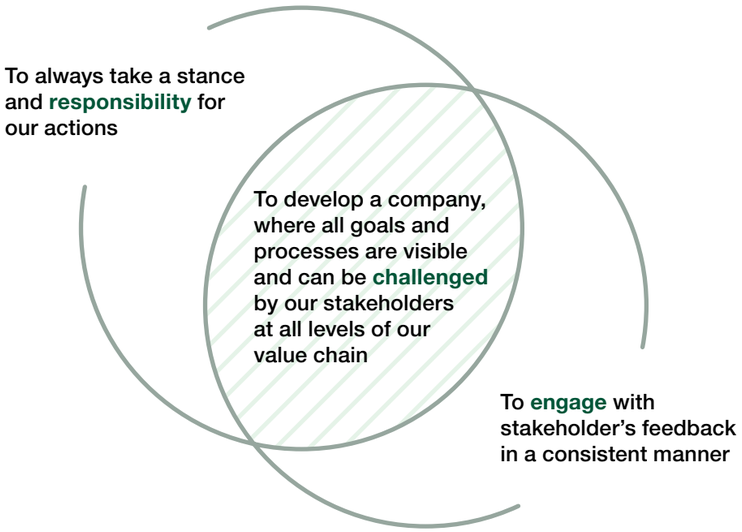
Action	Status	Lessons Learned and/or Explanation
Code of Conduct for suppliers	●	
ESG rating for suppliers	●	
ESG rating for Arper	●	



3.6 Radical transparency

We aim to manage knowledge and information in an open way, making objectives and processes visible at all levels, both to us internally and to our customers and other external stakeholders. We believe that radical transparency should act as a driving force to increase equity, involvement in the management of the company and should be everyone's responsibility.

Main goals



Indicators

EPD

We aim to add one EPD per year, to be performed on the best-seller of each collection analyzed.

ESG Rating Open-ES

Focuses on commercial aspects. Score obtained: 84/100, currently under validation (potentially + 20 points). Score 2022: 86/100.

ESG Rating Synergy

Focuses on operations and supply chain. Score obtained: A. Score 2022: B.

B Impact Assessment

focuses on the overall impact. Score obtained: 76,5 (last performed on 30/05/23). Score 2021: 71.8.

Our approach

Our approach develops over three lines of action.

Line 1
Overall transparency of our impact on the planet

If there were no climate emergency, a sustainability plan might be unnecessary. However, given the current situation, it's crucial to track and account for our environmental impact. We measure our performance annually, analyzing our improvements and identifying behaviors that need to change.

Tool to do this → Corporate Carbon Footprint

Line 2
Transparency at product level

As we progress, we aim to expand our EPDs. Currently, we have 10 EPDs, but we plan to integrate them into our best-selling products. These EPDs will be supported by LCA calculations during new product development, which – even if not third-party verified – will provide valuable information to be shared with our stakeholders as we work towards reducing our environmental impact.

Tool to do this → EPDs and LCAs

Line 3
Transparency at company level

We believe that – on top of CCF – we need to expand the verification of our performance through the use of third-party ratings.
We chose three ratings which focus on specific issues (see below) and produce a wider perspective on our activities, which also allows us to validate single values. In fact, ratings are very different from one another, and each one has its specific nuances and focus.
We believe that these three ratings cover a wide spectrum that encompass our entire range of activities.

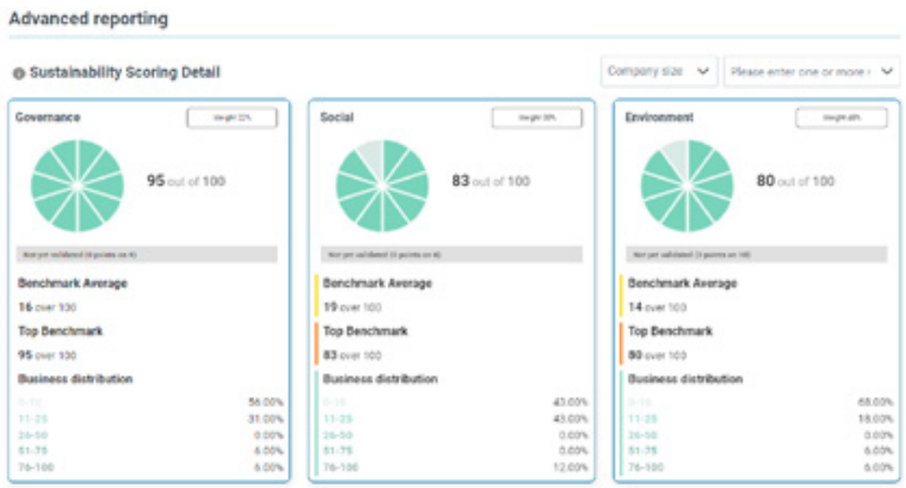
Tool to do this → Ratings ESG

Progress and activities in 2023

- Corporate Carbon Footprint 2022. See “Reduction of the Environmental Impact” for further information.
- Update of Open-ES rating and Synesgy ratings. See below for rating details.

Open-ES rating

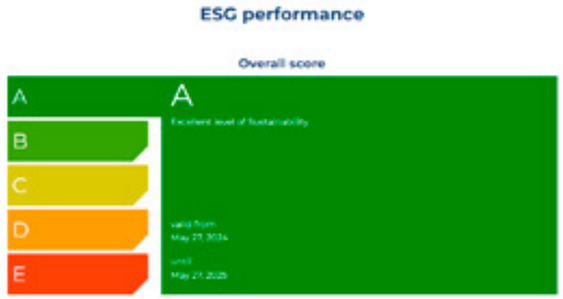


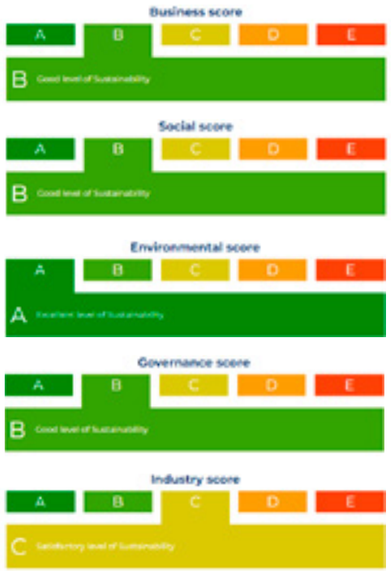


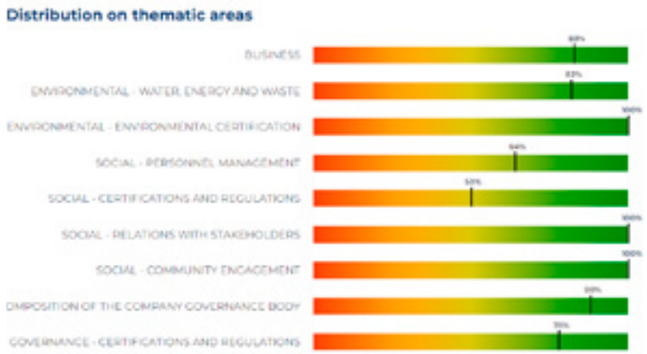
Synesgy rating*

The ESG Score is an assessment of the level of compliance of a Company with Environmental, Social and Governance (ESG) factors, which also considers the Company's sector and geographical area.

The ESG Score is divided into five classes:
Class A — Excellent level of Sustainability,
Class B — Good level of Sustainability,
Class C — Satisfactory level of Sustainability,
Class D — Sufficient level of Sustainability,
Class E — Low level of Sustainability.



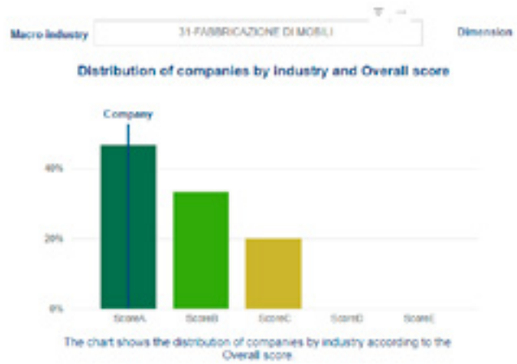




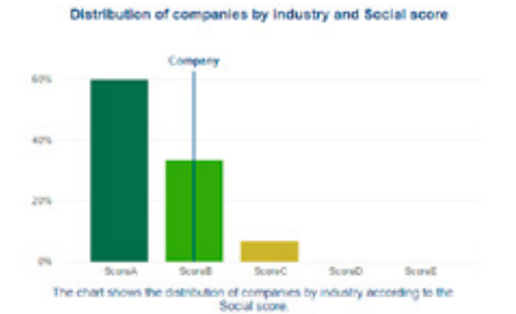
The ESG Score is calculated on the basis of the proprietary methodology of CRIF S.p.A. and/or its related, subsidiary, under common control and/or parent companies ("CRIF Group") using information provided by the Company that the ESG Score refers to through the completion of a questionnaire under the direct and sole responsibility of the Company. The information is not subject to verification by CRIF Group. The ESG Score refers to the date the questionnaire was completed and is not subject to monitoring. The ESG Score is not a certification or a specific assessment, but has the sole purpose of reporting the relevant class and is therefore for information purposes only.
The ESG Score is provided as is, without warranties of any kind, and in particular without guarantees of reliability, accuracy or completeness.
CRIF Group assumes no liability or obligation to third parties for use of the ESG Score. CRIF Group is therefore in no way responsible for the assessments and decisions made on the basis of the ESG Score by the Company or any third party.

*Synesgy is a digital platform which enables companies to collect and manage sustainability information through an ESG self-assessment of their supply chain.
The final results include an evaluation, benchmark information and guidance on the development plan to be undertaken. Synesgy currently covers around 60 countries, 150.000 manufacturing companies and 350 banks and insurance companies. Important Note: Assessment request has been officially forwarded to strategic suppliers only in 02/23 (see section on methodology for further details)

Benchmark statistics







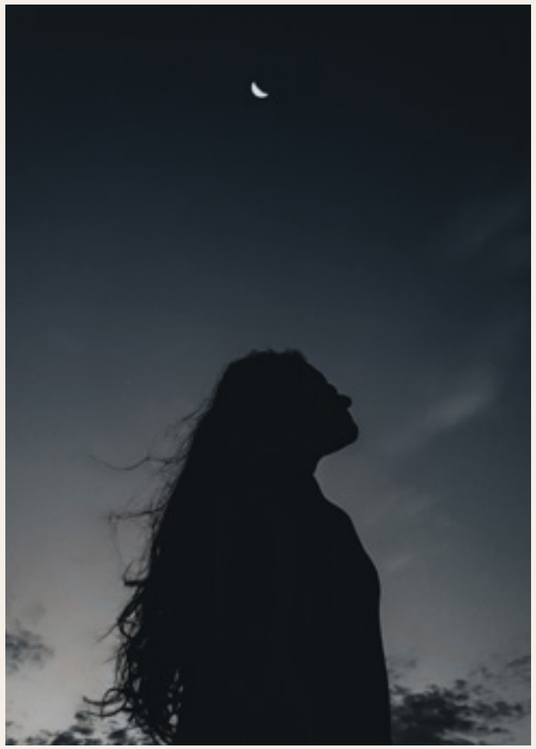


Action	Status	Lesson learned explanation
Issue of sustainability report with impact valuation section	●	Impact valuation is a new powerful method that allows to better evaluate the impacts on the company and the environment. It is based on the double materiality matrix approach and allows to quantify the incidence of risk management on the company's P&L
Hiring of an Internal Communication Manager	●	Internal communication is key when spreading the sense of urgency throughout the whole organization
Training to the marketing department on environmental issues	●	



4

WHAT WE DO: ACTED AND ACTIONABLE



Introduction

Since the pillars and the levers have been identified and listed, this report will now focus on the practical implementations of the strategy.

The following section will outline the areas where we believe we can make a difference in the long term. These areas range from the training and professional development of the Arper people, to the development of a responsible supply chain that will reduce our upstream impact. Some will also focus on the positive impact we aim to deliver to the local community and the role it plays in our strategy, and on more institutional aspects like governance and strategic partnerships.

In fact, this section aims to showcase how a consistent strategy will have positive repercussions on our actions, every day.
In order to facilitate its comprehension, we will use the same structure used in the previous chapters, starting with a description, and defining goals, indicators and policies.
The last section will highlight what we have been able to implement in 2023.

4.2 Certifications and voluntary schemes

Certifications – meaning the compliance with a standard declared and certified by a recognized third party – help us engage and protect our stakeholders, particularly our clients. At the same time, adhering to ambitious voluntary protocols guides us towards the optimization of efforts necessary to implement a more responsible plan.

Main Goals

To confirm the current certification scope

To add one EPD certification per year

To develop a worldwide certification strategy that covers as many geographies/needs/ requests as possible, while keeping costs and efforts within boundaries

Indicators

Supplier's screening using ESG criteria				
308-1 | New suppliers that were screened using environmental criteria				
New suppliers assessed using environmental criteria				
	2023	2022	2021	2020
Total new suppliers	0	4	5	3
Number of assessed suppliers	0	1	1	1
Percentage of assessed suppliers	-	25%	20%	33%
414-1 | New suppliers that were screened using social criteria				
New suppliers assessed using social criteria				
	2023	2022	2021	2020
Total new suppliers	0	4	5	3
Number of assessed suppliers	0	1	1	1
Percentage of assessed suppliers	-	25%	20%	33%
Internal indicator - ARP-2 | ESG rating of suppliers				
Strategic suppliers assessed using Synesgy				
	2023	2022		
Total suppliers included in the assessment	32	32		
Number of assessed suppliers	10	0		
Percentage of assessed suppliers	31%	0		
Internal indicator - ARP-3 | Certified products				
Certified products				
	Unit	2023	2022	
EPD	SKU	10	10	
Greenguard Gold	Collection	34	32	
GECA	SKU	78	78	
FSC	Collection	14	7	
TÜV GS	Collection	4	4	

Targets			
KPI	**GRI Disclosure**	**Description**	**Target**
Supplier's screening using ESG criteria	308-1	New suppliers assessed using environmental criteria	New suppliers assessed using environmental criteria
	414-1	New suppliers assessed using social criteria	New suppliers assessed using social criteria
	ARP-3	ESG rating for all strategic suppliers	50% 100%
	ARP-4	Certified products	1 new EPD per year Greenguard certification on all seatings FSC certification on all new wood items

Our approach

Arper has always strived to abide by the highest standards available. Information on our current certified standards can be found here:

www.arper.com/en_GB/sustainability

The list includes both system standards (ISO 9001, ISO 14001, ISO 45001) and product certifications (TÜV GS, EPD, Greenguard, GECA, FSC). While the first group determines how things need to be done, the latter guarantees both end users' health and construction strength.

In 2023, we worked on the integration of the ESG rating into our internal supplier rating system. At the same time, we worked to ensure all our strategic partners are rated on the Synesgy Platform. Synesgy is a tool that enables the collection and management of sustainability information on the supply chain through an ESG self-assessment, which is completed with an evaluation, benchmarks and guidance on the development plan to be undertaken by the supplier.

Since energy is an extremely impactful aspect of production, in the near future we also plan to integrate the system standards palette with ISO 50001.

We do not currently have a group strategy for certifications, we rather consolidate achieved standard levels. One of our set goals for the next few years is to update and formalize a strategy, which will be shared with all Arper entities and clients, based on one or two specific standards and several compliance tables, whose aim is to assist when a certified third-party standard is not provided. We are currently focusing on understanding Ecolabels, which are slowly becoming the recognized standard within the European Union.

Certification	Description	Arper's Stance
EPD	Document that allows companies to provide information on the environmental performance of its products on the basis of predetermined criteria in a fair and understandable manner. The reliability and accuracy of the information is guaranteed by external certification and registration by the body responsible.	Arper was the first Italian company to request and obtain the environmental certification for chairs, in 2008. Ten years later, in 2018, Arper became the first design company in Italy – the second in Europe – to obtain a process EPD from the International EPD System for its Chairs and Accessories product category. With a process EPD, the subject of the certification is the process whereby EPDs are issued internally to the organisation. This allows companies to issue their own EPDs for their products. Arper's EPD-certified products are: Catifa 46 and 53, in the versions with the polypropylene shell with four legs or with trestle legs, with painted or chrome-plated finish; Aava in the wooden version with polypropylene shell and steel base; Duna 02 with the shell in virgin or recycled polypropylene with wooden legs; Juno in the version with the open backrest; Babar with the exposed polyurethane seat; and Stacy.
GREENGUARD GOLD	Voluntary certification program developed in the U.S.A. by the US Green Building Council (USGBC) to control indoor emissions.	The main purpose of the Greenguard program is to protect human health by improving air quality and reducing people's exposure to chemicals and/or pollutants. Greenguard is a mark recognized by international programs and rating systems such as LEED. All Arper chairs are Greenguard Gold certified. The Gold level includes more stringent criteria and lower levels of total VOC emissions in accordance with the California Department of Public Health (CDPH) requirements, which are considered safe for use in educational and healthcare environments.
GECA CERTIFIED	GECA is an internationally recognized Australian certification only independent, not-for-profit and is the only Australian member of the Global Ecolabelling Network (GEN). GECA aim is to encourage manufacturers to reduce the environmental impact of their products and consumers to buy eco-friendly products.	Arper obtained "Good Environmental Choice Australia" (GECA) environmental product certification for various models in the following chair collections: Leaf, Palm, Catifa 46 e Catifa 53 (not padded version with structure in wood or aluminium o powder-coated steel), Saya, Juno, Ginger, Gher, Duna 02 e Aava (not padded version with structure in wood or aluminium o powder-coated steel). Green Star products with GECA certification are automatically awarded credits for the Green Building Council of Australia's Green Star, the assessment scheme measuring the environmental impact of buildings — from their design to their construction and maintenance.
FSC	FSC ® is an independent, third-party certification which guarantees the traceability of wood and its derivatives. Checks are carried out through the supply chain for the materials, from forest through to consumer, with the certification stating that the supply chain uses no materials from controversial sources (i.e. from illegal deforestation).	In 2019, Arper obtained Forest Stewardship Council® (FSC®) certification from the international body of the same name which works to promote the responsible management of forests.

Progress and activities in 2023

In 2023, we conducted the following audits:

Audit	Type of Audit	Date
EPD - Internal audit	Internal	January 2023
EPD - External audit	External (CSQA)	January 2023
Key Account - External audit	External	February 2023
FSC - Internal audit	Internal	March 2023
ISO 45001 - Internal audit	Internal	May 2023
SGA - External audit (HQ + Milan showroom)	External	June 2023
ISO 9001 - External audit	External (INTERTEK)	June 2023
ISO 45001 - External audit	External (RINA)	June 2023
FSC - External audit	External (DNV GL)	July 2023
ISO 14001 - External audit	External (DNV GL)	July 2023
FSC Multisite - External audit	External (DNV GL)	July 2023

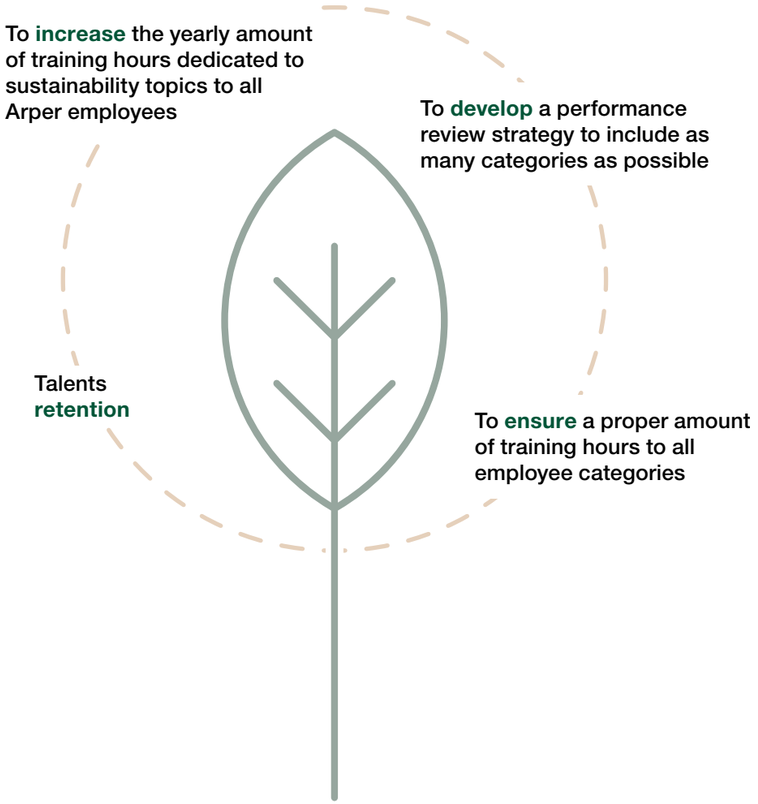
Following actions were also undertaken:

Action	Status	Lessons Learned and/or Explanation
Compliance to external market requirements	●	Each market calls for its own certification scheme, therefore a certification policy at group level is highly desirable.
Internal pre-audits	●	
Implementation of an internal testing lab	●	
Internal strength tests extended over standards' compliance	●	

4.3 Training and growth of the individual

We strive to guarantee all Arper employees the continuous development of their knowledge and skills, as well as to offer them the opportunity to reach their full potential. This is achieved through training courses aimed at ensuring the growth and strengthening of their know-how – in line with the needs of the market of tomorrow –, thus increasing the intrinsic value of the company's internal resources. In the same way, we aim to extend growth opportunities to our stakeholders too, trying to become a development model for other companies like us.

Main goals



Indicators

People's training

403-5 | Worker training on occupational health and safety

Worker training on occupational health and safety

	Unit	2023	2022
Total trainings conducted	n	97	104
Total number of employees trained	n	71	91

404-1 | Average hours of training per year per employee

Annual training hours per capita by professional category and gender

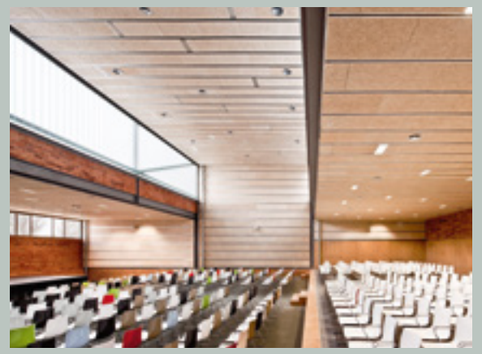
		2023		2022	
	Unit	Male	Female	Male	Female
Senior management	hours	22.94	26.97	3.25	5.60
Middle management	hours	22.31	24.12	9.47	6.83
Specialised workers	hours	10.47	18.18	1.47	3.12
Other workers	hours	33.83	19.00	10.35	8.35
Total	hours	14.76	20.25	4.36	5.29
Total	**hours**	**17.50**		**11.57**	

404-3 | Percentage of employees receiving regular performance & career development reviews

Employees thar receive regular performance review

		2023			2022		
	Unit	Male	Female	Total	Male	Female	Total
Senior management	n	8	2	10	7	1	8
	%	38.80	22.47	34.48	38.89	14.29	32.00
Middle management	n	19	26	45	20	27	47
	%	97.44	91.55	93.95	100.00	100.00	100.00
Specialised workers	n	0	3	3	0	0	0
	%	0.00	3.95	1.71	0.00	0.00	0.00
Other workers	n	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00
Total	n	27	31	58	27	28	55
	%	18.63	25.16	21.63	19.01	23.33	20.99





Our approach

The Human Resource department organizes and programs training courses for different categories of employees in order to teach technical and transversal skills (GRI Indicator 404-2).
The standard training packages include:

- Leadership courses
- Sustainability initiatives
- Role-specific lessons

Our induction program, which includes training on all areas of the company is particularly important for us. Our ultimate goal is to embed sustainability throughout the entire organization, gaining even more traction and commitment at every level.

The sustainability training delivered an unexpected yet rewarding result.
After our sessions, some colleagues felt they wanted to make a difference and asked us to become Arper's Sustainability Ambassadors.
As a consequence, we now have a group of Ambassadors that support us and the actions we plan within the organization.
We decided to put them at the center of the new sustainability governance model that we will implement during 2024, which will see them becoming active members of the Sustainability Committee, as well as lead some topic-specific working groups.

Progress and activities in 2023

- Launched a workshop series aimed at designing the GHG reduction strategy at group level
- Organized first sessions of an extensive training project on generative management, open to all Arper managers (“The Generative Manager” project
- Extended a structured training on brand positioning with a special focus on vision, mission and core values to the whole group, as well as to all agents
- The “Spritz Pills” project: an after-work event where we share videos of different themes with the aim to provoke and inspire dialogue between colleagues.
- Provided a free training package consisting of various courses that the employee could choose based on her/his personal inclinations and interests, not related exclusively to the work environment.
- Provided a free training package consisting of various courses that the employee could choose based on her/his personal inclinations and interests, not related exclusively to the work environment.
- Organised the first world-wide Sales and Marketing Meeting at HQ with team building activities

Action	Status	Lessons Learned and/or Explanation
Training sessions on different subjects	●	Ambassadors are hidden anywhere in your company, you just need to create opportunities for them to emerge.
The Generative People Manager	●	The project started in 2022 and helped us get to know our managers better and support them in their daily routines, as well as making them aware of their responsibilities and tools at their disposal to do a better job.



4.4
Responsible management of the value chain

We aim to analyze the life cycle of our products in every detail, in order to minimize their impact on the environment. We want to adopt procurement processes that are based on specific criteria to select, evaluate and monitor suppliers not only in terms of economic, but also social and environmental performance, contributing to the responsible development of the whole value chain.

Main goals

To implement an ESG rating in our vendor rating system

To ensure seller-buyer relationships evolve into long-term partnerships

Indicators

Local suppliers		
204-1 | Proportion of spending on local suppliers		
Country	Amount (€)	%
Italy	25,903,213.94	84.44%
United States	2,341,216.78	7.63%
Japan	569,970.35	1.86%
Sweden	530,685.84	1.73%
Switzerland	234,838,73	0.77%
Germany	206,100,04	0.67%
Spain	150,263,02	0.49%
United Kingdom	138,909.90	0.45%
Mexico	98,651.23	0.32%
Taiwan (Republic of China)	92,080.92	0.30%
Denmark	82,856.86	0.27%
San Marino	69,830.78	0.23%
Norway	42,490.86	0.14%
Ireland	42,367.39	0.14%
Belgium	38,929.27	0.13%
Austria	33,887.90	0.11%
Netherlands	27,357.70	0.09%
United Arab Emirates	23,326.19	0.08%
France	21,605.90	0.07%
Poland	9,595.07	0.03%
Luxembourg	7,000.31	0.02%
Romania	4,814.00	0.02%
Israel	3,284.71	0.01%
Canada	1,694.70	0.01%
Cyprus	749.34	0.00%
Latvia	650.00	0.00%
Slovenia	643.20	0.00%
Total	**30,677,014.94**	**100.00%**

Country of purchased goods and services at SUBSIDIARY level in 2023		
	Amount (€)	%
Arper Spa (Italy)	**25,736,134.13**	**83.91%**
Italy	**24,165,382.15**	**93.90%**
Sweden	**508,087.40**	**1.97%**
Switzerland	**234,838.73**	**0.91%**
Germany	**193,983.85**	**0.75%**
Spain	**150,263.02**	**0.58%**
Taiwan (Republic of China)	**92,080.92**	**0.36%**
Denmark	**82,856.86**	**0.32%**
San Marino	**69,830.78**	**0.27%**
Norway	**42,490.86**	**0.17%**
Ireland	**42,367.39**	**0.16%**
Belgium	**38,929.27**	**0.15%**
Austria	**33,887.90**	**0,13%**
Netherlands	**27,357.70**	**0.11%**
United Arab Emirates	**23,326.19**	**0.09%**
Poland	**9,595.07**	**0.04%**
United Kingdom	**6,084.54**	**0.02%**
Luxembourg	**5,326.64**	**0.02%**
Israel	**3,284.71**	**0.01%**
France	**2,573.14**	**0.01%**
United States	**1,975.79**	**0.01%**
Cyprus	**749.34**	**0.00%**
Slovenia	**643.20**	**0.00%**
Canada	**218.68**	**0.00%**
Arper Japan (Japan)	**571,300.37**	**1.86%**
Japan	**569,970.35**	**99.77%**
Italy	**1,330.02**	**0.23%**
Arper LATAM (Mexico)	**107,542.96**	**0.35%**
Mexico	**98,651.23**	**91.73%**
Italy	**8,721.90**	**8.11%**
United States	**169.83**	**0.16%**
Arper UK (United Kingdom)	**247,109.84**	**0.80%**
United Kingdom	**132,825.36**	**53.75%**
Italy	**114,284.48**	**46.25%**
Arper USA (USA)	**2,363,183.55**	**7.69%**
United States	**2,339,071.16**	**98.98%**
Sweden	**22,598.44**	**0.96%**
Canada	**1,476.03**	**0.06%**
Italy	**37.92**	**0.00%**
Corium (Italy)	**1,583.39**	**7.69%**

Country of purchased goods and services at SUBSIDIARY level in 2023		
	Amount (€)	%
Italy	**1,583.39**	**100.00%**
Iride (Italy)	**1,650,160.70**	**5.38%**
Italy	**1,611,874.08**	**97.68%**
France	**19,032.76**	**1.15%**
Germany	**12,116.19**	**0.73%**
Romania	**4,814.00**	**0.29%**
Luxembourg	**1,673.67**	**0.10%**
Latvia	**650.00**	**0.04%**
Total	**30,677,014.94**	**100.00%**
Total number of suppliers located in Italy		**607 out of 922 (65.84%)**
Total spending of Italian suppliers		**25,903,214.00 (84.44%)**
Total Italian suppliers within 100 km from HQ		**361 out of 607 (59.47%)**
Total spending of Italian suppliers located within 100 km from HQ		**18,408,250.00 (71.07%)**
Total Italian suppliers located in the Veneto region		**351 out of 607 (57.83%)**
Total spending of Italian suppliers located in Veneto region		**14,905,960.00 (57.54%)**

Supplier's screening using ESG criteria			
308-1 | New suppliers that were screened using environmental criteria			
New suppliers assessed using environmental criteria			
	2023	2022	2021
Total new suppliers	0	4	5
Number of assessed suppliers	0	1	1
Percentage of assessed suppliers	0%	25%	20%
414-1 | New suppliers that were screened using social criteria			
New suppliers assessed using social criteria			
	2023	2022	2021
Total new suppliers	0	4	5
Number of assessed suppliers	0	1	1
Percentage of assessed suppliers	0%	25%	20%
ARP-2 | ESG rating of suppliers			
New suppliers assessed using Synesgy*			
	2023	2022	
Total suppliers included in the assessment	32	32	
Number of assessed suppliers	10	0	
Percentage of assessed suppliers	31.25%	0%	
***Synesgy** is a digital platform which enables companies to collect and manage sustainability information			

*Synesgy is a digital platform which enables companies to collect and manage sustainability information through an ESG self-assessment of their supply chain.
The final results include an evaluation, benchmark information and guidance on the development plan to be undertaken. Synesgy currently covers around 60 countries, 150.000 manufacturing companies and 350 banks and insurance companies.
Important Note: Assessment request has been officially forwarded to strategic suppliers only in 02/23 (see section on methodology for further details)



Our approach

Our biggest environmental impact derives from the transportation of goods and our supply chain (see Categories 3 and 4 of indicator 305-1/2/3). Therefore, we have always given special attention to our suppliers and the way they operate.

We conduct several audits, both internal and external, which outline a fairly clear scenario of where impacts and risks lie. We approach these in a dedicated manner, aiming at a (climate change) risk mitigation and/or adaptation strategy, reviewed yearly.

For instance, we are aware of a sub-supplier located in Vietnam, specialized in die-casting production. Auditing is currently limited to our main suppliers located in Italy, who shall then report and guarantee the compliance of their entire supply chain. Our goal is to extend auditing to sub-suppliers for selected entities within 2025. Generally speaking, we strive to keep the supply chain as local as possible, as the indicators in the previous pages show. This is a major strategic choice that was made several years ago, which allowed us to shape our company sourcing accordingly.

While on the one side it might seem more challenging to explain to smaller entities the added value that sustainability could bring to their businesses, on the other hand, smaller and closer suppliers allow for a more consistent and better planned auditing.

Local production has to abide by our same regulations. In the future, we will continue on this path and will try to increase the number of local suppliers as much as possible. This produces several positive side-effects — for instance, the creation of real partnerships, which in turn lead to collaboration and innovation projects. Local suppliers are the foundation of the symbiosis network that we want to establish in the long term and is part of our sustainability direction (in the previous pages).

Progress and activities in 2023

- Incorporated Corium into Arper Spa. This has been by far the most challenging operation at corporate governance level so far.
  The incorporation required several important decisions and took place over the whole first semester. Among the most delicate matters we had to deal with, a special mention is due to the streamlining of all internal processes, the alignment of all suppliers' policies and the management of stock supplies.

- Further developed the Arper District project, a thorough and long-term endeavor that incorporates the strategic portion of our supply chain into our sustainability strategy. We identified nine key suppliers that deliver the biggest impact in terms of GHG and we will be developing a customized reduction strategy for each one of them.

- Started structured collection of environmental certifications of the supply chain through Synesgy.

- Performed ISO14001 and FSC Multisite audit which also included part of the supply chain.

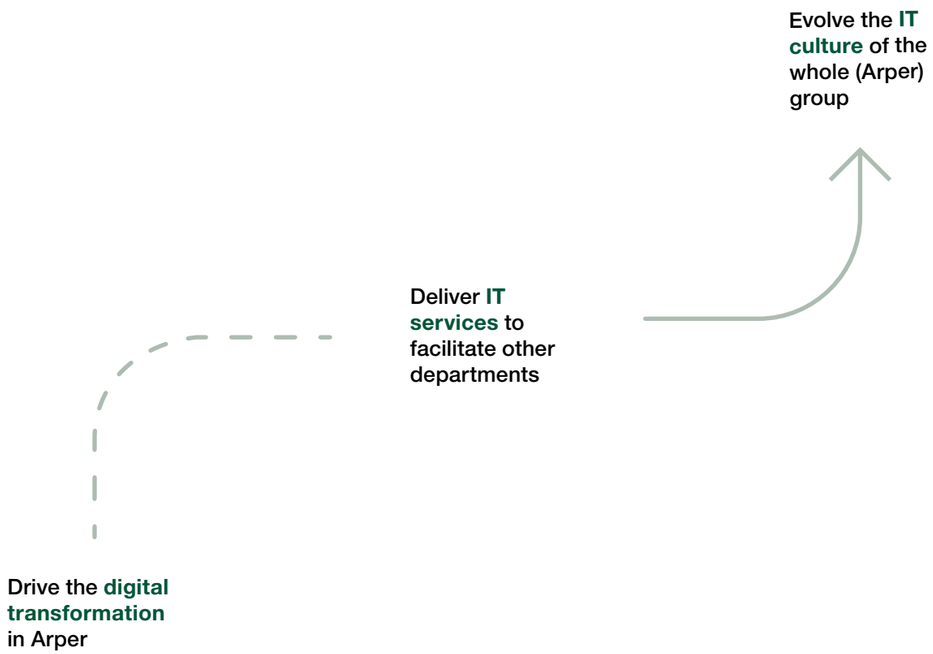
Action	Status	Lessons Learned and/or Explanation
Supplier's Code of Conduct	●	
ESG requirements for suppliers (ESG rating)	●	Knowledge about ESG topics boosts awareness about social aspects
Supplier performance monitoring & supplier audits	●	
IT platform for supplier's management (JUNGO)	●	
Focus on local suppliers	●	
Arper District project (company/supplier integration)	●	Currently limited to 32 suppliers. Focus in 2023 will be on how to expand the project to a larger target.



4.5 Digitalization of Services and Processes

Arper's digital transformation represent a significant cultural shift and is essential for driving our strategic initiatives. It involves more than just adopting digital tools: it encompasses our entire environment, including people, organizational structure, business processes and technologies. This transformation will require our organization to challenge the status quo and embrace continuous change.

Main goals



Our Indicators

Digitalization of services			
Internal indicator - ARP-4 | Resources and support			
Resources			
	Unit	2023	2022
Budget dedicated to digitalization vs. total budget	%	14%	11%
Operational efficiency			
	Unit	2023	2022
IT projects implemented	%	27	N/A
On-time delivery of IT projects	%	72.7% (24/33)	N/A
Total numbers of tickets served	n	2006 (+2.7%)	1954





Our Approach

We aim to become a proactive and agile company that drives innovation, ensures seamless and secure technology operations and generates sustainable growth and competitive advantage. To achieve these goals, we strive to enhance operational efficiency by streamlining processes and eliminating waste through automation and optimization. We embrace innovation to cultivate a culture of experimentation and technological readiness, in order to drive new business opportunities.

Furthermore, we intent to optimize the customer experience by leveraging technological advancements, while bolstering our defenses against cybercrime. Finally, we undertake to implement environmentally friendly practices and technologies that enhance efficiency and lower energy consumption.

Progress and Activities in 2023

- In collaboration with the Sustainability Department, a preliminary analysis of the (Digital Product Passport (DPP) regulations and gap analysis have been made. The goal is to develop a comprehensive database containing sustainable data for each product.

- We have expanded our digital toolbox by adopting Microsoft365 Suite, including advanced feature training and the implementation of Microsoft Teams as our central internal communication tool. Additionally, we have implemented several cybersecurity processes based on penetration tests and vulnerability assessments to ensure data integrity and availability across all locations and departments.

- Following a request of the Sustainability Department we have installed a LCA software that will allow us to produce life cycle assessments (LCAs), maximizing the effectiveness of our EPD process certification.

- We delivered continuous support to the departments for day-to-day business operations.

- Implementation of a PIM (Product Information Management) software, which allows us to collect data about substances and materials (“Materials Database”)

- We have redesigned the infrastructure of our US operations to meet the highest IT standards and significantly reduce energy consumption.

- We have completed preliminary work for the 2024 digital signage implementation, which will also enable more reliable visitor tracking, thereby facilitating a more precise calculation of our corporate carbon footprint.

- We have collected user support documentation from different sources and have build one single large library with a quick and easy access.



- Finally, our Corium subsidiary has been merged into Arper SpA, involving intensive efforts such as user migration, working hours data integration, ERP alignment.

This merger was closely tied to our broader project on operational excellence, a key component of our “10 Jobs In 5 Years” change management project.

Action	Status	Lessons Learned and/or Explanation
Merge with Corium	●	
Analysis of the DPP	●	
Microsoft365 implementation (including collaboration tools)	●	
Digital signage implementation	●	
US infrastructure redesign	●	

4.6 Partnership

To promote a truly integrated culture around sustainability, we intend to proactively support external activities and projects aiming to protect the existence and wellbeing of our employees, their families and businesses. Specifically, we aim to build relationships with other companies with whom we share sustainability visions and goals.

Main goals

To increase the number of proficient partnerships at all levels

Indicators

Long-term partnerships		
Indicator - ARP-4 | Ongoing long-term partnerships		
Partnership	Ongoing Since	Description
Royal Institute of British Architects (RIBA)	2016	Sponsoring of the Gold Medal that the Royal Institute of British Architects assigns to the most influential British architect of the year
International Interior Design Association (IIDA)	2016	Corporate membership and sponsoring of the regional chapters of New York, Northern California, Southern California and the Pacific Northwest
Guggenheim Intrapraese	2017	Patronage of one of the most iconic art collections in the world. Arper's People are granted free access to the Venice collection.
Museo Bailo	2018	Long-term relationship that ended up in Arper's financial support of the renovation of the new aisle of the museum
Villa Filanda Antonini	2021	Collaboration with an artistic residence which sponsors new talents in visual arts
Confindustria Veneto Est Sustainability Group	2022	Participation in the Sustainability Group of the local section of the local furniture manufacturers' association
Libera università di lingue e comunicazione (IULM)	2022	Partnership with the university for the Master in International Marketing



Our approach

When we think about the world, we see a network of living systems that continuously interact with one another. The tiniest cells and the enormous planets are connected, just as—in our living spaces—smaller accessories are connected to bigger products to create homes, offices, and larger and more complex environments.

By nature, Arper is, and has always been, intrinsically inclined towards dialogue: Ar-per stands for “arredamento per” (furniture for). We exist if and because others exist. Our products are successful if those who use them feel comfortable.

Our work is based on the relationship between person and products. This is the reason why we seek partnerships that will add value both to us and the community we live in.

Progress and activities in 2023

- Cultural partnerships have been confirmed (e.g., Guggenheim Intrapresae) and new have been established (A Lot With Little project)

- Arper confirmed its partnership with the partner of the Sustainability Group of Confindustria Veneto Est

  www.assindustriavenetocentro.it

- The legal representative of Arper SPA is the current President of Federlegno Arredo and Arper Feltrin Foundation. Federlegno Arredo is the Italian Federation of Furniture Manufacturers

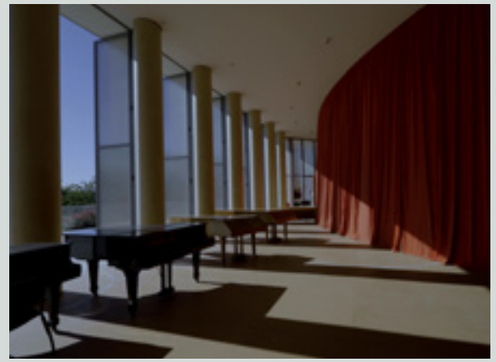
  www.federlegnoarredo.it

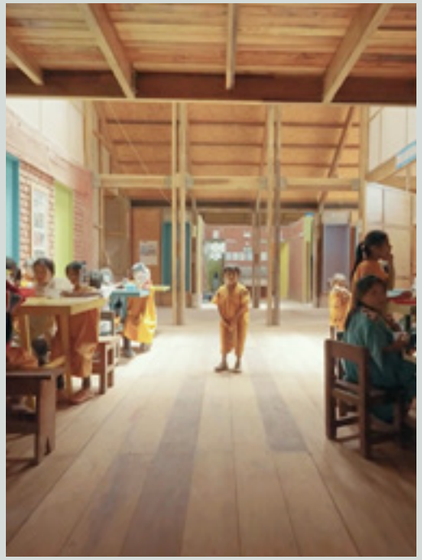
- Sponsoring of the RIBA Gold Medal award

  www.architecture.com

- Development of a partnership with the local school system, aimed at transferring our know-how on design and product ideation to the new generations. We worked together on the definition of workshops focusing on the use of colour and the creation of new pieces of art out of our standard products. The classes will start at the beginning of 2024.

Action	Status	Lessons Learned and/or Explanation
Engagement with the local furniture Industry association Sustainability Group	●	Sharing of best practices and common goals. Mutual help on operational tasks



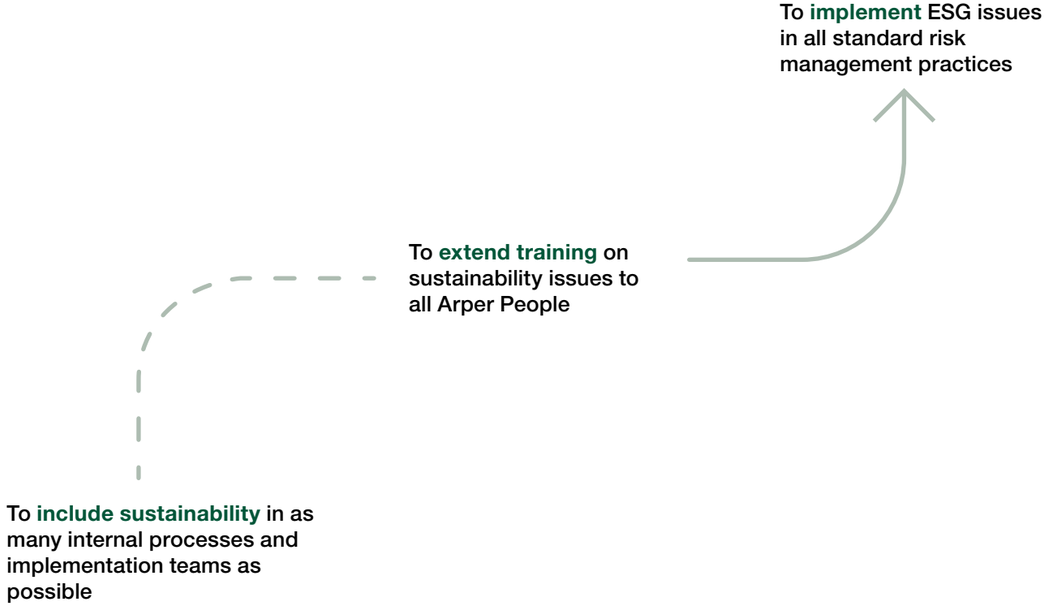




4.7 Governance

We aim to implement a solid, transparent and shared governance. We aim to equip ourselves with effective and efficient management and supervisory bodies, a lean and orderly organizational model, as well as shared internal procedures, which aim to put sustainability at the center of every project we undertake.

Main goals



Indicators

Anti-corruption				
Indicator - 205-3 | Confirmed issues of anti-corruption and actions taken				
Confirmed issues of anti-corruption				
	Unit	2023	2022	2021
Total number of confirmed incidents of corruption	n	0	0	0
Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	n	0	0	0
Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption	n	0	0	0

Our approach

Our governance policy is based on two major documents that describe our approach to business.

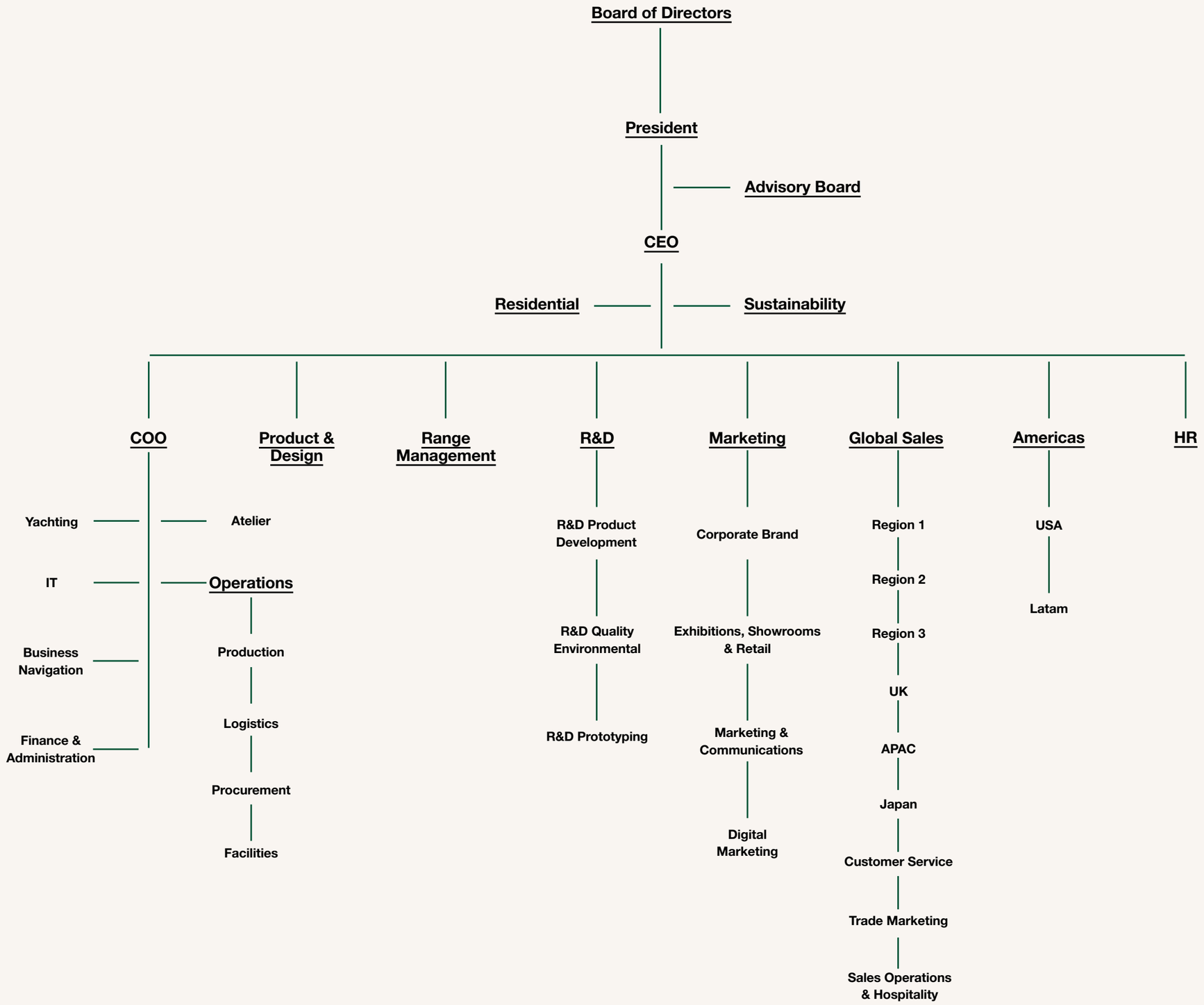
- The Code of Ethics drives our daily activities and includes all the best practices that we request from our employees and our suppliers to guarantee that we conduct business in a responsible way.

- The Italian regulations pertaining to the “Administrative liabilities of legal entities deriving from offences” contained in Legislative Decree no. 231 of 8 June represent a pillar of the Italian criminal and public framework. They state that legal entities, including limited companies, may be held liable in relation to certain crimes which are committed or attempted in Italy or abroad, in the interest or for benefit of the company. From this perspective, the company may adopt organizational, managerial and control models which are suitable for preventing the crimes themselves. Such models provide for the implementation of control activities at all operational levels, which make it possible to formally identify responsibilities, which can also be ascribed to the employee.

Additionally, we strive for a flat organization where inter-department meeting groups create a matrix structure. In this setup, team members report to both a project manager and their respective department head.

Sustainability needs to be integrated into as many of these groups as possible to ensure consistency across all our activities.

Additionally, we strive to deliver clear information throughout our structure: minimum notice period for operational changes are 28 days in average in the whole Arper group (GRI Indicator 402-1).



Progress and activities in 2023

- No legal actions for anti-competitive behavior, antitrust and monopoly practices were reported (GRI Indicator 206-1)
- Sensitivity analysis related to anti-corruption risks are not performed since this specific task is not included in the organizational model imposed by D.Lgs. 231/01 (GRI indicator 205-1)
- Started update of the governance model as per 231/01's new list of alleged crimes
- In 2023 we expanded our impact analysis and associated them to an impact valuation. More information about this project can be gathered from the dedicated section in this report.
- We created a map of the competencies associated with various roles at Arper and drafted dedicated job descriptions. This initiative aims to help us better understand our people and design a well-considered growth path within the company (Craft Map). This project also enabled us to begin reviewing and streamlining our organizational chart.

Action	Status	Lessons Learned and/or Explanation
Enterprise Risk Management	🟢	Current ERM matrices need to be updated to include ESG risk
Quality Policy	🟢	
Health & Safety Policy	🟢	
Energy Policy	🔴	Energy policy will be consequent to the ISO 50001 certification
Adoption of D.Lgs. 231/01	🟢	
Code of conduct (internal and external)	🟢	
Compliance to ISO 9001, ISO 14001 and ISO 45001	🟢	
Internal audits	🟢	



4.8 Technological and economic progress

We encourage and try to apply new ideas and technologies related to the production methodology and the materials used, to support sustainable development and generate the right balance between productivity and environmental impact.

Main goals



Indicators

Economic progress					
Indicator - 201-1 | Direct economic value generated and distributed					
		Direct generated economic value			
	Unit	2023	2022	2021	2023 vs. 2022
Revenues	€	63,257,822.00	64,612,937.00	57,193,249.00	-2.10%
Distributed economic value	€	60,106,353.00	61,043,465.00	53,460,334.00	-1.53%
Operating costs	€	43,298,751.00	44,666,593.00	36,745,491.00	-3.06%
Salaries and employee benefits	€	16,621,497.00	16,034,595.00	14,274,652.00	3.66%
Payments to capital providers	€	0.00	0.00	1,950,000.00	-
Payments to the Public Administration	€	72,191.00	202,013.00	395,345.00	-64.26%
Investments in the community	€	113,914.00	140,264.00	94,846.00	-18.79%
Retained economic value	€	3,151,469.00	3,569,472.00	3,732,915.00	-11.71%

Our approach

Economic results should naturally come from a correct set of actions, rather than being the only goal of the company.
In other words, we strongly believe that if we do the right things the economic results will follow. The right things include – among other things – a strong focus on sustainability, a firm grip on governance and a clear outlook on what the future will bring.

Technological progress materializes into innovation. For Arper, innovation is the ability to apply new solutions, even if they have already been developed in other sectors, therefore not necessarily inventive, but capable of offering real advantages for the end user.

This may involve the use of new materials and new technologies and/or manufacturing processes or solving design problems for the combination of features and/or functions. We offer our inventors, specifically our designers, total openness to developing unconventional solutions to well-known problems, while consistently monitoring and guiding the sustainability aspect of every project.

Progress and activities in 2023

- Increased sustainability presence in several internal processes
- In 2023 a material of new generation has been scouted and tested extensively. The new material is called Papershell and lies at the heart of a much larger project focused on the revisitation of our most iconic product, Catifa 53. This set of activities is geared to present an innovative, ground-breaking product during the Salone del Mobile 2024 called Catifa Carta.
- Continued implementation of a material database to track all materials used in products

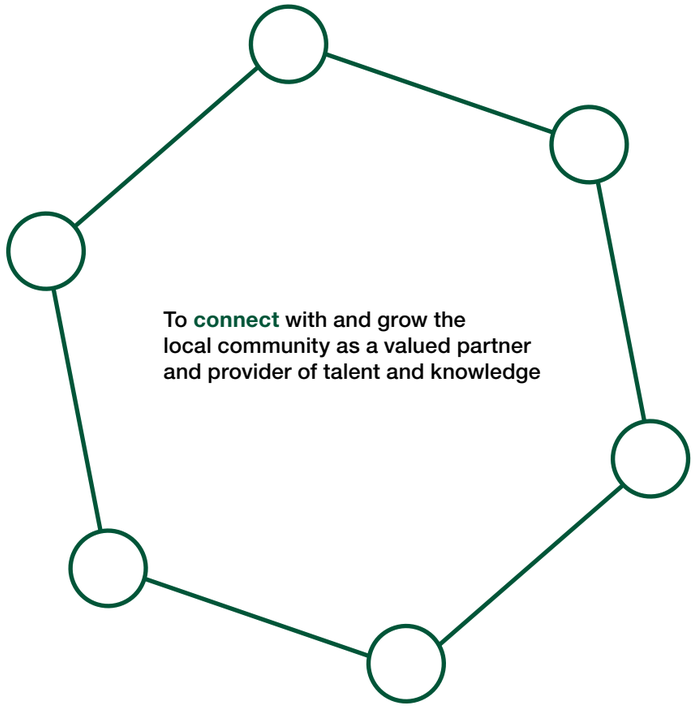
Action	Status	Lessons Learned and/or Explanation
Collaboration with material databanks	🔴	Collaboration will be improved in the next years
Detailed new material test process	🟢	When new materials enter the product development perimeter, they undergo a detailed testing process. Currently in development.



4.9 Local communities

We wish to cooperate with local administrations and communities to promote sustainable development initiatives related to environmental, social and cultural projects directly connected to the territories in which we operate.

Main goals



Indicators

Local management							
202-2 | Proportion of senior management hired from the local community							
Executives and Managers hired from the local community							
		2023			2022		
	U.m.	Male	Female	Total by category	Male	Female	Total by category
Local executives (senior and middle management)	n.	29	29	58	27	30	57
Total executives (senior and middle management)	n.	32	38	70	31	35	66
Percentage of locally hired executives	%	**90.63**	**76.32**	**82.86**	**87.10**	**85.71**	**86.36**

Important notes:
- "Local community" means the same country where the corresponding Arper subsidiary operates.
- Senior management includes Executives and Managers

Local suppliers						
204-1 | Proportion of spending on local suppliers						
See "Responsible management of the value chain" for details						
Local community engagement						
413-1 | Operations with local community engagement, impact assessments and development programs						
Operations with local community engagement						
	2023		2022		2021	
	Operations	%	Operations	%	Operations	%
Social impact assessments	0	0.00	0	0.00	0	0.00
Environmental impact assessment	0	0.00	0	0.00	0	0.00
Public disclosure of results	0	0.00	0	0.00	0	0.00
Local community development programs	1	100.00	1	100.00	0	0.00
Stakeholder engagement plans	0	0.00	0	0.00	0	0.00
Local community consultation committee	0	0.00	0	0.00	0	0.00
Representation bodies to deal with impact	0	0.00	0	0.00	0	0.00
Formal grievance processes	0	0.00	0	0.00	0	0.00

Targets				
KPI	GRI Disclosure	Description	Target	Year
Local community engagement	413-1	Operations with local community engagement	3 long-term programs a year	2025



Our approach

We want to foster relationships with the local community, since it represents our roots and history. On top of this, the local community is strongly connected to some of our core values, like responsibility and care. We will not focus on financial support, but rather on the growth of the whole local ecosystem, starting from our local supply chain. In fact, the way we do business and contribute to strengthening the entrepreneurial structure of our neighborhood will shape our chances to mitigate the risks connected to climate (e.g., shortage of raw material) and markets (e.g., price of commodities).
We achieve this by structuring a sourcing policy that is respectful of our suppliers – the Arper District is only one example of partnership projects that we are developing – and our people. At the end of the day, companies are made of people, and people live and act in communities.

Progress and activities in 2023

- We have started a collaboration with the Secondary School Directorate of Roncade, a city near our Headquarters, which is developing a work experience program for students who have to choose their future career, be it academic or not. Schools are a huge container of yet unexpressed talent. By connecting with the local community and engaging with local youth, we can share what we do and how we do it, while indirectly recruiting future talents. Expected outcomes are the support of the local community, the connection with the local school system, and the development of possible new talents.

- In 2023, we have launched Arper Campus, a project specifically created to leverage on this newly created knowledge base.

- We are involved with a local day-time community of mentally fragile people in a nearby town to carry out clerical work, which we hope to transform into a long-term collaboration.

Action	Status	Lessons Learned and/or Explanation
Arper Campus, an internal academy for talent recruitment	●	The talent lies around you and needs to be fostered before in can be exploited
Generation of opportunities to seek and find dialogue about impacts on local communities	●	Implementation started in the local school system
Pursue of radical transparency on all issues generating an impact (material topics)	●	Following to our impact analysis, a consistent stakeholder engagement strategy will need to be implemented. Currently not being addressed in a structured way.



4.10
Eco-design and life cycle thinking

Up to 80% of a product's environmental impact is defined at the design stage.
It is essential for us to guide design choices by making use of the Extended Producer Responsibility and the Life Cycle Thinking, i.e., the analysis of the economic, environmental and social impacts of a product during its entire lifecycle and not only in a cradle-to-gate fashion.

Main goals

To **improve** on our eco-design practices

Indicators

Environmental Product Declarations			
Internal indicator - ARP-3 | Certified products			
EPD certified products			
	Unit	2023	2022
EPD	SKU	10	10

Our approach

Sustainable design aims to minimize a product's social, environmental, and economic impacts. Eco-design encompasses the entire lifecycle—conception, design, sale, and disposal—respecting the environment by reducing negative impacts on the ecosystem.
Circular design focuses on creating products or services that generate no waste or pollution, ensuring materials remain in use. It contributes to a closed-loop system in our economy where everything is shared, repaired, reused, or recycled.
The ultimate goal is to achieve zero waste and thus, zero impact.
Arper's approach is to concentrate on eco-design as much as possible, as soon as possible, to then implement a more circular approach as we get further down our path.

In order to do so, we focus on the following aspects:

- **Environmental data as foundation**
  We use Life Cycle Assessment (LCA) results as the foundation to create improvement scenarios and test the environmental effects of new designs.

- **Full life cycle approach**
  We look at reducing the environmental footprint throughout the complete life cycle of a product – from production to the end of its life (waste, recycling, upcycling, reuse, etc.).

- **Circular business models**
  We need to optimize our design to minimize waste and environmental impact, and a circular business model is an essential condition for circular design to work.

All these efforts are summarized in our 10 Eco-design basics:

Timeless and emotional design

Trends come and go, while a sustainable product must be designed to last. When a product creates an emotional bond with the user, throwing it away becomes more difficult, providing a reason to repair it and therefore increase the longevity of the product.

Consideration of the entire lifecycle of a product

From production to transport, use and disposal. Literature agrees that 80% of a product's ecological impact is being decided at the design stage.

Choice of materials

A carefully chosen material is the basis of any project and can have a significant impact on the biosphere. Prefer local purchases: shipping recycled plastic to the other side of the world will not make the project sustainable. Like energy, materials also play an essential role in sustainable design: every designer should look for materials that are easily recyclable or that the planet can recreate in a short time.

Durable design solutions

To get as close as possible to zero waste, products must be durable enough to last a long time or be made entirely from recycled and recyclable materials so they can be turned into new products. Using both methods can help decrease dependence on the Earth's resources.

The shape represents the visual form of the product and is usually perceived as the main element of the design. Before designing a product layout, however, designers should ask themselves: how will its shape affect energy consumption, and how will its size affect packaging, transportation costs, and fuel emissions?

Function and usability

The function and usability of a product contribute to its sustainability, as they help consumers use the product correctly. People do not want to store difficult or inconvenient products, therefore lighter and more manageable products can help reduce waste.

Move towards a circular economy

Embrace closed-loop production systems, considering the end-of-life of products from the outset. Waste is a design flaw. Design for disassembly and recyclability. Good design offers new opportunities, not waste.

Product weight and dimensions

All products have to be moved and weight and size play a huge role in the carbon emissions caused by transportation.

Cost effective solutions

Cost is one of the main barriers that prevents many consumers from overcoming their dependence on unsustainable products. Therefore, designers are responsible for reducing the cost of less impactful products.

Energy consumption

Designers should choose materials and processes after taking into consideration the calculation of energy consumption. They should stop depending on carbon energy and think of products that depend exclusively on renewable energies.

Transparency

Nothing is perfect and there is always room for improvement. Humbly declare your defects: to be solved, a problem needs truth and true innovation.

Progress and Activities in 2023

- Development of an eco-design guide for the internal development of product briefs. The guide is based on 4 standards: GECA, Ecolabel, Minimum Environmental Criteria (CAM) and the newly issued ESPR frame regulation. The guide is currently being discussed and revised internally, with the aim of implementing it during 2024 for all 2026 product developments.

We conducted the first pilot application of our eco-design guide on one of our best-sellers, Aava 02. Following the new principles, we replaced virgin polypropylene with post-consumer polypropylene in varying quantities and percentages, aiming to retain the original colors and strength qualities for which Aava is renowned.

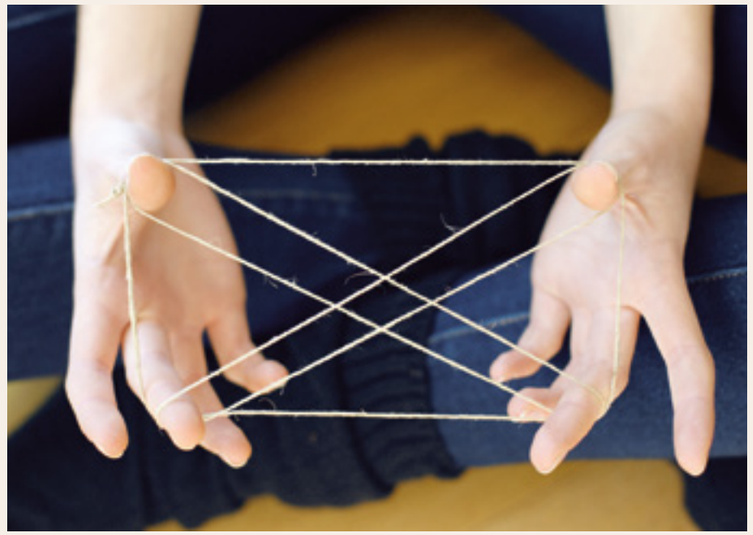
Action	Status	Lessons Learned and/or Explanation
Frugal design approach (sobriety in the number of raw materials used)	●	Less materials = less waste
Development of Eco-design best practices (Disassembly, Durability, Sourcing, etc.)	●	Crucial activity in order to reduce GHG impact. Currently in the final stage of implementation.
Where possible, revisit older collections to lower their GHG emissions (ideally at least one product a year)	●	Very difficult task to implement, due to the large number of legacy collections and the impact of the activity in itself. Still, the activity has been approached in a solid manner and the first results are already available to the market (Juno 02 and Aava 02).





5

METHODOLOGY



How this document is built

The process of collecting data and information and drafting the Report is coordinated and managed by the internal Sustainability Department. The content of the document has been defined according to the principles of accuracy, balance, clarity, comparability, reliability, completeness, timeliness and verifiability. The data were processed and validated by the corresponding function managers across the entire Group. The reporting process was supported by a computer software that facilitated the collection, processing and consolidation of information, thus enabling greater traceability of data.

Since this is Arper's second sustainability report, many aspects of collection and reporting are subject to improvement: impact analysis, for instance, needs to become more and more structured and quantitative, while evaluation needs to be extended to a wider range of stakeholders. From 2024 onwards we aim to switch to the new ESRS - one year ahead of time – which will be the most appropriate point in time to revise the materiality and impact analysis as a whole.

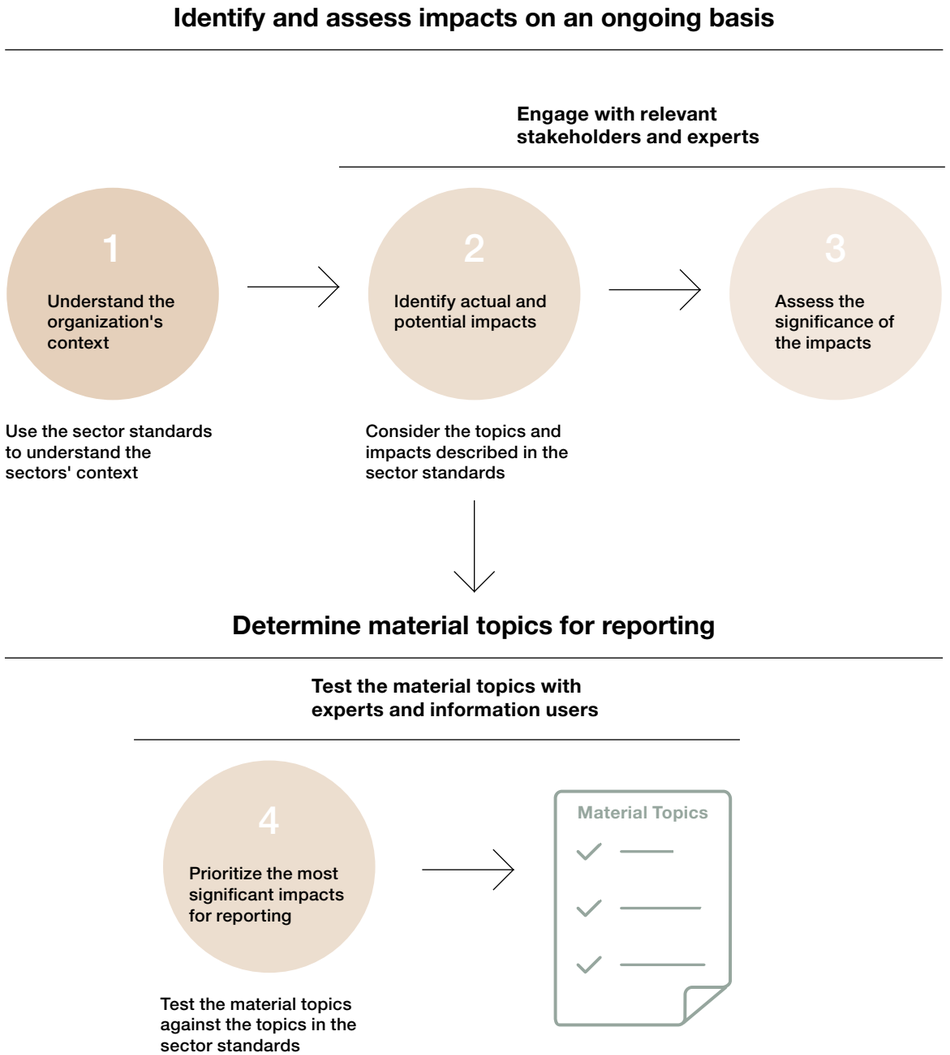
Where possible, we tried to simplify concepts in order to make the document as understandable as possible. For any detected incongruence or unclear content please refer to Arper's Sustainability Department at **sustainability@arper.com**.

Economic values are expressed in Euros (thousands and/or millions of euros). Sometimes the data are rounded to one decimal point or to a round number, and therefore their sum may not coincide exactly with the total value.

The reporting boundary of the data presented in the Report relates to full consolidated entities. Any limitations or clarifications concerning the calculation method are indicated in the relevant sections of the document.

5.2
Identification of material topics (GRI 3.1)

To define our material topics, we followed the indications of the GRI standards 2021. The GRI 3.1 defines the topic identification as follows:



Nonetheless, at the time when the standards came out, we had already gone through a deep analysis phase that had led to the identification of 17 topics of importance for our company.

These topics were the result of the following steps, which took place in this precise order:

1. Creation of a spontaneous committee on Sustainability covering all company departments
2. Delivery of the first Arper's Sustainability Manifesto
3. Conceptualization and execution of The Windmill Workshops – three sessions named **Core**, **Non-Core** and **Group** – with the declared goal of:
   - Identifying the main strategic key possibilities and the corresponding key issues of the Arper group as far as sustainability is concerned
   - Linking the strategic key possibilities to the United Nations Sustainable Development Goals (SDGs) in order to be able to use them as benchmarking and reporting
   - Contributing concretely to the drafting of a strategic document to be used as a blueprint for all other departments

   The three workshops included, respectively: (a) the members of the spontaneous committee ("CORE", 5 people), (b) remaining top management and second lines of management ("NON-CORE", 16 people) and (c) other pivotal people related to the rest of the group ("GROUP", 5 people) (i.e. a member of the BoD, Iride, etc.)
4. Identification of a first list of strategic topics
5. Production of a so-called "internal" materiality matrix, internally renamed into "Feasibility matrix", which provides an outline of how difficult it is to approach the topic within the company
6. Reaching out to our stakeholders to produce a classic "external" materiality matrix
7. Production of a strategic document which delineates the company's future sustainability direction

As far as point 6 is concerned, we identified 5 categories and 25 types of stakeholders, which resulted in 165 potential interviewees, to be interviewed on how they perceived our strategic topics. We chose to interact with them mainly through an online survey, while in some cases we conducted 1-to-1 calls. Still, using one single tool to collect information allowed us to deal with data in a more consistent manner.

The table below sums up categories, types, numbers and dialogue channels used.

Category	Type	Nr.	Dialogue Channel
Internal	Owner	1	1-to-1
Internal	CEO	1	1-to-1
Internal	Board of Directors	4	1-to-1
Internal	Top management	7	1-to-1
Internal	Talents	3	Online survey
Internal	Workers	6	Online survey
Suppliers	Raw material suppliers	4	Online survey
Suppliers	Semi-finished product suppliers	13	Online survey
Suppliers	Fabric suppliers	5	Online survey
Suppliers	Internal manufacturing	1	Online survey
Suppliers	External manufacturing	1	Online survey
Suppliers	Services suppliers	5	Online survey
Suppliers	Energy suppliers	1	Online survey
Suppliers	Consultants	2	Online survey
Suppliers	Designers	1	1-to-1
Customers	Clients B2B - Dealer	43	Online survey
Customers	B2B Clients - architects	39	Online survey
Customers	B2C Clients - corporations	6	Online survey
Customers	Generation Y (Millennials)	10	Online survey
Associations	Federlegno	1	1-to-1
Associations	Other associations	1	1-to-1
Associations	Academic organizations	1	1-to-1
Local communities	Local communities	3	Online survey
Media	Media	4	Online survey
Competitors	Competitors	2	1-to-1
		165	

All stakeholders had to rate specific topics on a scale from 1 to 10. However, we realized that not all stakeholder voices had the same weight. Therefore, we ranked them based on their ability to steer choices in Arper's social and environmental sphere and reported the following percentage ranges:

A	They have an impact on decisions today (e.g., Top management, Customers, Suppliers)	100%
B	They will shift the balance tomorrow (e.g., Millennials)	70%
C	They proactively support the achievement of objectives (e.g., Associations)	≤50%

This process produced a weighted list of topics which reflected their importance for the stakeholders:

Material Topic	Weighted Preference
Reduction of the environmental impact	9.404
Eco-design and life cycle thinking	9.248
Efficient use of resources	9.237
Quality of life and wellbeing of the person	9.205
Transition to a circular economy	9.099
Involvement and corporate culture	9.097
Inclusion, diversity and social protection	9.026
Responsible management of the value chain	8.829
Governance	8.814
Recovery and conservation of the cultural and natural heritage	8.769
Training and growth of the individual	8.761
Technological and economic progress	8.740
Radical transparency	8.622
Partnerships	8.507
Certification and voluntary schemes	8.387
Digitization of services and processes	8.370
Local communities	8.117

This information has confirmed the validity of the chosen topics, as graphically depicted in the materiality matrix described in the corresponding chapter of this report.

On top of the assigned rating, stakeholders had to indicate their top 5 priorities, which in turn informed the Sustainability Team on the appropriate level of importance of each topic. This served as a confirmation that the priorities that we envisaged were actually consistent throughout the whole process. In fact, the first three topics have also become Arper's sustainability pillars.

Material Topic	Weighted Preference
Quality of life and wellbeing of the person	135
Reduction of the environmental impact	109
Transition to a circular economy	90
Eco-design and life cycle thinking	89
Training and growth of the individual	74
Involvement and corporate culture	65
Governance	61
Efficient use of resources	57
Responsible management of the value chain	51
Radical transparency	44
Technological and economic progress	41
Digitization of services and processes	38
Inclusion, diversity and social protection	36
Partnerships	26
Recovery and conservation of the cultural and natural heritage	23
Certification and voluntary schemes	17
Local communities	16

One improvement that we foresee for the future is to fine-tune the weight of each stakeholder based on the specific topic: stakeholders that bear more insights on specific issues should be granted more importance.

At this stage, we still had not considered the actual impacts, given that the process was designed based on GRI 2016 standards, which did not approach the impact issue as a whole. Since the main goal was to produce a report compliant with the new 2021 standards, we integrated what we already had as follows (indicated numbers refer to the GRI 3.1 picture at the beginning of this section):

Understand the organization's context

We analyzed the topics included in the (sector) standards of other Boards/ institutions/assessment methods like SASB, MSCI, EFRAG, BIA, examined a selection of peers (9 competitors and partners) and consulted a third-party external expert to confirm the topic definition process.

Identify actual and potential impacts

We focused on the identification of actual and potential impacts of the topics that we delineated in the previous phase only, since we were quite confident that they were the most important ones for our business.
We confirmed this analysis with an external consultant, as well. See next chapter for details.

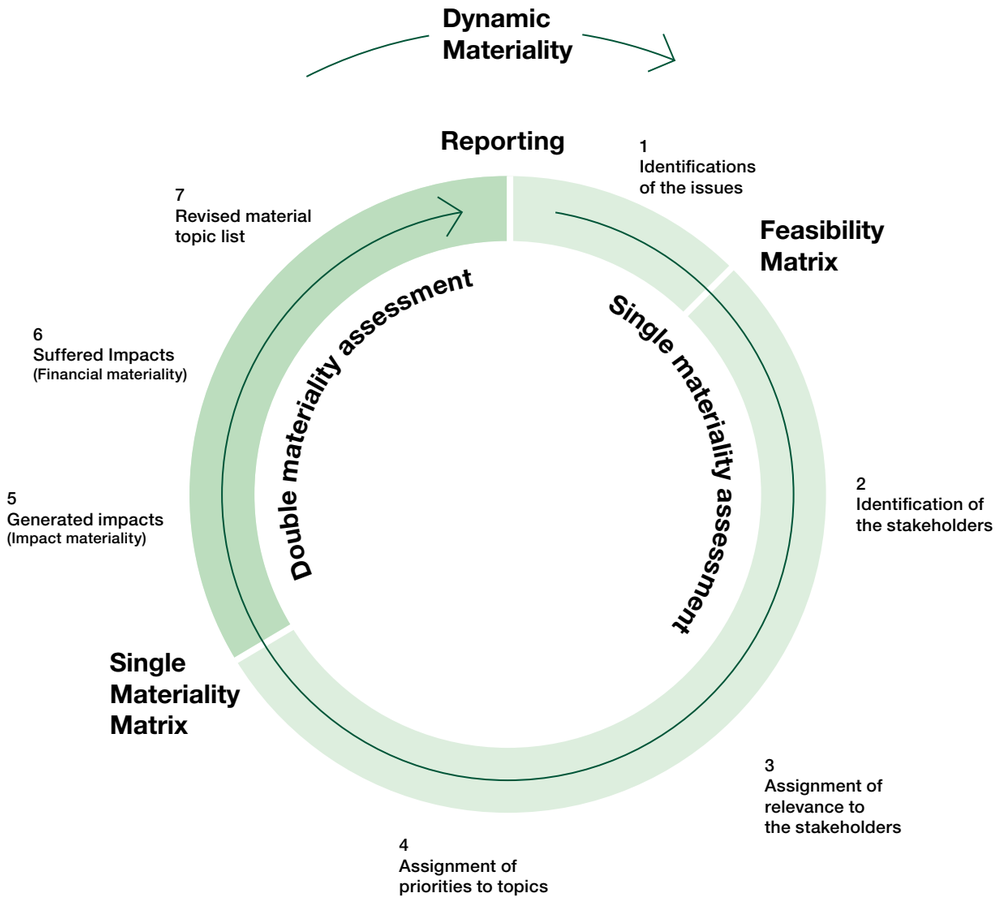
Assess the significance of the impact

This step was preceded by a first topic prioritization (see above for further details), for then being performed in both inside-out (impact) and outside-in (financial) fashion. The impact analysis produced a more refined prioritization which resulted in the exclusion of a topic that was initially included in the selection.

Prioritize the most significant impacts for reporting

We already had the priorities produced by our dialogue with our stakeholders. As a confirmation step, we tested them with a restricted pool of experts (third-party consultants), since no sector standards are currently available for the furniture sector.

Our process in a nutshell



A more detailed description of the format and information gathered during the workshops is available upon request from the Sustainability Department.

Final list of material topics

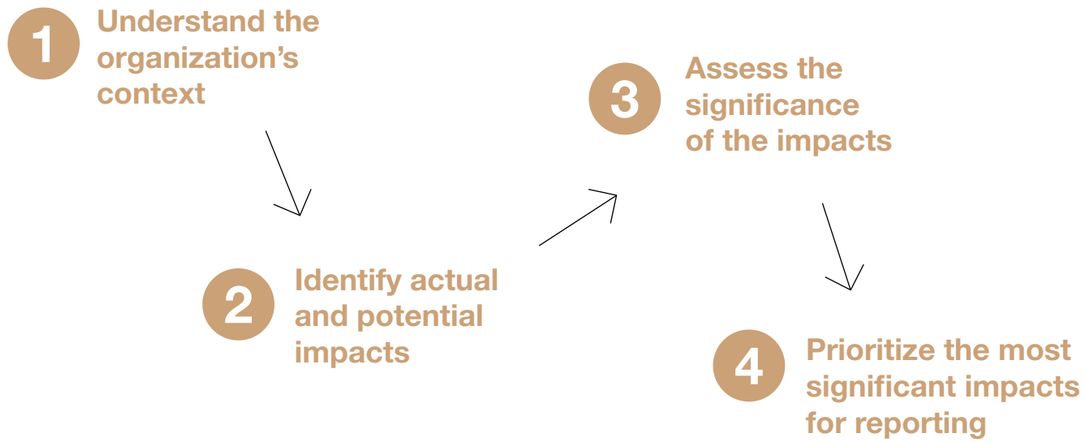
Our final material topics are:

- Quality of life and wellbeing of the person
- Reduction of the environmental impact
- Transition to a circular economy
- Eco-design and life cycle thinking
- Training and growth of the individual
- Involvement and corporate culture
- Governance
- Efficient use of resources
- Responsible management of the value chain
- Radical transparency
- Technological and economic progress
- Digitization of services and processes
- Inclusion, diversity and social protection
- Partnerships
- Recovery and conservation of the cultural and natural heritage
- Certification and voluntary schemes
- Local communities

These topics have been thoroughly discussed with and approved by the CEO of the company. They have then been presented to the Board of Directors for acknowledgement.

5.3 Management of material topics

The GRI 3 standard clearly defines the steps to be taken to identify the topics which should be disclosed in the report.



Step 1: Understand the organization's context

In this step, the organization generates an overview of its activities and business relationships, the sustainability context in which these occur, and an overview of its stakeholders.
This provides the organization with critical information for identifying its actual and potential impacts.

Step 2: Identify actual and potential impacts

This step focuses on the identification of an organization's actual and potential impacts on the economy, environment, and people across the organization's activities and business relationships. Actual impacts are those that have already occurred, and potential impacts are those that could occur but have not yet. Impacts can be of negative and positive nature, as well as have a short-term and long-term implication on people and the planet.

Step 3: Assess the significance of the impacts

As a third step, the organization assesses the magnitude of its identified impacts to prioritize them. Prioritization enables the organization to take action to address the impacts and also to determine its material topics for reporting. Prioritizing impacts for action is relevant, since very often it is not feasible to address all impacts immediately.

Assessing the significance of the impacts involves quantitative and qualitative analysis. How significant an impact is needs to be specified by the organization and will be influenced by several factors, including the sector of activity, its network of relations, and the lobbying activities they can implement. In any case, a substantial number of subjective decisions will be required. Such decisions cannot always be tracked down to a specific standard or methodology, since perceptions may differ among decision makers. In our case, a consultation with external experts has taken place to strengthen evaluation consistency. As far as quantitative analysis is concerned, a very simple methodology to determine the significance of each impact was developed. The methodology is based on a mathematical formula that includes scale, scope and likelihood (see GRI 3 2021 for further details on the selected approach). The scale of an impact refers to how detrimental or beneficial the impact is or could be, while the scope refers to how widespread the impact is or could be (e.g., the number of individuals or the extent of environmental resources that are or could be positively affected). We assigned a value ranging from 1 to 5 as reported in the following table.

Scale	Scope
1 Totally irrelevant	1 Very reduced
2 Minimal	2 Reduced
3 Medium	3 Medium
4 Relevant	4 Large
5 Very relevant	5 Very large

Finally, for potential impacts, we defined the chance (likelihood) that such impact materializes. The likelihood was determined qualitatively by an internal pool of experts led by the Sustainability team and was described mathematically using probability values.

Step 4: Prioritize the most significant impacts for reporting

In this step, to determine its material topics for reporting, the organization prioritizes its impacts based on their significance and arranges them from most to least significant, to then define a cut-off point (threshold) to determine which of the impacts it will focus its reporting on.

In our case, the formula used for the calculation is (Scale+Scope* Likelihood) and the threshold has been set to 5. This analytical phase results in a list of the organization's material topics, which is being listed here below.

Material Topics	Weighted Preference
Reduction of the environmental impact	37
Quality of life and wellbeing of the people	32.3
Certification and voluntary schemes	30
Transition to a circular economy	25.9
Efficient use of resources	23.6
Recovery and conservation of the cultural and natural heritage	16.6
Responsible management of the value chain	14.8
Technological and economic progress	14
Radical transparency	12.9
Engagement and corporate culture	12.6
Governance	10.6
Inclusion, diversity and social protection	10.5
Local communities	8.3
Training and growth of the individual	8.2
Eco-design and life cycle thinking	7.6
Partnerships	6.6
Digitalization of services and processes	2.8

Finally, the revised list of topics has been presented and approved by the CEO of the company.

5.4
The Economic Valuation of Impacts

A basic introduction has already been shared in the Impact Valuation section of this report. Below, we will elaborate on the basic concepts of both the original and revised methodology. This will help the reader better appreciate the efforts Arper is making to provide a fully transparent report of its activities.

Basic concepts

The concept of impact assessment is characterized by many different terms that could generate confusion and misunderstandings. Below we report the main concepts, to provide a solid starting point for the topics that have been addressed in this document.

Impact

The portion of the total changes in ecosystem conditions or human well-being that occur because of a particular activity.

Activities

Actions undertaken to manage a business or produce products/ services, which generate potential impacts due to interactions with ecosystems and society.

Externalities

An indirect consequence suffered by a third party which cost is not accounted for in the financial report of the organization responsible for the activity itself.
An externality can be positive or negative.

Ecosystem Services

The benefits that society derives from natural ecosystems (for example clean air, water supply or land productivity).

Causal chain or chain of impacts (impact pathway, causal chain, result chain)

The processes that connect activities to socio-environmental impacts through cause-effect relationships. Causal chains are fundamental to evaluate the social and environmental impacts of the organization's activities in a detailed manner.
A causal chain consists of five key components:

Input
the resources needed to carry out an activity (e.g. raw materials)

Activities
the flows or behaviors whose effects are intended to generate an impact (e.g. the processing of a material)

Output
the direct result of the activity (e.g. the CO2 emissions caused by production)

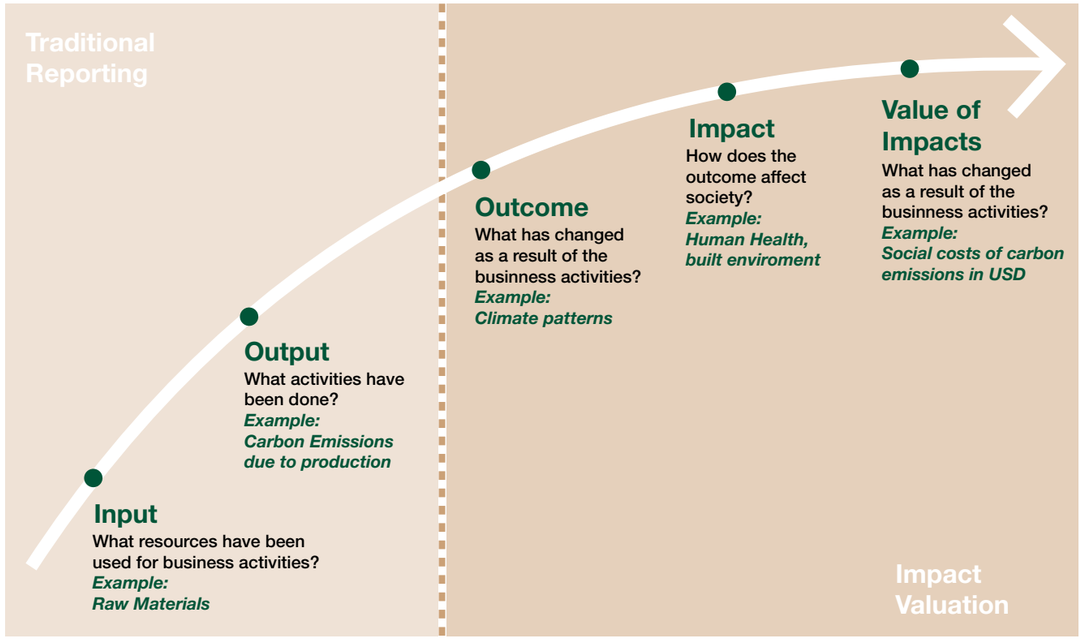
Outcome
the changes in the conditions of a population or ecosystem (e.g. climate change or reduction of ecosystem services)

Impact
the part of the outcome that affects human well-being or the ecosystem (e.g. human health or the built environment)

Activities
the flows or behaviors whose effects are intended to generate an impact (e.g. the processing of a material)

Impact value
the estimated monetary value of positive and negative impacts on society and the environment (e.g. expressed through the Social Cost of Carbon (SCC) in EUR/USD or through the Disability-Adjusted Life Year (DALY) indicator).

Impact drivers
input and output are grouped under the definition of impact drivers as they are the components that actually generate the impact itself. They represent the basis of traditional reporting, while the impact assessment extends the analysis of the drivers also to the outcome, to the actual impact and to the valorisation of the latter.



Impact valuation – Source: Schurr et al. (2017)



Providing a simple definition of basic concepts is not sufficient to comprehensively contextualize the topic of impact assessment. In fact, similar words are used on the topic of impact analysis, but they express different concepts and, consequently, could lead to confusion. Furthermore, there is not yet a standardized and globally accepted method for assessing impact, although many efforts have been made in this direction in recent years. It is therefore essential to explain three fundamental concepts such as measurement, evaluation and monetization.

Measurement

is distinct from valuation, and valuation does not necessarily equate to monetization. Measurement involves the collection of raw primary and secondary data, which varies depending on the type of capital being assessed. Financial capital is typically measured in monetary terms, manufacturing capital in units of weight, while human capital can be measured by factors such as the number of people, or metrics like workplace accidents and employee satisfaction levels. These measurements serve as prerequisite for evaluation processes.

Evaluation

enables collected data to be interpreted and compared, either through assigning a numerical value (rating) or assessing progress relative to predefined objectives (benchmarking).

Monetization

is a specific type of valuation, which is used by companies to quantify the capital generated by the organization. It represents a fundamental pillar of traditional accounting and can be drawn up following different accounting methods (GAAP, IFRS, etc.). However, when it comes to non-financial capitals, monetization is a relatively new concept and lacks specific regulatory frameworks. In recent years, there has been a growing consensus within the the financial community that to comprehensively assess the total value generated by a company, all forms of capital should be monetized.
This includes not only financial and manufacturing capital, but also human and environmental capitals. Dedicated tools such as the Environmental Profit and Loss account (EP&L) area increasingly used to facilitate this broader evaluation.
Still, one important aspect to take into consideration is that monetization is heavily influenced by parameters that have a considerable impact on the final result. For instance, choosing a low Social Cost of Carbon can help cover the actual negative performance of the organization, thus facilitating greenwashing practices.
Furthermore, the classic monetization concepts – the net profit above all – tend to suggest a compensation of negative impacts with positive ones, while
the doctrine of impact evaluation is very explicit on the fact that the two types of impacts must be evaluated independently (VBA, 2021a).

Historical evolution of the main impact valuation methods

The pioneers

The monetary assessment of the impacts started in 2011 with seminal work carried out by Puma with the support of PwC, which culminated in the first environmentally-focused income statement, also called Environmental Profit & Loss (EP&L).
Puma was able to quantify the global environmental impact of its products and – mostly importantly – to share the data with its clients. A few years earlier, in 2007, Puma was acquired by the luxury group Kering, which owned other prominent brands such as Balenciaga, Bottega Veneta, Gucci and Yves Saint Laurent. Kering adopted and refined the practice of EP&L, making it understandable to a larger audience thanks to a simplified description of the applied methodology[3].

In 2014, the chemistry company AkzoNobel raised the bar and aligned its own impacts to the four main capitals: the natural, social, human and financial capitals.
Their 4D P&L Report was of particular interest because it included the entire value chain (upstream, core and downstream)[4], for the first time ever.

In response to Puma's request to contribute to the review and expansion by industry experts of its EP&L methodology, in 2014, the pharmaceutical giant Novo Nordisk released their first EP&L, developed in collaboration with Trucost, NIRAS, 2.-0 LCA and the Danish Ministry of the Environment. The document was originally divided into two parts: (a) the main report, which focused on the results and their practical applications, and (b) the methodology section, which delivered a thorough description of the applied methodology.

The year after – 2015 – the Swiss cement manufacturer Holcim published its first integrated P&L[5]. The term “integrated” has become increasingly familiar, implying that identified impacts are directly linked to financial results through specific additional indicators.
In the same year, the Swiss group Nestlé published their first assessment of impact (Vionnet et al., 2015), which from then onwards would be considered as a basic reference for large-scale analyses of the nutrition system.

A few years later, in 2019, Solvay, a Belgian chemistry company, followed in Kering's footsteps and developed an approach for the evaluation of the impact in the form of a sustainable product development guide called “Sustainable Portfolio Management”, which would have a large impact on the global strategic direction of the company. The approach was discussed in a separate case study edited by Harvard University (Serafeim et al. 2022) and included to date on the website of the Belgian manufacturer[6].

Over the span of about ten years, only a few exceptionally large companies have implemented the impact valuation methodology. These pioneers were firmly convinced they were on the right track and quickly realized the importance of collaborating to foster the evolution of the methodology.

In 2016, Nestlé and Holcim representatives started a working group where they exchanged relevant information related to approaches, casual chains, data sources, frameworks and any other type of resource that could contribute to the further evolution of the E P&L movement.
The working group subsequently became what is now known as the Impact Valuation Roundtable (IVR).
In same year the Natural Capital Protocol – a decision-making protocol that enables organizations to explore their relationship with nature – was launched[7].

The Natural Capital Protocol quickly became a very relevant reference in the field of impact valuation and the IVR started several collaborations to demonstrate the validity of their approach (Schurr et al., 2017).
It is important to mention that these pioneers of impact valuation did not develop their methodologies on their own, they relied heavily on industry experts. Several of these approaches are described in the following section.

[3] kering.com/en/sustainability/measuring-our-impact/our-ep-l/
[4] www.akzonobel.com/content/dam/akzonobel-corporate/global/en/investor-relations-images/result-center/archive-annual-reports/2019-2010/Akzonobel-annual-report-2014.pdf
[5] holcim.com/sites/holcim/files/2022-04/06132016-press-lafargeholcim_sustainability_report_print_2015.pdf

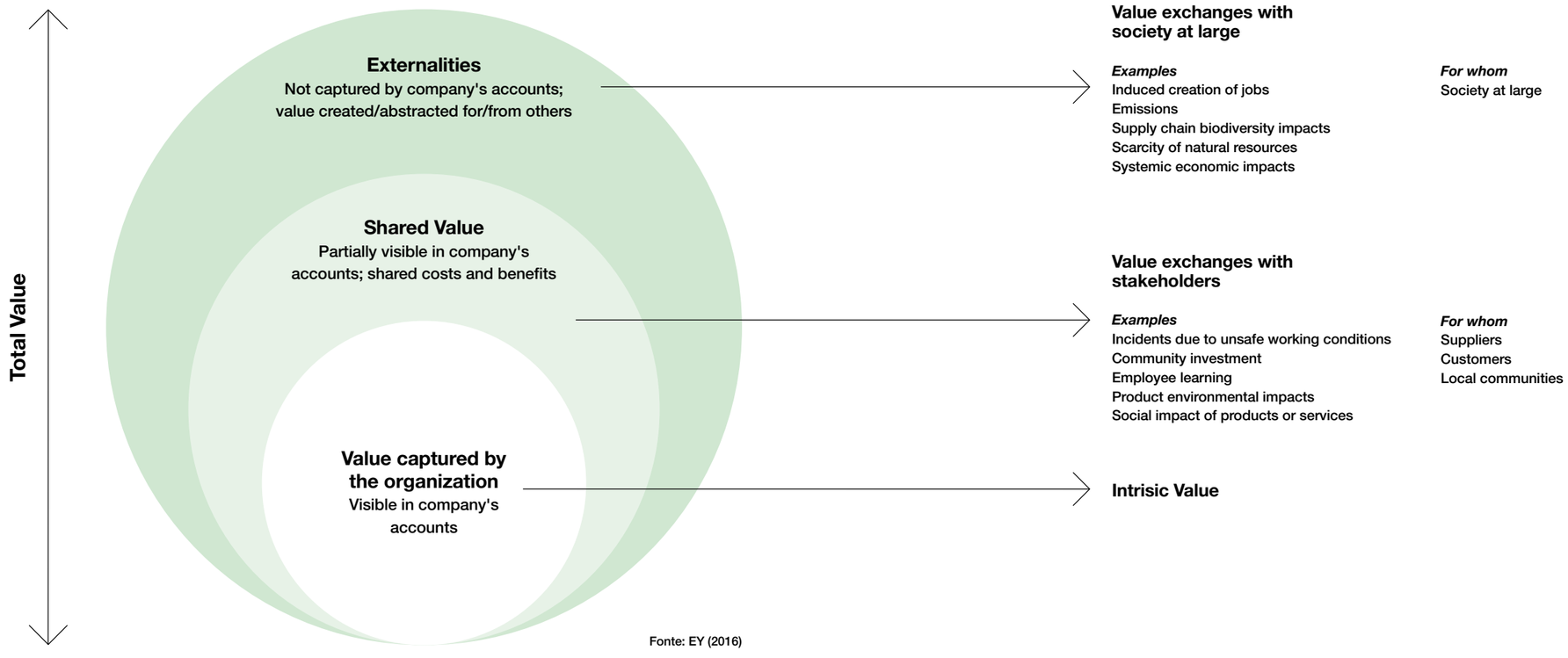
[6] www.solvay.com/spm/0001.html
[7] The Natural Capital Protocol was developed by the then Natural Capital Coalition (now Capitals Coalition), a platform that aims to harmonize best practices and develop a global, standardized and globally accepted approach in the field of impact valorisation.

Available methodologies

In the following years, all efforts began to be consolidated into methodologies. The first example in these terms was that of True Price, a social business founded in 2012 with the aim of developing tools to measure and monetize the impact by recalculating the price of hundreds of products[8]. The concept of "True Price" begins with the market price of goods and adds the external costs that are typically unaccounted for. There external costs are calculated based on the monetization of specific factors (Galgani et al., 2023), thus revealing the full costs involved in the production of goods and services.

In 2013, the global consultancy company PwC developed what is still considered the turnstone of the economical quantification of impacts, which allowed for all subsequent methodologies to be developed. The framework, called "Total Impact Measurement & Management" (TIMM), attributes a positive or negative value to impacts on the society, the environment and the global and corporate economy (PwC, 2013).
This methodology has been the starting point of the standardization project carried on by the Value Balancing Alliance.

In 2014, on wake of its main competitors, KPMG also developed a methodology for the monetary valuation of impacts.
As a matter of fact, the KPMG methodology was the first one to develop a graphical approach called "True Value Bridge", which allows for a generic but immediate comprehension of the evaluated impacts, thus facilitating the structuring of a more complete analysis.
In 2016 the consulting company EY developed the Total Value framework (EY, 2016). Although similar for many aspects to the model of other competitors, the methodology chooses to concentrate mainly on the support of strategic decisions by developing the concept of the total value of an organization. Figure 2 represents their concept of value, which has been a reference for several methodologies developed in recent years.
The latest methodology to date is the eQALY (Vionnet et al., 2024) – publicly disclosed in August 2024 –, which aims at increasing the quantity and relevance of the information available to decision-makers.
One of the advantages of this method is its high operationality, since it has been reportedly used in several scenarios as different as single activities, projects, businesses and investment funds.



Fonte: EY (2016)

[8] trueprice.org

The Value Balancing Alliance methodology

Among all projects started in the last twenty years, the Value Balancing Alliance (VBA) is worth mentioning. The mission of the alliance is to develop a comprehensive methodology that enables any company to translate its social and environmental impacts into financial terms.

The VBA includes very important players like BASF, Bosch, Novartis and Porsche, just to name just a few[9], and is driven by the strong belief that an accounting approach to impacts will create and consolidate competitive advantage in companies, will add resilience to their business models and will enable stakeholders to take more informed decisions. In other words, that they will create long-term value for the whole society.

The evaluation methodology currently comprehends five documents:

The general introduction to the **methodology**
(“General Paper V 0.1”)

The methodology related to **social** and **economic** topics
(“Social and Economic V 0.2”)

The methodology related to **environmental** topics
(“Environment V 0.1”)

The methodology related to the **modelling using extended input/output tables**
(“Extended Input-Output Modelling”)

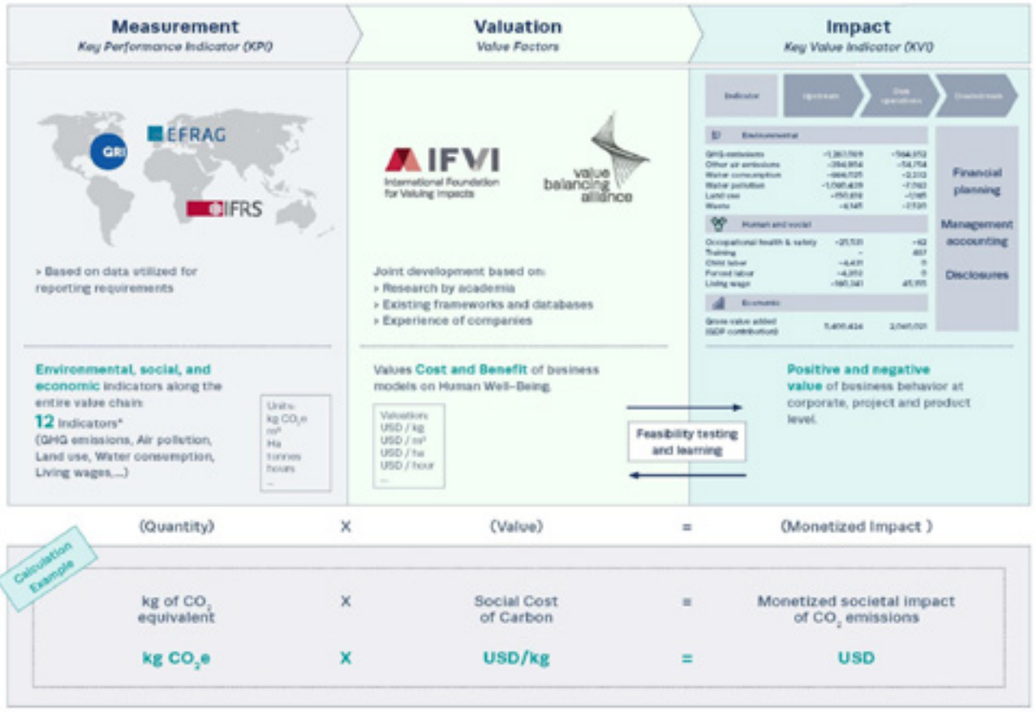
The general guide for the **evaluation of the downstream impact**
(“Downstream Industry Agnostic Guidance”)

[9] For a complete list of Alliance partners see www.value-balancing.com/en/about-us.html

The calculation logic

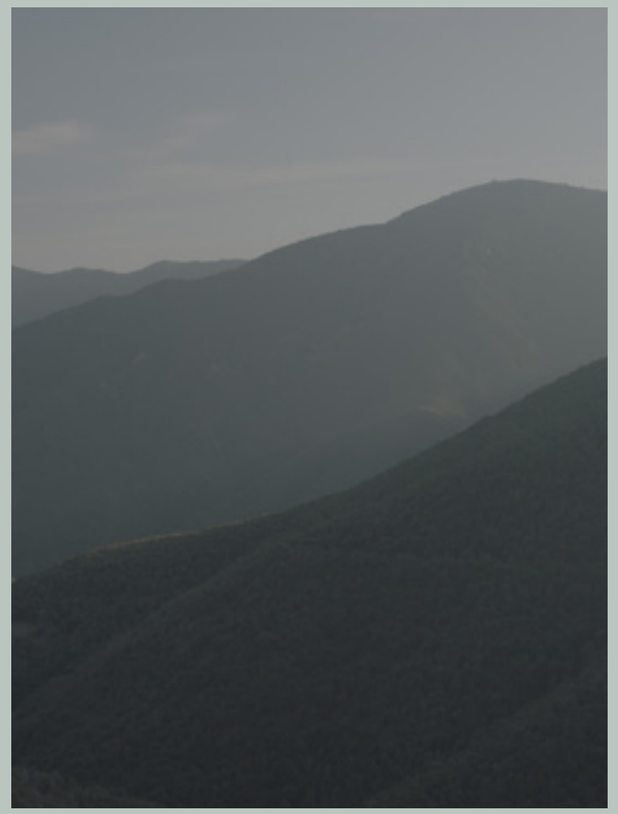
In order to produce a monetary value of the footprint of the organization, the impacts of any action are modelled based on the casual chains concept.

The picture below illustrates one of processes, the one linked to GHG emissions:



VBA causal chain for GHG emissions – Source: VBA website (www.value-balancing.com/en/our-work.html)

In conclusion, the VBA methodology employs a monetary metric to identify the impacts of an organization's business model.
It contextualizes these impacts locally, assesses their significance and magnitude, and ultimately integrates them into the organization’s current management practices as much as possible.



The Social Cost of Carbon

In the last ten years, many States have adopted the SCC methodology to account for the impact of policies aimed at climate change damage prevention. Implementing measures with a Marginal Abatement Cost (MAC) greater than the SCC implies investing in climate change mitigation activities more than society is currently willing to bear. In other words, the SCC allows you to execute costs-benefit analyses related to climate change: adopting measures that turn out to be too expensive compared to the benefits they generate would mean to neglect opportunities in other fields, such as education or health.

The SCC is calculated by means of a mathematical model that involves four different phases:

1. prediction of future emissions based on current and forecasted population, economic growth and others macro factors
2. modelling of future climate forecasts based on the data gathered in Phase 1
3. evaluation of the economic impact that the climate changes will have on agriculture, health, energy consumption and other key macroeconomic indicators
4. discounting of the estimated future damages to a corresponding value in the present and determination of the total sum

These four steps allow to obtain a damage baseline generated by the GHG emissions. The process is then reiterated by adding a unit of additional emissions (1 kg of CO_2eq), in order to be able to quantity the change in total damage. The delta represents the value of the SCC. Modelling then performs the same operation for hundreds of thousands of times to reduce uncertainty.

Application scenario for Arper Group

The original parameters of the methodology

The VBA 0.2 methodology aims to monetize the impact of an organization through the evaluation of 12 different environmental, social and economic parameters:

Environmental parameters	Social parameters	Economic parameters
greenhouse gas emissions, emissions of other gases, water consumption, water pollution, land use, waste	occupational health, safety, training, child labour, forced labour, living wage	gross value added (GVA)

The methodology provides a calculation method for each indicator connected to the identified parameters. The table below summarizes the indicators and the calculation method associated with each of them:

Scope	Parameter	Indicators	Main Calculation Methods
Environmental	Greenhouse gas emissions	Corporate carbon footprint (scope 1-2-3)	SCC based on DICE/RICE, PAGE, FUND modelling
	Emissions of other gases	Direct measurement or EEIO tables	Dispersion model of gases (ATMOS 4.0) superimposed on a housing density grid, social cost of impact of pollutants (Muller et al., 2007)
	Water consumption	Number of litres used, water stress index, water depravation factor, number of malnutrition cases, human health factor, number of infectious diseases, impoverishment of aquifers	DALY (Disability-adjusted Life Years), mathematical regression models, human health factor, cost estimation of social consumption of water (AQUASTAT dataset)
	Water pollution	Exposed population, direct measurement of effluent (own and direct providers), data coming from LCA or EEIO tables, quantities of toxic pollutants emitted (phosphorus, nitrogen)	USEtox (Rosenbaum et al., 2011) integrated with GLOBACK and limited to emissions in water, DALY, phosphorus calculation model (Helmes et al., 2012) for freshwater and standard LCA for salt water, DALY, WTP as defined by Ahlroth (2009)
	Land Use	Hectares of land occupied, type of occupation, geographic location geographic, data coming from LCA or EEIO tables	Calculation based on the loss of ecosystem services by ecoregion and country
Environmental	Waste	Direct measurement or data coming from LCA or EEIO tables	SCC multiplied by the GHG emissions produced during disposal (landfill and incineration), net of obtained energetic recovery, WTP, HARAS model
Social	Occupational Health & Safety	Short absence, long absence, partial inability, total inability, death	Sum of costs to the worker and the community after excluding the employer costs, multiplication of the costs for the corresponding number of accidents (illness and injury) in each severity category, alignment of the related national costs comparing GDP per capita, application of inflation starting from the base year of the study (Safe Work Australia, 2015)
	Training	Hours of training, average salary of employees, average age of employees, turnover rate	The wage increase is determined using a formula in which the years that the individual derives benefits from increased earnings are calculated up to the point of retirement
	Child labour	Number of child labour cases, gross national income per capita, health utility income (HUI) by nation	Quantification of the child labour cases for one's own operations and for one's suppliers based on the sector they belong to (7.2% for the manufacturing sector), estimation of the loss of income due to missed school training, HUI calculation, calculation of DALYs lost
	Forced labour	Number of forced labour cases	Quantification of the cases of force labour for one's own operations, injury estimation due to forced labour of one's supply chain using the Global Slavery Index, assigning 50% of the DALY value to each case of injury caused.
	Living wage	Salary, minimum salary per country, positive-negative balance	Positive-negative balance calculation between the salary paid in every country and the minimum salary of the country for one's own operations and one's own suppliers, calculation of the country's HUI, determination of the DALY and QALY values, separate sum of negatives and positives impacts of all employees
Economic	Gross Value Added	Turnover, other operational income, net inventory of the finished products, raw materials, others operating expenses, NOPAT, depreciation expenses, employee benefits expenses, tax expenses	Production approach or Income approach depending on data availability. The Income approach corresponds to: NOPAT + depreciation expenses + employee benefits expenses + tax expenses (less production subsidiaries)

Evidently, some of the calculation methods used by the VBA, although well-grounded and tailored to the targeted result, are rather difficult for medium-to-large businesses to apply. This is because it is notoriously hard for them to identify and catalog the necessary data. To extend the methodology to as many entities as possible, it is necessary to simplify the calculation method.

Application scenario for Arper Group

The Simplified Parameters

Starting from the result of the VBA calculation, the ultimate goal of the simplification was to obtain the best possible alignment, while applying a more streamlined and understandable procedure.
The first step was to evaluate two important aspects related to the calculation methods:

- the degree of complexity: the result of the calculation can be more or less complex to obtain, and consequently the result could be more or less reliable
- the development state of the calculation method: some parameters from the VBA methodology do not cover all identified impacts yet, or they are currently under further study

The following table summarizes the state of the art, as perceived by us:

Scope	Parameter	Complexity	Evolution State
Environmental	Greenhouse gas emissions	Average	🟢
	Emissions of other gases	High	🟢
	Water consumption	High	🟡
	Water pollution	High	🟡
	Land use	High	🟡
	Waste	Average	🟢
Social	Occupational Health & Safety	Low	🟢
	Training	Average	🔴
	Child labour	Average	🟡
	Forced labour	Low	🟡
	Living wage	Average	🔴
Economic	Gross Value Added	Low	🟢

Complexity and maturity of the VBA calculation methods – Source : own calculation based on Value Balancing Alliance (2021a, 2021b, 2021c).

This preliminary evaluation allowed us to concentrate our efforts on those parameters that turned out to be more complex to manage. In turn, this led to the elaboration of an alternative calculation method, which is summarized in the next table.

Scope	Parameter	Suggested Method
Environmental	Greenhouse gas emissions	SCC as per Rennert et al. (2022)
	Emissions of other gases	Social cost (own elaboration)
	Water consumption	Excluded from the valuation process
	Water pollution	WTP as defined by Ahlroth (2009) (136 USD/ KgP for fresh water + 68 USD/ KgP and 9 USD per Kg/N for salty water)
	Land use	Excluded from the valuation process
	Waste	SCC multiplied by emissions produced by the end of life based on the LCA data of the corporate carbon footprint
Social	Occupational Health & Safety	Sum of costs for the worker and the community excluding the employer's costs, multiplied by the corresponding number of accidents (illness and injury) in each severity category. These costs are then adjusted to align with national costs by comparing them to GDP per capita. Inflation adjustments are applied starting from the base year of the study (Safe Work Australia, 2015).
	Training	Excluded from the valuation process
	Child labour	Number of child labour cases from one's own operations and the supply chain by comparing the UNICEF database (data.unicef.org) and the number of suppliers' employees, estimation of the income loss (10% of gross national income per capita due to missed training for the subsequent 20 years of non-child labour). Division of the total by the average annual national income. The result represents the DALYs lost, which are then quantified as per VBA literature at 185,990 USD.
	Forced labour	Number of force labour cases for one's own operations, estimation of the total number of accidents due to forced labour of one's own tier 1 suppliers using the Global Slavery Index, assignment of 50% of the DALY to each case of possible forced labour
	Living wage	Average positive/negative balance calculation between paid wage and minimum wage based on the data collected by Valuing Impact (Vionnet, 2020) for one's own operations and main suppliers
Economic	Gross Value Added	Gross Value Added = production value – suffered costs for third economies (Income approach)

Summary of the simplified calculation methods for each one of the VBA parameters – Source: own processing based on the Value Balancing Alliance methodology (2021a, 2021b, 2021c).

In more detail, the changes made to each one of the individual parameters are:

Greenhouse gas emissions

As highlighted by Rennert et al. (2021), impact assessment models (IAMs) based on the modelling DICE/FUND/PAGE (Nordhaus, 2017) depict scenarios that are no longer aligned with the global evolution of world economy. This leads the author to suggest a SCC value which is much higher than the previously considered one (Rennert et al., 2021).

Emissions of other gases

The suggested simplification involves transforming the impact of geo-localized air pollutants into global impacts, similar to the approach used in the VBA methodology for GHGs. While this approach sacrifices some precision, it enhances practicality by avoiding dispersion modelling. Moreover, calculating a social cost of atmospheric pollutants remains uncertain. Therefore, we opted for more historical sources, estimating missing data by comparing the tracking of US air pollutants[10] with the globally estimated cost of the yearly generated damage (Muller & Mendelsohn, 2007). The social cost of air pollutants is summarized in the following table:

Air pollutant	Tons issued in the usa in 2002 (thousands)	Damage caused in the usa in 2002 (million usd/year)	Social cost (usd/ ton.)
$PM_{2.5}$	5,000	17,400	3,480.00
PM_{10}	16,670	9,100	545.89
SO_2	14,845	19,500	1,313.57
NH_3	4,354	10,000	2,296.74
VOC	17,333	12,100	698.09
NO_x	25,254	6,200	245.50
Total	**83,456**	**74,300**	

Summary of the estimated social costs of atmospheric pollutants– Source: own elaboration based on the caused harm estimated by Muller & Mendelsohn (2007).

While the social cost of air pollutants generally aligns with the experiments carried out by Muller and Mendelsohn (2007), the estimations for NOx and VOC are higher than those utilized by the VBA methodology for assessing the impacts of non—CO2 polluting gases on agriculture (Value Balancing Alliance, 2021b).

[10] www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data
[11] UNICEF data on child malnutrition are available at the following address: data.unicef.org/topic/nutrition/malnutrition
[12] The latest published report is available at the following address: www.ecdc.europa.eu/sites/default/files/documents/efs2_7209_Rev2.pdf

Water consumption

We decided to exclude from our analysis some of the impacts identified by the VBA methodology: “Malnutrition” – Italy is not present in UNICEF’s Child Malnutrition Database[11] –, “Infectious water-borne diseases” – the annual report of the European Center for Disease Prevention and Control[12] indicates no cases for Italy – and “Groundwater depletion” – in 2020 the total amount of renewable water resources of Italy was 191.30 Km3 /year, which was greater than the total national water requirement of 33.65 Km3/year (17.59%[13]);

Water pollution

Willingness-to-Pay (WTP) is the maximum price that a person is willing to pay for a given product, service or condition. Ahlroth (2009) calculates a precise WTP value in relation to the pollutants highlighted by the eutrophication potential[14] derived from the LCA calculation.

Land use

Excluded from the valuation process due to the extreme complexity of the calculation and the uncertainty of the final result.

Waste

The reference term is the SCC as calculated by Rennert et al. (2021), this time multiplied by the CO2eq emissions assigned at the end-of-life stage as per the corporate carbon footprint (part of category 5 according to ISO 14064-1:2019).

Occupational Health & Safety

As per original calculation method identified in the VBA methodology.

Training

Excluded from the valuation process since the VBA calculation method does not include the impacts on society, but only those directly related to the organization. From this perspective, we believe that valuation has already been partially included in the Gross Value Added parameter.

[13] Both data refer to the FAO AQUASTAT database. For Renewable Water Resources , see: data.apps.fao.org/aquastat, while for national water needs, see: statista.com/statistics/1404836/total-water-withdrawal-italy/ . The aggregate data is confirmed by the AQUASTAT summary tables: data.apps.fao.org/aquastat
[14] ARPA FVG defines eutrophication as the enrichment of water with nutrients, in particular nitrogen and/or phosphorus compounds, which causes an abnormal proliferation of algae and/or higher forms of plant life, producing the disturbance of the the balance of the organisms present in the water and the quality of the waters involved . The definition is available at: www.arpa.fvg.it/temi/temi/acqua/impariamo-insieme/eutrofilazione/

Child labour

The calculation of the Health Utility of Income (HUI) is rather complex, and the data needed for processing are not easy to gather. Therefore, we decided to proceed as follows:

1. Quantification of the child labour issues within one's own organization;
2. Estimation of the child labour issues in one's supply chain based on the data from the UNICEF Data Warehouse[15] and the total number of suppliers' employees;
3. Estimation of the loss of income caused by missed basic training, which is being quantified in 10% of the Gross National Income per capita[16] for a time span of 20 years[17];
4. Calculation of the value corresponding to lost DALYs by dividing the total by the average annual national income;
5. Multiplication of the number of lost DALYs by the DALY value taken from the VBA methodology[18].

Forced labour

The suggested calculation is very similar to the VBA methodology, except for the way it estimates the probability of encountering force labour cases forced along the supply chain: the simplified version retrieves data from the Global Slavery Index and applies it to the number of employees of all tier 1 suppliers.
The results are then valuated as per VBA methodology.

[15] The filtered data from the UNICEF data warehouse on child labor is available at the following address: data.unicef.org/resources/data_explorer/unicef
[16] Gross income per capita (GNI) data is available in the World Bank database at: databank.worldbank.org/source/world-development-indicators
[17] The data is the result of our estimation by the author based on the VBA documentation.
[18] Value Balancing Alliance (2021a, 2021b, 2021c) values the lost DALY at $185,990.

Living Wage

As in the case of the Child Labour parameter, the main hurdle is the calculation of the health utility of income (HUI), together with the fact that the Italian legislation does not foresee a legal minimum wage.
To proceed to a reliable valuation of this parameter, we decided to use the value indicated by Vionnet (2020) for a typical family as a starting point, for then calculating a positive/negative balance for the organization.

Gross Value Added

As per original calculation method identified in the VBA methodology.

All the calculated values are expressed in USD and require therefore an alignment to the Italian purchasing power. Purchasing power parities (PPPs) are the rates of currency conversion that try to equalise the purchasing power of different currencies, by eliminating the differences in price levels between countries. In practice, their refer to the number of units of a country's currency needed to purchase the same quantities of goods and services in the domestic market as one U.S. dollar would buy in the United States.
The basket of goods and services priced is a sample of all those that are part of final expenditures: final consumption of households and government, fixed capital formation, and net exports. This indicator is measured in terms of national currency per US dollar. For 2022 (latest data currently available) the OECD sets the PPP between USD and EUR/ Italy at 0.596[19].

In summary, we believe that the simplified methodology proposal allows to get very close to the eventual result of the VBA methodology, but it makes use of less external sources, where the only one linked to a real cost for the organization is the corporate carbon footprint.

[19] data.oecd.org/conversion/purchasing-power-parities-ppp.htm

Simplified Valuation Data

This section focuses on the valuation of the 9 selected parameters.

Greenhouse Gas Emissions

The total amount of GHGs generated by Arper in 2023 was equal to 12,547.93 t/CO2eq Rennert et al. (2021) set the SCC value at USD 185.00/t. Therefore, the negative impact generated by the greenhouse gas emissions corresponds to the following:

Total GHG impact = 12,547.93 x USD 185.00 = USD 2,321,367.05
USD – EUR/Ita via PPP = USD 2,321,367.05 x 0.596 = **EUR 1,383,534.76**

Emissions of Other Gases

The emissions of air pollutants of the Arper Group and its supply chain in 2023 (scope 1, 2 and 3) include primary data – Arper Spa is subject to third-party auditing for the emissions of its prototyping department – and secondary data – gathered by means of the corporate carbon footprint inventory –, both expressed in tonnes.
The total impact is calculated by multiplying the single air pollutant amount by the corresponding social cost.

PM_{10} : 2.501 x 545.89 = USD 1,365.27
$PM_{2.5}$: 0.791 x 3,480.00 = USD 2,752.68
SO_2 : 4.738 x 1,313.57 = USD 6,223.69
NH_3 : 0.068 x 2,296.74 = USD 156.18
VOC : 0.002 x 698.09 = USD 1.39
NO_X : 8.487 x 245.50 = USD 2,083.56

Total valuation = USD 12,582.77
USD – EUR/Ita via PPP = USD 12,582.77 x 0.596 = **EUR 7,499.33**

Water Pollution

The corporate carbon footprint inventory also allows to calculate the eutrophication potential, i.e. the undue increase of nutrients such as potassium, nitrogen and phosphorus in fresh and salt water. Such values are then multiplied by WTP as defined by Ahlroth (2009):

Fresh Water
Potassium: 1,856.76 x USD 136 = USD 252,519.36

Salt Water
Potassium: 7.46 x USD 68.00/KgP = 507.28
Nitrogen: 0 x USD 9.00/KgN = USD 0.00

Total valuation = USD 253,026.64
USD – EUR/Ita via PPP = USD 253,026.64 x 0.596 = **EUR 150,803.88**

Waste

The emissions classified as Category 5 of the corporate carbon footprint at group level correspond to 301.89 tonnes of CO 2 eq, and in our case all of them are generated by the product's end-of-life. Therefore, the calculation turns out be as follows:

Total impact of waste = 301,89 x USD 185.00 = USD 55,849.65
USD – EUR/Ita via PPP = USD 55,849.65 x 0.596 = **EUR 33,286.39**

Occupational Health & Safety

In 2022, one minor accident occurred resulting in a prolonged absence of 6 working days, with an overall impact valuation of EUR 20,283.06. However, in 2023, no work-related illnesses or accidents were recorded at the group level, resulting in an Occupational Health and Safety impact parameter set to 0.

Total cost = **EUR 0.00**

Child Labor

In 2023, no cases of child labor were reported within the Arper Group and its tier 1 suppliers.

However, there is a potential risk associated with a tier 2 supplier located in Vietnam, where primary data collection was not possible. Previous site visits suggest an average annual workforce of 140 workers. According to the UNICEF database, there is a 5.693% risk of child labor in economic activities[20]. Based on this, an estimated 8 potential cases of child labor can be projected. The gross national income per capita of Vietnam for 2022 (the last known figure) is 10,844.07 USD.

Loss of income = 8 cases (Vietnam) x USD 10,844.07 = USD 86,752.56
USD 86,752.56 x 10% x 20 years = USD 173,505.12
Calculation DALYs lost = USD 173,505.12 : USD 10,844.07 = 16 DALYs lost
Quantification of DALYs lost = 16 x USD 185,990.00 = USD 2,975,840.00
USD – EUR/Ita via PPP = USD 2,975,840.00 x 0.596 = **EUR 1,773,600.64**

[20] https://data.unicef.org/resources/data_explorer/unicef_f/?ag=UNICEF&df=GLOBAL_DATAFLOW&ver=1.0&dq=VNM.PT_CHLD_5-17_LBR_ECON+PT_CHLD_5-17_LBR_ECON-HC..&startPeriod=2016&endPeriod=2023

Forced Labour

No cases of forced labour have been reported within the Arper Group. 72.78% of tier 1 suppliers are based in Italy (607 companies), while the other suppliers are located mainly in the United States (106), Japan (27), Germany (26), Mexico (14), and the United Kingdom (8). The following table sums up all countries where the Arper Group sources its products from and the corresponding forced labour risk estimated by The Global Slavery Index:[21]

Supplier's Country	N. of Supplier's Country	Employed population in private sector (2023)	N. of private businesses (2022)	Average n. of employees	Total estimated employees	GSI Risk (per 1,000 employees)	Estimated forced labour cases
Austria	2	4.244.000	289.267	14,67	29,34	1,86	0,05
Belgium	4	4.879.000	853.323	5,72	22,87	0,97	0,02
Canada	1	12.214.400	1.216.550	10,04	10,04	1,83	0,02
Denmark	4	2.731.000	379.917	7,19	28,75	0,64	0,02
France	3	27.399.000	4.842.033	5,66	16,98	2,06	0,03
Germany	26	40.255.000	3.221.804	12,49	324,86	0,56	0,18
Ireland	2	2.471.000	382.603	6,46	12,92	1,10	0,01
Japan	27	57.950.000	5.156.063	11,24	303,46	1,14	0,35
Latvia	1	828.000	144.614	5,73	5,73	3,38	0,02
Luxembourg	2	313.000	42.453	7,37	14,75	0	0
Mexico	14	59.403.947	4.817.791	12,33	172,62	6,59	1,14
Netherlands	2	8.671.000	2.204.413	3,93	7,87	0,57	0
Norway	2	2.599.000	449.992	5,78	11,55	0,52	0,01
Poland	3	16.776.000	2.668.101	6,29	18,86	5,51	0,10
Romania	1	7.568.000	994.970	7,61	7,61	7,55	0,06
San Marino	2	23.963	5.150	4,65	9,31	0	0
Slovenia	1	960.000	195.114	4,92	4,92	4,45	0,02
Spain	5	20.684.000	3.332.445	6,21	31,03	2,31	0,07
Sweden	5	4.900.000	837.717	5,85	29,25	0,57	0,02
Switzerland	3	4.429.000	158.694	27,91	83,73	0,50	0,04
Taiwan (Republic of China)	1	11.530.000	771.311	14,95	14,95	0	0
United Arab Emirates	1	4.800.000	343.000	13,99	13,99	13,37	0,19
United Kingdom	8	33.000.000	5.600.000	5,89	47,14	1,80	0,09
United States	106	128.346.299	6.294.604	20,39	2161,33	0	0
Total							2,45

The average Global Slavery Index reports an total value of 2.45 cases every 1,000 employees, which means that in the case of the Arper Group and its tier 1 suppliers the risk of incurring in a forced labour issue has to be calculated as follows:

Forced labour = (DALY x 50%) x 2.45 = (USD 185,990.00 / 2) x 2.45 = USD 227,838.00
USD – EUR/Ita via PPP = USD 227,838.00 x 0.596 = **EUR 135,791.45**

[21] See ec.europa.eu/eurostat/databrowser/bookmark/8ba7a1c6-f81e-4f82-954c-071ed8f5ac95?lang=en and https://ec.europa.eu/eurostat/databrowser/view/sbs_sc_ovw__custom_11451642/default/table?lang=en for details. For data on Mexico, please see www.economia.gob.mx/datamexico/en/profile/geo/mexico?occupationMetrics=workforceOption&totalAndInformalJob=totalOption

Minimum Wage

The average net annual salary in 2023 paid by Arper to its employees has been summed up by country in the following table. The methodology is being investigated by Anker & Anker (2017) and Vionnet (2020) and refers to the year 2022.

Country	LW Single individual (USD/year)	Average USD to EUR (2023)	LW Single individual (EUR/year)	Average Net Pay (Arper)	Delta	Number of employees (FTE)	Positive/negative Balance
United Arab Emirates	20,431	0.9248	18,895	89,300	70,405.15	1.3	91,526.69
Belgium*	20,573	0.9248	19,026	29,047	10,020.86	1.0	10,020.86
China*	10,785	0.9248	9,974	29,047	19,072.74	1.0	19,072.74
Germany*	19,153	0.9248	17,712	29,047	11,334.59	1.0	11,334.59
France*	17,388	0.9248	16,081	29,047	12,966.40	1.0	12,966.40
United Kingdom	21,720	0.9248	20,087	47,014	26,927.35	4.9	131,944.00
Italy (Arper + Iride)	18,389	0.9248	17,006	29,047	12,041.15	207.2	2,494,925.72
Japan	14,435	0.9248	13,350	40,044	26,694.35	5.7	152,157.82
Mexico	10,173	0.9248	9,408	29,850	20,442.34	4.0	81,769.35
Norway*	24,128	0.9248	22,313	29,047	6,733.63	1.0	6,733.63
Singapore*	48,850	0.9248	45,176	29,047	-16,1294	1.0	-16,1294
Sweden*	20,785	0.9248	19,222	29,047	9,824.88	1.0	9,824.88
United States	32,121	0.9248	29,705	50,318	20,612.92	34.0	700,839.22
Total						264.10	3,706,986.50

* Employed through Italy (same average pay value)

Given the sensitivity of the data, it was not possible to gather relevant information from tier 1 suppliers, which have been therefore excluded from the valuation. To translate USD into EUR the average yearly value from the European Central Bank has been used, as suggested by Vionnet (2020).

Total balance positive = EUR 3,706,986.50

Gross Value Added

There are two principal methods for calculating GVA at company level: the production approach and the income approach, the latter being privileged because of data availability.

The income approach directly calculates the components of the difference between intermediate inputs and outputs considering remuneration for primary inputs of production (labour and capital) and other taxes, less subsidies for production.

These components are:

The costs of employment (wages and other benefits)

Production taxes (less subsidies)

Gross operating surplus (profit)

GVA can be calculated using the following P&L items:

GVA calculation income approach	
System of National Accounts definition	**Corresponding Profit & Loss items**
Net operating surplus	Profit (after taxes) plus interest expenses, net of financial income
Consumption of fixed capital	Depreciation / impairment expenses
Compesation of employees	Employee benefits expenses
Other taxes, less other subsidies on production	Tax expenses (less production subsidies)
	=GVA

To obtain the GVA we deducted the total cost of staff from the official value, since the positive/negative impact of headcount has already been reflected in the Minimum Wage parameter, thus avoiding double counting[22]. The Gross Value Added (GVA) of Arper Group for 2023 equals to EUR 1,844,123.00.

Gross Added Value (GVA) = Gross Added Value OIC – Total costs of personnel

GVA = EUR 13,644,076.00 – EUR 11,799,953

GVA = EUR 1,844,123.00

[22] IAS 1.102 principles are currently being applied only to the consolidated financial statements at group level, while Arper Spa still applies the OIC accounting principles (ITA GAAP)

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5.5 Project description

Below we provide a short description of the main idea behind the project listed in the sustainability plan for the next 5 years (2023-2027). For some of them, deployment has already started, while some others might be rescheduled based on overall progress. The degree of project definition may also vary depending on the implementation timeline.

“The Pact”

Activation of "Give-And-Take" projects for the Arper people with the aim of encouraging them to invest in their personal wellbeing (e.g. availability of zero-emission vehicles vs. "recommended" use, Friday afternoon free vs. season ticket at the pool, etc.).

Energy cashback

Arper already has some guidelines (rules of conduct) in place that aim to reduce energy consumption. Energy saving as a global KPI for all employees becomes connected to a reward mechanism: if the annual target set by Ownership/Management is achieved, the delta accrued is deposited in a fund dedicated to the creation of works/services aimed at to people's wellbeing (attributable to the company agreement).

Sustainability culture

Daily event during the year where Arper stops its operations and invests the day in approaching culture and sustainability.

Information bank

Creation of a free knowledge trading system among colleagues where everyone can contribute with the things that they know/can do in exchange for other people’s knowledge, where Arper makes company spaces available during extra-working hours.

Green area repurposing

Repurposing of the outdoor spaces owned by the company dedicating them to people’s wellbeing (e.g. synergic vegetable garden, dining space, outdoor fitness).

Local community support

Further introduction of social cooperatives into the supplier network for daily routine jobs (packaging, marketing tools, etc.)

Partnerships with local schools

Joint project with the Didactic Management and Education Department of Monastier di Treviso with the aim of opening the doors of the company to second/third graders.

Benefits/BCorp

Transformation of Arper into a benefit company, with the option of obtaining the BCorp certification at a later step

Social certification

SMETA is an audit which focuses on standards of labor, health and safety, environmental performance, and ethics at the supplier’s site and is designed to help protect workers from unsafe conditions, overwork, discrimination, low pay and forced labor.

Eco-design workshop

Increase of the eco-design conscience by organizing a series of hands-on workshops on eco-design principles.

Circular startup

Spinoff project with focus on the creation of a 100% circular product by revisiting some of our legacy collection.

Industrial symbiosis

Creation of virtuous circles for the recovery of waste materials from other production lines of the Arper supply chain

Use of secondary raw materials in products

Recovery and upcycling project connected to the waste generated during the upholstery phase.

Product passport

Development of the necessary infrastructure to produce a digital product passport which includes data on product sustainability.

Product traceability

Development of a downstream and upstream product tracking methodology, making extensive use of new technologies.

Product LCA databank

Implementation of a process aimed at producing internal LCAs on the main products/production processes of our range, as well as new developments

Responsible partnerships

Creation of partnerships with organizations and companies to create an extended sustainability network which should help put forward sustainability goals (i.e., peer sustainability groups, universities, manufacturers’ associations, etc.).

Widespread Ambassadorship

Creation of a network of sustainability ambassadors extended to the main suppliers, with the aim of creating a movement across the supply chain (Arper District).

Sustainability KPI for top management

Inclusion of KPIs related to sustainability aspects in the (top) management's MBO.

Identification and Reduction of GHG impact intensity

Development of a plan to gradually reduce the group's overall GHG emissions. Part of this project has already started in 2022 with a series of workshops which have been extended to the whole Arper population with the aim of identifying possible areas of intervention at group level.

Energy Manager and Energy management plan

Implementation of an Energy Manager and the corresponding specific energy-related targets, with the aim to improve energy efficiency and reduce scope 1 and scope 2 emissions. This process should then be formalized in a ISO50001 certification.

Packaging 2.0

Reevaluation of Arper's packaging system and materials in order to reduce the impact of packaging as a whole and optimize transportation.

Sustainable mobility

The “Sustainable Mobility on the Go” (S.M.O.G.) project aims to decrease the company’s impact caused by the movement of people and goods. In order to achieve this, several programs will be launched at different points in time. The first three projects are: (a) a carpooling service, possibly extendable to other neighboring companies, which includes a reward system for drivers and passengers; (b) an e-bike sharing plan, which will stimulate slow mobility for employees coming from the local area; (c) the electrification of the shuttle service between company locations and slow but steady transition to an electric corporate fleet.



5.6
Direct economic value generated and distributed

The parameters used for the calculation included in this report are:

Source of the data	Is the Consolidated Financial Statement from January 1st, 2023 to December 31st, 2023
Revenues	Total Revenues (revenues related to sales + other revenues)
Operating costs	Cost of materials, cost of services and other operating expenses
Wages and employee benefits	Payroll expenses of the year
Payments to capital providers	Dividends paid to the shareholders
Payments to the P.A.	Current income taxes of the year
Investments in the community	Donation expenses, included under “Other Operating Expenses” in the **Consolidated Financial Statement** as of 31st December 2022
Retained economic value	EBITDA - payments to PA - dividends
Distributed economic value	Costs for services + cost for raw materials + donations + salaries and employee benefits + payments to the Public Administration + dividends

5.7
Corporate Carbon Footprint assumptions

Methodological LCA choices

The adopted LCA approach is attributional. The LCA attributional model represents the evaluation of the actual, average or estimated supply chain of a product or process. The existing or estimated system is considered in a static technological context. The attributional approach is a type of modeling in which environmentally relevant inputs and outputs for each process involved in the product life cycle are attributed to the functional unit.
The functional unit is the activity of a whole year of the Arper Group.



The reporting year is 2023.
Organizational boundaries are defined as the whole Arper Group.
A control approach has been adopted, meaning that the organization accounts for all GHG emissions and/or removals from facilities over which it has financial or operational control. With regards to end-of-life allocation, the “cut-off” approach is adopted. Raw materials and production processes are included for virgin resources. No allocation is made for materials subject to recycling. The recycling process is included for input of recycled resources. Outputs subject to recycling are regarded as inputs to the next life cycle.
Reporting boundaries are defined according to ISO 14064-1:2019.
The study includes direct GHG emissions (Category 1), indirect GHG emissions from imported energy (Category 2), indirect GHG emissions from transportation (Category 3), indirect GHG emissions from products used by the organization (Category 4) and indirect GHG emissions associated with the use of products from the organization (Category 5) of Arper Group in 2023.
Indirect GHG emissions related to natural gas not included in Category 1 are reported as indirect GHG emissions from other sources (Category 6).
A significance analysis is performed to evaluate indirect GHG emissions based on criteria indicated in ISO 14064-1.

“Category 1 – Direct GHG emissions” occur from GHG sources that are owned or controlled by the organization, distinguished in the following subcategories:

- Direct emissions from stationary combustion (ex. heaters, gas turbines, boilers);
- Direct emissions from mobile combustion (ex. company fleet running on diesel or gasoline);
- Direct emissions from industrial processes (ex. manufacturing, waste treatment);
- Direct fugitive emissions from the release of GHGs in anthropogenic systems (ex. refrigerant leaks);
- Direct emissions from land use, land use change and forestry (LULUCF).

Category 1 includes direct emissions from natural gas combustion for boilers, company vehicles, refrigerant leaks based on data provided by the company.
Indirect emissions from imported energy (Category 2) include emissions only from purchased electricity because no energy other than electricity (for instance heat, steam, cooling and compressed air) was imported by Arper Group in 2023.
Indirect emissions from transportation (Category 3) consist of business travels, employee commuting, clients and visitors transport, transportation of purchased products from suppliers, capital goods and company waste.
Indirect emissions from purchased products, capital goods, waste treatment, water consumption, and office cleaning are included in Category 4. For the sake of simplicity, purchased products are modeled based on primary data about material composition and product weight. There are no emissions from the use of assets.
Indirect emissions from the use of services such as mail delivery, conference call, consulting, etc. are excluded from the study based on the significance analysis.
Category 5 only includes the end-of-life stage of products. There are no emissions from downstream leased assets. Indirect emissions from the use stage of the products are excluded from the study based on the significance analysis.
Category 6 comprises indirect emissions related to natural gas that are not included in Category 1 (i.e., emissions due to the fuel production, infrastructure and and the portion of the company fleet running on electricity).

Main assumptions and simplifications

- The SimaPro 9.6 software and Ecoinvent v3.8 are used for Carbon Footprint calculation.
- Showroom: waste production and visitors to shared spaces with other companies are neglected; Energy consumption in shared spaces with other companies are allocated based on the occupied floor surface area.
- Indirect emissions related to the purchase of electricity (Category 2) from the grid are reported considering the national energy mix as available in the Ecoinvent database v3.8. The location-based approach is used as indicated in the reference ISO standard 14064-1:2019 (par. E.2.1).

Transportation (Category 3)

- If not specified, vehicle fuel is assumed as petrol for America and diesel for Europe.
- If not specified, Euro 4 is assumed as vehicle emissions standard.
- If not specified, a medium size car is assumed for vehicles, cars, Uber cars, and taxi.
- If not specified, a 16-32 ton, Euro 4 truck is assumed for waste transport.

Transport of goods (Category 3)

- For Arper SpA, 80% of destination countries is considered based on the transported weight and re-proportioned to 100%.
- For the remaining Arper units the main destination was considered (>90% of the total weight), with the exception of Iride and Arper Japan, for which all destinations were considered as they were limited in number.
- Transport from the company to the capital of the destination country is assumed, with an additional local road transport of 300 km.

If transport is intercontinental, transport by ship is considered (assuming the most popular port close to the capital of the destination country).

- For Arper USA, the average distance from the 4 locations (Chicago, High Point, Los Angeles, New York) to the capital of the destination country is considered.

Capital goods (Category 4)

- The entire impact related to raw materials and their production is attributed to the reporting year (2023). The impact is not spread over the useful life of the assets.
- Capital goods are grouped in main categories (ex. steel products, air conditioning, workshop tools) with their respective weights.
- Only suppliers strictly related to manufacturing (ex. production of components, semi-finished products, finishing operations, product storage) are considered, excluding services such as logistics, consultancy, and IT (Category 4).
- 80% of total turnover from all suppliers to the Arper Group is considered to select the most relevant 40 suppliers of which 2 are excluded from the study due to the fact that they carry out only minor operations.
- GHG emissions due to emails, credit transfers, and investments (Category 4) are not considered.
- The use stage of the products (Category 5) is not assessed.

End of life stage (Category 5)

- Starting from selected major destination countries for transportation, 90% of countries based on transported weight are considered to simplify product and packaging end-of-life scenarios.
- Waste scenarios are based on statistical data from Eurostat and OECD database respectively for European and non-European countries.

6

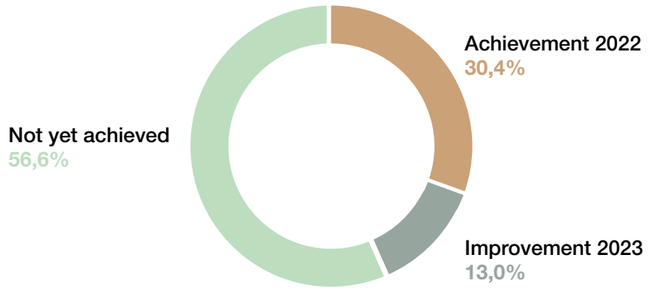
DATA APPENDIX

6.1
Goals recap

Area of interest	KPI	GRI Disclosure	Description	Target	Year	2022	2023	Trend
People	Employee turnover	401-1	Negative employee turnover (terminations)	< 10%	2023	9.2%	11.7%	↘
			Positive employee turnover (new hires)	Pos > Neg	2023	✓	✓	=
	Internal training on sustainability issues	404-1	Annual training hours per capita	Training on sustainability topics +10%	2023	11.57	17.50	↗
				Extend to all subsidiaries	2023	No	Yes	↗
	Category and gender	405-1	Total number of employees by professional category and gender	50% male-female-ratio	2027	45.7%	45.7%	=
	Vulnerable groups		Number of employees belonging to vulnerable groups by gender	Vulnerable group ratio >= 10%	2024	9.9%	9.4%	↘
	Salary and remuneration	405-2	Remuneration ratio Women to Men	100% in all categories	2027	1 out of 4	2 out of 4	↗
	Health and Safety	416-2	Incidents of non-compliance with regulations and/or voluntary codes	0	2023	0	0	=
Product	Supplier's screening using ESG criteria	ARP-4	Certified products	1 new EPD per year	2024	0	0	=
				Greenguard certification on all seatings	2023	✓	✓	=
				FSC certification on all new wood items	2024	✓	✓	=
	Secondary raw materials used	301-2	Percentage of recycled input materials used to manufacture the organization's primary products and services	>20% (considering the whole current range)	2027	14,00%	16.14%	↗
		301-3	Reclaimed products and their packaging materials	5%	2027	0%	0%	=
	Waste	306-3	Waste produced/Waste intensity	-10%	2027	7.8%	15.66%	↗
	Circularity index	ARP-1	TECLA score by FederlegnoArredo	50%	2025	43%	55%	↗
Emissions	Corporate carbon footprint	305-1/2/3	GHG emissions	42% reduction of Scope 1-2 and between 25%-42% reduction of Scope 3 emissions compared to 2022 (consistent with a possible future alignment with the science-based targets)	2030	1-2 = 651.23 3 = 12,206.63 tCO2eq (base year)	1-2 = 663.13 3 = 11,634.75 tCO2eq	↗
	Energy	302-1	Total energy consumption	100% electricity from renewable sources	2027	49.6%	61.56%	↗
	Water	303-3	Water withdrawal sources	-20%	2027	5,273 ML	3,093 ML	↗
Supply chain	Supplier's screening using ESG criteria	308-1	New suppliers assessed using environmental criteria	100% of new suppliers	2024	✓	✓	=
		414-1	New suppliers assessed using social criteria	100% of new suppliers	2024	✓	✓	=
		ARP-3	ESG rating for all strategic suppliers	50%	2025	X	X	↗
				100%	2030	X	X	↗
Community	Local community engagement	413-1	Operations with local community engagement	3 long-term programs a year	2027	1	1	=

Data has been revised due to previous calculation errors

% GOALS ACHIEVED



6.2 Corporate Carbon Footprint

Greenhouse Gas Inventory

	Quantity (Kg CO_2eq)							Emission Factor (kg CO_2eq/kg)	GWP kg CO_2eq	GWP %
Gas	**Category 1**	**Category 2**	**Category 3**	**Category 4**	**Category 5**	**Category 6**	**TOTAL**		**TOTAL**	**TOTAL**
CO_2 fossil	154,888	455,870	1,875,932	8,275,870	178,137	44,854	10,985,550	1	10,985,550	89.3%
CO_2 land transformation	0	96.4	876	12,738	10.8	48.9	13,770	1	13,770	0.1%
CH_4 and transformation	0	0.014	0.203	2,172	0.004	0.008	2,401	29.8	71.6	<0.1%
CH_4 biogenic	0	165	30.4	6,154	4,438	2.37	10,790	27.2	293,479	2.4%
CO_2 to soil or biomass stock	0	2.07	31.3	282	0.59	2.15	318	-1	-318	<0.1%
CH_4 fossil	5.16	1,261	1,598	23,577	169	386	26,997	29.8	804,511	6.5%
N_2O	2.05	21.1	46.0	246	10.5	1.32	326	273	89,129	0.7%
SF_6	0	0.143	0.044	0.847	0.001	0.003	1,038	25,200	26,165	0.2%
NF_3	0	6.51E-11	1.40E-11	8.13E-04	1.81E-12	6.19E-13	8.13E-04	17,400	14.1	<0.1%
Other GHGs	2.56	34.7	35.4	411	0.424	13.4	498	-	85,512	0.7%
GWP (kg CO_2eq)	155,602	507,533	1,940,296	9,330,593	306,787	57,074	12,297,884	-	12,297,884	100%

Gas	kg CO_2 biogenic
CO_2 biogenic emissions	1,685,619
CO_2 biogenic uptake	1,663,723

6.3
GRI index

GRI content index

Statement of Use
Arper Group has reported in accordance with the GRI Standards for the period from 1st January 2023 to 31st December 2023.

GRI 1 used
GRI 1: Foundation 2021

Applicable GRI Sector Standard(s)
None

GRI standard/other source	Disclosure	Location/Information	Omission		
			Requirement(s) omitted	Reason	Explanation
General disclosures					
GRI 2: General Disclosures 2021	2-1 Organizational details	11-15			
	2-2 Entities included in the organization's sustainability reporting	32			
	2-3 Reporting period, frequency and contact point	8			
	2-4 Restatements of information	8			
	2-5 External assurance	8			
	2-6 Activities, value chain and other business relationships		yes	Confidentiality constraints	Names and processes are covered by confidentiality constraints
	2-7 Employees	63			
	2-8 Workers who are not employees		yes	Confidentiality constraints	Omissions are due to confidentiality issues
	2-9 Governance structure and composition	158-159	partly omitted	Confidentiality constraints	Omissions are due to confidentiality issues
	2-10 Nomination and selection of the highest governance body	Nominated by the owners			
	2-11 Chair of the highest governance body	Mr. Claudio Feltrin, President of the Board			
	2-12 Role of the highest governance body in overseeing the management of impacts	Overall strategic direction and control			
	2-13 Delegation of responsibility for managing impacts	Management of impacts have been delegated to CEO			
	2-14 Role of the highest governance body in sustainability reporting	Control and compliance			
	2-15 Conflicts of interest	None detected			
	2-16 Communication of critical concerns	No major concerns have been communicated to the BoD			
	2-17 Collective knowledge of the highest governance body	2 sessions dedicated to the progress of sustainable development activities			
	2-18 Evaluation of the performance of the highest governance body		yes	Confidentiality constraints	Omissions are due to confidentiality issues
	2-19 Remuneration policies		yes	Confidentiality constraints	Omissions are due to confidentiality issues
	2-20 Process to determine remuneration		yes	Confidentiality constraints	Omissions are due to confidentiality issues
	2-21 Annual total compensation ratio		yes	Confidentiality constraints	Omissions are due to confidentiality issues
	2-22 Statement on sustainable development strategy	42-49			
	2-23 Policy commitments	See the "Our approach" section in the dedicated section of each material topic			
	2-24 Embedding policy commitments	See the "Our approach" section in the dedicated section of each material topic			
	2-25 Processes to remediate negative impacts	34-37			
	2-26 Mechanisms for seeking advice and raising concerns	157			
	2-27 Compliance with laws and regulations	157			
	2-28 Membership associations	151			
	2-29 Approach to stakeholder engagement	182-185			
	2-30 Collective bargaining agreements	76.84% For employees not covered by collective bargaining agreements, like employees abroad, the organization determines their working conditions and terms of employment according to the corresponding national legislation			

GRI standard/other source	Disclosure	Location/Information	Omission		
			Requirement(s) omitted	Reason	Explanation
Material Topics					
GRI 3: Material Topics 2021	3-1 Process to determine material topics	182-188			
	3-2 List of material topics	189			
	3-3 Management of material topics	190-192			
Quality of life and well-being of people					
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	63			
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	63			
	401-3 Parental leave	63			
GRI 416: Customer Health and Safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	63			
Transition to a circular economy					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	69			
	301-2 Recycled input materials used	69			
	301-3 Reclaimed products and their packaging materials	69			
GRI 306: Waste 2020	306-3 Waste generated	69			
Reduction of the environmental impact					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	78-79			
	302-3 Energy intensity	79			
GRI 303: Water and Effluents 2018	303-3 Water withdrawal	79			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	78			
	305-2 Energy indirect (Scope 2) GHG emissions	78			
	305-3 Other indirect (Scope 3) GHG emissions	78			
	305-4 GHG emissions intensity	78			
Engagement and corporate culture					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	89			
	404-2 Programs for upgrading employee skills and transition assistance programs	89			
Efficient use of resources					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	95			
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	95-97			
	306-3 Waste generated	95			
Recovery and conservation of the cultural and natural heritage					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			

GRI standard/other source	Disclosure	Location/Information	Omission		
			Requirement(s) omitted	Reason	Explanation
Inclusion, diversity and social protection					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	108			
	405-2 Ratio of basic salary and remuneration of women to men	109			
Radical transparency					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
Certifications and voluntary schemes					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	125			
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	125			
Training and growth of the individual					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 403: Occupational Health and Safety 2018	403-5 Worker training on occupational health and safety	131			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	131			
	404-3 Percentage of employees receiving regular performance & career development reviews	131			
Responsible management of the value chain					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	137-139			
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	125			
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	125			
Partnerships					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
Governance					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	160			
	205-3 Confirmed issues of anti-corruption and actions taken	157			
	402-1 Minimum notice periods regarding operational changes	158			
GRI 206: Anti-competitive behaviour 2016	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	160			
Technological and economic progress					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	163			
Local communities					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			
GRI 202: Market Presence 2016	202-2 Proportion of senior management hired from the local community	167			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	167			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments and development programs	167			
Ecodesign and life cycle thinking					
GRI 3: Material Topics 2021	3-3 Management of material topics	190-192			

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