

Sustainability Report 2022

Essentials



Contents

Letter from the President	4	E for Environmental	54
Flowers and Plants from the RadiciGroup World	7	S for Social	86
		G for Governance	152
The Group	8		
Who we are	9	Flowers and plants from our world	164
Our Mission	9	Sustainability Report collaborators	166
The Code of Ethics	10	Assurance statement	168
Values	10	Contacts and useful addresses	169
United Nations	13		
Sustainable Development Goals (SDGs)			
The Group Quality, Environment, Energy, Health and Safety Policy	14		
Figures making a difference	16	Case Studies	
A global presence	18	<i>A year of awards</i>	66
RadiciGroup governance	20	<i>Energy-Action</i>	74
Sustainability is embedded in everything we do	24	<i>Roadmap to climate action</i>	78
Organisational structure	26	<i>Outdoor training</i>	98
RadiciGroup Business Areas	27	<i>Knowledge, awareness, consequences</i>	104
The main areas of application	28	<i>Health and well-being</i>	108
We put our Customers at the centre of everything we do	40	<i>Little artists</i>	110
We seek the best to provide the best	42	<i>Radipeople®</i>	120
Work the system, always: trade associations	44	<i>Life Cycle Assessment</i>	124
Radici. One company, many worlds	46	<i>Textile excellence</i>	128
Sustainability	48	<i>Sustainability, innovation and fashion</i>	130
A sustainability story	50	<i>Introducing Anima</i>	136
The materiality and sustainability matrix	52	<i>Uni-Forme</i>	138
Stakeholders	53	<i>Logit and the territory</i>	150
		<i>Enablon</i>	162

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*Once again this year, I welcome you to the opening of the RadiciGroup Sustainability Report as if I were welcoming you through the door of one of our companies. Turning the pages of this report is like stepping onto one of our sites and discovering all its unique features. Sustainability is now so much a part of us that we cannot talk about our plants, our expertise, our offer to the market without talking about **People**, the **Environment** and **Innovation** as the key factors that define us. The Sustainability Report is a transparent presentation of our company, providing a dynamic, all-round view.*

*In 2022, we embarked on a major review and update of our sustainability strategy through which we want to remain at the forefront of ethics and competitiveness. We know that sustainability and competitiveness go hand in hand and are mutually reinforcing. Together with 200 Stakeholders, we reflected on the material topics that guide us on our current and future path. We reaffirmed our deep commitment to the environment, people, health and safety, and communities. But we have also shared with our Stakeholders that **digitalisation**, the **value chain**, **governance** and many other issues are also of increasing relevance to us, and these are explained in the following pages.*

*As you will read in the report, despite the macroeconomic and geopolitical difficulties in 2022, our **environmental performance** remained **strong**. I am particularly pleased to mention the further **increase in the renewable energy** we use, the investments in decarbonisation and the **decrease in product-related emissions**. This is where we have worked extensively with the value chain to implement **solutions that perform well but are also “light” on the environment**, as described in the case studies. Innovation has played an important role on this journey; it has been the tool to explore further opportunities related to, for example, the circular economy, recycling or bio-based polymers, to make the most of the resources we use.*

*We do not just say we are working to reduce our footprint – we prove it with facts and hard data. We have carefully measured the impact of our products through **Life Cycle Assessment** studies and will continue to do so in order to make improvements where they are needed. As you will see, digitalisation is increasingly helping us in this and in our day-to-day work, and we are putting it to work for sustainability in a number of projects.*

*This Sustainability Report is about people who share a common vision of **Health and Safety** as non-negotiable*

*values, along with **respect, non-discrimination** and valuing individual differences. Last but not least, the report describes who we are, who our **Employees** are, those that build the Group's success every day through their work and passion, and to whom, as every year, **I would like to express my gratitude**.*

*There are more than 3,100 people in our Group, and I am pleased to see that the number of Employees is gradually increasing. And that's not all. Every year, we offer new **specialised training courses**, develop and update the skills of our Employees, offer young people positions with **growth prospects** and provide **professional development** at every stage of their careers.*

*We recognise that our **attractiveness to young people** and our ability to retain talent depends heavily on the **integrity and credibility of our actions**. It is together with young men and women that we want to build the future of the Group.*

*Ours is a company that reaches out to the world, but we're **proud to say that we are rooted** in the Local Communities where our businesses “live”. It is a pleasure for me to discover and share with you the different ways*

*in which we have supported **Local Communities** in 2022. Support for sporting activities, participation in cultural events and assistance to people in difficult health situations are all part of being RadiciGroup.*

*I would like to conclude this letter with a quote from the Group Code of Ethics, which has become an important reference point for all of us over the past year. Increasingly, **we have to have a sense of “ownership”**, of both the ability to do things and the responsibility to do them well. This is the commitment that I personally renew here with the people of RadiciGroup and all those who are part of our journey towards sustainability*

”

Angelo Radici
President of RadiciGroup



“
**A sustainable future
belongs to those who make
it happen, not to those who
just imagine it.**”

Angelo Radici
President of RadiciGroup

Flowers and Plants from the RadiciGroup World

We have illustrated the 2022 Sustainability Report with striking images of flowers and plants representing some of the countries in which the Group operates. They embody the beauty and diversity of the natural heritage of these places, which we are all called to respect and protect. What is more, these plants and flowers tell different but equally rich and important stories. They symbolise the cultural, linguistic and social diversity that makes RadiciGroup increasingly unique.

*For the complete version of
the Sustainability Report.*



The Group



Who we are

RadiciGroup is **one of the world's leading producers of a wide range of chemical intermediates, polyamide polymers, high performance polymers and advanced textile solutions**, which include nylon yarn, polyester yarn, yarn made from recovered and bio-source materials, nonwovens and personal protective equipment for the healthcare and industrial sectors.

RadiciGroup products are the result of the Group's outstanding chemical expertise and vertically integrated polyamide production chain and have been developed for use in a variety of industrial sectors. The basis of the Group's strategy is a strong focus on innovation, quality, customer satisfaction, and social and environmental sustainability.

Our Mission

- **To promote the development** of our businesses while **pursuing** our Group values and culture.
- To pursue our vision by **valorising and optimising our resources**, establishing alliances and searching for new markets, including niche markets.
- To embed **sustainability** into **new product** and application development.

The Code of Ethics

In 2022, the Code of Ethics of the holding company Radici Partecipazioni became, in all respects, the Code of Ethics of all the companies of RadiciGroup. The Code of Ethics, which was presented in a virtual event to all Employees around the world, is not an arrival point, but **rather a starting point for daily improvement, without losing sight of our common identity**, even given the diversity of corporate, social and cultural contexts, which is, on the contrary, an asset.

One of its key features is the formalisation of certain commitments to fair, transparent and responsible behaviour towards Stakeholders, who play a central role in the Group's ethical vision.

To ensure inclusiveness and full transparency, **RadiciGroup's Code of Ethics is available on the Group's website to anyone who wishes to consult it.**

For the full version of
the Code of Ethics.



Our values

Founded on the passion and commitment of around **60 Employees** of different ages and nationalities, who have contributed to building a vision for RadiciGroup today and tomorrow, **the values guide our daily choices.**

They also promote the **individual's contribution** to achieving the **common goals** of growth, transparency, people-centred governance and environmental protection set out in the RadiciGroup Code of Ethics.

01. Legality and respect for the Law: a guarantee for all of us

Our Group respects the law and enforces compliance by all its Companies with the Laws of the Countries where it does business. Indeed, we support the dissemination of a culture of "active" legality, firmly believing that, in the workplace as in any other environment, everyone must contribute to the values of dignity, freedom, safety and solidarity.

03. Health and Safety at work

For us, Health and Safety is a primary concern. This is why we are committed to comply with all the provisions of the relevant laws in force, and more. We constantly act proactively to analyse risks and prevent injuries. In our Group, the training and engagement of our Workers are what makes a difference.

02. Sustainability is our guide

We optimize our processes, invest in reducing environmental impact and produce products with measured and limited environmental impact. We promote training and take responsibility for the Health and Safety of our Workers, because RadiciGroup recognizes the centrality of people as a key principle.

We work together with Local Communities, where most of our Workers are from, for sustainable harmonious growth. We put our commitment to sustainability into practice, together with our Stakeholders, to create shared value.

04. Our capital is above all human

Our strategy is Person-centred. We promote professional advancement by recognizing merit, fully utilizing competence and potential, and investing in training. We believe that achieving a balance between work and personal life is a key aspect in creating an optimal corporate environment.

05. Value-added features

Our Group is local and, at the same time, global. Diversity is one of our strong points and adds value to our decision-making. For this reason, we promote the principles of equal opportunity and inclusiveness and reject any discrimination based on sex, race, ethnic and national origin, age, political opinion, religious creed, state of health, sexual orientation and social economic condition.

06. Always fair and transparent

Fairness and transparency are our key principles. For every corporate process, the roles and responsibilities must be clearly defined and every decision must be motivated and made in keeping with the principle of good faith and in full respect of the rules and the People involved. Our relationships with all Stakeholders are built on a foundation of transparency, but always in keeping with our confidentiality obligations.

07. We all take responsibility

Each of us commits to take responsibility for our actions, follow the time schedule set out for our job and respect all Stakeholders. We believe that any mistake made in our daily work is an opportunity for improvement.

08. Team spirit is our best raw material

We firmly believe that sharing information and experience among the different functions within the same Company, as well as among different Group Companies, creates growth. We want to contribute to a shared culture among corporate functions and promote initiatives to strengthen team spirit, the most important raw material of all.

The United Nations Sustainable Development Goals (SDGs)

When the United Nations developed the 2030 Agenda, the ambitious programme of action for people, planet and prosperity based on equitable economic growth, social welfare and environmental protection, they first called upon companies. The latter have been entrusted with an important responsibility, to put their resources at the service of all-round sustainability.

RadiciGroup has not shielded away from the challenge. Year after year, **the Group shares the spirit of the SDGs and makes a real contribution to their achievement** through numerous initiatives described in this Sustainability Report and highlighted by the characteristic icons in the various chapters.



The Group Quality, Environment, Energy, Health and Safety Policy

As the title suggests, this Policy sets out some of the **key issues involved in managing the Group responsibly, both now and in the future**. It is also an important guideline to support RadiciGroup **in the implementation of the United Nations Sustainable Development Goals**.

As an integral part of the Group's governance, it aims not only to ensure compliance with the law, but also to **support proactive strategies and increase Stakeholder responsibility** in the process of sustainable and responsible growth.



Looking at added value from a broad perspective, **ensuring continuity and being inclusive of all Stakeholders**. This is how RadiciGroup brings to life its corporate values: putting people at the centre of everything it does, reliability, fairness and transparency. By following these guidelines, the Group ensures **the quality of its products, promotes occupational health and safety, and carries on business with respect and care for the environment**. A long-term commitment to the pursuit of truly sustainable social, economic and environmental development driven by innovation and research is the foundation for the engineering and advancement of the Group's technology, processes and products.

Within the above framework, RadiciGroup pursues the objective of increasing **cooperation and synergy among the functions of the Group Business Areas** to build a path towards the optimisation and excellence of each process through the **continual improvement of activities, transparency in operations and communications, and quality and performance of products and services** – all in close collaboration with Stakeholders.

Diligent compliance with the laws and regulations on the environment, occupational health and safety, and prevention of harmful incidents potentially affecting products and production processes is the fundamental basis of every Group business activity. To this end, **RadiciGroup companies have adopted Quality, Environmental, Energy, Health and Safety Management Systems**, duly certified by recognised certification bodies and based on a set of well-defined procedures, understood at all organisation levels.

June 2019

In order to ensure the **quality of its products** and services, the Group has numerous tools at its disposal that enable its companies to develop **robust and reliable processes**, meet the most exacting requirements and foster continual improvement. As regards the **environment and energy**, RadiciGroup is engaged in **optimising performance** and working towards targets that can be seen and measured, by investing financial, human and technological resources to monitor and reduce environmental impact. At the same time, the Group is **engaged in promoting commitment to the environment among its Customers, Suppliers and Workers**, in particular through activities aimed at getting all Stakeholders involved. The Group's environmental agenda covers its entire production value chain, including the calculation of the environmental footprints of the main products and services and feasibility assessments of **using ecodesign and circular economy principles**, wherever possible.

RadiciGroup management is aware of the fact that **Worker Health and Safety** is always a **top priority** and of central importance. Thus, management ensures the application of the safety standards set out in the applicable laws and regulations, regularly verifies compliance with said standards and assesses their effectiveness, with the aim of improving accident prevention and reducing accident risk. Group management also promotes **transparent and collaborative relationships with local authorities and communities**, furthers the implementation of **Worker consulting mechanisms** and encourages Worker participation in corporate processes. Moreover, the Group invests sizeable resources in **training Workers to increase knowledge and raise awareness** of how important the contribution of each single Worker is in achieving the overall result.

Angelo Radici
President of RadiciGroup

Maurizio Radici
Vice-President of RadiciGroup



Figures making a difference



Personnel
around **3,100**
employees

2022 Sales*
1,543
million €

Network
>30
production and sales
units in Europe, North and
South America and Asia

A global presence



Europe

Czech Republic

Podbořany

France

Saint Priest

Germany

Lüneburg

Selbitz

Tröglitz

Hungary

Szentgotthárd

Switzerland

Stabio

United Kingdom

Wakefield

Romania

Săvinești

Spain

Barcelona

North and South America

Argentina

Buenos Aires

Rio Grande

Brazil

Araçatuba - São Paulo

São José dos Campos

Mexico

Ocotlán

USA

Wadsworth

Italy

Ardesio

Buronzo

Casnigo

Chignolo d'Isola

Gandino

Novara

Villa d'Ogna

Asia

China

Shanghai

Suzhou

India

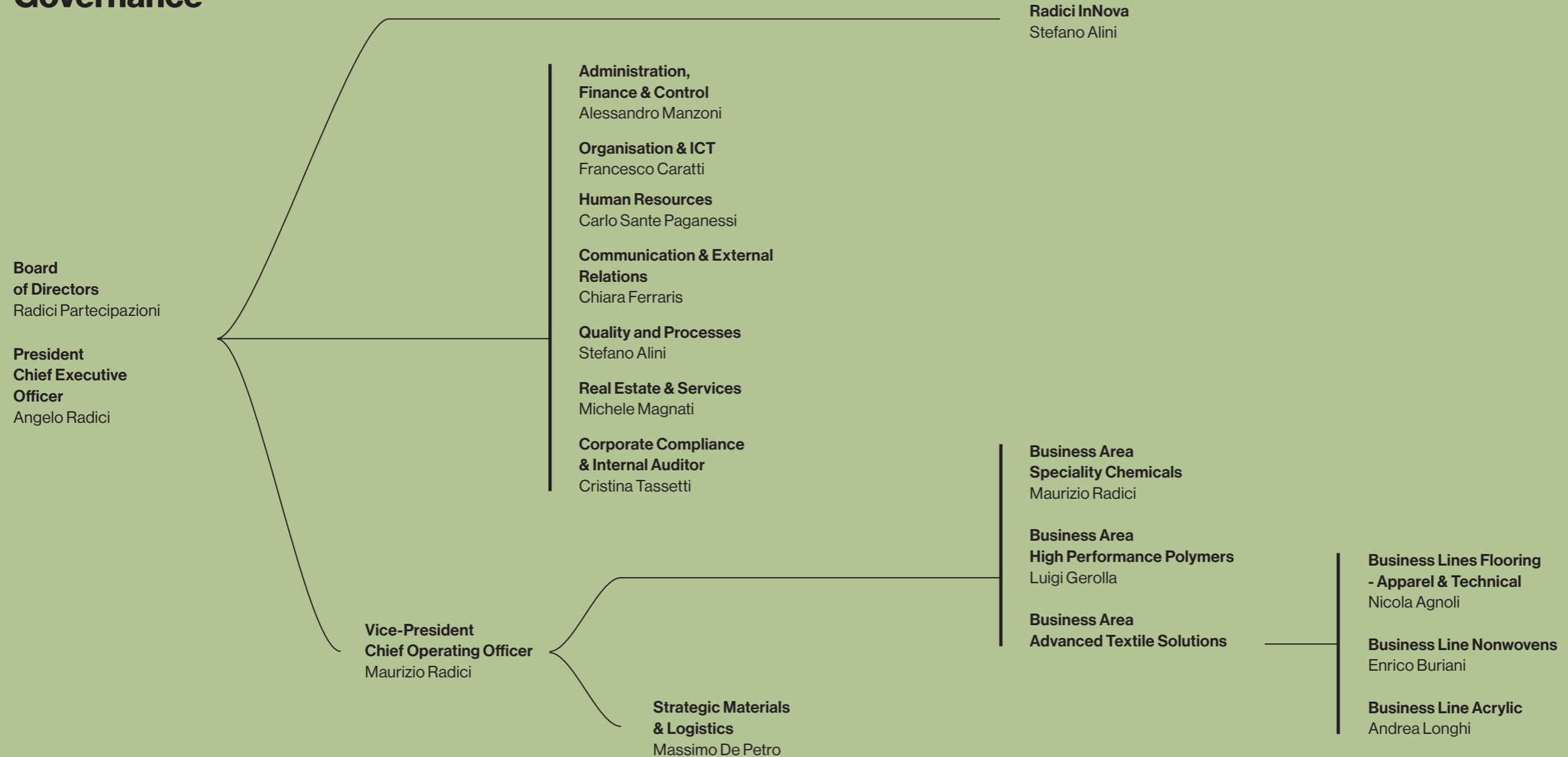
New Delhi

Gurugram

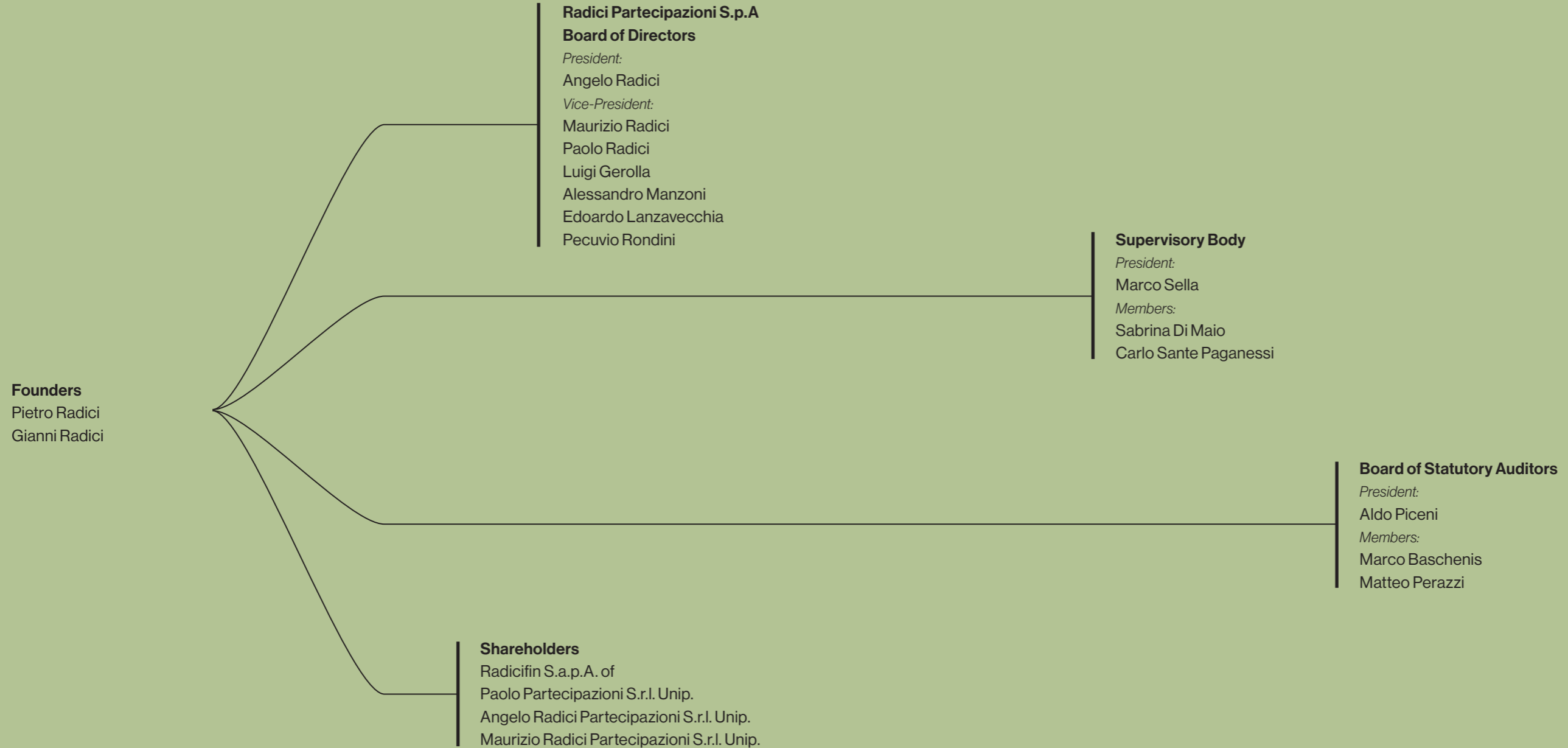
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RadiciGroup Governance



RadiciGroup Governance

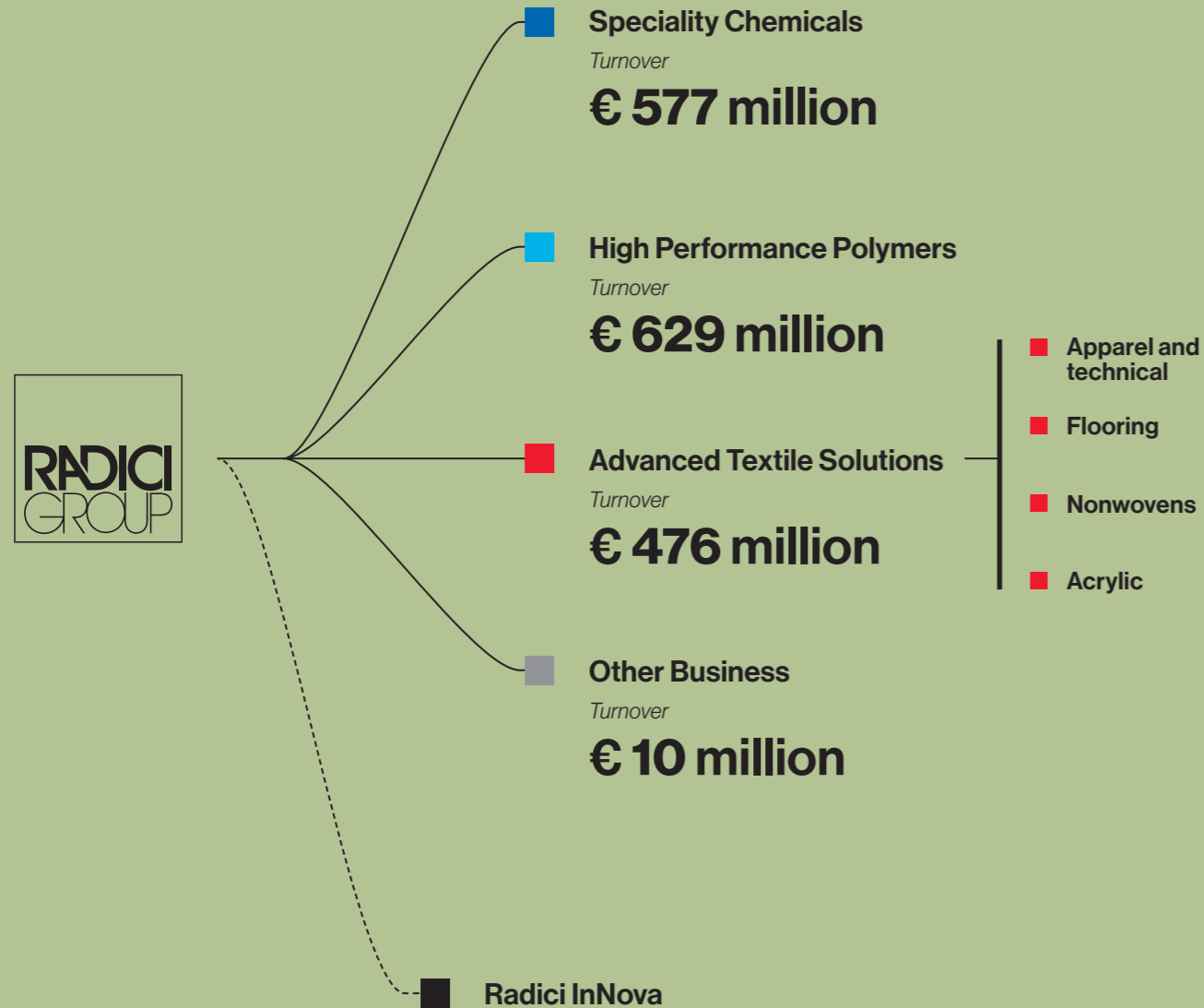


Sustainability is embedded in everything we do

Sustainability in its various social, environmental, economic and governance **aspects is increasingly on the agenda of RadiciGroup's top management. The Board of Directors plays a central role in supporting the commitment to sustainable development** along the value chain and in **integrating ESG issues** into the Group strategy.

- In 2022, the **Board of Directors of Radici Partecipazioni** approved the **RadiciGroup Code of Ethics**, which is intrinsically linked to ESG issues, and acts in accordance with this guideline by promoting its values. Our President, in his letter introducing the Code itself, described it as the benchmark for everyday action. And that is not all. He described it as the tool through which RadiciGroup presents itself to Stakeholders.
- Also in 2022, following a thorough **redefinition of the material topics**, the **owners of RadiciGroup approved the topics of most relevance to the Group** as identified by the Stakeholders and **proposed new topics** through a dedicated sustainability governance process.
- In addition to approving the main topics, the **President of RadiciGroup** provides Stakeholders with a **commentary on the Group's sustainability performance** in the **letter that introduces the Sustainability Report** each year. **He also outlines future strategies** and gives Stakeholders a preview of the topics that will be the focus of RadiciGroup's efforts in the short and medium term.
- In 2023, **the shareholders will discuss and approve the practical resolutions** that the Group plans to implement in the medium and long term, such as decarbonisation, resource use, circular economy, respect for human and Workers' rights, and the improvement and well-being of its staff, by **setting objectives** that define **RadiciGroup's contribution to the 2030 Agenda**.

Organisational structure



2022 turnover, consolidated at Business Area level. Individual Business Area figure includes sales to other Group Business Areas.



RadiciGroup Business Areas

Speciality Chemicals Area

This Business Area specialises in the production of **chemical intermediates and PA6, 66, 610 and speciality polymers**: raw materials used for the manufacture of multiple products both directly by the Group, for further processing in the high-performance polymer and fibre sectors, and by Customers.

High Performance Polymers Area

Specialising in the production of **high-performance polymers, including from bio-based or recycled sources**. RadiciGroup engineering polymers have numerous chemical-physical-mechanical properties depending on the type of application for which they are used.

Advanced Textile Solutions Area

This Business Area covers a **variety of product types ranging from polyester yarn, nylon yarn, non-woven fabrics**. All these options are available **from fossil, recycled and partially or wholly bio-based sources**.

Radici InNova. The Source of InNovation.

The 3 business areas are flanked by **Radici InNova**, a consortium company, which **aims to develop new research and innovation projects** for the chemicals, high-performance polymers and advanced textile solutions sectors, **in line with the Group's sustainability strategy**.

The main areas of application



RadiciGroup products are present in every aspect of everyday life. Their properties – durability, performance, and sustainability – make them the ideal choice for Customers all over the world. Below is an overview of the main products and their respective application sectors.



Apparel



**Electrical
Electronic**



Automotive



Medical



**Industrial
Sector**



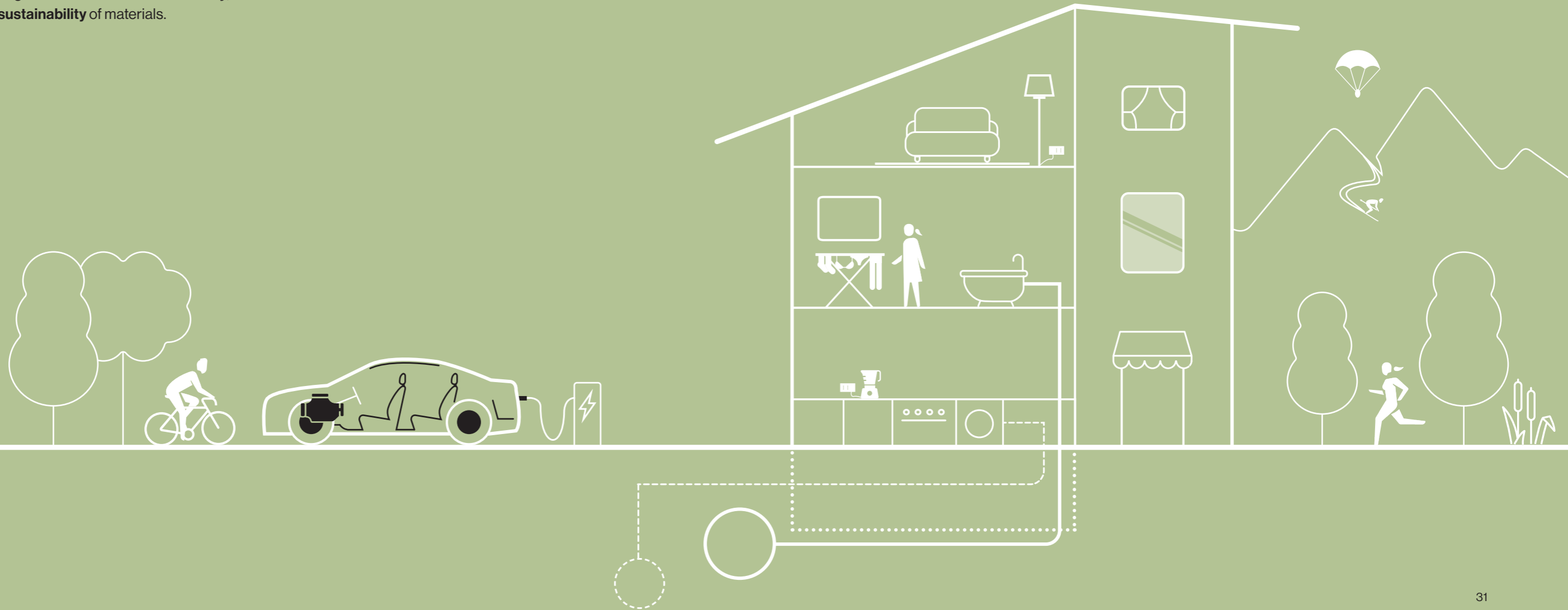
Sports



**Interior
& Outdoor**

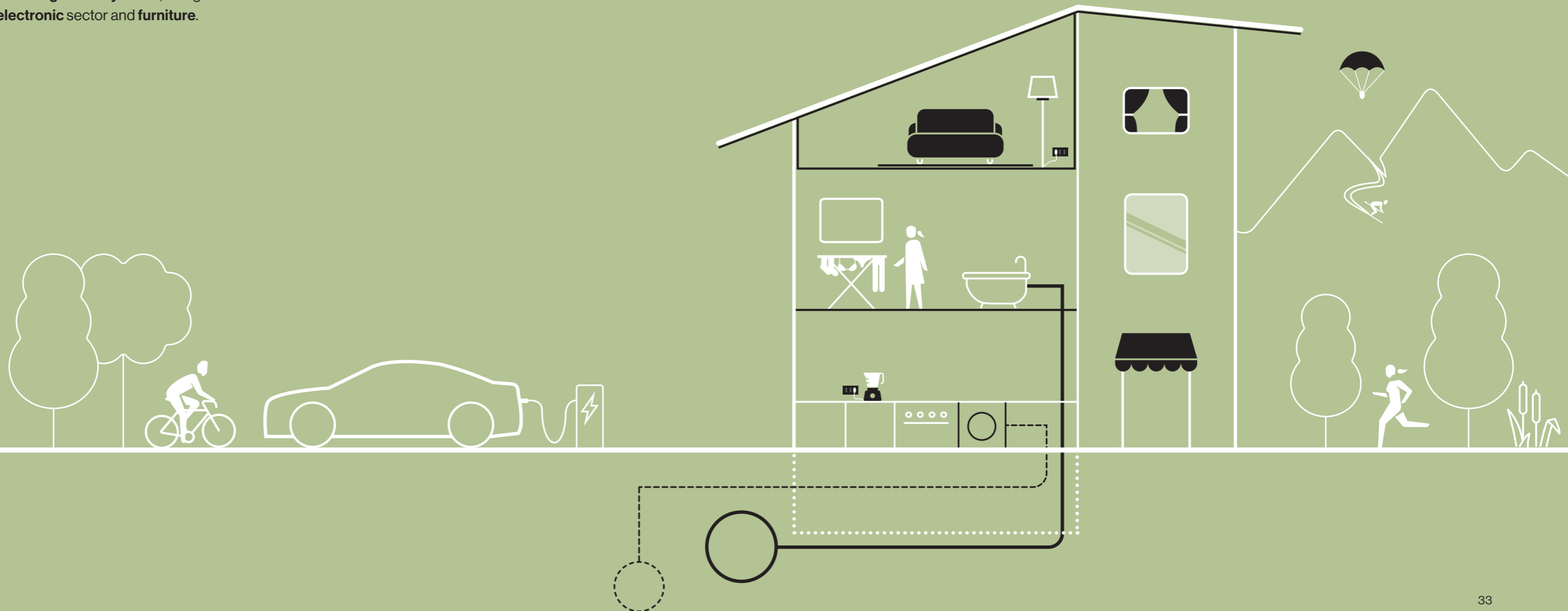
Automotive

A relevant presence as for **engineering polymers in the car structural parts** and in **engine components, batteries** and **charging systems** of electric and hybrid vehicles. Advanced textile solutions with yarns and nonwovens for **car interiors: mats, seats and trunk lining**. A cutting-edge know-how to ensure **safety, performance** and **sustainability** of materials.



Interior & Outdoor

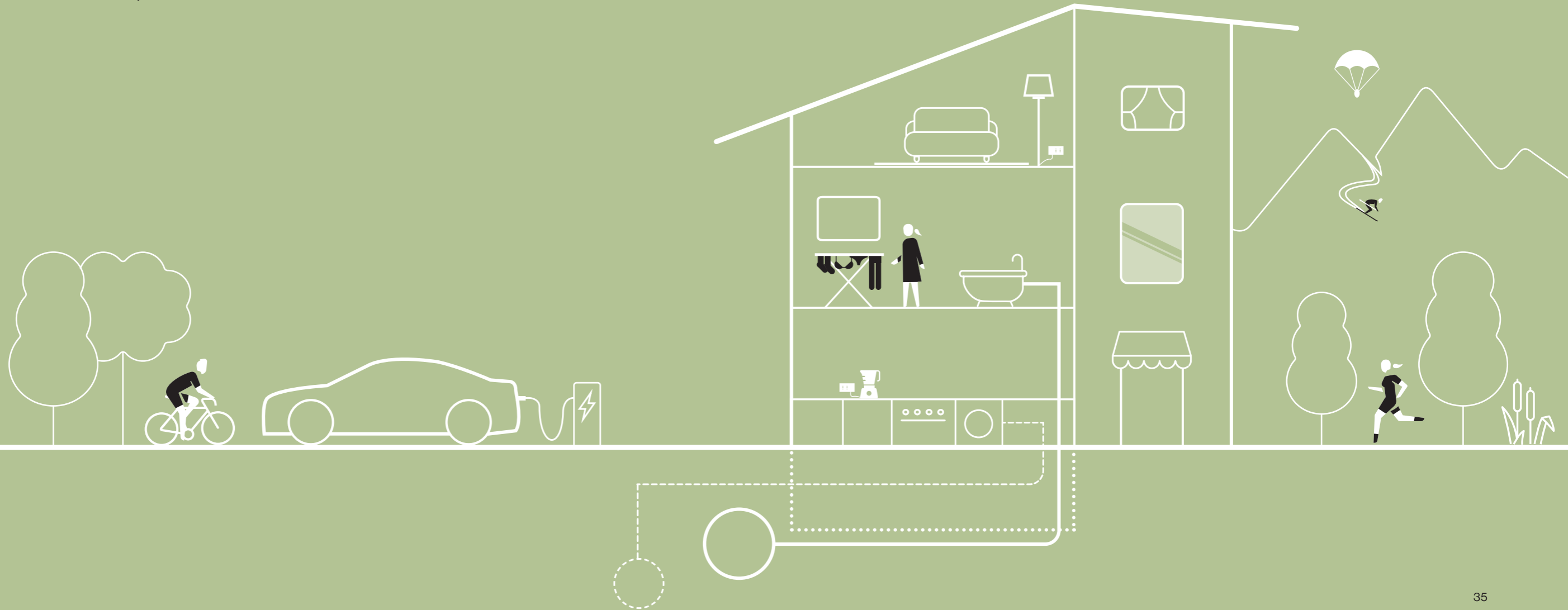
Innovative **textile solutions** with **yarns for flooring**, **curtains**, **sun protection systems**, upholstery of **furnishing accessories** such as sofas and armchairs. **Nonwovens** for the **construction** and **roofing** sectors. Engineering **polymers** for **household appliance components**, **water management systems**, along with the **electrical** and **electronic** sector and **furniture**.



Apparel

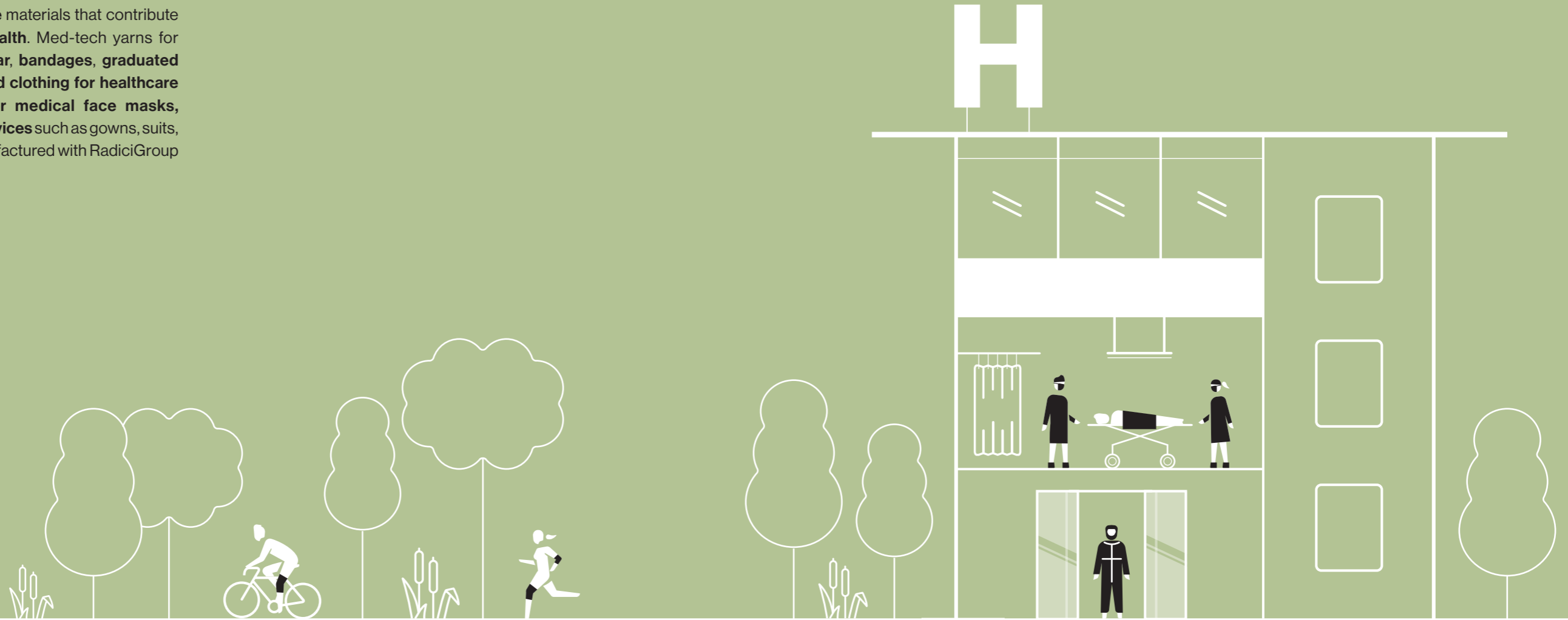
Cutting-edge know-how for **applications in clothing**, from **sportswear** to **underwear**, from **hosiery** to **athleisure** and **beachwear**.

Functionalized yarns to enhance garment **comfort**, **wearability**, **durability** and **performance**, with special focus on reducing their environmental impact.



Medical

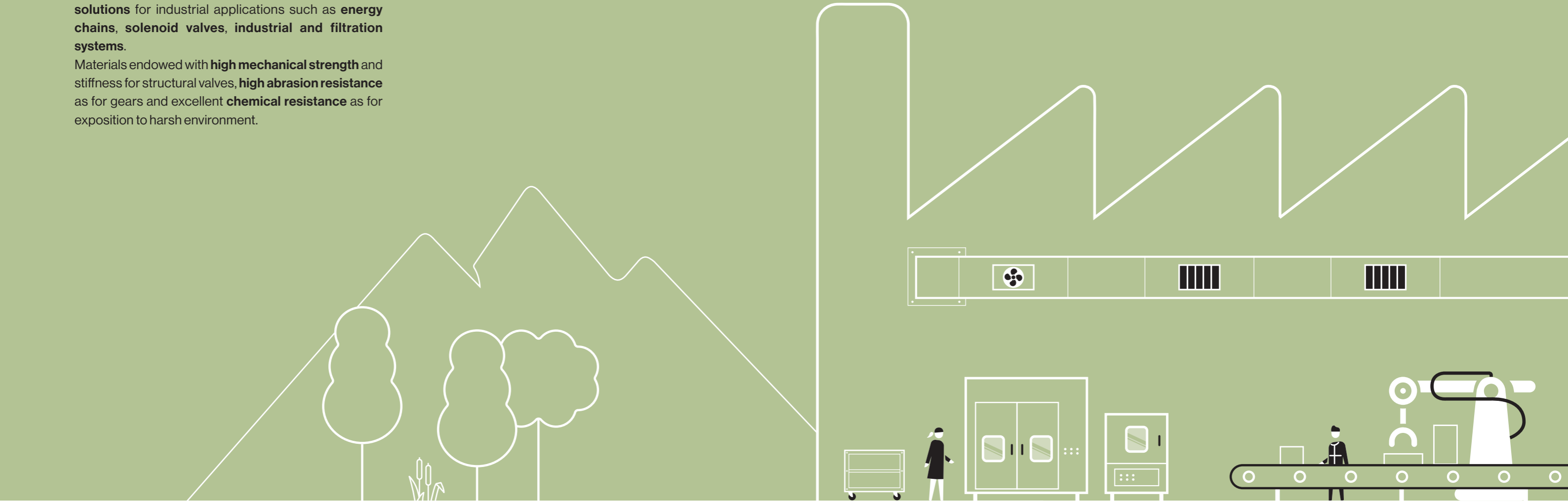
Safe and high-performance materials that contribute to **daily well-being and health**. Med-tech yarns for **braces, sheaths sportswear, bandages, graduated compression stockings and clothing for healthcare personnel**. **Nonwovens for medical face masks, production of protective devices** such as gowns, suits, caps, and shoe covers manufactured with RadiciGroup nonwovens.



Industrial Sector

A range of **engineering polymers and advanced textile solutions** for industrial applications such as **energy chains, solenoid valves, industrial and filtration systems.**

Materials endowed with **high mechanical strength** and stiffness for structural valves, **high abrasion resistance** as for gears and excellent **chemical resistance** as for exposition to harsh environment.



From the Code of Ethics

We put our Customers at the centre of everything we do

At RadiciGroup we are **constantly working to meet Customer expectations** and foster the business relationship.

- We work with our Customers according to the principles of fairness, following contractual specifications.
- We are committed to offering quality service and products, at competitive conditions, in compliance with the law. We work together to develop and use low-impact products, through processes that reduce the use of resources and the generation of waste and emissions.
- All our products come with the documentation required by current legislation.
- We provide and ask for comprehensive information from our Customers so that they can always make informed decisions.
- We expect compliance with the agreed conditions and, in turn, we adhere to these same conditions. We never carry out services without an appropriate contractual relationship.

RadiciGroup has a **worldwide Customer network**, served both through a global distribution network and an internationalised manufacturing operation with plants in major markets.

The **Specialty Chemicals** area, strengthened by its integration in polyamide intermediates, offers a wide range of polymers used both in the **engineering polymers and fibres sector within RadiciGroup** and by **third-party companies**. The adipic acid business, in addition to its own requirements for the production of its own PA66 polymer, supplies medium and large Customers in a wide range of sectors, from polyurethanes to plasticisers and other industries.

The **High Performance Polymers** area has a significant number of **medium and large companies** operating in globalised sectors such as automotive and electrical/electronics, which require both commercial and production proximity to the production centres of each sector and the ability to offer a standardised product to serve global value chains, regardless of the physical location of production.

In **Advanced Textile Solutions**, the high proportion of **small and medium-sized enterprises** in the Customer base requires a special focus on relationship management that takes into account the complex, networked and often globalised value chains in which they operate. Performance and sustainability are the watchwords in the fibre application sectors, from clothing to furniture to automotive.

All RadiciGroup Customers are manufacturing companies.

Again in 2022, RadiciGroup provided Customers with:

- **Robust upstream integration with optimised and controlled processes.**
- An **extensive production, distribution and sales network**, a guarantee for the Customer of proximity and continuity of supply.
- **Constant awareness of the challenges of different sectors**, from **circularity to green chemistry, from sustainable fashion to electric mobility and med-tech.**
- **Strengthening the sustainable solution offer** with new recyclable, recycled and bio-based products.
- **R&D activities**, with a strengthening of **projects in the area of circularity and process and product sustainability, also on the basis of eco-design**, to develop high-performance solutions and materials, where possible based on sustainable intermediates, that can be translated into **safe, durable, light-impact and recyclable products**, in line with the most pressing market demands.

From the Code of Ethics

We seek the best to provide the best

In our Group, we choose our **Suppliers** based on criteria of **competitive advantage, equal opportunity, cost-effectiveness, quality, sustainability**, as well as on the basis of objective assessments that protect the interest and reputation of our companies.

- We select Suppliers after we have established their reliability, their ability to provide adequate goods and services, and their guarantee of compliance with applicable regulations with a particular focus on legislation on occupational health and safety and environmental protection. To do this, we use objective and verifiable criteria that do not preclude potential access to all those Suppliers who meet the necessary requirements.
- We work with Suppliers according to principles of transparency, loyalty and fairness with a view to stable and enduring business relations.
- To ensure maximum transparency and efficiency of the procurement process, we have set up an adequate traceability system in each Group company, storing the relevant documentation, in compliance with current regulations.
- We require Suppliers to comply with the agreed conditions and we also adhere to them.



The Group's production processes are structured and complex, starting with raw materials: caprolactam, phenol, K Oil, ammonia, adiponitrile, polypropylene and polyethylene or polyester polymers, materials that are indispensable for RadiciGroup's processes.

There **are around 70 Suppliers of strategic raw materials, operating worldwide**, and they are linked to the Group by framework agreements. They **cover around 73% of the Group's procurement expenditure** and are essential for every Group activity.

The Group's Suppliers in relation to turnover and geographical location

Breakdown of RadiciGroup Supplier types by turnover in 2022

Strategic raw materials	from EUR 950 to EUR 970 million
Packaging + Transport	approximately EUR 76 million
Maintenance + Utilities	approximately EUR 243 million
Other goods or services	approximately EUR 61 million

Geographical breakdown of RadiciGroup Suppliers by turnover in 2022

Europe	around 85% of turnover*
Asia	around 10% of turnover
North and South America	around 5% of turnover

* Of which around 20 key Suppliers account for a turnover exceeding EUR 10 million.

Work the system, always: trade associations

RadiciGroup attaches great importance to its membership of trade, industry and scientific associations. These organisations cover the whole supply chain from upstream to downstream and provide important pre-competitive context, where it is possible to:

- **Develop research projects and address key present and future challenges collectively,** related to products and systems.
- **Share competencies and potential risks in the development of common solutions** to meet new needs arising from the market.
- **Have one's voice heard at the institutional level and give authoritative support to government bodies** in their decision-making and legislative processes, as well as work to build consumer awareness and culture.

The membership, in these associations, of numerous Group competitors, providing for open and direct dialogue, testifies to RadiciGroup's full respect for all players in the scenario and for the rules of commercial fairness.

RadiciGroup memberships in trade and other associations in 2022

ABRAFAS - Associação Brasileira de Produtores de Fibras Artificiais e Sintéticas

AICQ

Association of Plastics Industry

Camera di Commercio e Industria di Neamt

Camera di Commercio italiana in Cina

Camera di Commercio Italo-Ceca

CEFIC - European Chemical Industry

Chemie Wirtschaftsfoerd GMBH

CIESP - Centro das Indústrias do Estado de São Paulo

Cirfs

Comitato Elettrotecnico Italiano

Confindustria Bergamo

Confindustria Novara -Vercelli -Valsesia

IBIS Consortium

Edana

Ellen MacArthur Foundation

EPCA - European Petrochemical Association

Federazione Patronale Tessile

Federchimica Assofibre

ICESP – Italian Circular Economy Stakeholder Platform

IHK (Industrie- und Handelskammer)

Nordostchemie

OMA - Ohio Manufacturer's Association

PINFA - Flame Retardants Association

Plastics Europe AISBL (BE)

Plastics Europe Italia

Proplast

SINDTEXTIL - Sinditêtil Sindicato Indústria Fiação Tecelagem Estado São Paulo

Sistema Moda Italia - TexClubTec

Spring

Tessile e Salute

Tecnici Materie Plastiche

Uniplast-Ente Italiano di Unificazione delle Materie Plastiche

VTB: Verband der Bayerischen textil und Bekleidungsindustrie

Wadsworth Chamber of Commerce



Among the topics in 2022, especially for European associations, it is worth noting the legislative framework that the European Union is outlining in line with the Green Deal, with the ultimate goal of climate neutrality. The Group has been particularly active on a number

of system and product issues, e.g. the Ecodesign for Sustainable Products Directive proposal, the Digital Product Passport, the Corporate Sustainability Reporting Directive and the extended producer responsibility schemes.

Radici. One company, many worlds

RadiciGroup is a structured and multifaceted reality that, in addition to its core businesses described above, **is also part of a larger industrial organisation** that includes textile machinery (IteMa), energy (Geogreen) and the hotel (San Marco) businesses.

itema

The history of IteMa Group traces back to the entrepreneurial vision of **Gianni Radici** who has built, through important partnerships and acquisitions, **a solid company at the pinnacles of the textile machinery industry since 1967**. Headquartered in Colzate, **60% of the shares of IteMa belong to the family of the heirs of Gianni Radici, while the remaining 40% belongs to the Arizzi and Torri families.**

With **1,099 employees** in **7 production plants** and **15 branches** around the world, IteMa Group generated an overall **turnover of € 337,5 million in 2022.**

- The parent company IteMa® is today among the **world leaders in the supply of advanced weaving solutions**. It is also the **only manufacturer in the world** to provide the market with the top three shuttleless weft insertion technologies: **rapier, airjet and projectile.**
- IteMa Group is also active in the industrial sector through **Schoch®**, manufacturer of accessories for the textile industry, and **Lamiflex®**, producer of components in composite materials for the textile machinery, industrial, aerospace and medical sectors.
- **IteMablab®**, IteMa®'s advanced research incubator, also offers to third companies' **transversal systems engineering and business process re-engineering services.**



GEOGREEN gas, power and efficiency

An Italian group founded in 2000 as the sole energy supplier for RadiciGroup, with its companies GeoEnergie SpA and Geogreen SpA it is now **one of the most qualified Suppliers** of an integrated system of products and services:

- Supply of **renewable electricity and natural gas.**
- Production of **Hydroelectric** and **Thermoelectric Energy from Cogeneration.**
- Development of **renewable energy** and **district heating** projects.



Prestigious **hotel in the heart of Bergamo**, at the foot of the famous medieval village that attracts tourists from all over the world.

- **Rooms equipped with the most modern comforts** and facilities with advanced technical and audiovisual services.

- **Consulting services for energy efficiency management, quota management and CO₂ emission rights.**
- **Trading of energy efficiency** certificates (white certificates) and **Guarantees of Origin from Renewable Sources (GO).**

With a constant awareness of the need to **protect the environment and in particular water**, a key resource for its activities, the Geogreen group operates under the most advanced standards of sustainability and in harmony with the local areas where its power plants are located and to which it **offers 100% renewable energy.**

- Capacity for hosting **corporate meetings** and **receptions**, as well as offering refined **catering and banqueting services** thanks to the **Roof Garden restaurant.**
- Cuisine that combines **traditional Italian flavours and aromas** with **innovation** and experimentation with cutting-edge techniques and products.
- It is also suitable for a **wide range of banqueting, business lunches** and **special occasions.**

Sustainability



The keywords of sustainability

- **Environmental, Social, Governance**
for an all-encompassing sustainability approach in all our Companies.
- **People**
to put our commitment to sustainability into practice, day after day, with passion, work and expertise.
- **Growth**
economic growth of our businesses and the human and professional growth of our Workers, both driven by sustainability.
- **Resources**
being good stewards of our resources today, with an eye to the needs of tomorrow.
- **Eco-design**
researching and implementing solutions that combine performance with minimum impact.
- **Measurement**
to be sure of the effectiveness of the solutions implemented and to identify where they have the greatest impact.
- **Innovation**
to meet the challenges of the present while looking forward to the opportunities of the future.
- **Value chain**
to jointly build effective upstream and downstream product and system solutions.

A Sustainability story



- 1950**
The experience of **recovering wool waste** within the Group's first **textile companies** begins.
- 1981**
RadiciGroup develops its **know-how in polymer recycling**.
- 2000**
RadiciGroup uses its partner **Geogreen** for the purchase of **renewable energy**.
- 2003**
RadiciGroup signs up to the **Responsible Care®** protocol. The Group obtains its **first ISO 14001** environmental certification.
- 2004**
RadiciGroup publishes its first **Social Report**.
- 2012**
The **Global Reporting Initiative model** becomes the reference framework for the Group's Sustainability Report.
- 2013**
The first **Product Category Rules (PCR)** drafted by RadiciGroup become industry standards for the textile fibres and engineering polymers industries.
- 2014**
RadiciGroup, through Radici Chimica SpA, becomes the first chemical group in Europe to obtain **OEF (Organisation Environmental Footprint) and PEF (Product Environmental Footprint)** certificates of conformity. The first **Ecodesign** projects are launched and Radici Novacips SpA obtains **EPD Process Certification**.
- 2015**
Radici Novacips and RadiciFil achieves **EPD certifications** for their products.
- 2018**
RadiciGroup publishes its third party-certified **Sustainability Report** in conformity with the most advanced **GRI Standards**.
- 2020**
RadiciGroup invests in **innovation** and **circularity** and continues to work towards the creation of shared value added. **Radici InNova**, RadiciGroup's consortium for sustainability-driven innovation begins its activities. **Radici EcoMaterials** joins the Group, a specialist in **open and closed loop recycling**.
- 2023**
RadiciGroup renews its **firm commitment to sustainability** by establishing its 2030 Agenda in line with the United Nations Sustainable Development Goals.

Our materiality and sustainability matrix

The materiality matrix illustrates, with tangible topics, the translation of the concept of sustainability and value creation in RadiciGroup's daily operations. "Material" topics are the environmental, social, economic and product topics that are essential for the Group.

In 2022 RadiciGroup revamped its materiality matrix by adding the "double materiality" dimension that also includes economic aspects in the assessment, involving around 200 internal and external Stakeholders in the process.

RadiciGroup materiality matrix - topics

Environmental	Sustainable management of energy resources
	Emissions and climate change
	Circular Economy
	Environmental footprint of products
	Materials and chemicals management
	Protection of water resources
	Responsible waste management
Social	Workers' Health and Safety
	Sustainable Research and Innovation
	Attracting, valuing and developing human resources
	Human and Workers' rights
	Cybersecurity and data protection
	Relations with Territories and impact on Local Communities
Governance	Long-term value creation and business sustainability
	ESG corporate governance, risk management and compliance
	Responsible supply chain management and traceability



Stakeholders

- Trade associations
- Group companies
- Customers
- Local Communities and territories
- Bodies, Institutions and Public Administration
- Suppliers and business partners
- Financial institutions
- Workers and their families
- Media
- Trade union organisations
- Schools, universities and research and innovation centres
- Third sector

The principles underpinning the relationship between RadiciGroup and its Stakeholders:

- **Sharing goals** for social, economic and environmental sustainable growth.
- **Joint and participatory planning**, especially with value chain players.
- **Transparent relationships and respect for the roles** of all Stakeholders and their operating context.
- **Openness to dialogue** and mutual improvement through discussion and collaboration.

E for Environmental

Material topics

- Sustainable management of energy resources
- Emissions and climate change
- Protection of water resources
- Materials and chemicals management
- Responsible supply chain management and traceability

The Environment and Innovation are good investments

For RadiciGroup, investing in sustainability means **nurturing inseparable combination of competitiveness and responsible growth**.

To do this, the Group uses BAT for processes and pursues the **technological and digital transformation** desired at European level to increase the **efficiency** of decision-making and production processes.

In particular, the Group:

- Has long invested in **reducing emissions, limiting consumption** and using **energy from renewable sources** in a business continuity logic that is mindful about the availability of resources for future generations.
- Works on **innovation**, to explore and seize the various opportunities offered by the **circular economy** mainly in terms of **ecodesign, recycling** and **biopolymers** and making its portfolio increasingly sustainable.

Sustainability, in facts

€ 277 million
in investment supporting
competitiveness
of the Group companies in the
five-year period 2018-2022.

Of this,
€ 86 million
specifically invested
in 2022.

€ 4.5 million
environmental
investments in 2022
earmarked for the introduction
of best available techniques,
increasing energy efficiency,
emissions abatement, and
research and development of
limited impact processes and
products.

€ 7.3 million
environmental
management and
protection costs in 2022
(such as certification, waste
disposal and water treatment
costs) at Italian companies.

The future of energy is today.
We promote energy transition by using renewable source energy.

We decouple resource consumption from economic growth.
In our production sites the use of raw materials, water and energy is curbed thanks to plant efficiency, and the Best Available Techniques.

Resources, nothing is more precious.
We make the best use of raw materials, reduce the amount of waste and scrap, recover and recycle waste whenever it cannot be avoided, and we constantly work on the quality, durability and performance of our materials, which are all recyclable.

Light for the Environment, transparent in communication.
We communicate our activities and achievements in our Sustainability Report and through all available internal and external communication channels.

The Environment as a privileged Stakeholder.
We protect it through strategies, investments and concrete, targeted actions.

Eco-design, safe and responsible.
We engage in the ecodesign of reduced-impact products, which are safe for the manufacturer, the user and the environment.

Less emissions, more innovative products.
We fight climate change by reducing emissions and introducing innovative products with a smaller carbon footprint.

Achievements which help to improve.
We constantly measure the performance of all production sites, with a view to achieving continuous improvement and reducing environmental risks.

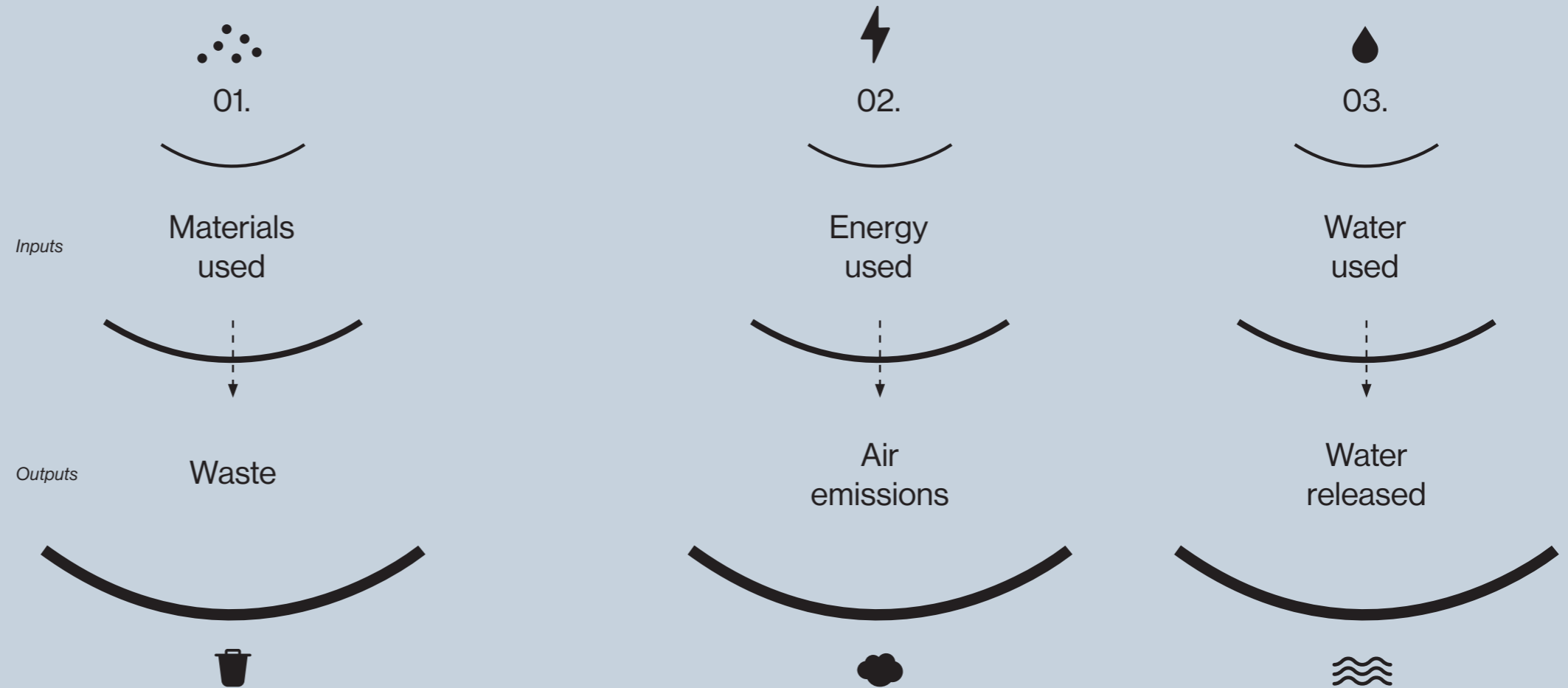
Achievements

The following sections provide an **overview of RadiciGroup's environmental results** grouped by complementary data **inputs** (received from the Environment) and **outputs** (delivered to the Environment).

As a general consideration, it should be noted that the energy crisis and the resulting shortage of certain strategic raw materials led to a number of shutdowns and restarts of Group companies in 2022, as well as the continuous shutdown of plants in the Specialty Chemicals division for approximately two months.

While this has led to a reduction in the absolute values of energy and water consumption and emissions, it has also led to a systematic deterioration in the indices that relate this consumption to the quantities processed. Every break and restart results in loss of efficiency, waste and second choices when restarting and transitioning from one production campaign to another.

Taking these considerations into account, **the Group's environmental performance in 2022 remains remarkably stable**, although many indicators may appear to be deteriorating if read without this premise.



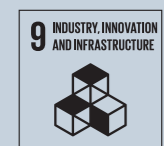
01. Materials Used

From used materials to new resources

In line with Goal 12 of the United Nations 2030 Agenda (Responsible Consumption), RadiciGroup has long promoted an **economic model** capable of making the **best use of resources** and **transforming waste into new opportunities**.

The 2022 data, although roughly in line with pre-Covid data, show a decrease (-13.1%) compared to the previous year, which was, however, a peak year, a decrease directly related to the shutdown of the chemical area and production interruptions. The only exception was a growth in renewable auxiliaries (+73 tonnes), related to BA High Performance Polymers, which used renewable auxiliaries.

On a positive note, high levels of production efficiency were maintained in the Group. Although it is not possible to give a precise figure due to the extremely diverse nature of the processes in RadiciGroup companies, it is empirically possible to state a percentage of around 90-95% for production yields, which is significant in view of the numerous stop-and-go events that characterised the second half of the year. Processes are always subject to control systems capable of reducing faulty batches and, consequently, waste, an important fact that has helped to limit the inconvenience of production fragmentation.



GRI 301-1 Materials used by type and weight

Materials used by type		2020	2021	2022
t	Direct materials*	397,372	471,310	410,473
t	Accessory materials	1,936	3,102	2,126
t	Packaging	14,098	16,768	14,059
t	Total	413,406	491,180	426,659
Non-renewable materials				
t	Non-renewable direct materials	395,871	469,180	409,507
t	Accessory materials	1,934	3,099	2,050
t	Packaging	1,430	1,822	1,392
t	Total	399,235	474,101	412,949
Renewable materials				
t	Non-renewable direct materials	1,501	2,130	966
t	Accessory materials	2	3	76
t	Packaging	12,668	14,946	12,668
t	Total	14,171	17,079	13,710
% renewable packaging to total packaging		89.9%	89.1%	90.1%
% renewable direct materials to total direct materials		0.38%	0.45%	0.24%
% renewable materials to total materials		3.43%	3.48%	3.21%

* Intra-group raw material flows, including recycled material processed by Radici EcoMaterials (formerly Zeta Polimeri), are not taken into account for the purposes of the indicator, as they do not represent resources taken from outside the Group and, in general, removed from the environment.

01. Waste

Too valuable to be called waste

Regarding waste, all RadiciGroup companies work to contain the generation of scrap and waste through rigorous process management.

In a logic of circularity, nylon-based waste from all business areas is transformed into raw materials for the industries that generated it or for other industries of RadiciGroup. Radici EcoMaterials (formerly Zeta Polimeri) plays a key role in this area, consolidating RadiciGroup's historical approach to mechanical recycling. Thanks to the technology in its plants, it can treat scraps of synthetic fibres and thermoplastic materials and obtain high-quality products.

A similar process is in place for the polypropylene scraps originating from the Group area that produces nonwovens. The scraps are collected, sorted and regranulated to create new raw material.

This logic explains the indicator shown on the right, which shows an increase in non-hazardous waste destined for internal recovery as a percentage of total non-hazardous waste destined for recovery, despite a decrease in absolute numbers due to reduced production. Indeed, the figure increased from 53.1% in 2021 to 55% in 2022, thanks to the hard work of Radici EcoMaterials and the other RadiciGroup companies that recover post-consumer waste for open and closed-loop recycling, driven by growing market demand.

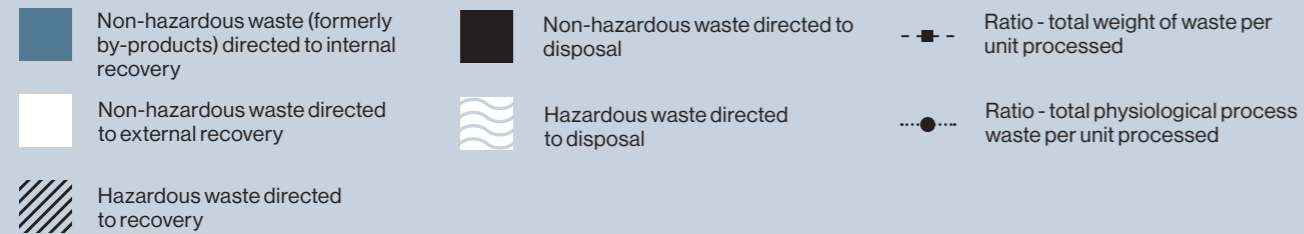
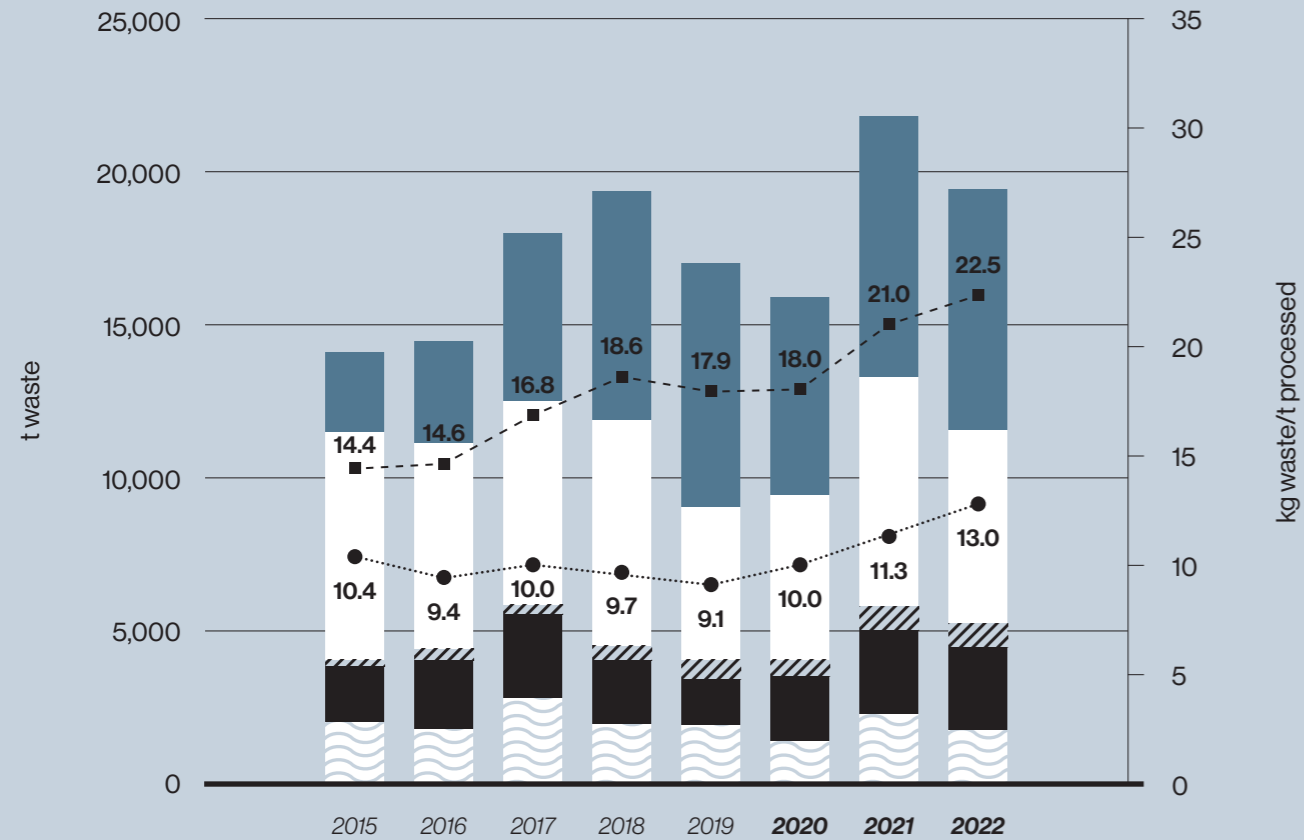


GRI 306-3 Total waste by type and disposal method*

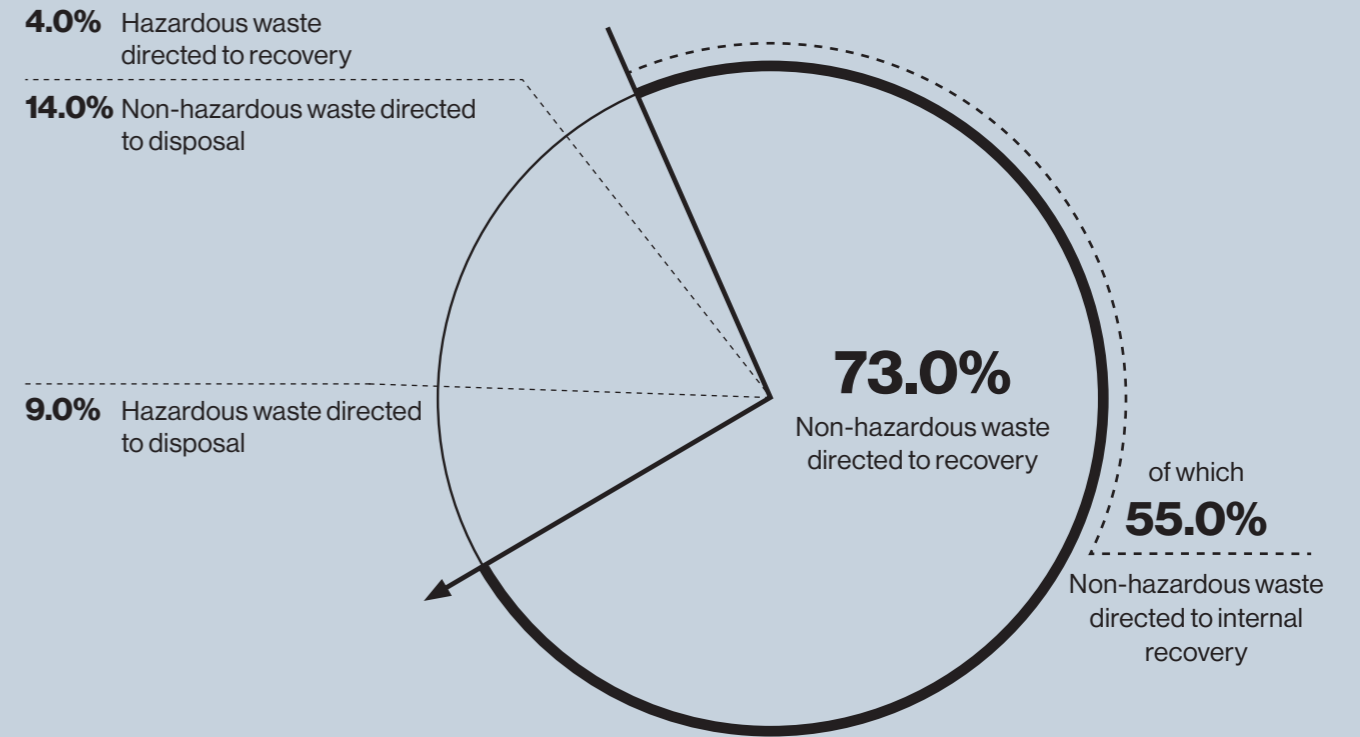
	2020	2021	2022
t Total hazardous waste	1,949	3,088	2,493
t Hazardous waste directed to recovery	561	817	768
t Hazardous waste directed to disposal (GRI 306-5)	1,388	2,271	1,725
t Total non-hazardous waste	13,968	18,730	17,073
t Non-hazardous waste directed to recovery	11,852	15,998	14,360
t Non-hazardous waste directed to disposal (GRI 306-5)	2,116	2,731	2,713
t Total waste	15,917	21,818	19,566
<i>of which</i>			
t Occasional non-process waste (building renovations, maintenance, etc.)	565	1,581	388
t Non-hazardous waste (formerly by-products) directed to internal recovery	6,494	8,487	7,900
t Process waste directed to external treatment	8,858	11,750	11,278
% Non-hazardous waste for internal recovery/total non-hazardous waste for recovery (GRI 306-4)	54.8%	53.1%	55.0%
kg/t Ratio - Process waste per unit processed	10.0	11.32	12.95
kg/t Ratio - Total waste per unit processed	17.96	21.02	22.47

* Based on the documentation held by the Group and provided by the companies in charge of waste management and treatment, it is not possible to give more detailed information, as required by the GRI model, concerning the actual disposal method.

GRI 306-2 Waste by type



GRI 306-2 Waste by type 2022



The ISO Quality, Environment and Health and Safety certifications, held by most of the Group companies, ensure that the best management standards are applied to all phases of the process: scrap collection, recovery and production of engineering polymers and textile polymers from the recycled scrap.



A year of recognition

for being more responsible and environmentally conscious.

RadiciGroup Companies are working to improve the degree of sustainability of their products and to implement increasingly environmentally friendly systems and plants.

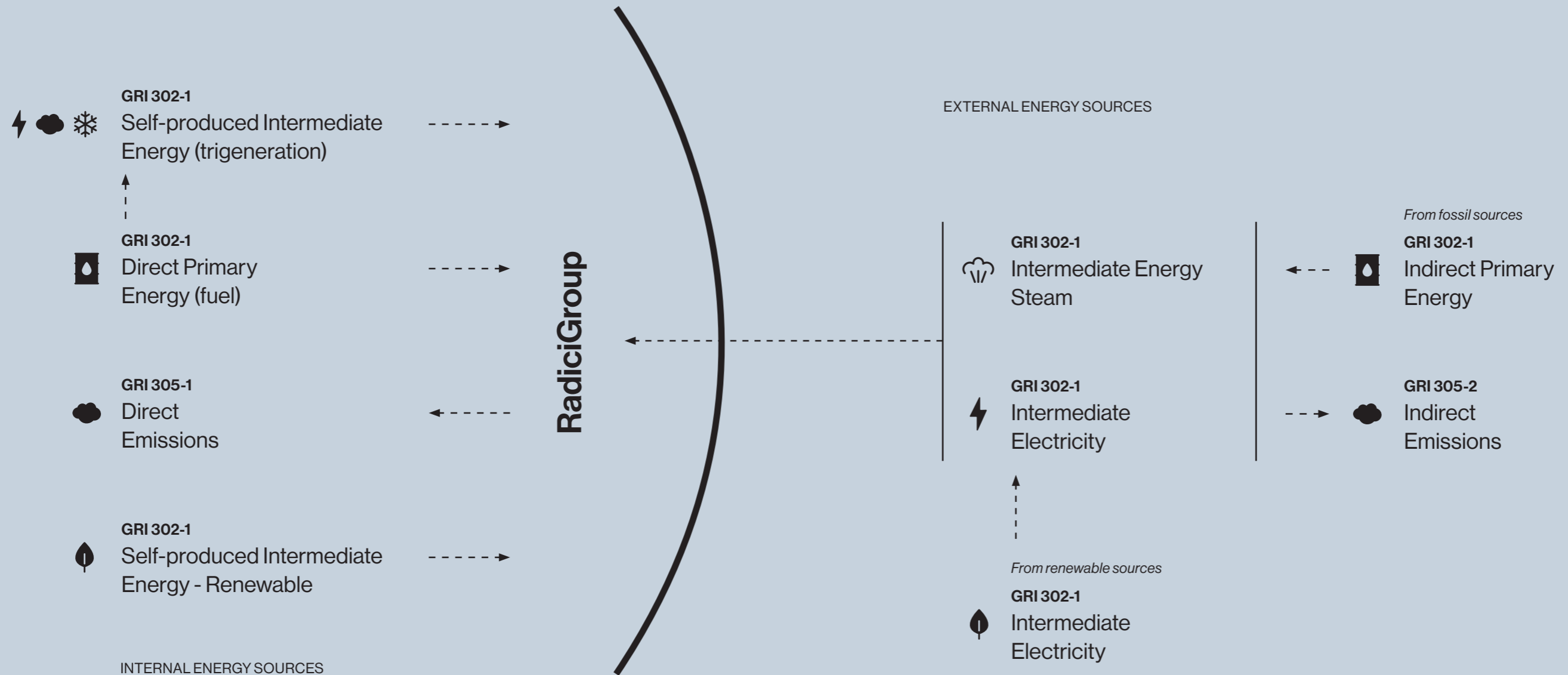
In 2022, the Asociación Nacional de Industrias del Plástico A.C. (ANIPAC) **“Distintivo Azul” award** was presented to **Radici Plastics Mexico** for its excellent implementation of the “Cero Pérdida de Pellets - CPP programme”, an initiative to combat the dispersion of plastic pellets and dust into the environment. This was **achieved through zero pellet loss containment and handling practices**. Radici Plastics Mexico is the fourth company and the first in the automotive sector to receive the award at national level.

The CPP programme is the local version of “Operation Clean Sweep - OCS”, an international programme promoted by industry trade associations, which RadiciGroup High Performance Polymers joined in 2019.

Not only that, but one year after moving to the new plant with double the production capacity, the company also obtained ISO 14001 certification for environmental management and ISO 50001 certification for energy management systems in 2022. These are important milestones with **100% of the High Performance Polymers Business Area sites** now **certified** to ISO 9001, ISO 14001 and ISO 45001.

02. Energy

Our Footprint on the sustainability path



02. Energy

Our Footprint on the sustainability path

The Group's energy consumption in 2022 was affected by the difficult crisis situation in Europe. The values surveyed all show a decreasing trend with one exception: fuel and electricity from renewable sources. Indeed, the purchase of biogas by companies is growing, increasing by 28.6% in 2021 and by 31.2% in the three-year period 2020-2022. This is a specific choice for the Specialty Chemicals BA, which cannot replace natural gas power for its plants, but uses alternatives with a lower impact. Furthermore, RadiGroup energy strategy led to a progressive and significant reduction in dependence on fossil fuels as for both direct and indirect primary energy, which goes from 7.6 GJ/t in 2011 to 5.2 GJ/t per tonne processed in 2022.

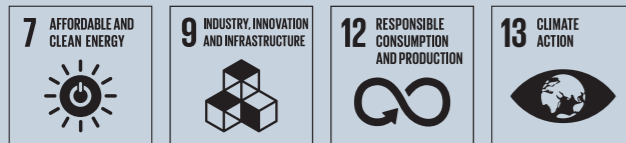
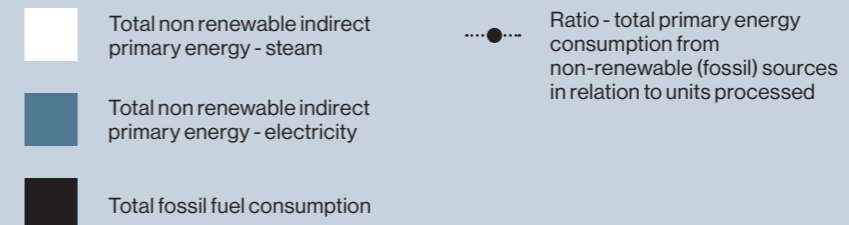
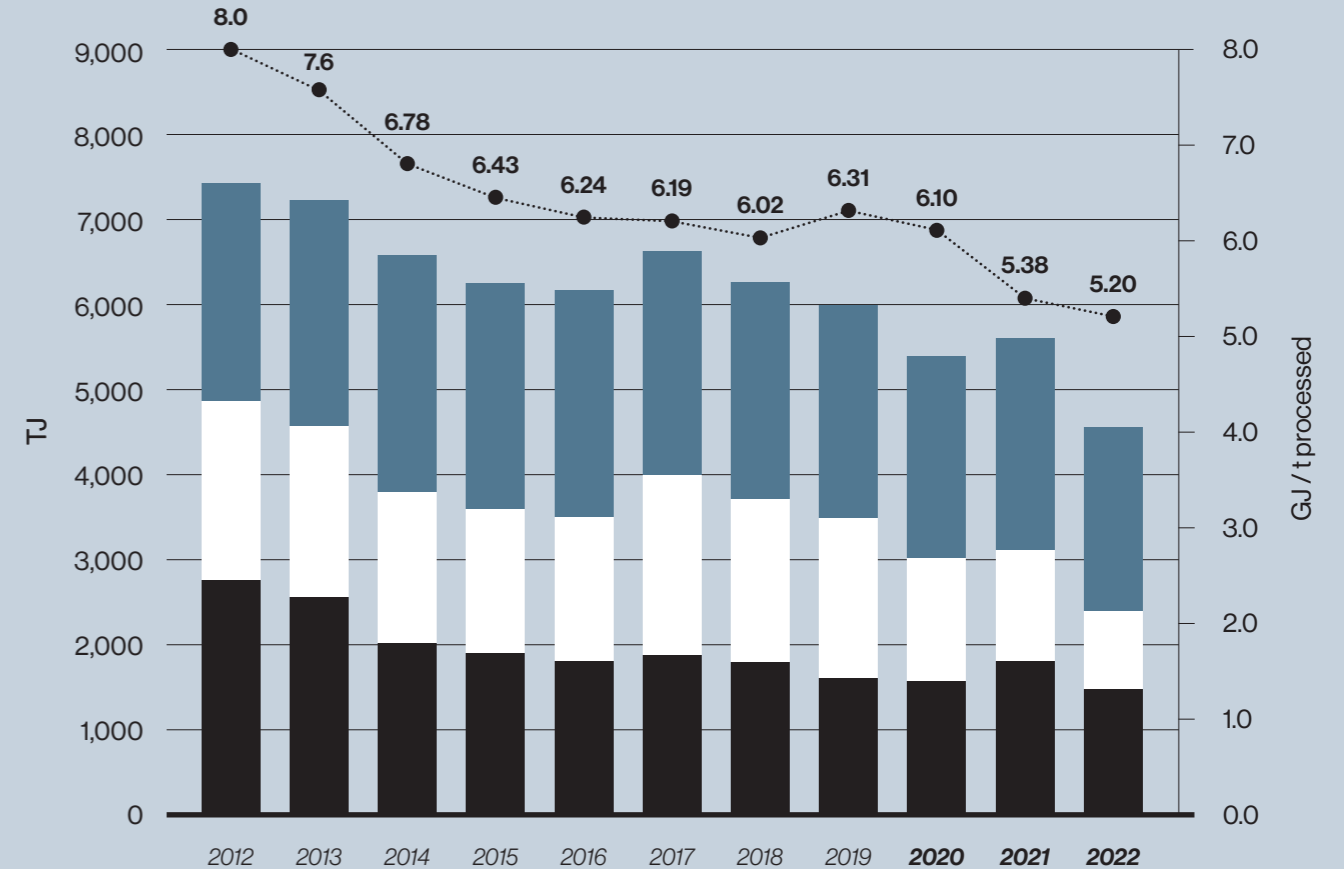


- 14.7%
total energy consumption from fossil sources per tonne processed compared to 2020

- 35.1%
total energy consumption from fossil sources compared to 2020



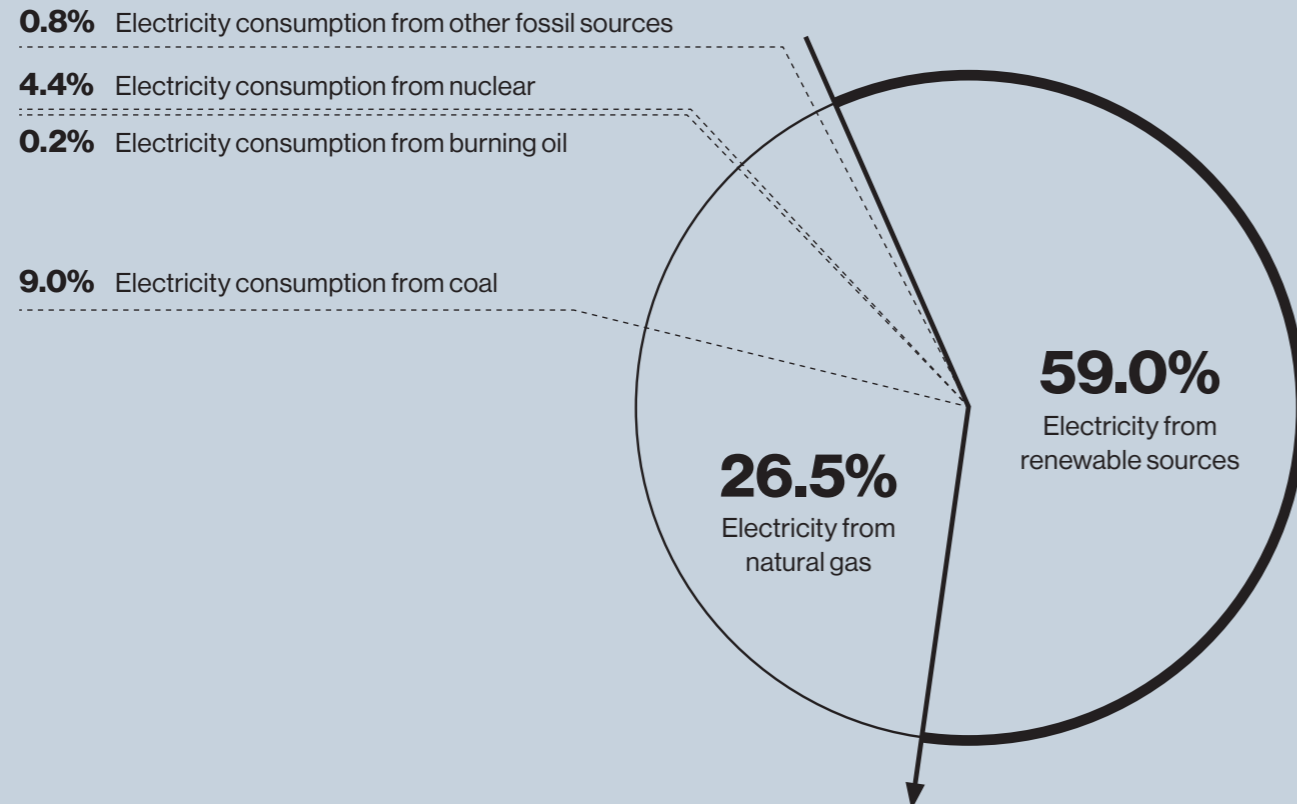
GRI 302-1 RadiciGroup global impact on Primary Energy



02. Energy

Our Footprint on the sustainability path

GRI 302-1 Electric energy mix - consumption



Electrical energy mix 2022

Despite the difficult scenario and the drought that severely affected the hydroelectric production of Geogreen, RadiciGroup's historical partner, the Group confirmed its commitment to the energy transition in 2022 by purchasing an increasing amount of green electricity. Today, worldwide, the Group's percentage of energy from renewable sources is 59%.

The amount of green energy generated by the Group is currently limited, but the sources are being diversified and, in addition to hydroelectricity, photovoltaic power has been introduced, the share of which is expected to increase over time. Finally, it is worth emphasising the constant presence in the RadiciGroup energy mix of a share of energy from nuclear power, a non-renewable but zero-emission source.

Companies and sites using renewable energy 2022

100% renewable energy:

- Noyfil - (Andalo Valtellino) Italy
- Noyfil - (Chignolo d'Isola) Italy
- RadiciFil - (Casnigo) Italy
- Radici EcoMaterials - (Buronzo) Italy
- Radici Novacips - (Villa d'Ogna) Italy
- Radici Novacips - (Chignolo d'Isola) Italy
- Radici Partecipazioni - (Gandino) Italy
- Radici Plastics GmbH - Germany
- Radici Yarn - (Ardesio) Italy
- Radici Yarn - Polymerization - (Villa d'Ogna) Italy*
- Tessiture Pietro Radici - (Gandino) Italy



>90% renewable energy:

- FibrexNylon - Romania

>80% renewable energy:

- Radici Fibras - Brazil

* Radici Yarn Villa d'Ogna purchases 100% renewable energy to power its polymerization plant, the remaining energy quantity is used to power the other departments, integrated with self-produced energy both from hydroelectric and from high efficiency trigeneration plants (trigeneration also produces steam and refrigeration).

Energy Action

energy-saving tips.



Less energy... more awareness:

is the name of the energy-saving awareness campaign that RadiciGroup has launched with its partner Geogreen, a provider of sustainable energy.

Disseminated through a manifesto sent to all Italian companies, it proposes some **simple rules to help us all contribute to reducing consumption**, starting from 2022, a year in which the problem of energy costs had a profound impact on the industrial sector and did not spare RadiciGroup.

Saving energy means first of all reducing energy requirements and, consequently, consumption.

This can be achieved through conscious behaviour by limiting waste not only in production areas, but also in meeting rooms and offices. Adjusting the room temperature, making better use of lifts, using natural light and switching off computers and electronic equipment after use were a few simple suggestions that were widely disseminated within the company.

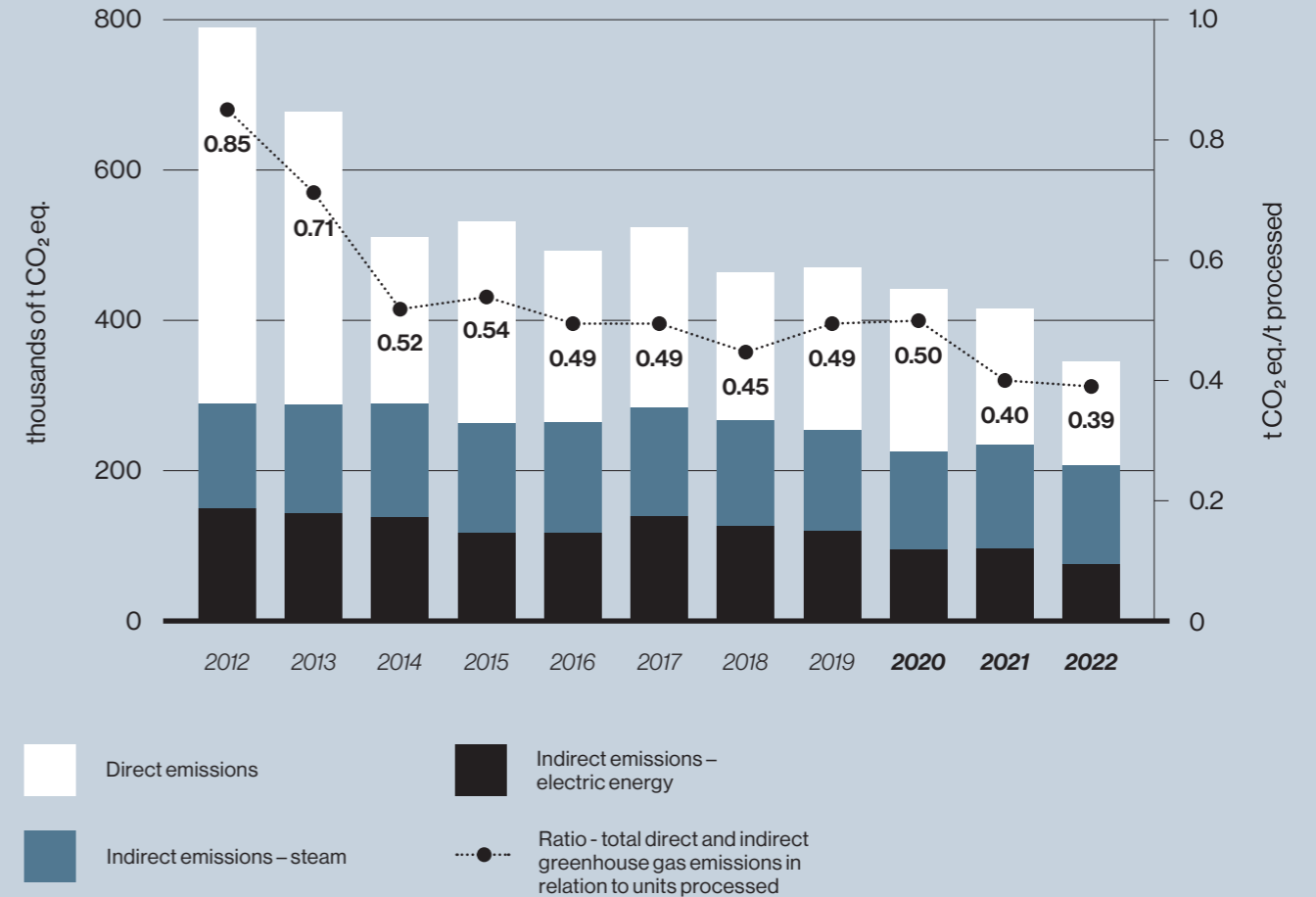
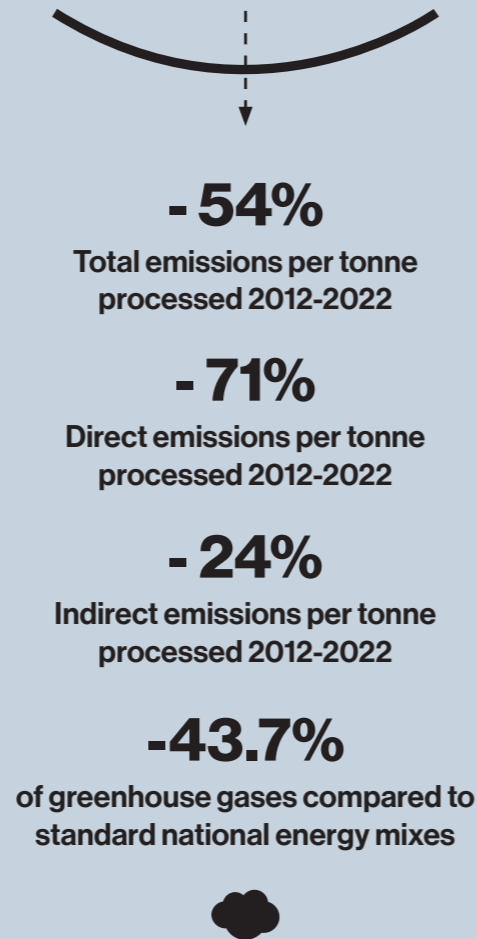
02. Emissions

We aim low only when our target is emissions

Again in 2022, the ratio relating to the group's total emissions to the quantities processed showed a decreasing trend from 0.402 tCO₂eq to 0.395 tCO₂eq. This figure indirectly confirms that the reduction in total emissions in absolute terms (about -17,5% compared to 2021) is not only due to the shutdown of plants, but also and above all to the climate change policies in which RadiciGroup has been investing for years, especially in the chemicals sector. Focusing on the chemicals sector and Radici Chimica Spa in particular, the decrease in direct emissions in relation to quantities processed in the three-year period 2020-2022 was -54.5% (-21.4% compared to 2021). By 2023, on the other hand, a further significant reduction in emissions is expected at the German site of Radici Chimica Deutschland thanks to a brand new plant that went into operation in January. The strategy of environmental responsibility that led to the investments, combined with the policy of purchasing green electricity, meant that by 2022 the emissions "avoided" by the chosen energy mix would be 43.7%. If the Group had simply used the standard national energy mixes of the countries in which it operates, it would have had an impact of 56,307 tCO₂eq more.



GRI 305-1 / GRI 305-2 Total (direct and indirect) greenhouse gas emissions*



* Direct emissions: figures reported include the CO₂ deriving from combustion and the N₂O deriving from the production of adipic and nitric acids. In the 2022 Sustainability Report, for the sake of completeness, figures related to direct emissions also include the leaks of F-Gases, the fluorinated greenhouse gases RadiciGroup uses for plant cooling purposes.

Roadmap to climate action

reduce emissions by 80% by 2030.



An important press meeting was held at Radici Chimica Novara in June 2022. During the event, the roadmap to a **significant reduction of emissions in the Group** was retraced. A multi-year investment plan of more than EUR 10 million involved three major projects at the Novara site: the commissioning in 2004 of a reactor designed and patented by the company; the installation in 2013 of an EnviNOx plant to abate nitrous oxide associated with nitric acid production and, in 2021, a further improvement of the abatement system for emissions associated with adipic acid production.

All these measures have meant that Radici Chimica Novara can now boast **nitrous oxide emissions of less than 10 ppm** (parts per million), a value that is close to zero.

The event was also an opportunity to launch a new and ambitious goal. After **direct emission reductions of 70%** between 2011 and 2020, the next target is to reduce emissions by a **further 10% by 2030**, mainly through Best Available Techniques in the chemical sector with further investments and the commissioning of an EnviNOx plant, also in Germany, in January 2023 to drastically reduce nitrous oxide emissions from nitric acid production.

03. Water used

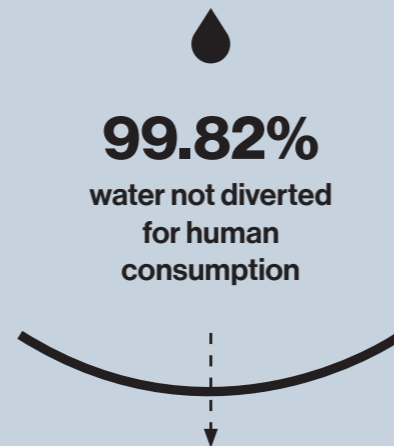
Saving water is our second nature

2022 was a complex year from a water perspective. The European Commission estimates that drought has caused several billion euros of damage to all industries. The Group has also been affected by water scarcity, particularly in relation to the reduced availability of hydroelectricity supplied directly by Geogreen, but this has been offset by a policy of careful market research into green energy.

This fact confirmed to the Group the need to protect water more and more, also as a consequence of climate change phenomena.

Three-quarters of the Group's sites have developed and maintain an ISO 14001 Environmental Management System, which focuses on preventing environmental risks, including those related to water management.

While the Group's products contain little or no water, the production processes are heavily dependent on it for plant cooling. It is therefore strategic for RadiciGroup to protect water, not to waste it and to reuse it as many times as possible (up to 60.5 times) before releasing it into the environment, under controlled conditions and in compliance with the regulations in force in the various countries.



GRI 303-3 Water withdrawal by source*

		2020	2021	2022
Thousands of m³	Total	77,010	83,100	73,335
Thousands of m³	Total surface water	32,056	32,811	27,389
Thousands of m ³	from rivers/canals	31,452.1	32,230.1	26,916.5
Thousands of m ³	from springs	603.6	581.3	472.5
Thousands of m³	Total groundwater	8,085	8,542	8,132
Thousands of m ³	from wells	8,084.7	8,542.5	8,132.3
Thousands of m³	Total third-party water	36,870	41,746	37,814
Thousands of m ³	from aqueducts	126.9	141.1	134.6
Thousands of m ³	from private utilities	36,743.1	41,605.3	37,679.4
Thousands of m³/t	Ratio - Use of water resources per unit processed	0.087	0.080	0.084

* For production sites where the quantity of discharged water is not measured, this quantity is generally assumed to be equal to withdrawn water. The same applies to cases when only discharged water is measured. In this case, withdrawn water is generally considered equal to discharged water. The Group uses "fresh water" for its activities, i.e. with < 1,000 mg/l of total dissolved solids.

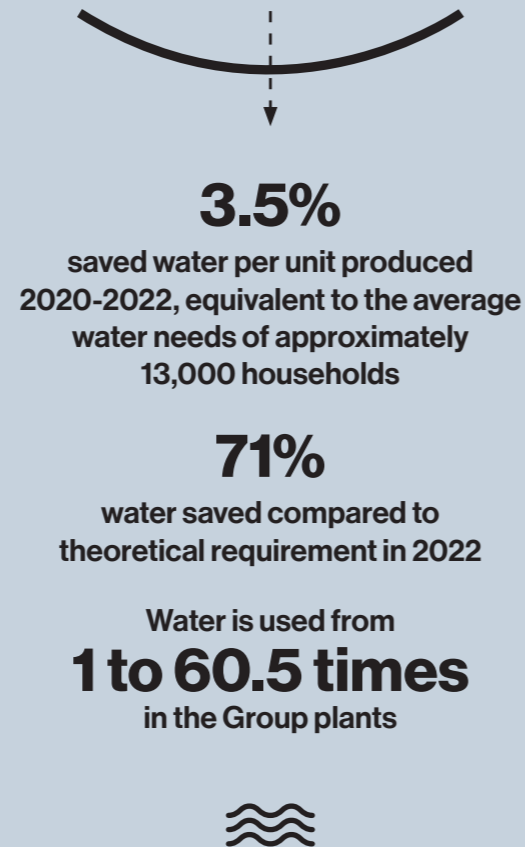
03. Water released

At the source of recycling

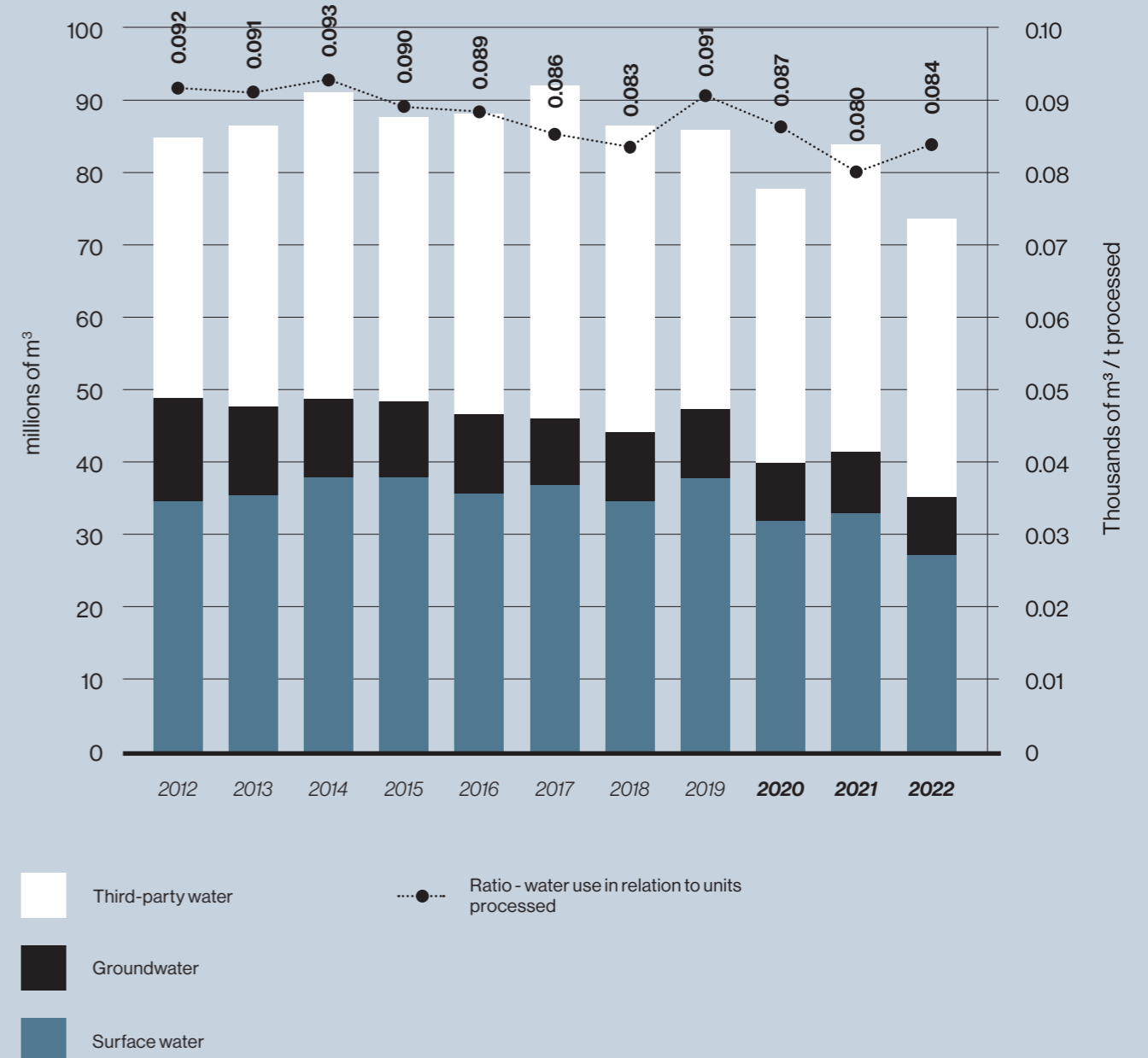
In 2022, the practice of recycling cooling water saved up to 71%, which is in line with the previous year.

As in every year, Radici Chimica Deutschland GmbH adopted a specific water management policy: for the operation of its plants, it draws the resource from a water loop, managed by the industrial park to which it belongs. The same consortium also deals with the recycling of output water.

Formally, the recycling activity takes place outside the company gates, so the contribution of Radici Chimica Deutschland GmbH to the savings ratio indicator is zero. Excluding the German company from the scope, the percentage of water saved in 2020 rises to 146%.



GRI 303-3 Water withdrawal by source



GRI 302-3 Energy intensity ratio for the organisation

		2020	2021	2022
GJ	Total energy consumption (GRI 302-1)	5,408,531	5,586,749	4,531,932
€	Total net value added	253,092,544	356,803,131	234,576,786
GJ/€	Total energy consumption (direct+indirect) in relation to net total value added	0.021	0.016	0.019

GRI 305-4 GHG emissions intensity

		2020	2021	2022
tCO ₂ eq	Total emissions into the atmosphere (GRI 305-1 and 305-2)	441,059	416,701	343,690
€	Total net value added	253,092,544	356,803,131	234,576,786
kgCO₂eq/€	Total emissions to the atmosphere (direct + indirect) to total net value added	1.81	1.17	1.47

Water resources ratio to net total value added

		2020	2021	2022
ML	Water resources (GRI 303-3)	77,010	83,100	73,335
€	Net total value added	253,092,544	356,803,131	234,576,786
ML/€	Water resources to net total value added	0.00030	0.00023	0.00031

Ratio of waste subject to disposal without recovery in relation to total net value added

		2020	2021	2022
t	Waste subject to disposal without recovery (GRI 306-2)	3,504	5,003	4,438
€	Net total value added	253,092,544	356,803,131	234,576,786
Kg/€	Waste subject to disposal without recovery to total net value added	0.014	0.014	0.019

S for Social



Material topics

- Workers' Human Rights
- Attraction and Valuing of Staff
- Workers' Health and Safety
- Relations with Territories and impact on Local Communities
- Sustainable Research and Innovation
- Circular Economy
- Product environmental impacts
- Materials and chemicals management
- Responsible supply chain management and traceability

From the Code of Ethics

We care about People

At RadiciGroup **we recognise the centrality of the Person**, basing our relationship with our employees on the principles of fairness, legality and respect for national collective agreements.

- We reject all forms of child or forced labour.
- We promote merit and equal opportunities, rejecting any kind of discrimination.
- We carry out the personnel selection and recruitment process based on the suitability of candidates to meet the organisation's needs, according to equal opportunity and transparency criteria.
- We invest in the growth, training and fulfilment of People, to increase and enhance their skills and knowledge.
- We recognise and protect, in every company, the right of employees to join trade union or political associations, promoting constructive dialogue with these associations.
- We protect labour relations from harassment, hostile and discriminatory actions intended to isolate or demean individual people or groups of Workers. Included in this principle is sexual harassment, i.e. the imposition of expressly unwelcome interpersonal relationships.

Elements creating value

- **Safeguard employment** as the primary asset with **collective, full time agreements**.
- **Respect the human rights** of Workers everywhere in the world.
- **Protect Worker Health and Safety** by constantly monitoring the effectiveness of risk management processes and providing training on specific health and safety topics.
- Implement continuous and voluntary training programmes that aim at **developing the skills** of each employee in accordance with their aptitudes, work duties and professional career.
- Promoting **work-life balance** through flexibility measures.
- Involve Workers through **daily dialogue**, and through all the information and communication instruments of RadiciGroup.

Employees by geographical area



In terms of the geographical distribution of Employees, there is a significant balance between Italy and the rest of the world, an element that makes it increasingly important to value the cultural diversity that the different countries in which the Group operates bring, and which is also recognised in the Group's values.



GRI 102-8 Employees* by region and gender

	Men	2020	2021	2022
n	Italy	1,249	1,249	1,212
n	Rest of Europe	556	587	612
n	Asia	71	88	131
n	North and South America	279	309	328
Women				
n	Italy	313	329	325
n	Rest of Europe	369	397	398
n	Asia	29	31	34
n	North and South America	76	75	82
Total				
n	Italy	1562	1,578	1,537
n	Rest of Europe	925	984	1,010
n	Asia	100	119	165
n	North and South America	355	384	410

* Data on RadiciGroup Workers and Employees are reported as of 31 December of each year and counted HDC (Headcount).

RadiciGroup Employees by gender, employment contract and employment type*

		Men			Women			Total		
		2020	2021	2022	2020	2021	2022	2020	2021	2022
n	Total Employees	2,155	2,233	2,283	787	832	839	2,942	3,065	3,122
	<i>of which</i>									
n	Permanent contract Employees	2,062	2,135	2,145	732	774	790	2,794	2,909	2,935
n	Temporary contract Employees	93	98	138	55	58	49	148	156	187
%	Permanent Employees to total Employees	95.7%	95.6%	94.0%	93.0%	93.0%	94.3%	95.0%	94.9%	94.0%
n	Full-Time (permanent + temporary)	2,132	2,209	2,262	657	698	712	2,789	2,907	2,974
n	Part-Time (permanent + temporary)	23	24	21	130	134	127	153	158	148
%	Full-time Employees to total Employees	98.9%	98.9%	99.1%	83.5%	83.9%	84.9%	94.8%	94.8%	95.3%

* No RadiciGroup Company has employees with non-guaranteed hours.

Employees by bargaining agreement type

		2020	2021	2022
n	Collective bargaining*	2,692	2,791	2,973
n	Individual employment agreement	250	274	149
n	Total Employees	2,942	3,065	3,122
%	Individual employment agreement	8.5%	8.9%	4.8%
%	Collective bargaining agreement	91.5%	91.1%	95.2%

* Collective bargaining includes national bargaining and company bargaining.



People, our most important resource

The Group has always regarded its employees as key Stakeholders for its sustainable growth.

That is why it works on:

- **Maintaining**, under enhanced **safety conditions**, all possible work activities.
- **Financial support for Workers** through the timely application of the support instruments provided by law.
- **Training** to improve the qualities and contribution of each individual.
- **Management of the relationship between young and mature workforce** with a view to the effective management of people's entire professional life cycle.
- **Encouraging team spirit.**

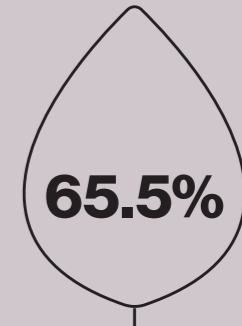
We value our Employees

Balancing the different facets of sustainability. This is the challenge that RadiciGroup has taken on, with the deep conviction that economic, social and environmental interests must be harmonised for the sake of enhancing its corporate reputation and creating a virtuous cycle of **improvement in its overall performance.**

Added value is a fundamental **link between** RadiciGroup's **economic-financial strategy** and its **sustainability policy.** It allows us to quantify the wealth produced and to understand how it is distributed among Stakeholders.

It is in this spirit that in 2022, again, remuneration has found a prominent place in the value-added distribution statement for the over 3,100 Employees.

Together with the remuneration of the Public Administration, this is based on fairness and a contribution to the Group's traditional regional development.



of value added
2022

3,122
Employees

Training courses for professional growth

For some time now, RadiciGroup has been implementing **important training programmes** aimed at enhancing the skills of its Employees by stimulating their professional and personal growth.

Training provides staff with **useful tools** to successfully face the daily challenges brought by the numerous **technological and organisational changes** the Group has undergone in recent years.

In 2022, the number of training hours per capita was 15.2, up slightly from the previous year. The Group's training plan followed some key common guidelines:

- The delivery of **courses in a mixed mode, face-to-face and e-learning**, a method that has become established in recent years and that allows employees to take advantage of important opportunities without having to move from place to place, but still sharing the experience with colleagues from different companies.
- **Intercompany training**, to support the integration process of RadiciGroup Business Areas, fostering knowledge and exchange between people from different functions or companies.
- **Training** on key issues that allow the Group to **remain at the forefront** not only in terms of production and sales, but also in terms of the skills of its personnel.
- Courses with a **strong practical component** to stimulate learning through practical experience, including in unusual and innovative ways.

- For new employees and all Workers worldwide with a named mailbox, the **'Kaspersky ASAP - Cyber Security'** course for the creation of a **shared IT security** culture continued.
- For all employees, **courses** on the correct use of work equipment and **health and safety** continued. The latter accounted for **58% of the Group's training hours**. Language courses also restarted, with an important new feature: the first Italian language module for international staff was launched, with a view to ever closer integration and collaboration between all employees worldwide.

In 2023, some **further innovative training courses** are planned, in particular a plan that will see top management involved in the creation of a new **leadership style based on sharing**. The **first large-scale course in the Group** is also planned, **involving about 200 people**, to provide **the basics and essentials of the concepts of sustainability and circularity**, applied to the RadiciGroup organisation and its application sectors.

GRI 404-1 Training for Employees

		2020	2021	2022
hours	Total hours of training	35,911	45,477	47,492
hours	Total hours of training for Health and Safety	19,136	24,989	27,562
%	% hours of training for Health and Safety to total hours of training	37%	55%	58%

Hours of training per capita and per gender

n	Total employees	2,942	3,065	3,122
hours/n	Hours of training per capita	12.2	14.8	15.2

Men

hours	Total hours of training	28,533	36,859	38,313
n	Total Employees	2,155	2,233	2,283
hours/n	Total hours of training	13.2	16.5	16.8

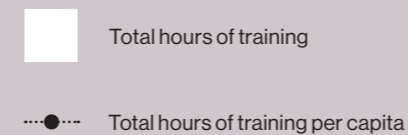
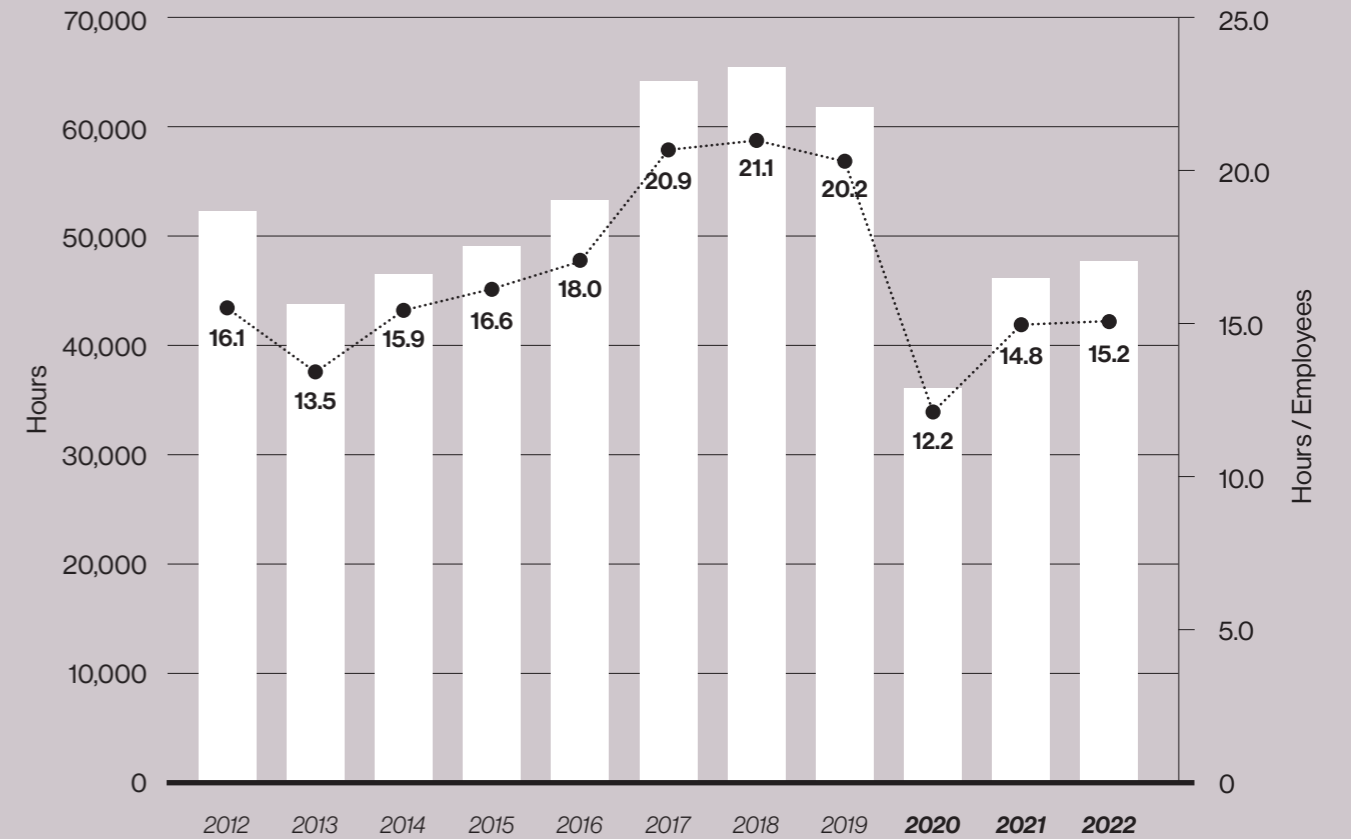
Women

hours	Total hours of training	7,377	8,618	9,179
n	Total Employees	787	832	839
hours/n	Total hours of training	9.4	10.4	10.9

Hours of training per capita and per geographical area

hours/n	Italy	6.4	9.9	11.1
hours/n	Rest of Europe	13.8	10.1	10.5
hours/n	Asia	37.1	33.9	21.7
hours/n	North and South America	26.9	41.5	39.6

Total hours of training



Outdoor training

build and consolidate teamwork.



RadiciGroup invests in **training** to make Workers aware of their role in safety in the company. For this reason, in 2022 it implemented a training plan called “Lavorare Bene e Sicuri” (Working Well and Safely) to update all the people involved in various capacities (around 420 people). **Classroom lessons** were organised, for an in-depth look at health and safety regulations, but also with forays into the topics of work-related stress, time management and organisation of activities including smart working.

The Safety Managers and Office Managers group then experimented with special **outdoor training** in nature, using the innovative Outdoor Training method.

Its added value lies in building and consolidating teamwork. It is **experiential training that accelerates the learning process** by bringing the cognitive component into play along with the emotional and physical ones. With this method, the participants did exercises to become more flexible, to increase their self-confidence and that of their colleagues, and to train their focus and reactivity on the tasks they had to carry out. The outcome of the outdoor training was particularly positive and the intention of the Group's Health and Safety and Human Resources managers is to repeat the experience in future courses.

Health and Safety at work

RadiciGroup safeguards the Health and Safety of Workers monitoring performances in terms of:

- **Risk analysis and risk management** through robust management systems, to translate Health and Safety concepts into every aspect of daily business.
- **Compulsory and voluntary training**, starting with newly recruited Workers, as a distinctive factor, making people an active part of safety.
- **Raising the awareness** of each employee about their contribution to the safety management of the company.
- **Organising initiatives to promote healthy lifestyles and support prevention** as a means of tackling some of the most serious or widespread diseases.



Health and Safety



of overall training hours

A key role is assigned to the individuals responsible for the management system, mainly Employees of the various sites, who assume different job titles depending on the regulatory framework of the different organisations. For Italian sites, the person in charge of the prevention and protection service (RSPP), and the employer, in compliance with Italian Legislative Decree 81/2008, have the specific task of organising and managing the system of risk prevention and protection.

The tasks of these professionals, whose obligations include the continuous updating of skills, include:

- **Identifying and assessing risk factors.**
- **Developing preventive and protective measures.**
- **Worker training and information.**

All Workers, not just those involved in Health and Safety, are called upon to develop and improve management systems.

As already indicated, training is considered vital: approximately **58% of the total training hours are dedicated to Health and Safety issues**. In addition to training courses, operational instructions, communications and teaching materials are among the most common means of involvement.

In addition, a **Workers' safety representative (RLS) is elected or appointed** at all RadiciGroup companies or production units in Italy.

The specific task of this role is to **report Workers' requests**, with the aim of building a spirit of active participation in the practice of health and safety principles in the workplace.



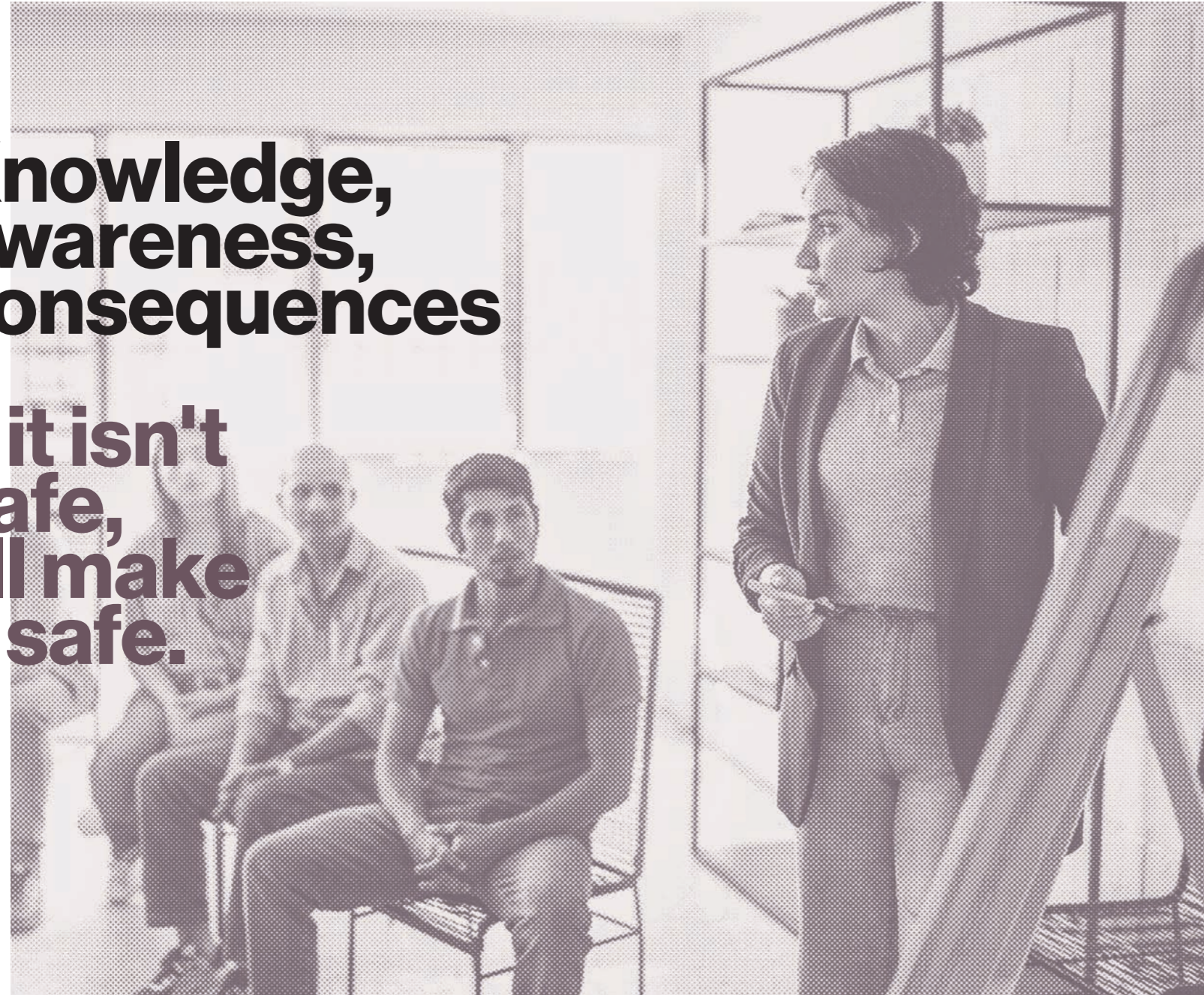
GRI 403-9 Work-related injuries

		Total			Men			Women		
		2020	2021	2022	2020	2021	2022	2020	2021	2022
n	Total Workers*	3,227	3,428	3,451	2,416	2,559	2,561	811	869	890
hours	Total hours worked	4,880,086	5,552,211	5,480,135	3,731,119	4,230,331	4,132,779	1,148,967	1,321,880	1,347,356
n	Number of fatal injuries	0	0	0	0	0	0	0	0	0
n	Number of high-consequence injuries	12	16	9	12	15	7	0	1	2
n/200,000h	High-consequence injury rate	0.49	0.58	0.33	0.64	0.71	0.34	0	0.15	0.30
days	High-consequence injury lost days (days away from work)	1,380	1,423	1,192	1,380	1,356	757	0	67	435
n/200,000h	High-consequence injury days lost rate	56.6	51.3	43.5	74.0	64.1	36.6	0	10.1	64.6
n	Number of non-high-consequence injuries	35	53	70	31	47	60	4	6	10
n/200,000h	Injury rate	1.43	1.91	2.55	1.66	2.22	2.90	0.70	0.91	1.48
days	Injury lost days (days away from work)	511	690	1,001	449	599	875	62	91	126
n/200,000h	Non-high-consequence injury days lost rate	20.9	24.9	36.5	24.1	28.3	42.3	10.8	13.8	18.7

* At 31/12/2022, Workers included contract Workers, temporary Workers (who work continuously for RadiciGroup), and Employees.

Knowledge, awareness, consequences

if it isn't
safe,
I'll make
it safe.



In 2022, a communication campaign was launched at Radici Plastics Mexico with the slogan “If it isn't safe, I'll make it safe”, which involved all employees with the aim of increasing the **safety culture**. A course was organised to provide participants with all the tools they need to **recognise a risk situation and act accordingly**. The first theoretical phase, consisting of a workshop entitled “Knowledge, Awareness and Consequences”, introduced the basics and analysed the different scenarios, identifying the risks to which Workers are exposed and the different types of safety that need to be implemented. A doctor and an occupational safety specialist carried out the training for the staff, assessing their initial and final level of knowledge. The second practical phase was an exercise called “**Colleagues look after Colleagues**”.

In the first simulation, colleagues deal with a person falling from a mezzanine and suffering a fractured skull; in the second, a person suffering a sulphuric acid burn inside a laboratory. In both cases, the members of the first aid team took action to assist their colleagues, putting into practice what they had learnt during the course. Participants were thus able to gain **practical experience and much food for thought**. The initiative was well received and will be repeated in 2023.

From the Code of Ethics **Our capital, is, above all, human**

The Person is at the heart of our strategy. We promote professional development by recognising merit, valuing skills and investing in training. We consider work-life balance a pivotal point for an optimal corporate environment.

A serene private life is important to face daily work with enthusiasm and dedication. This is a fundamental principle to RadiciGroup which favours the balance of private and work life through concrete and consistent activities and initiatives.

Since 2015, the project formerly known as WHP (Workplace Health Promotion) has been running and has been gradually rolled out to the various Italian and foreign companies under the name of “**StoBene**” (I’m well), to **encourage Workers to adopt healthy lifestyles and positive mental attitudes.**

Additional initiatives linked to specific socio-cultural contexts are also active in some locations. For example, **green mobility** is encouraged by providing company bicycles or organising **sports competitions** for employees. In other cases, **sites open their doors to Employees' families**, allowing them to be guests on company premises, in the belief that it is important to foster a virtuous circle between family and work.



The introduction of an integrated corporate **welfare** system in some of its plants.

The promotion of initiatives for Employees to increase their **physical and psychological well-being.**

The introduction of **agile working two days a week** for Italian Workers.

Workers' engagement through internal communication and involvement initiatives **to boost their team spirit.**

Experimental **hourly flexibility** pilot rules as a result of the agile model.



Health and well-being

a priority for Radici Plastics Ltda.

“Pink October” is a worldwide initiative to raise awareness among women about the **prevention** and early detection of breast cancer, which remains the most frequently diagnosed cancer in women.

In 2022 Radici Plastics Ltda joined the initiative by organising an **internal information and training campaign** on the subject. An oncologist was brought in to talk to female employees about prevention, which is particularly important as the disease is often asymptomatic.

Similarly, in November, a meeting was organised for male staff on prostate cancer prevention. A medical specialist addressed the issue with the aim of raising awareness of this and other key men's health issues. Both initiatives were well received and will be repeated and expanded in the coming years to improve the quality

of personal and working life, in line with the Group's initiatives to **improve the mental and physical well-being of its employees.**

Finally, also in 2022, the employees of Radici Plastics Ltda were able to enjoy **physical activity courses** for the various company teams. The company organised special outdoor group sessions where the exercise not only helped to improve the fitness of those taking part, but also **built motivation** and cohesion amongst the participants.

Little artists

a cultural competition for Children's Month.



Radici Plastics Ltda, a production company of the RadiciGroup's HPP division, dedicates each month of the year to a specific theme in order to **maintain and improve the relationship between employees and the company**. The aim is to overcome the conflict between private life and work, with a view to improving people's overall quality of life through more balanced management of interpersonal relationships and physical and mental health. This also has many positive effects on the company, with an improved internal climate and a greater **sense of belonging and involvement for all Employees**.

October is dedicated to Workers children. In October 2022, the first corporate culture competition was launched for young children aged 11 and over, who were asked to

illustrate, through a drawing, poem or musical composition, how they imagined their parents' workplace and daily routines. Fourteen works of art were submitted with an overall positive response to the initiative.

The entire staff at Radici Plastics Ltda judged the entries and rewarded the winners, **Catarina and Eduardo**, with games and a visit to the company to see for themselves the offices and departments where their parents work.

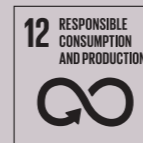
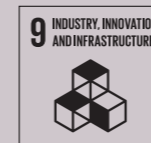
Innovation and products



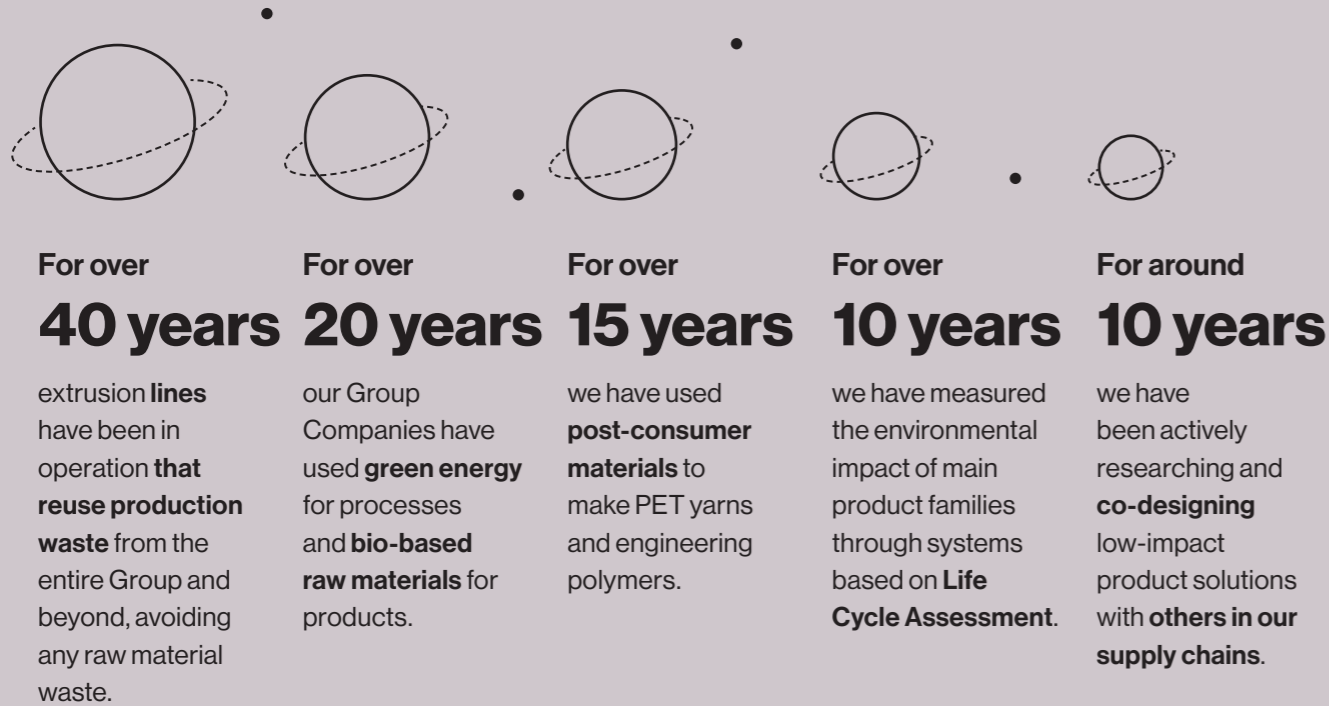
A quality-based value chain, also for the Environment

Our value chain is made of values before being made of products. **it is made of dialogue and constant collaboration** with our Suppliers, our Customers all our Stakeholders.

Our value chain looks at the **future of our planet** to create high quality, sustainable products **for the good of all.**



RadiciGroup the product sustainability story comes from afar



Today, RadiciGroup's low environmental impact products are developed and produced, while focusing on the following commitments:

- To develop new concepts through **innovation**, particularly circular, process and product innovation.
- **To rationalise** the use of **raw materials**, choose renewable energy sources and reduce scrap and waste.
- **To measure the impacts** using scientific methods, so as to ensure the Group can make sound decisions and act with transparency in the market.
- **To consider product end of life** from the beginning of product development, fostering the use of raw materials with low environmental impact and better recyclability, coupled with formulations that consider the entire life cycle in terms of high durability and performance.
- **To optimise processes** thanks to targeted investments.
- To work with Suppliers, Customers, associations and partners towards a **sustainable production chain**.

Traceability becomes a system

In recent years, as a result of the growing awareness of the **importance of each production step** from the standpoint of Quality, Health, Safety and compliance with applicable regulations, the ability to precisely trace the various steps in the procurement or processing of materials has become a key factor in RadiciGroup's sustainability strategy.

RadiciGroup traceability is:

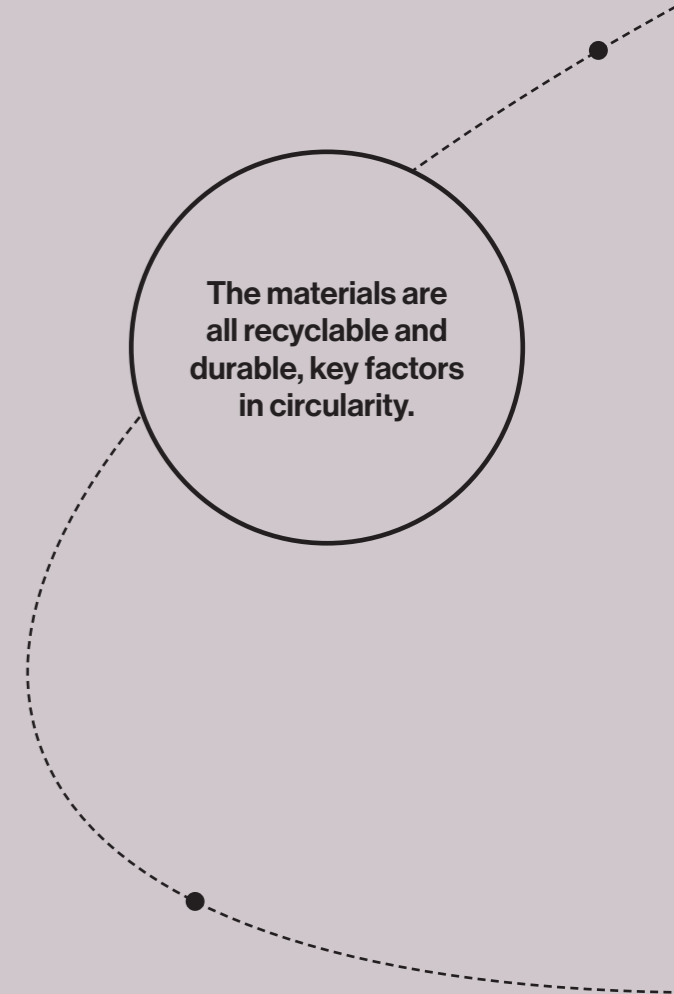
- Full for virgin and post industrial recycled materials handled in-house.
- The presence of GRS certification or the main ISO standards applied by RadiciGroup or Oeko-tex certification requires the traceability of post-consumer recycled materials purchased on the market.
- Governed by management software that monitors every step of the production chain. This makes it possible to trace each batch back to detailed information on the raw material, the production line, the different processes used and packaging or shipping data.









Why choose RadiciGroup low-environmental impact products?

Because they can be:

- Manufactured using **recycled materials** to reduce the use of valuable virgin raw materials and give new life to pre - and post-consumer scrap.
- **Solution-dyed**, thus significantly reducing water and energy.
- A **limited carbon footprint** measured through the **LCA methodology**, an advantage for the entire value chain.
- Manufactured using **green energy**, which decreases dependence on fossil fuels.
- **Bio-based**, i.e. made wholly or partly from **renewable natural raw materials**.
- **Biodegradable**: i.e. **able to be broken down into their different components** through biochemical processes.



RadiciGroup low-environmental impact products

Product	BA	 Energy from renewable sources	 Bio-based	 Solution-dyed	 Recycled	 Durable Recyclable	 Biodegradable
Radipol®	Speciality Chemicals	●				●	
Radipol® 6.10	Speciality Chemicals		●			●	
Heramid®	High Performance Polymers	●			●	●	
Radilon®	High Performance Polymers	●				●	
Radilon® D	High Performance Polymers		●			●	
Radilon®	Advanced Textile Solutions	●		●		●	
Radifloor®	Advanced Textile Solutions	●		●		●	
Dorix®	Advanced Textile Solutions			●		●	
Radyarn®	Advanced Textile Solutions			●		●	
Starlight®	Advanced Textile Solutions			●		●	
Dylar®	Advanced Textile Solutions	●		●		●	
Radimelt®	Advanced Textile Solutions	●		●		●	
Radipeople®	Advanced Textile Solutions	●	●	●		●	
Renycle®	Cross-Business Area	●		●	●	●	
Repetable®	Cross-Business Area			●	●	●	
Responsibile®	Cross-Business Area	●		●	●	●	
Biofeel®	Cross-Business Area	●	●	●		●	
Biofeel® PLA	Cross-Business Area		●	●		●	●

Radipeople®

when safety meets sustainability.



RadiciGroup Radipeople® PPE is the result of a **traceable supply chain and made in Italy**. These garments are designed for personal protection in healthcare and industrial environments. Overalls and gowns with different levels of protection depending on the application, and accessories such as footwear, head protection and ear protection.

All this is also sustainable:

The company adheres to the **ISCC PLUS** (International Sustainability and Carbon Certification) scheme, a **traceability certification for circular materials**, allocated through the mass balance approach. This means that for the same performance, a range of garments can be made from a minimum of 66% and a maximum of 100% circularly sourced fabric.

The products in the Radipeople® range are on average 25% lighter than what is currently available on the market, both to improve wearer comfort and to reduce waste. In addition, the nonwoven fabric that forms the basis of Radipeople® is produced in plants powered by 100% renewable sources, just as the vast majority of the products are entirely made in Italy, from the fabric to the finished garment.

The focus on people's health and safety, which is one of the pillars of the Group's sustainability strategy, is therefore combined with a strong commitment to environmental protection.

Transparency, you see

RadiciGroup considers it essential for itself and the entire value chain to have **robust**, accurately and scientifically obtained **reference values** for the environmental impact of its products. For this reason, RadiciGroup has long used **Life Cycle Assessment** studies and has set up a team of in-house experts, coordinated by Radici InNova, to provide a **specialised and strategic LCA service** to all its companies. Life Cycle Assessment (LCA) is a scientific, analytical

and systematic methodology that assesses the environmental footprint of a product throughout its entire life cycle. This is the only way to objectively **measure the environmental impact** of the product/organisation and to implement truly valid and targeted reduction solutions to concretely **improve the environmental footprint**, also in line with Best Available Techniques (BAT).

LCA

(Life Cycle Assessment)

The LCA method has been employed by the Group for all of its main polyamide and polyester based products since 2010, and **each product has been examined over the entire life cycle to fully reveal its interactions with the environment.**

LCA data are used in the Group as the basis for the Environmental Product Declaration (Environmental Product Declaration) and the PEF (Product Environmental Footprint).

EPD

(Environmental Product Declaration)

An EPD, issued by a company running an ISO 14025-certified EPD process, **communicates the environmental performance of a product.** As of today, EPDs have been developed and published by the RadiciGroup High Performance Polymers and Advanced Textile Solutions Business Areas. All EPDs are published online on a dedicated site operated by an EPD programme operator. For this service, the Group has chosen the International EPD® System, one of the world's most reputable EPD programme operators.

PEF

(Product Environmental Footprint)

The Product Environmental Footprint (PEF) is a methodology, promoted by the European Union, **that establishes the rules for calculating, assessing and communicating the environmental performance of goods and services to Stakeholders.** PEFs have been issued by the RadiciGroup Speciality Chemicals and Advanced Textile Solutions Business Areas.

Life Cycle Assessment

for a sustainable production system.

RadiciGroup considers it essential to have robust, accurately and scientifically obtained reference values for the environmental impact of its products. For this reason, RadiciGroup has long used LCA studies and has set up a team of in-house experts, coordinated by Radici InNova, to provide a **specialised and strategic Life Cycle Assessment service** to all its companies. Life Cycle Assessment (LCA) is an analytical and systematic methodology, applied in all the Group's Business Areas in 2022, which assesses the environmental impact of a product throughout its life cycle and provides the environmental impact values associated with each phase. This is the only way to objectively measure the environmental impact of the product/organisation and to implement **truly valid and targeted reduction solutions**

to concretely improve the environmental footprint, also in line with Best Available Techniques (BAT). Through LCA studies RadiciGroup intends to make an active contribution to Goal 12 of the United Nations 2030 Agenda for a sustainable and circular production system.

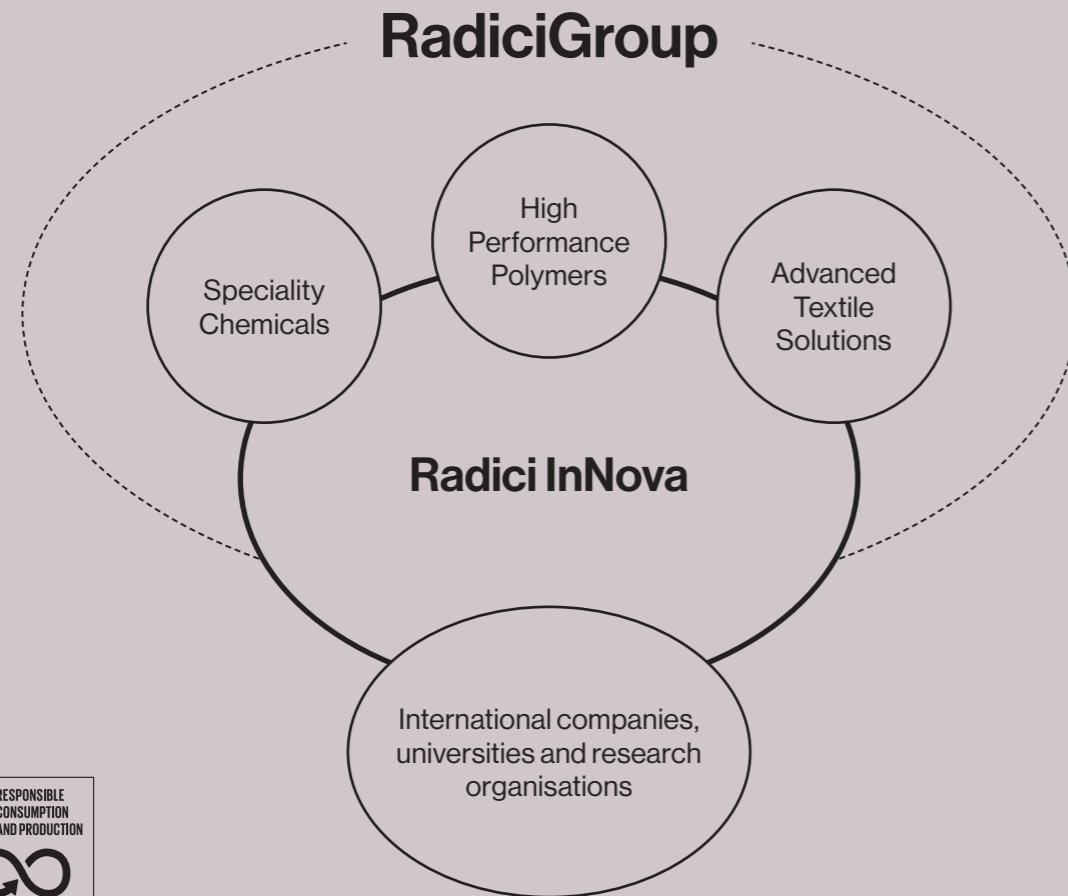
The benefits of LCA

- It is essential to identify possible areas for improvement in the production process.
- It is essential to monitor the reduction of the environmental footprint along the value chain.
- It is strategic in assessing the environmental performance of a new product/process in advance.
- It is an excellent tool for transparent communication.

Radici InNova. The Source of InNovation

At the end of 2019, Radici InNova, a Consortium for Research and Innovation, was founded.

The new company **will play a key role in RadiciGroup's sustainable growth** and provide crucial support for the Group's strategic decision-making



Projects of strategic importance in 2022

Radici InNova operates on the basis of a **multi-Stakeholder collaboration logic**, involving the companies of RadiciGroup, research institutes, clusters and qualified partners able to provide infrastructure resources and technical and scientific support for the implementation of projects.

Every year, the consortium carries out numerous projects. In 2022, the main action lines were:

- The **Circular Economy**, with studies and experiments on different forms of nylon recycling, in particular on identifying the best solutions for processing post-consumer mixed thermoplastics.
- **Ecodesign**, with experiments in collaboration with Customers and Suppliers to support a successful, yet sustainable economic model such as the circular model right from product conception.
- **Nylon-based biopolymers**, with special work on the characterisation of biopolymers already in the Group's portfolio for the fibre (clothing) and technopolymers (automotive) sectors, and research into new bio-based polymer matrices.
- **Filtration materials**, especially polypropylene nonwovens for the automotive sector for cabin air filtration and air conditioning systems.

Also strategic for Radici InNova in 2022 were a number of topics with a medium to long-term horizon, which are essential for the ecological transition. Firstly, **the mass balance approach**, to support the recovery of mixed fractions of plastics, particularly polyolefins, which are difficult to recycle today. Secondly, **chemical safety**, in the spirit of the European principle of "safe and sustainable by design", where RadiciGroup works to integrate safety, sustainability and functionality of products and processes throughout their life cycle.

Excellence in textiles

space suit designed for Mars.



A team of companies from the Italian textile supply chain, led by RadiciGroup, has created the **first spacesuit simulator, designed and developed entirely in Italy**, for use in the Space Medicine Operations (SMOPS) mission, promoted and organised by Mars Planet, the Italian section of the Mars Society, under the patronage of the Italian Space Agency.

The SMOPS mission is focused on monitoring the health of future astronauts and developing technologies to support the simulation of life in space and planetary environments.

RadiciGroup, together with Italian textile groups such as Eurojersey, Vagotex and DEFRA, made the project a reality. It provided the materials for the clothing of the six analogue astronauts who will take part in the mission, and coordinated the technological development that

led to the creation of **technical clothing for use in extreme conditions**.

The garments were used in experiments at the research station in the Utah desert to simulate living and working conditions on Mars.

The RadiciGroup-led team's contribution to the SMOPS mission was the production of three **technical garments with high standards of well-being, comfort and performance** that will allow analogue astronauts to move easily and safely outside the base station using advanced control, monitoring and communication systems.

Sustainability, innovation and fashion

Phygital Sustainability Expo in Rome.



RadiciGroup participated in the third edition of Phygital Sustainability Expo, an event entirely dedicated to the **ecological transition of fashion and design brands** held in July 2022 in Rome.

Two pieces of sustainable clothing by RadiciGroup were also presented during the “narrated fashion show” that took place at the Imperial Forum Museum complex: the fully recyclable ski suit and the Yamamay swimming costume made from yarn obtained by recycling plastic bottles. The “circular” ski suit is the result of a collaboration between RadiciGroup and DKB, a company specialising in technical sportswear. It was made from Renycle®, a yarn produced by RadiciGroup from recycled polyamide (nylon). The padding

and many of the suit’s accessories are also made from polyamide: this monomateriality makes it much easier to recycle the garment at the end of its life, for example to produce components for ski boots and bindings or for automotive applications in a logic of applied circularity.

Yamay has used RadiciGroup's Repetable® yarns in its new range of sustainable beachwear. Repetable® is a polyester yarn obtained by a recycling process of plastic bottles, which, compared to virgin polyester, enables a reduction in CO₂ emissions (-45%) and a reduction in water consumption (-90%) and energy (-60%)*.

*Internal LCA study, for further information www.radicigroup.com

Circular economy, all-round sustainability

The circular economy is a **new way to design, produce and use** things and services within the boundaries of our planet, its resources, limitations and opportunities. It is a conceptually and operationally regenerative system that can today count on a favourable normative framework, thanks to the EU Circular Economy package and the European Green Deal, as well as a financial context distinguished by big global operators investing in circularity. Circularity is the basis of most of the sustainability choices made by RadiciGroup, for which it:

- **Is a driver of process and product innovation**, particularly thanks to **ecodesign**, and also offers development opportunities in unexplored sectors, thanks to RadiciGroup's range of 100% recyclable materials and recycled and bio-based products offer.
- **Motivates production and system efficiency** through the **reduction of waste and operating costs**.
- **It is an important lever for value chain transformation and integration**, through partnerships for implementing best-practice or supporting best technologies, optimising transport, chemical safety of materials and sharing values such as the health and safety of Workers.



RadiciGroup's circularity principles

- **Ecodesign:** RadiciGroup is increasingly working with Customers and Suppliers to design circular products. There is a particular focus on the concept of **monomateriality**. The concept is based on the creation of products using a single material, or very few chemically related ones, that can meet all the necessary performance needs and be immediately recycled at the end of life, possibly mechanically, requiring only the disassembly of the different components.
- **Materials:** the production offer is largely based on **recyclable, durable and recycled materials**. Through Radici InNova, the Group is investing in a further area for new and increasingly sustainable sources of raw materials, also obtained through innovative and technologically pioneering processes.
- **Processes:** the Group invests in **optimising every aspect of production**, from the use of raw materials to energy resources, combating all forms of waste. Processes are scientifically and rigorously measured to verify their impact.
- **Durability:** RadiciGroup products are based on **high-performance, carefully selected** raw materials from traceable and qualified supply chains. Nylon, in particular, is designed to last over time and confer the same characteristic to its Customers' products.
- **Recyclability:** all Group materials **can be recycled** at the end of their life through a mechanical process with limited energy and environmental impact. They can thereby be transformed into new polymers for the most challenging sectors, from automotive to technical textiles.
- **Quality recycling:** The Group is able to **select** different **waste materials** by exploiting their intrinsic qualities and direct them to the most appropriate second life, based on the desired technical, environmental and market performance.
- **Renewable resources:** renewable resources, especially energy resources, **are a key factor in RadiciGroup's sustainability policy**. Thanks to its 20-year partnership with Geogreen, the Group has long had more than 50% clean energy in its mix.
- **Extended producer responsibility:** RadiciGroup is inspired by extended producer responsibility schemes to implement structured, controlled and efficient circular economy models.

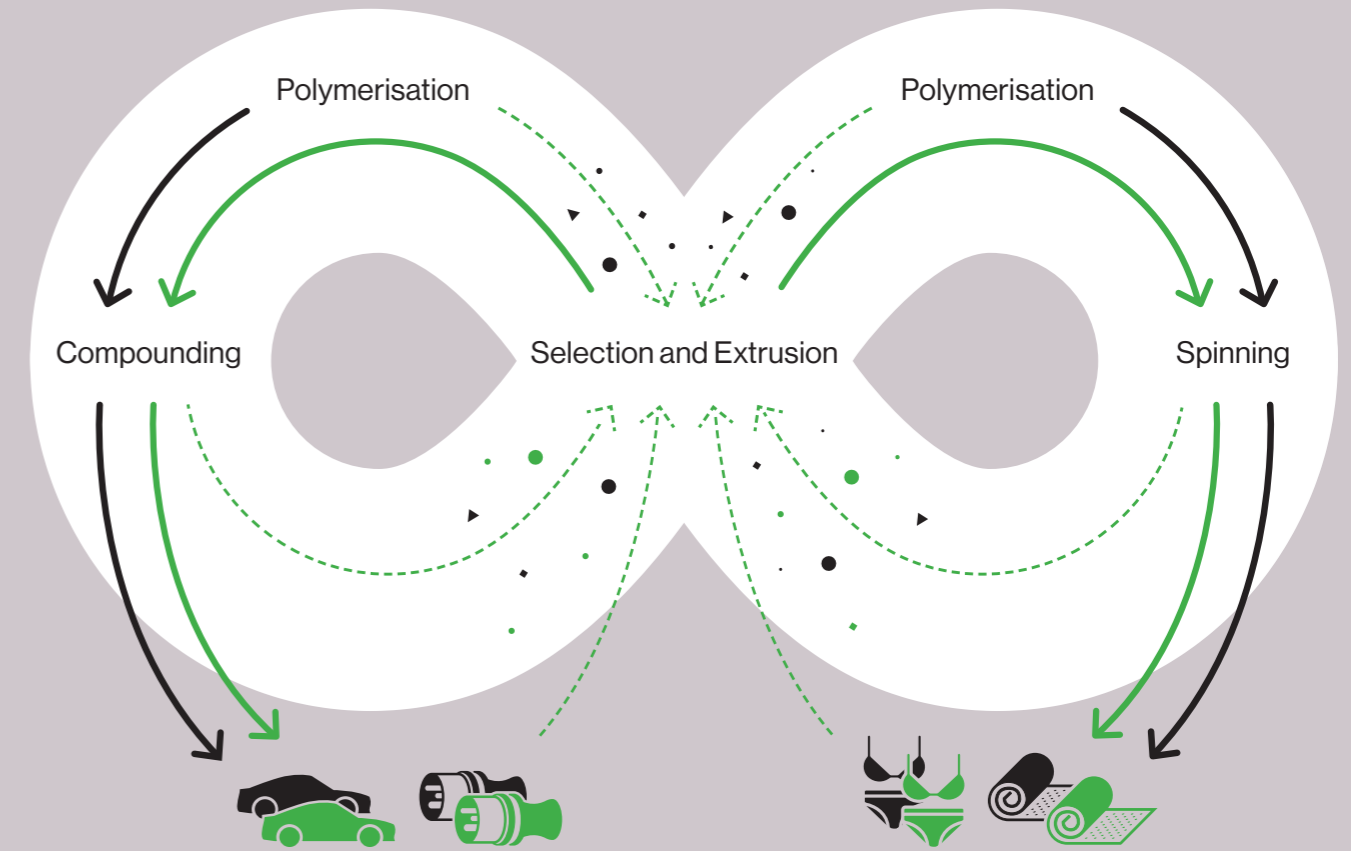
The nylon recycling system for circularity

RadiciGroup, thanks to its long-standing know-how in material formulation and recycling, is able to **convey scraps either in the same industry which originated them or in a different one.**

This depending on the specific characteristics of the materials and the performance expected from final applications, **choosing the most sustainable solution.** This applies to **pre-consumer** recycling, i.e. related to the process of industrial waste, and to **post-consumer** recycling, i.e. related to actual objects that have already lived a first life.



RENYCLE[®]
nylon after nylon



- Key**
- Virgin raw materials
 - Recycling materials
 - Recycling process
 - Scrap

Introducing Anima

**circularity
for
sustainable
fashion.**



In 2022, RadiciGroup, together with the brands Save The Duck and Vibram, presented **“Anima”, the backpack that stands out for its style, high performance and high degree of circularity.**

The three players in the Italian textile supply chain, at the forefront of sustainability choices, have joined forces to create an accessory made from recycled and end-of-life recyclable materials, in an **eco-design** pilot project created as part of SDA Bocconi’s “Monitor for Circular Fashion” initiative.

Anima is bimaterial: it is made from Renycle® fabric, a yarn produced by RadiciGroup and 100% derived from the mechanical recycling of polyamide, GRS certified and compliant with the Oeko-Tex Standard 100 for responsible production. The rubber components are made from

recycled industrial waste from the Vibram factory in Albizzate, which is certified to ISO standards for environmental, energy and safety management.

Anima is easily disassembled and significantly simplifies end-of-life recycling: the fabric part can be transformed into a polymeric material that can be used in any industry involving high-performance polyamides; while the rubber part is easily converted into a new accessory. Finally, the nylon composition gives Anima a significantly lighter weight and smaller footprint than traditional backpacks.

Uni-Forme

a school and enterprise project.



The “Uni-Forme” project for the **new Dalmine Foundation ETS staff uniforms, designed with sustainability, comfort and aesthetics** in mind, was launched in 2022. The initiative was launched with the aim of promoting industrial culture by highlighting the history of Dalmine, a company that has been rooted in the area for over a century and is now part of the Tenaris group.

The main project partners were RadiciGroup and DKB, a company specialising in the production of high-end technical sportswear. Sponsored by Confindustria Bergamo and Confindustria Brescia, “Uni-Forme” saw the participation of students from the textile department of the Paleocapa Institute in Bergamo and those from the Technological Designer course at ITS Machina Lonati in Brescia. A collaboration between

schools, companies and the region, which strengthens the partnership between Bergamo and Brescia, the Capital of Culture 2023, from an educational point of view.

The Paleocapa students focused on the selection and analysis of the materials to be used, respecting the criteria of circularity.

The students from Lonati, on the other hand, focused on style and design to create comfortable and aesthetically pleasing garments. The companies actively accompanied the students by giving them the opportunity to visit the production facilities involved: the RadiciGroup plant, where the selected yarns are produced, and the DKB factory, where the fabrics will be used to make the uniforms. The collection will be presented during the inauguration ceremony of the new Dalmine ETS Foundation headquarters in autumn 2023.

Territory



A reference point in the territory, for the territory

To us, **the territory** is much more than a physical space in which to operate.

It is a part of us, **it is in our very roots**: we were born and grew here, we founded our companies here. Here, every day, we devote all our efforts and passion to create new opportunities and value.

For this reason **we want to improve** our territory, and make it, day by day, a **safer and healthier place** in which to grow and to live.

In our Group, we are aware of the leading role we play in the territories in which we operate.

- We plan our actions with the interests and characteristics of the local area in mind and are committed to cultivating transparent and proactive relationships with Local Communities.
- While respecting the rules we have set for ourselves, in particular the ban on supporting any political organisation, we strongly support the institutions and associations in the area engaged in cultural, social and sporting activities.



The territory is in our roots



- **RadiciGroup is a family business**; some members of the Radici family, including the Shareholders, reside and are physically present in the areas where RadiciGroup was established and operates.
- **The first Group company**, still in operation today, **was established over 80 years ago in Val Gandino**, one of the areas of choice of Bergamasque textile entrepreneurs. Over the years, the company has changed its type of production, market and technology several times, but it has never moved its headquarters.
- **All the historic RadiciGroup companies are located near urban areas**, or are even part of the urban fabric itself.
- At the same time, many of these companies are also located in **mountain areas**, or in close contact with **rivers, woods, protected areas and cultivated fields** which RadiciGroup respects.
- The **Workers** are the residents of the host community. **About 80% of RadiciGroup Workers in Italy actually reside within a 20 km radius from the Group company where they work.**

From the Code of Ethics

RadiciGroup and Local Communities: a single entity

The identity of RadiciGroup has been profoundly shaped by its local roots.

- Our companies are a guarantee of **employment**, professional **development** and **innovation** in the territories.
- The Group promotes a wide-ranging **Health** and **Safety** culture that has a positive impact on Local Communities.
- We establish and nurture an ongoing dialogue with local educational institutions to create a positive cross-fertilisation between the world of **education** and the world of **work**.

As we consider Local Communities to be one of our most important Stakeholders, in 2022 we approached a number of representatives of territories (local authorities, schools, associations) around the world to make them an active part of the review of our materiality matrix.

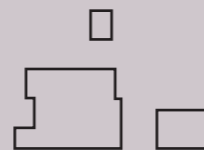


From RadiciGroup to Local Communities

- Production culture with **high Health and Safety standards** in all the world.
- **Promotion of local social sustainability** through welfare policies in the various countries.
- **Development in emerging countries** and a solid employment opportunity for the younger generation in mountain areas.

From Local Communities to RadiciGroup

- **Support and closeness**, seen also by their excellent attendance at public events organised by the Group.
- **A unique and special know how**, a vocation that local schools have cultivated.
- An inclination for **organisational and production flexibility** typical of Local Communities.
- **Local Suppliers**, with whom RadiciGroup has established a relationship of trust and loyalty.



RadiciGroup and the territory 2022

In a logic of **active corporate citizenship**, Group companies support Local Communities in different ways, according to the different needs they identify.



- **“On-site” training**

Radici Chemiefaser GmbH (Germany) opens its doors to students from the local textile university for the preparation of their theses and the development of practical knowledge.

- **Youth competitive sport**

Radici Partecipazioni Spa (Italy) supports the RadiciGroup Ski Club, a long-standing association with more than 100 local athletes between the ages of 6 and 18.

- **Quality public green spaces**

Cordonsed Argentina SA (Argentina) works with the municipality for street furniture and supplies materials to municipal gardeners for the maintenance of flowerbeds and public gardens.

- **Health of Employees and their families**

Yarnea SRL (Romania), through the Gianni and Luciana Radici Foundation, supports Employees and local residents undergoing treatment for serious illnesses.

- **Sport as a vehicle for growth**

RadiciFil SpA (Italy) supports the Gianni Radici Juvenes Sports Academy, whose sports development project goes hand in hand with an innovative educational development project.

- **Scientific and cultural popularisation**

For many years Radici Partecipazioni SpA (Italy) has been a partner of the BergamoScienza Festival, a science popularisation event founded in 2003, which every year involves the city and province of Bergamo with an increasingly international outlook.

- **Open doors for local schools**

Radici Plastics Mexico S. de R.L. de C.V. (Mexico) opens its doors to high school and university students to promote the link between the world of work and the world of education.

- **Strengthening tourism resources**

Logit Sro (Czech Republic) is working with the municipality to restore signage and create parking spaces for responsible tourism.

- **Discovering green energy**

RadiciGroup and Geogreen (Italy), both part of the Radici Family, open the doors of the Campignano hydroelectric power plant in Valle Seriana to host schools and local residents.

- **Cultural integration and social cohesion**

Radici Chimica SpA (Italy), through the Cassiopea association, supports integration school initiatives in the multi-ethnic district of S. Agabio in Novara, where the company is based.

- **Fighting cancer**

Radici Partecipazioni SpA (Italy) supports the Oncological Association of Bergamo (A.O.B.), which works to facilitate the treatment and quality of life of cancer patients and their families.

The future belongs to generations to come

In particular, the Group gives special attention to the **younger generations** who are the ones that will bring life to Local Communities and foster dialogue and relations with companies in the future.

It is on these foundations that the **Education project** was launched, which for years has been establishing and strengthening effective partnerships between the Group and the educational institutions in the territories in which it operates with its companies offering:

- **Company internships** involving students from local vocational schools.
- **University internships.**
- **Extra-curricular internships** that enabled students to be included in site workforces.
- **Visits, company lessons and meetings** with local entrepreneurs.
- **Career guidance interviews** with RadiciGroup management to help young people shape their training path towards a career.
- **Webinars** held by RadiciGroup experts.



Sport to train as you grow

The education of the new generations also involves **sport**. After all, **sport and work share the same values**: sacrifice, hard work and the desire to constantly improve to reach new ambitious goals.

That is why RadiciGroup **supports sports associations**, local mainly youth sector clubs that not only teach sport, but also contribute to the growth of young people. One example is the **support for the RadiciGroup Ski Club**, a Bergamo organisation with over 100 athletes between the ages of 6 and 18.



Attention and support for:

Schools

Sports associations





Logit and the territory

a winning combination.

Photo@unsplash.com

There are numerous initiatives that Logit organises each year in **cooperation with its community** and the city of Podbořany in the Czech Republic. Special attention is given to the world of education. In 2022, Logit agreed to allow a local agricultural college to use land owned by the company. The students were able to learn how to use the machines for ploughing, sowing and harvesting, literally in the field. This initiative is part of an agreement signed by Logit in 2006 to enable young people to gain **practical experience in the world of work**.

The development of the territory is another priority for Logit.

In 2022, the company granted permission for a municipal cycle track to run on its land, linking Podbořany with Buškovice, the nearest village. The aim is to promote green and slow mobility,

to travel without producing emissions and with respect for nature. In addition, the company has been actively involved in the development of the Podbořany micro-region for several years together with the “Ústecká Komunitní Nadace” foundation. As part of this partnership, it financially supported six projects, including the installation of a covered lay-by and signage to boost tourism in the area around Podbořany.

The aim is to **strengthen the sense of belonging and the relationship with the places of daily life** through active participation and rediscovering the local cultural heritage.

G for Governance



Material topics

- Long-term value creation and business sustainability
- ESG Corporate Governance/Risk Management/Compliance
- Cybersecurity and data protection

The Importance of Governance

When analysing environmental, social and governance factors, the “G” factor is often relegated to second place behind the consideration of risks and opportunities related to the environment, represented by the letter “E”, and social aspects, represented by the letter “S”. However, “**good corporate governance**” is the cornerstone of a **sound system** both from a general and ESG point of view.

RadiciGroup:

- Sees the **active participation of top management** in **sustainability policies**.
- It understands **business sustainability** not only in terms of return on invested capital, but also in terms of **sharing added value** with Stakeholders.
- It uses robust **management systems** in each company to base its choices and operations on recognised models aligned with **international best practices**.
- It increasingly considers **digitalization** not only as a part of business management, but as an **enabling factor** of its sustainability policies, and potentially increasingly strategic.



We want to be there... for the long term

In RadiciGroup's vision, the **creation of long-term value** in a logic of sustainability goes far beyond the concept that the profit generated must exceed the costs incurred to obtain it.

The economic dimension, which is focussed on increasing profit, is combined with the environmental and social dimensions, which have the **ultimate goal of generating positive external effects that benefit people, the community and the planet**. In addition, this approach requires that the **sustainable value created be shared**, both materially and immaterially, with the Stakeholders (Employees, Customers, Suppliers, Communities, Public Authorities) who have contributed to the Group's success.

By translating these principles into tangible actions, RadiciGroup pursues a logic of prudent investment with a medium- to long-term return without chasing immediate profit. This provides "breathing space" for the projects undertaken, and is a guarantee of security and continuity for RadiciGroup employees as well as Suppliers and Customers.



RadiciGroup promotes the **training and upskilling of its personnel**.

The Group works on **innovation** to seize the opportunities offered by the **circular economy**.

RadiciGroup increase its competitiveness by investing in **technological and digital transformation**.

In 2022, the geopolitical and trade scenario was complex, as already mentioned, due to the cost of energy and raw materials and the conflict in Ukraine, which accelerated the already existing dynamics of instability. Nevertheless, **the Group's overall financial results remained positive and the environmental investment policy that has long characterised RadiciGroup's activities continued**. This is driven by an ethical commitment to sustainability, the demands of strategic markets and increasingly pressing European legislation to transform the EU into a low-carbon, resource-efficient, green and competitive economy.

RadiciGroup pursues an **environmentally friendly investment policy**.

The Group has a strong **ethical commitment to sustainability**.

GRI 201-1 Generation of value added

	2020	2021	2022
€ A) Production value	992,986,379	1,542,447,792	1,598,575,559
Sales and service revenue	1,017,850,797	1,507,508,410	1,542,700,014
Change in work progress, semi-finished goods and goods inventories	(25,189,105)	34,668,659	55,582,801
Change in contract work in progress	-	-	-
Increase in internally generated non-current assets	324,687	270,723	292,744
Other revenue and income	-	-	-
€ B) Intermediate production costs	709,553,569	1,145,107,360	1,346,838,660
Raw materials, supplies, consumables and goods for resale	489,678,028	880,164,220	1,039,396,583
Services	204,011,759	302,281,015	329,543,044
Lease and rentals	5,589,703	5,702,612	5,638,125
Change in raw materials, supplies and goods for resale inventories	7,959,275	(46,864,856)	(31,630,511)
Provision for liabilities and charges	215,640	503,550	704,714
Other provisions	257,738	174,853	196,501
Miscellaneous operating costs	1,841,425	3,145,967	2,990,203
€ Gross value added from operations (A-B)	283,432,810	397,340,432	251,736,899
+/- Additional and extraordinary items	13,432,075	16,932,725	43,196,382
€ Gross total value added	296,864,886	414,273,156	294,933,281
- Depreciation and amortisation	43,726,957	57,470,025	60,356,496
€ Net total value added	253,137,929	356,803,131	234,576,786

GRI 201-1 Generation of value added

	2020	2021	2022
€ Personnel wages and benefits	132,331,564	149,042,091	153,848,590
Contract Workers	6,097,960	7,290,50	7,422,809
Employees	126,233,604	141,751,588	146,425,782
Direct compensation	101,210,043	114,086,091	117,002,249
Indirect compensation	25,023,561	27,665,497	29,423,532
€ Payments to government	30,774,032	52,856,534	(4,515,136)
Current taxes	37,184,830	56,091,602	21,758,717
Direct taxes	34,314,961	52,754,312	17,971,746
Indirect taxes	2,869,869	3,337,290	3,786,971
Deferred taxes	(3,381,104)	(1,621,685)	123,478
Revenue grants	(3,029,694)	(1,613,383)	(26,397,331)
€ Payments to loan providers	2,302,863	2,296,089	4,100,952
Short-term loan interest	2,302,863	2,296,089	4,100,952
Long-term loan interest	-	-	-
€ Payments to shareholders	15,000,000	40,200,000	49,980,000
€ Retained value added	72,181,028	111,798,810	30,581,430
+/- Changes in reserves	72,181,028	111,798,810	30,581,430
€ Contributions and donations	548,442	609,608	580,949
€ Net total value added	253,137,929	356,803,131	234,576,786

The Management Systems

Voluntary quality, safety, environmental and energy management systems, implemented according to the most advanced and recognised international standards, make up a framework of best practices that touch every aspect of corporate life and are therefore a **valuable tool for sustainable management**.

They have been **in place at RadiciGroup since 1993**, the year of the first certification, and offer numerous advantages:

- They support the Group in **maintaining legislative compliance**.
- Through the “RadiciGroup Policy for Quality, Environment, Energy, Health and Safety” they are an important **formal and substantive guideline** for all companies and employees.
- They bring a **systemic, process-based approach** to the organisation, streamlining processes and creating synergies between different companies to manage common goals.
- They embody the **principle of continuous improvement** that drives RadiciGroup to set ambitious sustainability targets.

- They help to **build and maintain Stakeholder engagement**.
- They ensure internal and external **customer satisfaction**.
- They make it possible to understand the context and to identify or take account of the **expectations of Stakeholders**.
- By **assessing process performance**, they support the necessary management actions.

In the context of management systems, the **principle of risk-based thinking** is of particular relevance to governance, as a tool that enables users to approach decisions with the support of a structured assessment of the possible consequences, positive or negative, of the choices to be made. For RadiciGroup, it is a valuable tool for approaching the whole spectrum of possible decisions in the field of sustainability and beyond, with a rational vision that takes into account the present and future context.

Management system certifications confirm and substantiate RadiciGroup's commitment to quality, safety, the environment and energy, as well as to transparent, Stakeholder-oriented communication that is verified by third parties.



RadiciGroup Certification Table (updated 31 December 2022)

RadiciGroup Site	ISO 9001	IATF 16949	ISO 14001	ISO 45001	ISO 50001	VDE	ISO IEC 17025
Corporate							
Radici Partecipazioni SpA	●						
BA: Speciality Chemicals							
Radici Chimica Novara SpA	●		●	●	●		
Radici Chimica Deutschland GmbH	●		●	●	●		
BA: High Performance Polymers							
Radici Novacips SpA - Villa d'Ogna	●	●	●	●		●	
Radici Novacips SpA - Chignolo d'Isola	●		●	●			
Radici Plastics GmbH	●	●	●	●	●		
Radici Plastics Ltda (Brasil)	●	●	●	●			
Radici Plastics (Suzhou) Co. Ltd.	●	●	●	●			
Radici Plastics Usa, Inc.	●	●	●	●			●
Radici Plastics Mexico S. de R.L. de C.V.	●	●	●	●			
BA: Advanced Textiles Solutions							
RadiciFil SpA	●		●	●	●		
Logit Sro	●		●	●	●		
Radici Yarn SpA - Villa d'Ogna	●		●		●		
Radici Yarn SpA - Ardesio	●		●		●		
Yarnea SRL	●		●	●			
Radici Chemiefaser GmbH						●	
Radicifibras Indústria e Comércio Ltda	●						
Noyfil SpA - Andalo Valtellino	●			●			
Noyfil SpA - Chignolo d'Isola	●			●			
Noyfil SA - Stabio	●		●				
Cordonsed SA							
Tessiture Pietro Radici SpA	●		●	●			

Sustainability and digitalization: a new priority for the Group

Sustainability and digitalization are a **strategic combination** that can bring significant benefits in terms of **innovation**, competitiveness and **sustainability**.

With this in mind, the Group:

- supports **digitalization**, with a positive impact on performance in terms of **agile decision-making and executive processes**.
- It exploits the potential offered by digitalization not only to **improve the performance of industrial processes**, but also to improve **their environmental and social sustainability**.
- It has adopted and is progressively deploying **advanced data management application solutions**.
- It works towards **more efficient and effective data management** in terms of **accuracy, granularity, accessibility**.



In the period 2022-2023, the Group:

- is implementing **Enablon Performance Metrics**, an application to support the QHSEE Management processes, which will **facilitate data collection for metrics for the Sustainability Report and LCA studies**, as well as provide an important strategic database for Group decision-making.
- It is planning to introduce **Success Factor**, an **application solution to support HR Management processes** that will, among other things, facilitate the collection and aggregation of personnel data in one place for strategic management and reporting purposes.
- It is looking at extending the **Tagetik application solution**, currently used for Corporate Performance Management processes, **also to cover ESG reporting**.
- It is consolidating the **digital workplace**, which **complements its physical counterpart with smart working** policies that benefit work-life balance and the environment.
- It works to **consolidate cybersecurity**, through training people and the best available technologies, to coexist with digital development.

This was crucial in 2022 in responding quickly and effectively to the cyber attack suffered by the Group, which was able to quickly secure its systems and proactively meet the expectations of Stakeholders affected by the emergency.



Enablon

digitalization of Group ESG data.

RadiciGroup Management Systems support **change and continuous improvement in companies.**

The effective management of this change is a key success factor that, increasingly, is achieved through the analysis, **optimisation and digitalization of processes.**

For this reason, starting from 2021, the Quality and Processes function which coordinates RadiciGroup Management Systems, in collaboration with the ICT Area, has carried out a comprehensive selection of possible IT solutions, which has led to the choice of Enablon, one of the most recognised software packages in the world in terms of features and functionality. The implementation started with the adoption of the audit **management** and event reporting modules,

integrated with the modules for analysing the causes of non-compliance and improvement plans to achieve the set targets.

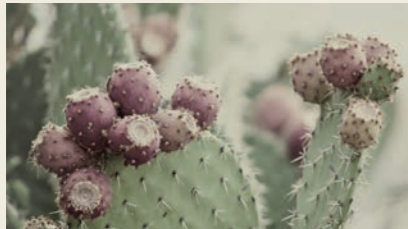
In 2022, the evaluation of the Enablon Performance Metrics application began, which enables the **structured collection of data needed** to calculate qualitative and quantitative indicators for the Sustainability Report, and to analyse performance over time and drive improvements. The system is also designed to become the Group's database for primary data for Life Cycle Assessment studies, which are also of strategic value in terms of product sustainability.

Flowers and plants from our world



Daisy
ITALY

The common daisy, synonymous with purity and candour, is a flower that grows spontaneously in many parts of Italy.



Prickly pear
MEXICO

For a long time, the prickly pear has been a symbol of the Aztec tradition. The importance of this plant and fruit for Mexicans is such that they embody the symbol of the country.



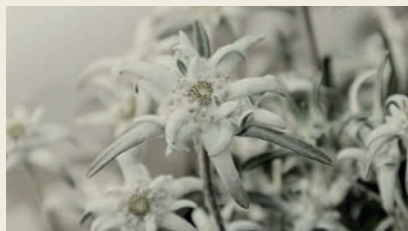
Asian lotus flower
INDIA

The Lotus flower is an aquatic plant native to Asia. Considered a sacred flower, it represents the integrity of the body and the spiritual elevation of the virtuous human being.



Laelia purpurata
BRAZIL

Many orchids are native to Brazil, perhaps Laelia purpurata, in all its forms, is the most outstanding. In the language of flowers it is sometimes used as a love message.



Edelweiss
SWITZERLAND

The Edelweiss, called the queen of the Alps, is a perennial plant that grows on sunny calcareous soils. A symbol of resilience and eternal youth, this flower has antioxidant properties developed thanks to its adaptation to the alpine environment.



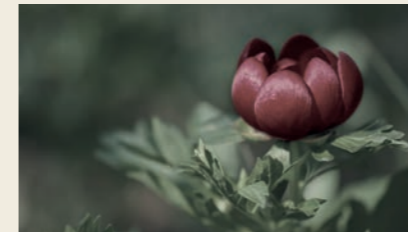
Cornflower
GERMANY

Cornflowers grow mainly in the fields but they can also be found in meadows or along roadsides. In the language of flowers, they are a symbol of lightness and sweetness.



Peach flower
CHINA

Peach flowers represent abundance, long life and are a symbol of feminine beauty. Traditionally, during the Chinese New Year, those in search of love buy a peach tree to keep at their home.



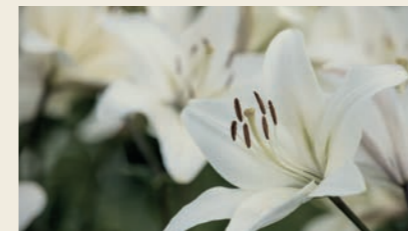
PEONY
ROMANIA

It blooms only for three months during the year, producing flowers with several petals which are a symbol of prosperity, luck and love. In general, the Peony is a flower admired for its beauty and variety of colors.



Cockspur Coral Tree
ARGENTINA

It is a small tree native to South America, its flower is the national emblem of Argentina. According to a legend, it is said to represent the indomitable soul of an offspring that does not want to die.



White lily
FRANCE

In general, the White lily is a symbol of purity, innocence, candour, but also fierceness and pride. The flower has a tall stem standing straight, this characteristic leads it to be a symbol of pride and nobility.

Sustainability Report

collaborators

An important group of people collaborated on preparing the Sustainability Report, making a major contribution to the commitment to transparency and reporting made by the Group starting in 2003.

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SUSTAINABILITY REPORT AUDIT YEAR 2022 RADICI GROUP

Scope

Certiquality S.r.l. received by Radici Partecipazioni S.p.A. a limited assurance engagement for the Sustainability Report of Radici Group relating to the year 2022 (Italian version), in order to assess its consistency with guidelines of the GRI (Global Reporting Initiative) Standards version 2021, with reference to the “in compliance” level of application, which provides for the reporting of all the general disclosures required by GRI Standard 2-2021, the materiality analysis in accordance with GRI Standard 3-2021, and the quantification of all the relevant performance indicators for each aspect identified as relevant (or “material”). This letter describes the activities carried out, reports the findings of the limited assurance engagement, and makes recommendations for improvement.

The verification has been carried out with reference to the “GRI Standards” published in 2021 by the Global Reporting Initiative, and it has concerned in particular:

- the analysis of the reporting principles (accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness and verifiability);
- precise definition of the report’s scope;
- the compliance of the contents of the Report with the 2021 GRI Standards guidelines.

The certification has been carried out in compliance with procedures implemented by Certiquality for audits in complying with the UNI EN ISO 19011:2018 standard. The audit has been partially carried out on site, partially off-site and partially remotely, by interviewing relevant staff in videoconference and examining the shared documentation.

Methods

The activity has been carried out as follows:

- analysis of the document “2022 Radici Group Sustainability Report” Italian version document, with particular reference to the principles and contents set out by the GRI Standards 2021 guidelines;
- interviews with the functions involved, directly or indirectly, involved in the drawing up of the document and in the processing of data and information management process (from collection to further processing);
- examination of documents and records in place at the operative site of Radici Partecipazioni S.p.A.’s operating headquarters in Gandino, and at a representative sample of production sites included in the report boundary: Radici Chimica Deutschland GmbH (from the headquarters Radici Partecipazioni Gandino); Noyfil S.p.A. in Chignolo d’Isola; Radicifil S.p.A. in Casnigo; Radici Plastics (Suzhou) Co. Ltd. (from Hotel San Marco - Bergamo); Radici Plastics GmbH (from Hotel San Marco - Bergamo); Radici Plastics USA (from Hotel San Marco - Bergamo);
- the analysis has concerned both the procedures implemented for the collection, filling and processing of data and the technical-normative aspects of the activities carried out.

Management of the data and information included in the Report was checked on a sample basis, ensuring adequate coverage of all topics discussed in the document.

With regard to certain indicators characterised by the absence of certain facts or events (e.g., absence of party funding, absence of sanctions of various kinds, absence of cases of discrimination), given the inherent difficulty of verifying facts that are not present, it was requested to produce declarations from the management of the companies or BAs subject to verification.

The economic and financial data are taken from the consolidated balance sheet of Radici Partecipazioni S.p.A., that already underwent a voluntarily auditing of accounts (as per letter by Deloitte & Touche letter of 30/05/2023), therefore they have not been further checked.

Results and recommendations

The “2022 Radici Group Sustainability Report” (Italian version), extended to the entire scope of consolidation of the economic-financial report (with the sole exclusion, for commercial, financial and service companies, of environmental indicators, in view of the insignificance of these aspects), confirms Radici Group capacity to respond to the problems encountered at a global level, already highlighted in previous years. The document is clear and complete and provides an exhaustive overall of the relationship of the Group company with the context in which they operate.

Concerning the new requirements of the 2021 version of the Standards, numerous disclosures were integrated (e.g., data and information on governance, problem reporting mechanisms). The quantification of some numerical indicators that were not previously included (such as GHG Scope 3 emissions, energy consumed outside the organisation, incoming and outgoing worker flows, or training provided to workers by contractual level), as clearly indicated in the table of contents at the end of the document, is nearing completion. This situation is justified by the current lack of data, which will be completed in future editions, also thanks to the implementation of the new data management system.

In some cases (e.g., energy, water discharges), the indicators are reported with more information than the minimum requirement, referring to previous and more articulated versions of GRI standards or, as in the case of value generated and distributed, to other authoritative sources in the field of sustainability communication (Social Report Group) without, however, derogating from the completeness of the information required by reference standard.

The data collection and data processing system is sufficiently well-structured and documented at the central level and a new integrated data management system, which is currently being tested alongside the well established data management system of previous years, is to be introduced as of next year.

As in previous years, the sample checks carried out on the sites reveal a situation that is not entirely homogeneous, with a higher quality of data at Italian sites, while for some foreign sites there is significant room for improvement, relating, for example, to the homogeneity of data collection in different contexts in the face of very different regulations (e.g., classification and destination of waste, units of measurement of certain quantities) or to certain details on reporting methods (e.g., training for categories of employees). More generally, it is recommended to pursue further the constant improvement of the data management system, especially as regard the information transmitted to foreign sites regarding the criteria for data collection and the checks carried out on the collected data.

Conclusions and asseveration

The verification of the “Radici Group Sustainability Report” (Italian version) concerning the year 2022 has not given rise to any significant issues, neither as regards compliance with the principles of the GRI Standards 2021 guidelines, nor as regards its content in terms of reported information or performance indicators, while still leaving some room for improvement; in particular, some indicators related to aspects considered relevant will be completed in future editions, as clearly reported in the GRI content index. On the basis of the audits performed and the above, the “Radici Group Sustainability Report” for 2022 (Italian version) is declared to be asseverated to the “in accordance” level of application of the GRI Guidelines version 2021.

26 July 2023

Certiquality S.r.l.
The President
Cesare Puccioni

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* Referring to the full document on the website



ORGANISMO NOTIFICATO 0548



Membro degli Accordi di Mutual Recognition EA, IAF e ILAC, Signatory of EA, IAF and ILAC Mutual Recognition Agreements.
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FPO n. 0038 - IAP n. 0038
SSI n. 0076 - SGE n. 0018 - ISP n. 0066 - GIG n. 0010
EMAS n. 008P - ITX n. 004L - FRS n. 100C



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