

Sustainability Report 2021

Complete version



The Group	4
People and Territories	4
Who we are	5
The Code of Ethics	5
Our values	6
United Nations Sustainable Development Goals	7
Group Quality, Environment, Energy, Health and Safety Policy	8
Letter of the President	9
RadiciGroup	10
Group organisational structure: three macro Business Areas	12
RadiciGroup products and sectors served	13
Main application sectors	17
Radici world	20
Governance	20
The Organization	20
Parent Company and Board of Directors	21
Business Area Managers	21
Sustainability strategy and value creation	22
Stakeholders	23
RadiciGroup and its Stakeholders	23
Shareholders	24
Board of Directors and Management	24
Group Companies	25
RadiciGroup Workers	25
Customers	34
Suppliers	35
Local Communities and Territories	38
Media	42
Trade Associations and Competitors	43
The road to Sustainability – integration into corporate strategy	45
Viewing the RadiciGroup Sustainability strategy through the materiality matrix	46
Economic performance	47
Investing in Sustainability	47
Generation and distribution of value added	48
Tax policy	53
Relations with Government	57
Environmental performance	58
Materials used	59
Waste	61
Energy	65
GHG emissions	71
Other emissions	72
Water used and returned	73

Social performance	79
Health and Safety	79
Occupational health services	81
Reconciling private and work life	86
Innovation	88
Circular economy	90
Product performance	93
RadiciGroup low-environmental impact products	93
Life Cycle Assessment	95
Transparency	96
Traceability	97
System Sustainability	98
Certifications and contribution to SDGs	100
Building the Report	101
Reporting principles	101
Stakeholder inclusiveness	101
Sustainability context	102
Materiality	102
Completeness, accuracy and balance	102
Comparability	102
Clarity	102
Reliability	102
Timeliness	103
Precautionary principle	103
Building the Radicigroup Sustainability Strategy	103
Context analysis	103
Materiality analysis	108
Assurance Statement	111
Contacts and useful addresses	112
GRI content Index	113
Sustainability Report collaborators	118

People and Territories

Disclosure 102-12

In 2015, the United Nations adopted a plan of action for people, the planet and prosperity, which incorporates 17 Sustainable Development Goals (SDGs) concerning economic growth, social well-being and environmental protection. **The UN Sustainable Development Goals are charting a new course of responsibility for companies around the world.** What is more, a mechanism of cultural and social change was set in motion. **The ESG (Environmental, Social, Governance) factors** underpinning the SDGs **increasingly influence the ability of companies to operate, grow and create value,** in the present and the long term. They are therefore opportunities that must be seized to maintain and increase competitiveness.

In this context, 11 Sustainable Development Goals refer to the social sphere and five goals are specifically dedicated to the environment. A way of emphasizing that people are increasingly at the heart of any sustainability strategy, after many years focused only on the environment. **People Sustainability is gaining a rightful place.**

In line with the vision inspired by the SDGs **in the 2021 Sustainability Report, it is people and Local Communities that play a key role** through numerous case studies that give examples of solid commitment.

The values outlined in the new Code of Ethics are added to this, built by the Group's People for themselves and for all Stakeholders, which guide the reading and interpretation of the various chapters of the Report and help to illustrate the complexity and multiplicity of RadiciGroup's responsibility choices.

Who we are

Disclosures 102-12, 102-16

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**, among which nylon yarn, polyester yarn, yarn made from recovered and bio-source materials, nonwovens and personal protective equipment for the healthcare sector.

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.

The Code of Ethics

Governance underpins RadiciGroup's structure, guides its strategic choices and guides its environmental and social responsibility policies. To further strengthen its governance, in July 2021 RadiciGroup adopted a **new Code of Ethics, in line with the most advanced sustainability criteria.**

The Code of Ethics came from the passion of around 60 employees of different ages and nationalities, with recent or established professional backgrounds, who have contributed to building the Group's vision today and in the future, without forgetting its origins. On the basis of their experience and expertise they have built the Corporate Values, laying the foundations, through principles shared with all stakeholders, for the sustainable growth of RadiciGroup in every part of the world.

Our values

01 | **Legality and respect for the Law:**

a guarantee for all of us

Our Group respects, and is committed to enforcing in all Companies, the laws of the countries where it does business. We support the dissemination of a culture of active legality, in the conviction that, even in the workplace, dignity, freedom, security and solidarity are values to which everyone must contribute.

02 | **Sustainability drives us**

Our processes are optimised, we invest in reducing our impact and creating products whose environmental impacts are measured and limited. We promote training and are attentive to Workers' Health and Safety because RadiciGroup recognises the centrality of the Person as its key principle. We work together with Local Communities, where most of our Employees come from, for harmonious growth.

Together with our Stakeholders, we have always realised our commitment to sustainability to create shared value.

03 | **Health and Safety at work**

Health and Safety are of paramount importance to us. This fuels our commitment to comply with all measures required by current regulations and beyond. We also act proactively to constantly analyse risks and prevent accidents. Employee training and involvement make the difference in our Group.

04 | **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.

05 | **Elements creating value**

We are a local and, at the same time, global Group. Diversity is one of our strengths, an element that gives value to choices. That is why we promote the principles of equal opportunities and inclusiveness and reject all discrimination based on gender, racial and ethnic origin, nationality, age, political opinions, religious beliefs, health status, sexual orientation and socio-economic status.

06 | **Never without fairness and transparency**

Fairness and transparency are among our key principles. Every process must be clear with regard to roles and responsibilities, every decision must be justified and taken without departing from the principle of good faith, respecting the rules and People. Our relationships with everyone we work with are built in the name of transparency, while respecting the obligations of confidentiality.

07 | **We feel responsible**

Each one of us is committed to taking responsibility for our actions, to respecting the time schedule in carrying out our work, to respecting all Stakeholders. We are convinced that any mistakes made in daily work are an opportunity to grow.

08 | **Team spirit is our best raw material**

We are confident that sharing information and experiences between different functions of the same company, as well as between different companies of our Group, helps us grow. We want to nurture a culture of collaboration between company functions and promote initiatives to strengthen our team spirit, the most important of all our raw materials.



United Nations Sustainable Development Goals

Disclosure 102-12

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 shied 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

Disclosure 102-16 Disclosure 103-1

This Group Quality, Environment, Energy, Health and Safety Policy is an important embodiment of the principles that inspire RadiciGroup in the implementation of the United Nations Sustainable Development Goals.

An integral part of Group Governance, it guides the ethical, compliance and quality standards that RadiciGroup has set over time.



*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 – centrality of people, reliability, fairness and transparency – in its day-in and day-out operations. 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.*

*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 Communities and authorities, 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

Letter of the President

Disclosure 102-14



The Sustainability Report always gives me the opportunity to look at RadiciGroup from a privileged vantage point, one that looks to the future, and to share some thoughts.

The UN 2030 Agenda is our main **guideline for sustainability today**. It presents us with an ambitious scenario, urges us to confront a multiplicity of challenges that impact our organisation from every point of view.

Global markets and value chains are the other major driver to lessen the impact of our organisation, to become stricter in terms of sourcing and supply chain social conditions.

Here we have the ambition to be, for those we work with, enablers or facilitators on many issues: from the **circular economy** in which we play a leading role through **eco-design** and **recycling**, to the **innovation** we put at the service of those who process and ultimately use our products. And we must also note the contribution we make to **decarbonisation**, a benefit for RadiciGroup and for Customers, Employees, Local Communities and all Stakeholders.

I am convinced that to be credible in this role, it is necessary to measure oneself to monitor the effectiveness of the path taken, and certainly the Sustainability Report is a vital tool to take stock of our results. In relation to the latter, I am particularly pleased to share with you the progressive increase of **electricity from renewable sources**, which now **exceeds 50%** across our Group.

Increasingly more of our companies are using entirely green energy and making a responsible choice for the environment and future generations.

Similarly, the significant investments in the chemicals sector made over time have enabled us to reduce direct emissions by **18,7% compared to 2019 and by 60% between 2011 and 2021**. An excellent achievement that encourages us to continue on this path: working earnestly on **state-of-the-art products that also perform well in terms of sustainability**.

The young people in our family look at us and ask us what our and their role will be in the years to come. The answer I share with my brothers is that our companies must continue to be places where **people are valued for their uniqueness**, can count on **safe working conditions** and **respect for their rights**.

Looking at the figures in the 2021 Sustainability Report, I am pleased to note that **our staff** is growing, with increasingly more women. The younger generation is also increasingly working alongside senior Workers, bringing skills and enthusiasm, and drawing on the valuable wealth of knowledge of those who have had their entire professional careers with us, at RadiciGroup. **I thank all of you**, our sustainability results (and more) are the result of the hard work of more than 3,000 employees worldwide.

If people are one of the main keys to understanding the Report, Territories are another equally important one. The Seriana Valley where we were established, but also the Europe that saw us grow and **the world that is our horizon today**. In each of the Communities where we are located, **the Territory is listened to and supported**. Projects with schools, the choice to support the local neighbourhood or the municipality, initiatives with Employees' families. Reading the Report myself, I am amazed at the quality and quantity of the initiatives. In each of these choices our Values are reflected, the same ones reaffirmed by the Code of Ethics that we renewed in 2021 and which marks the chapters of the Report itself.

After two years during which we were convinced that we had experienced every possible difficulty, 2022 also opened with great uncertainty. **I am confident** because in our Group, and this Sustainability Report confirms my belief, we have all the resources and potential we need to continue to do well. We know how to be responsive, innovative and tenacious while remaining true to our roots, to our style, **cultivating that pride in being RadiciGroup that makes us special**.



Angelo Radici

President of RadiciGroup

RadiciGroup

Disclosures 102-2, 102-4, 102-6, 102-7

With approximately 3,000 Employees, sales revenue of EUR 1,508 million in 2021, and a network of production and sales sites located throughout Europe, North America, South America and Asia, RadiciGroup is one of the world's leading producers of a wide range of chemical intermediates, polyamide polymers, high performance engineering polymers and advanced textile solutions, including nylon yarn, polyester yarn, yarn made from recovered and bio-source materials, nonwovens and personal protective equipment for the healthcare field. These products are the result of the Group's outstanding chemical expertise and vertically integrated polyamide production and have been developed for use in a variety of industrial sectors, such as: Automotive – Electrical and Electronics – Consumer Goods – Apparel – Furnishings – Construction – Household Appliances – Sports.

The RadiciGroup strategy is based on a strong focus on innovation, quality, customer satisfaction and social and environmental sustainability.



*Consolidated 2021 turnover of RadiciGroup.

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

Italy

Ardesio

Buranzo

Casnigo

Chignolo d'Isola

Gandino

Novara

Villa d'Ogna

**North and
South America**

Argentina

Buenos Aires

Rio Grande

Brazil

Araçariguama

São José dos Campos

Mexico

Ocotlán

USA

Wadsworth

Asia

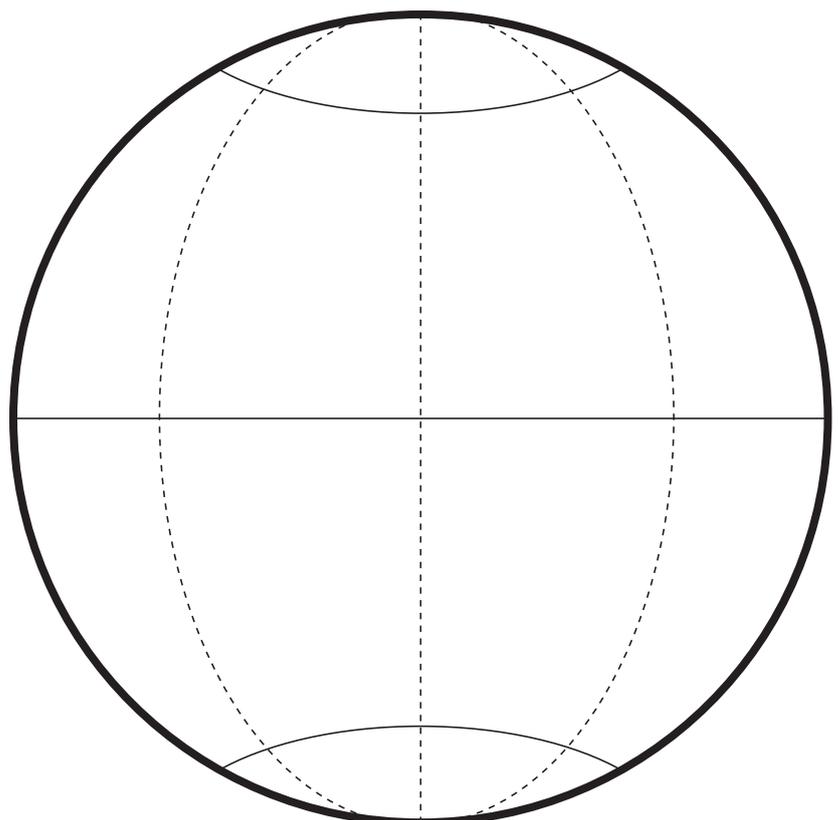
China

Shanghai

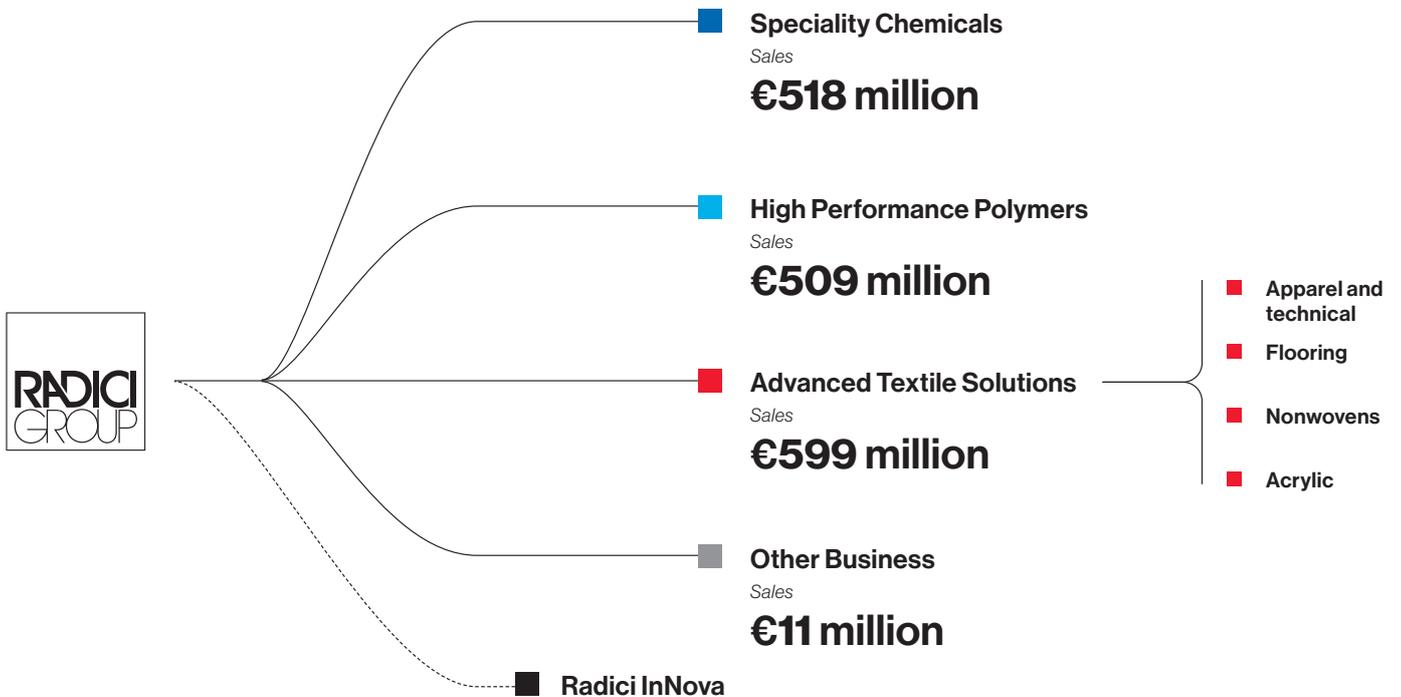
Suzhou

India

New Delhi



Group organisational structure: three macro Business Areas



2021 sales, consolidated at Business Area level. Individual BA figure includes sales to other Group BAs.

Radici InNova

The three Business Areas are joined by Radici InNova (Radici Consortium for Research and Innovation [Consorzio Radici per la Ricerca e l'Innovazione S.c.a.r.l.] which was established in December 2019 to pool the competencies of all RadiciGroup companies **with the objective of developing new sustainability-related research and innovation activities**. Radici InNova is included in the scope of consolidation of parent company Radici Partecipazioni, which is one of the consortium members, in addition to the Group's main manufacturing companies.

RadiciGroup products and sectors served

Disclosures 102-2, 102-6

RadiciGroup products are present in every aspect of everyday life. Their technical characteristics, including durability, high performance and sustainability, make them the ideal choice for the most diverse application needs.

Specialty Chemicals Business Area products

This Business Area **specialises in the production of chemical intermediates, PA 6, 6.6, 6.10 and speciality polymers**: all of which serve as raw materials for the manufacture of a variety of products, both by Group companies (further processing and the production of high-performance polymers and fibres) and by Customers.

Trademark	Description	 Apparel	 Interiors	 Automotive	 Medical	 Industrial	 Electrical & Electronics	 Sports
radichem [®]	Adipic Acid for the production of PA6.6 fibres and engineering polymers, hexamethylenediamine (intermediate for polyamides and coatings); AGS (intermediate for polyesters and solvents). Nitric Acid. KA Oil, esters and chemical intermediaries.	•	•	•	•	•	•	•
radipol [®]	PA6 and PA 6.6 polymers and copolymers, long-chain PA6.12 and PA6.10 polyamides (biopolymers). Special polyamides for high-temperature applications.	•	•	•	•	•	•	•

High Performance Polymers Business Area products

High Performance Polymers specialises in the manufacture of high-performance engineering polymers, also from bio-source and recycled materials. RadiciGroup engineering polymers are materials that can feature different chemical, physical and mechanical characteristics depending on the type of application for which they are intended. They are raw materials for a variety of industries, including automotive and e-mobility, electrical and electronics, plumbing and heating, and industrial sectors.

Trademark	Description	 Interiors	 Automotive	 Industrial	 Electrical & Electronics	 Sports
heraflex [®]	Thermoplastic copolyester elastomers (TPE-E) and thermoplastic styrene elastomers (SBS and SEBS) for technical/industrial, automotive and consumer goods applications.	●	●	●	●	●
heraform [®]	Products from acetal copolymer (POM) resins.	●	●	●	●	●
heramid [®]	Low-environmental impact polyamide compounds, manufactured primarily with sorted and regenerated secondary raw materials (PA 6 and PA 6.6), obtained from the recovery of industrial scrap.	●	●	●	●	●
radiflam [®]	Polyamide and polyester flame-retardant engineering polymers, including a complete range of halogen and red phosphorous-free products.	●	●	●	●	●
radilon [®]	Polyamide engineering polymers (PA 6, PA 6.6, copolymers, PA 6.10, PA 6.12, PPA and other specialty PAs for high temperature resistant applications) for injection moulding, extrusion and blow moulding.	●	●	●	●	●
radistrong [®]	Specialty PA 6.6 engineering polymers. The main distinguishing features are high mechanical properties, better property retention with moisture absorption and an excellent surface appearance. Suitable for injection moulding of high mechanical resistance parts.	●	●	●	●	●
raditeck [®]	High-performance PPS compounds, characterised by their exceptional chemical/thermal resistance and dimensional stability.	●	●	●	●	●
raditer [®]	Polyester (PBT and PBT compounds) for injection moulding.	●	●	●	●	●
torzen [®]	PA 6.6 compounds, including improved heat-resistance specialties (Torzen [®] Marathon).	●	●	●	●	●

Advanced Textile Solutions Business Area products

The Advanced Textile Solutions Business Area is engaged in the manufacture of numerous kinds of products, from polyester to nylon yarn and nonwovens. Different types of processing, finishing and functionalization are currently available in the Group. These advanced textile solutions are used in numerous industries, including automotive, sportswear, fashionwear, furnishings and medical, wherever applications require components featuring high performance in terms of mechanical resistance, comfort, protection, durability and safety.

Trademark	Description	 Apparel	 Interiors	 Automotive	 Medical	 Industrial	 Sports
dorix	Polyamide 6 staple fibre available in raw white and solution-dyed versions in a range of custom colours.		●	●			
dylar	High-performance nonwoven spunbond available in 12 to 150 g/sqm, with a wide choice of colours, additives and technical properties.	●		●	●	●	
radifloor	Polyamide 6 and 6.6 BCF yarn for carpeting, available in raw white and solution-dyed colours and in twisted, thermoset, frieze and air-entangled versions.		●	●			
radilon	PA 6 and PA 6.6 textile yarn and staple fibre with excellent resistance, breathability and dyeability. Available in raw white and solution-dyed in a vast range of colours.	●	●		●	●	●
radimelt	Continuous filament nonwoven fabric (from 1 to 5 microns in diameter) with excellent filtering capability for particles of microscopic size, such as viruses, which also ensures breathability and protection.				●	●	
raditeck	High-tenacity polyamide 6.6 yarn used for the production of technical items that require high performance in terms of resistance and reliability.			●		●	●
rad yarn	Raw, solution-dyed and additivated polyester yarn (flame retardant, bacteriostatic and UV protection), available in a microfibre, supermicrofibre and bicomponent version (PA/PET).	●	●	●	●		●
starlight	Raw, solution-dyed and additivated polyester yarn (flame retardant, bacteriostatic and UV protection), manufactured in a vast range of functionalities and custom colours.	●	●	●	●		●
radipeople	Line dedicated to personal protective equipment in healthcare and industrial settings. Overalls, gowns and accessories offering various protection levels based on use across various sectors, such as construction, agriculture, oil & gas, the chemical industry, pharmaceuticals and the food industry.	●			●	●	

Products across several Business Areas

These products are obtained from recycled materials or materials partially or fully of biological origin. This new innovative product range is RadiciGroup's way of putting into practice circularity principles. By assisting Customers and the whole distribution chain in their choice of materials, the Group helps conserve natural resources.

Trademark	Description	 Apparel	 Interiors	 Automotive	 Medical	 Industrial	 Sports
BIOFEEL *	Range of bio-based polymer, yarn and staple fibre, whose origin is wholly or mainly from renewable sources. They possess high resistance, dimensional stability, dyeability and comfort.	•	•	•			•
RENYCLE *	Polymers, engineering polymers, yarns and staple fibres obtained from polyamide recycling, with excellent technical performance and low environmental impact.	•	•	•			•
REPETABLE *	Polymer and continuous polyester yarn derived from flakes from post-consumer recycling (transparent PET bottles). It can boast considerable versatility in the solution-dyed, bacteriostatic and UV stabilised versions.	•	•	•			•
RESPONSIBLE *	Spunbond nonwovens made from recycled polypropylene, endowed with excellent chemical characteristics along with versatility, resistance and durability. Available in a wide range of colours, additives and technical properties.	•		•	•	•	

Main application sectors

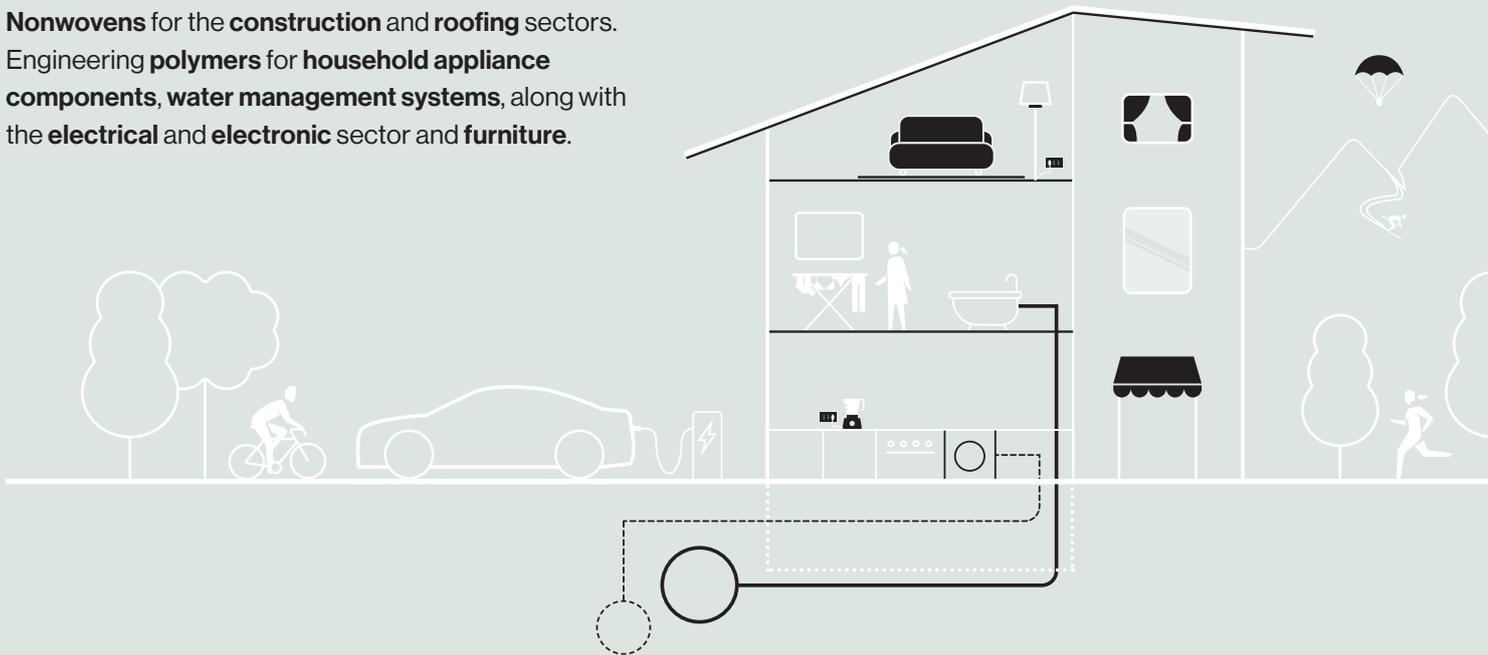
Automotive

A relevant presence as for **engineering plastics 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.



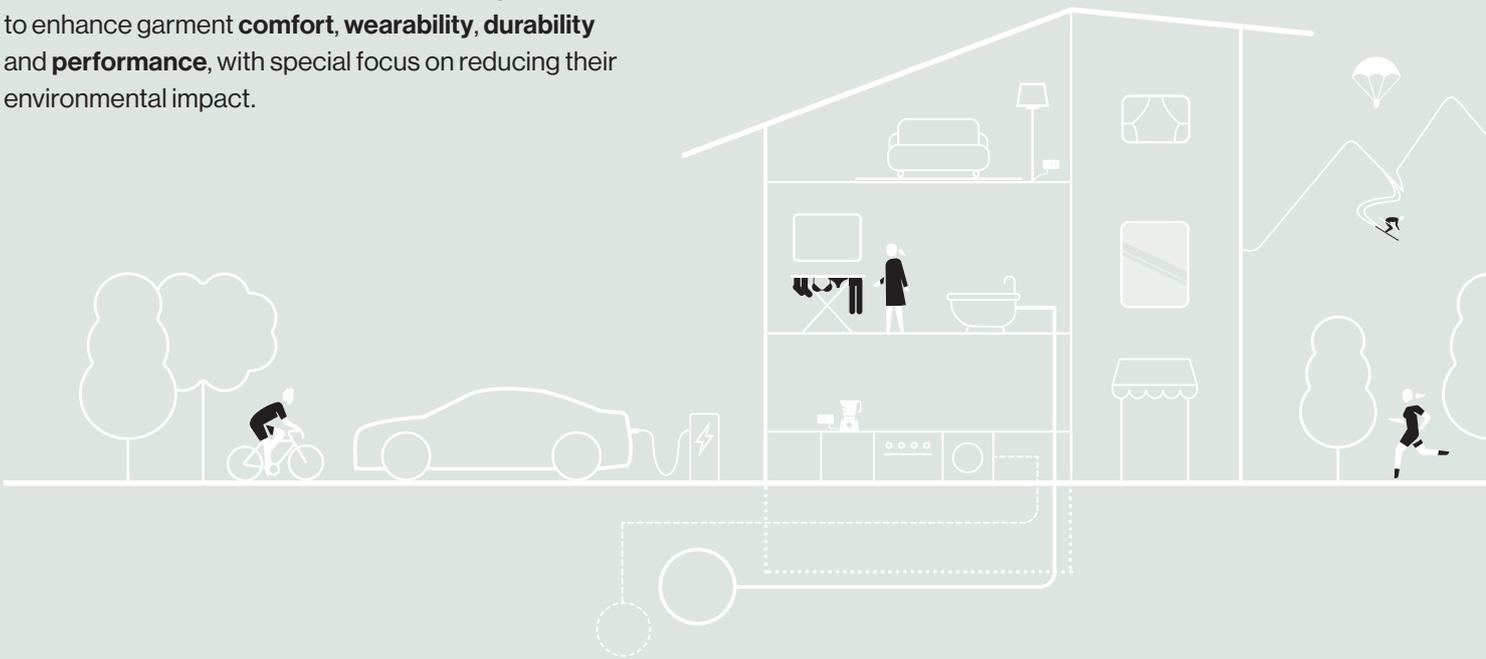
Interior & Outdoor

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**.



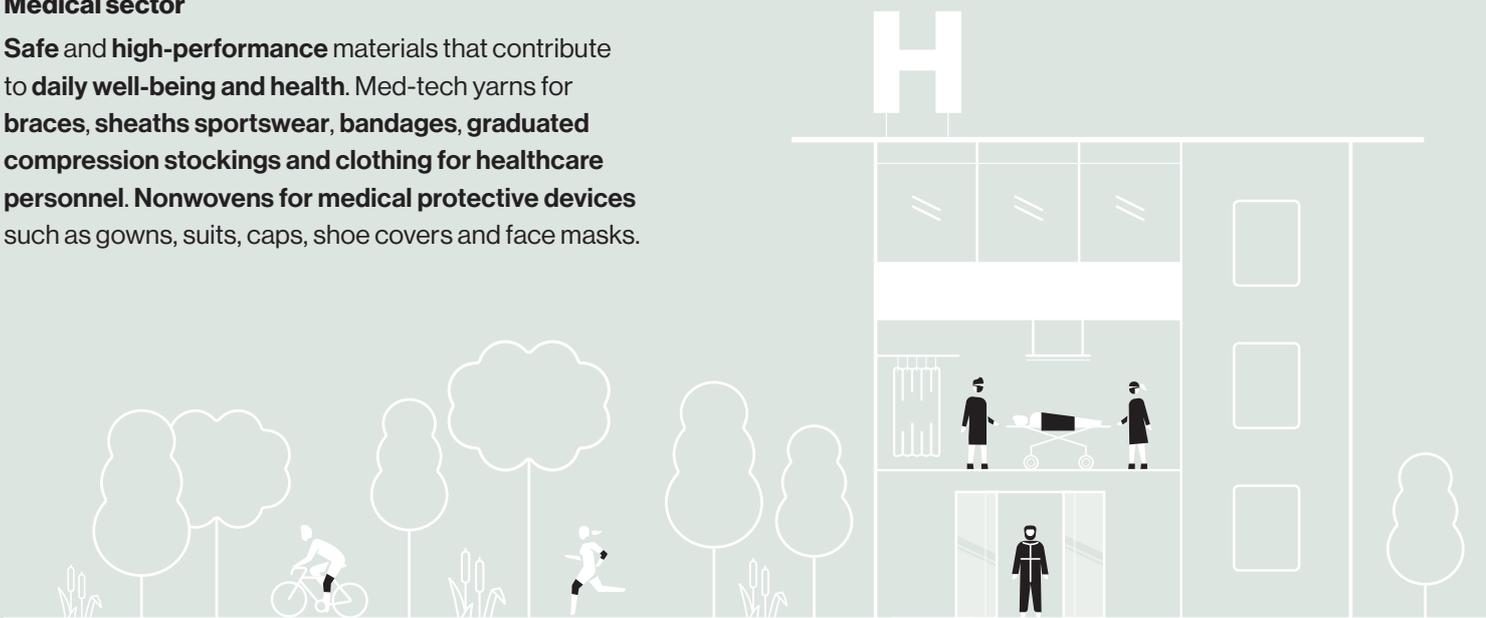
Apparel

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 sector

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 protective devices** such as gowns, suits, caps, shoe covers and face masks.



Industrial Sector

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** for exposition to harsh environment.



To learn more.

Radici world

Disclosure 102-5

RadiciGroup is a structured and multifaceted reality that, in addition to its core businesses described above, is also part of a larger industrial organisation, including textile machinery (ITEMA), energy (GEOGREEN) and hotel (SAN MARCO) businesses.



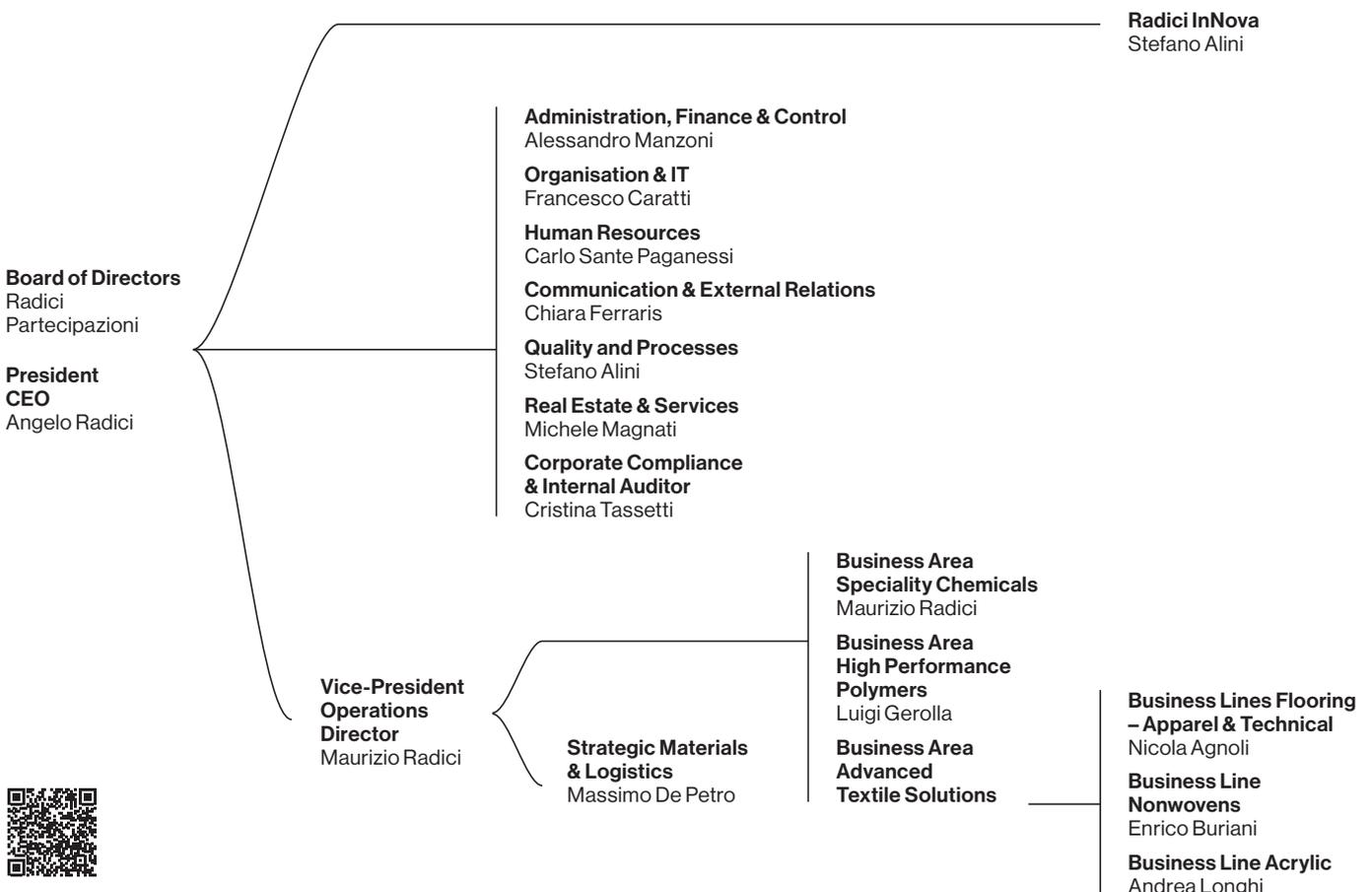
Governance

Disclosures 102-5, 102-18

The governance structure of the RadiciGroup organisation is based on direct management control by the Radici family. The latter owns the entire share capital of the Group and sets Group strategy in accordance with the Board of Directors. Angelo, Maurizio and Paolo Radici, in their capacities as President, Vice President and Member of the Board of Directors, respectively, have everyday operational control of Group operations.

The Organisation

As of 2021, parent company Radici Partecipazioni S.p.A. implemented on a voluntary basis the organisation and management model pursuant to Legislative Decree [D.Lgs.] 231/2001. The model is an important tool for monitoring and managing the risk of social, environmental and administrative crimes. Drawn up on the basis of the specific characteristics of the Group, the model reinforces the sustainability policies and prevention principles already in place, in a structured manner.



Organisational Structure as of 2022.

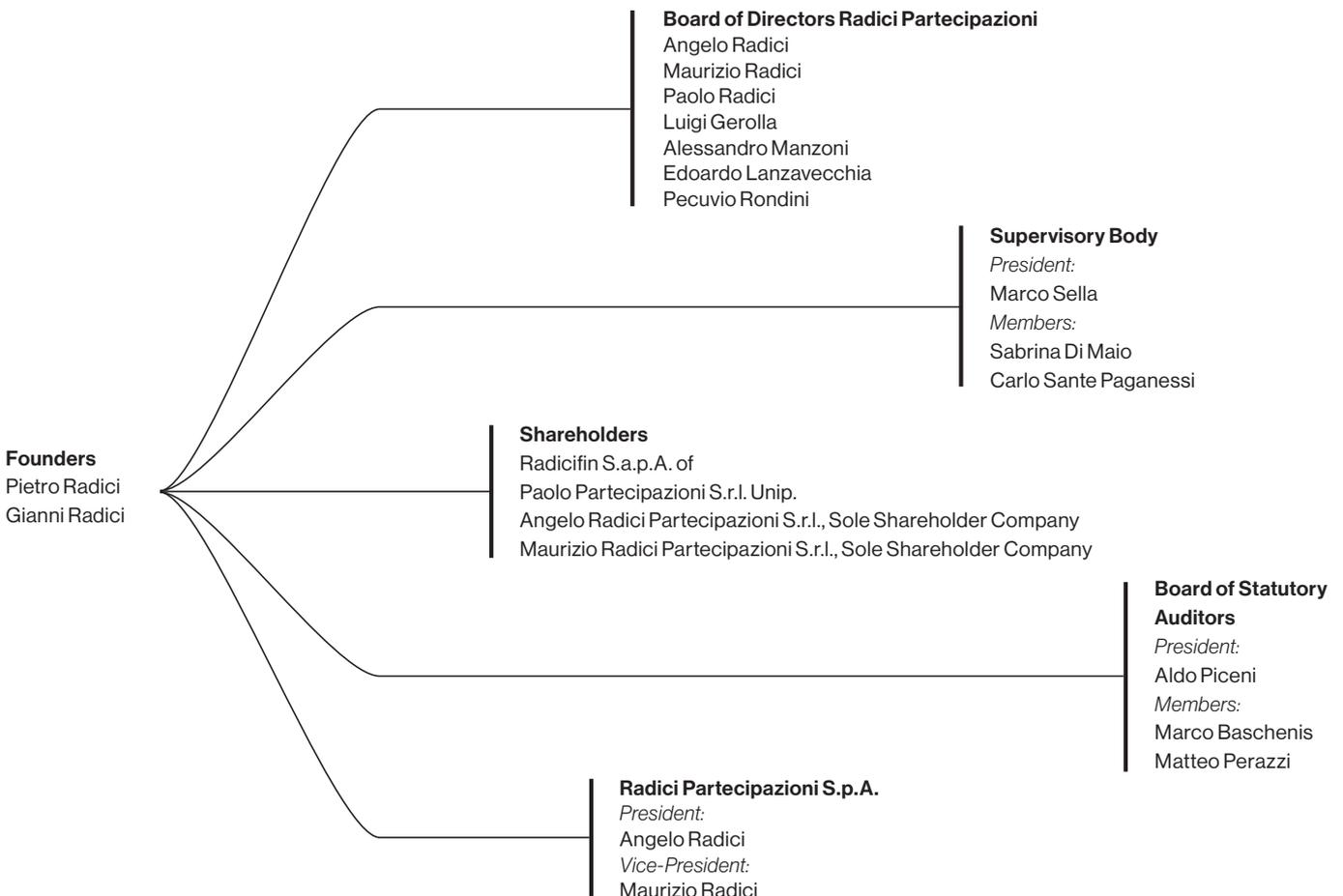
Parent Company and Board Of Directors

Radici Partecipazioni S.p.A. is the parent company that groups and controls the industrial businesses in the fields of chemicals, high performance polymers and advanced textile solutions and is under the direct control of the Group parent company, Radicifin S.A.p.A.

Radici Partecipazioni S.p.A. manages and coordinates the activities of all its subsidiaries along the guidelines set forth by the Board of Directors. It also provides certain centralised services through its corporate functions. For administration and control, the parent company has a Board of Directors, with strategic and administrative duties, and a Board of Statutory Auditors. The latter comprises 3 members, holding office for a period of 3 years, who perform control functions over the administration. The Board of Directors, holding office for 1 year, comprises 7 members. It is composed of majority Shareholders and members with competencies related to industrial, economic, financial, administrative and legal matters.

Business Area Managers

Group production and sales activities are entrusted to operational units (Business Areas), which, at the Board of Directors' behest, set down their business plans and carry them out, after submitting them to the Board of Directors for approval. The Business Areas (BAs) are defined according to the type of production or process technology, and each area, or part thereof, is headed by a manager appointed by the Radici Partecipazioni Board of Directors. Sometimes, BA Managers may also hold the position of managing directors at their respective companies, vested with the power of ordinary administration. With an eye on the future and with the purpose of increasing cooperation and capturing synergies among business area functions, the organisation of the corporate functions was redesigned so as to bring out the excellence of each of the corporate processes and enhance the international dimension of the Group. The corporate functions are company-wide points of reference across the Group BAs and agree on their objectives with the Board of Directors, in accordance with the objectives of the individual business areas.



Sustainability strategy and value creation

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 both improving corporate performance and contributing to a better future for our planet and its inhabitants. Today, one of the most important challenges in its **sustainability strategy** is to **create lasting value shared with stakeholders**. A principle that, year after year, has diverse objectives:

- **Creating value for the Workers**
 - Safeguard employment as the primary asset with collective, full time agreements.
 - Respect the human rights of workers everywhere in the world.
 - Protecting health and safety.
 - Building professional growth through mentoring side by side with more experienced partners, training, and a career path.
 - Involve People, through daily dialogue and the Group's information and communication tools.
- **Creating value for the Environment**
 - Fighting global climate change and the decline in the Planet's resources by setting and pursuing ambitious goals.
 - Adding more circularity to the current business model.
 - Decoupling production/economic growth from consumption of resources, particularly if not renewable, and making the best use of available renewable resources.
 - Investing in products and processes with reduced impact.
- **Creating value for the entire value chain**
 - Invest in innovation as a strategic driver.
 - Making products that are long-lasting, safe, high-performance and with limited and measurable impact, thus creating continual sustainable value in the value chain.
- **Creating Value for Local Communities and Territories**
 - Actively contributing to the vitality of the host Territories, which are often disadvantaged by geographical location and lack of infrastructure.
 - Specifically support the younger generations, to enable them to count on employee and growth opportunities in their communities of origin.
 - Supporting local sports and cultural activities.

The Group's annual Sustainability Report sets out how it is creating value; it is put together following GRI Standards, the most evolved global reporting system, and certified by a third party.

Stakeholders

Disclosures 102-40, 102-43

The Group considers its relationship with Stakeholders to be fundamental. RadiciGroup can only operate through collaboration based on joint knowledge, dialogue and continuous sharing of values and interests.

In this Sustainability Report, the groups of stakeholders set out below – defined by the RadiciGroup Sustainability team in 2018 and validated for the 2021 edition – were taken into consideration:

- Environment
- Trade associations
- Group companies
- Shareholders
- Board of Directors and management
- Customers
- Communities – discussion and interest groups
- Local communities and territories
- Competitors
- Suppliers
- Banks and insurance companies
- Workers
- Media
- Academic and research institutions
- Control and monitoring bodies
- Trade union organisations

RadiciGroup and its Stakeholders

Principles underpinning the relationship between RadiciGroup and its stakeholders include:

- **Common goals for social, economic and environmentally sustainable growth.**
- **Shared planning and participation, especially with value chain members.**
- **Transparent relationships and respect for the roles of everyone.**
- **Openness to discussion and mutual enrichment resulting from dialogue and collaboration.**

This kind of relationship between RadiciGroup and its stakeholders is described schematically in table 58 *"Mapping of Stakeholders, their expectations and risks"* in the section on "Building the Report".

The following sections will cover the characteristics of the relationships with some special stakeholders in more detail, with a view to sharing a vision of sound, long-term sustainability.

Shareholders

Disclosures 102-18, 102-43

"All of us, at every level, including Management and the Company's Board of Directors, respect the Law, regulations and corporate procedures. The company's leadership, management and divisional heads set an example for Employees through impeccable behaviour and are required to continuously promote a spirit of collaboration, trust and mutual respect."

- From the RadiciGroup Code of Ethics -

RadiciGroup is a family-run business. Angelo, Paolo and Maurizio Radici are engaged in sustainability-related issues on a daily basis as an intrinsic part of their role as directors. Furthermore, through their leadership role, they also promote social and environmental awareness both within the Group and among all players in the value chain. Moreover, each of the shareholders is personally engaged in public sustainability initiatives.

Angelo Radici supports and promotes youth sports activities through the RadiciGroup Ski Club and many other organisations. Maurizio Radici is personally involved in healthcare by supporting the Bergamo Oncological Association. Paolo Radici has worked for years on the recovery of vineyards, respecting nature and its rhythms through the choice of producing certified bio-wine and using energy from renewable sources for production.

Board of Directors and Management

Disclosures 102-16, 102-18, 102-43

All RadiciGroup top corporate functions work together towards sustainability goals. In particular, the Board of Directors is entrusted with the strategic direction and progressive implementation of a business model based on the principles of environmental, social and economic sustainability. The BA Managers support this choice and ensure that materiality, risk-opportunity and context analyses, together with the proposals of the various functions dealing with sustainability are consistent with the Group's general objectives. The Business Area Managers are delegated the task of adapting the corporate strategies to their sites and preparing the related executive plans, in collaboration with the relevant Function Heads. The BA Managers may promote specific sustainability improvement actions and provide a constant stimulus to the development of a sustainability culture within their respective business areas.

Group Companies

Disclosures 102-18, 102-43

"Our strength lies in our Group Companies. The Radici Partecipazioni Parent Company is committed to a transparent, Group-wide approach in its relationship with Subsidiaries, facilitating the flow of information and communicating in a timely manner situations that may have a significant impact on companies' performance. The companies themselves receive the Parent Company's services and indications in all relevant corporate areas and work together with it in a collaborative and transparent framework to ensure the smooth running of RadiciGroup."

- From the RadiciGroup Code of Ethics -

Each company, aware of the fact that sustainability is a challenge capable of generating big opportunities, efficiently manages the resources at its disposal and works in collaboration with its contacts on sustainability, innovation, QHSEE management systems (Quality, Health, Safety, Environment and Energy) and production to offer the market high-performing products with reduced environmental impact and entirely made within controlled, optimised and safe supply chains.

Through their know-how and operations the Group Companies drive Radici InNova. The operating companies

also drive the numerous sustainability case histories in this Report. Each Group business is also attentive to the economic and social context of the community in which it operates, supporting the different needs of both employees and Territories.

Finally, site sustainability teams actively collaborate on collecting data for the Sustainability Report, provide input and suggestions to the intercompany coordination groups and, jointly with the latter, develop action and improvement plans for their sites.

Radicigroup Workers

Disclosure 102-8, Disclosures 103-1, 103-2, 103-3

"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."*

- From the RadiciGroup Code of Ethics -

The Group has always considered its Workers as its main stakeholders. After a difficult 2020 due to the pandemic, which lasted also in 2021 though in less severe manner, some important **commitments remained in place towards people**, which decline concretely the principles contained in RadiciGroup Code of Ethics, namely:

- 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.**
- **Building team spirit through communication** and initiatives in **support** of institutions and social associations **in the local communities** to which Employees belong.

The number of RadiciGroup Employees grew compared to the previous year. Comparing the 2021 employee figure with the equivalent figure in 2020, RadiciGroup personnel increased by 43 people (25 men and 18 women). In considering the new 2021 scope, which includes for the first time all production, finance and commercial companies, the figure increased to 123 (78 men and 45 women) [Tables 01 - 04]. The most prevalent age group remained "30-to-50" for both male and female workers [Tables 05 and 06].

On the positive side, as per tradition, the percentage of Employees with a permanent employment contract remained very high at 94.9% [Tables 07 - 09], confirming RadiciGroup's constant focus on and protection of its employees. The Group's reputation as a company that values its employees is further reinforced by the percentage of its Employees worldwide covered by collective bargaining agreements (91.1%), which offer better protection than individual contracts [Table 10].

Disclosure 102-8

Table 01 | Radicigroup Workers

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Total Workers*	2,497	2,416	2,559	851	811	869	3,348	3,227	3,428
n	Self-employed Workers	179	168	175	9	9	12	188	177	187
n	Employees and temporary Workers	2,318	2,248	2,384	842	802	857	3,160	3,050	3,241
n	Temporary Workers	69	93	151	17	15	25	86	108	176
n	Employees	2,249	2,155	2,233	825	787	832	3,074	2,942	3,065

* At 31/12/2021 - Workers include self-employed Workers (who carry out continuous activities in RadiciGroup), temporary Workers and Employees.

Table 02 | Employees and temporary workers by region and gender

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Italy	1,333	1,302	1,354	327	326	346	1,660	1,628	1,700
n	Rest of Europe	603	557	602	418	369	398	1,021	926	1,000
n	Asia	71	76	95	26	29	31	97	105	126
n	North and South America	311	313	33	71	78	82	382	391	415

Table 03 | Employees by region and gender

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Italy	1,292	1,249	1,249	312	313	329	1,604	1,562	1,578
n	Rest of Europe	597	556	587	418	369	397	1,015	925	984
n	Asia	70	71	88	26	29	31	96	100	119
n	North and South America	290	279	309	69	76	75	359	355	384

Table 04 | Percentage of female workers by region*

		Women		
		2019	2020	2021
%	Europe (Italy + Rest of Europe)	27.8%	27.2%	27.6%
%	Italy	19.7%	20.0%	20.4%
%	Rest of Europe	40.9%	39.8%	39.8%
%	Asia	26.8%	27.6%	24.6%
%	North and South America	18.6%	19.9%	19.8%

* The percentage of female workers is related to each different geographical area and is calculated on the total number of employees and temporary workers.

Table 05 | Employees by age group and gender

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Employees <30 years old	262	233	241	108	95	91	370	328	332
n	Employees 30-50 years old	1,106	1,033	1,049	474	439	477	1,580	1,472	1,526
n	Employees >50 years old	881	889	944	243	253	263	1,124	1,142	1,207

Table 06 | Employees by gender, age group and region

			Men			Women			Total		
			2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Italy	Emp. <30 years old	123	108	110	27	25	29	150	133	139
n		Emp. 30-50 years old	572	528	507	165	174	192	737	702	699
n		Emp. >50 years old	597	613	632	120	114	108	717	727	740
n	Rest of Europe	Emp. <30 years old	60	50	52	54	37	37	114	87	89
n		Emp. 30-50 years old	313	292	288	254	209	223	567	501	511
n		Emp. >50 years old	224	214	248	110	123	136	334	337	384
n	Asia	Emp. <30 years old	13	14	8	9	10	7	22	24	15
n		Emp. 30-50 years old	56	56	78	16	18	22	72	74	100
n		Emp. >50 years old	1	1	2	1	1	2	2	2	4
n	North and South America	Emp. <30 years old	66	61	71	18	23	18	84	84	89
n		Emp. 30-50 years old	165	157	176	39	38	40	204	195	216
n		Emp. >50 years old	59	61	62	12	15	17	71	76	79

Disclosure 102-41

Table 07 | Radicigroup employees by gender, employment contract and employment type

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Total Employees	2,249	2,155	2,233	825	787	832	3,074	2,942	3,065
<i>of which</i>										
n	Permanent contract employees	2,146	2,062	2,135	768	732	774	2,914	2,794	2,909
n	Temporary contract employees	103	93	98	57	55	58	160	148	156
%	Permanent employees to total employees	95.4%	95.7%	95.6%	93.1%	93.0%	93.0%	94.8%	95.0%	94.9%
n	Full-Time (permanent + temporary)	2,222	2,132	2,209	703	657	698	2,925	2,789	2,907
n	Part-Time (permanent + temporary)	27	23	24	122	130	134	149	153	158
%	Full-time Employees to total Employees	98.8%	98.9%	98.9%	85.2%	83.5%	83.9%	95.2%	94.8%	94.8%

Table 08 | Permanent and temporary Employees by region – 2021

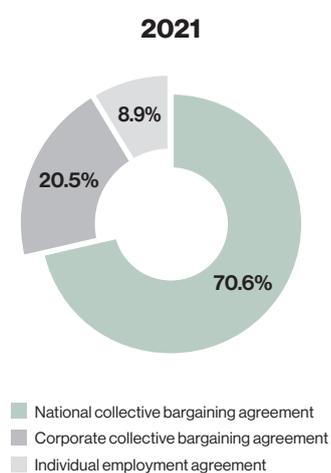
		Employees	Permanent	Temporary	% Permanent
n	Total	3,065	2,909	156	94.9%
n	Italy	1,578	1,547	31	98.0%
n	Rest of Europe	984	940	44	95.5%
n	Asia	119	38	81	31.9%
n	North and South America	384	384	0	100%

Table 09 | Employees by employment type and region – 2021

		Employees	Part-time	Full-time	% Part-time
n	Total	3,065	158	2,907	5.2%
n	Italy	1,578	124	1,454	7.9%
n	Rest of Europe	984	34	950	3.5%
n	Asia	119	0	119	0.0%
n	North and South America	384	0	384	0.0%

Table 10 | Employees by bargaining agreement type

		2019	2020	2021
n	National collective bargaining agreement	2,148	2,103	2,163
n	Corporate collective bargaining agreement	627	589	628
n	Individual employment agreement	299	250	274
n	Total Employees	3,074	2,942	3,065
%	Individual employment agreement	9.7%	8.5%	8.9%
%	Collective bargaining agreement	90.3%	91.5%	91.1%



Compensation

Concerning compensation, the minimum wage levels established by **national agreements, corporate agreements and labour market conditions apply by default to all Group workers**. RadiciGroup realizes that a **rewarding compensation strategy** is one of its main strengths. In fact, the 2021 economic data on the distribution of value added show that the largest portion, more than 41.7%, went to employee wages and salaries, which confirms that RadiciGroup believes compensation is one of the keys to attracting and retaining the best talent. The compensation schemes adopted by Group companies take into account the responsibility level and individual contribution to achieving organisational goals. Male and female employees have equal pay rates for equal job duties, in accordance with the Group ethical principles and the national and corporate collective agreements, which provide for a pay scale with no difference between genders. Furthermore, the incentive plan for management is based on the Management by Objectives (MBO) approach and performance is evaluated in relation to Group objectives, company objectives and individual objectives.

Disclosure 401-2

With regard to other employee benefits, where provided (company car, restaurant vouchers, canteen service and special discounts agreed on with stores, sport centres or travel agencies), in 2021, they were made available and/or assigned to Employees based on the company agreement and the job position of the individual employee, irrespective of the type of employment or employment contract (full-time or part time, temporary or permanent employment). Also in 2021, albeit with a lower impact than the previous year, RadiciGroup continued to anticipate redundancy funds, in the interest of its Workers.

Training

Disclosure 404-1, 403-5

As set out in the Code of Ethics, **training is another way of developing expertise to its full potential, a key plank of RadiciGroup's strategy**. In the Group, individual training plans are structured along a set pathway that begins with the identification of needs, then translated into targeted training and ends with an assessment of the effectiveness of the training.

The primary objectives of the plan include increasing skills, improving awareness of one's role, and achieving full legislative compliance.

Generally, training hours, after a decreasing 2020, gradually began to increase again from 12 hours per capita in 2020 to 15 hours in 2021. Thanks to the improvement in the general pandemic situation, RadiciGroup was able to resume the vital training of the pre-Covid period by providing courses in mixed mode: some Employees attended face-to-face courses, some remote. This choice made it

possible to optimise management from a logistical point of view (reducing travel and use of spaces) and allowed for a broader and more cross-cutting presence, without the need to limit the number of people. The participation of personnel from several companies, bringing different experiences and challenges, is considered a key factor, which increases the effectiveness of the courses [Table 11]. In terms of content, for new recruits worldwide, the Group organized participation in the first six modules of 'Kaspersky ASAP - Cyber Security', an e-learning course that had already been taken by all Employees in 2020. The increase in digital interaction driven by Covid made this course even more strategic, as are the skills it aims to impart regarding the effective management of risks linked to activities including the use of email, Internet access, password management and recognising digital threats posed by malware. In addition to the safety training common to all

Employees, new Italian recruits had the opportunity to have immediate training also on sustainability. For all Employees, courses on the correct use of work equipment and health and safety continued in 2021.

The latter accounted for 55% of the Group's training hours (Disclosure 403-5).

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.

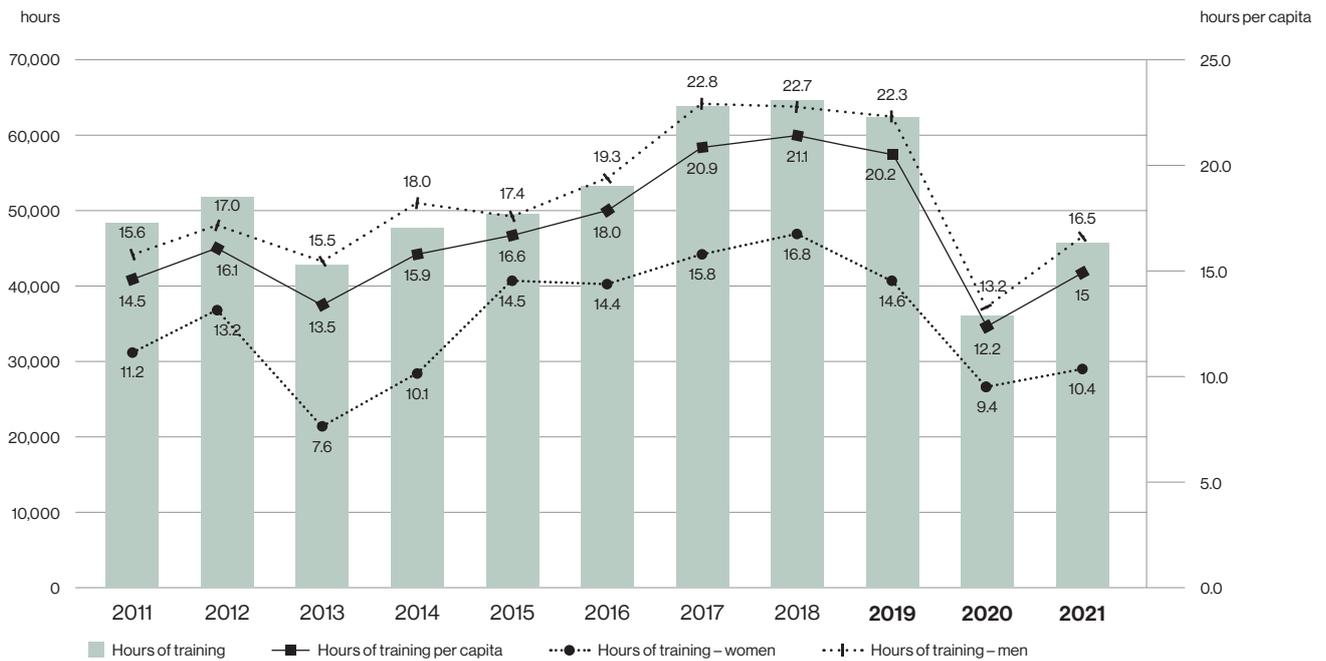
Another new development was the collaboration with Itepa, a world-class mechanotextile company that is 60% owned by the Radici family. Front line staff of RadiciGroup and Itepa took part together in the "Let's build the future together" training project. The topics dealt with are very current: from better professionalism management in all age groups to cultural integration and innovation. The ultimate goal is to manage these challenges with a common, integrated model, which sees the diversity of the two industrial groups as assets.

Disclosure 404-1

Table 11 | **Training for Employees**

		2019	2020	2021
hours	Total hours of training	62,207	35,911	45,477
n	Total employees*	3,074	2,942	3,065
hours/n	Hours of training per capita	20	12	15
hours	Total hours of training – men	50,174	28,533	36,859
n	Total employees – men	2,249	2,155	2,233
hours/n	Total hours of training – men	22	13	17
hours	Total hours of training – women	12,033	7,377	8,618
n	Total employees – women	825	787	832
hours/n	Total hours of training – women	15	9,4	10
hours	Total hours of training for Health and Safety	22,825	19,136	24,989
%	Percentage hours of training for Health and Safety to total hours of training	54%	37%	55%
hours/n	Italy	10	6	10
hours/n	Rest of Europe	23	14	10
hours/n	Asia	48	37	34
hours/n	North and South America	53	27	41

* at 31/12/2021.



The strategic use of LinkedIn: a European-level course for RadiciGroup

Another significant training course was held in 2021: "Optimise your LinkedIn Profile" saw participation from some of RadiciGroup's main European companies. LinkedIn is the most popular social network in business, used to forge relationships with other users by publishing high-value content. Decision-makers use it to get in touch with key individuals from different sectors for high-level professional dialogue. The importance of having a strategically managed corporate page and well-structured and coordinated profiles led RadiciGroup to involve around 70 employees from Italy, France, Spain, Germany, Romania and Switzerland in a process to get to know the tool and its potential.

The training was managed entirely online, with the Group's own trainers joined by external trainers to structure the lessons in brief and flexible modules in the participants' own language to boost its effectiveness. The results were fully in line with expectations. Colleagues from sales, marketing, technical support, research and development, as well as HR extraction teams were able to independently manage their personal LinkedIn profiles, optimising use of the platform and experimenting with active interaction with profiles of other companies, first in a guided way and later independently.

A specific programme, which involved just one group of participants working in sales, gave more in-depth training on the Sales Navigator tool to locate new prospects or identify the best contacts for business development within existing corporate relationships. In 2022, RadiciGroup plans to extend the course to colleagues outside Europe to create, also through universal training, an exchange of knowledge and an ever-improving synergy of all employees worldwide.

Customers

Disclosures 102-6, 102-16

"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.*
- *All our products come with the documentation required by current legislation.*
- *We are committed to offering quality service and products, at competitive conditions, in compliance with the Law.*
- *We provide and ask for comprehensive information from our customers so that they can always make informed decisions.*
- *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.*
- *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."*

- From the RadiciGroup Code of Ethics -

RadiciGroup has a worldwide Customer network, served both through a global distribution network and an internationalised manufacturing operation with plants in major markets. RadiciGroup production sites and sales offices have followed the evolution of the markets with characteristics varying from region to region and from sector to sector.

In the polymers and engineering polymers areas, the considerable presence of medium and large-sized companies operating in globalised sectors such as automotive and electrical/electronics requires proximity to the production hubs of each area from a commercial and often also a production perspective. In the fibre area, which involves numerous small to medium-sized players, it is important to manage the customer relationship taking into account the complexities of highly articulated value chains. All RadiciGroup Customers are processing companies.

2021 in Europe was marked by:

- **A general recovery of production levels and demand** in the majority of sectors. Demand held up during the year, with the exception of the automotive sector which, after an initial recovery, suffered the negative impact of the global shortage of components and key materials, particularly semiconductors, which downgraded expectations for growth.
- Following the robust and widespread recovery, a general increase in the **prices of basic commodities was also seen during the year**. Issues with the availability of certain chemical and polymer intermediates caused by plant and climate-related problems led to significant further price rises and impacted the supply of chemical and polymer specialities in Europe and the world on several occasions.
- **As of early 2021, there was a sharp and persistent increase in the cost of international freight** due to the global shortage of ships and containers, in particular on Asia routes. This led to bottlenecks in globalised value chains and issues in both material and component procurement and export flows from Europe. Logistics issues were compounded at a local level by the European shortage of drivers and heavy-goods vehicles for specialised transport.
- **In the last quarter of the year, surging energy prices** drove production costs even higher with consequent increases in sales prices in the main value chains on European and global markets. This dynamic continued into 2022 and gained further momentum with the start of the Russia-Ukraine conflict. The result has been uncertainty around production levels and future demand, with a range of expectations according to each sector.

Against this backdrop, RadiciGroup has implemented all appropriate measures to best meet Customer demand on the basis of its **strengths**:

- **Solid upstream integration** with **optimised processes fully under control**.
- A **widespread production, distribution and sales network**, as a guarantee of proximity and continuity of supply for customers.
- **Constant awareness of the challenges of different sectors**, from **circularity** to **green chemistry**, from **sustainable fashion** to **electric mobility** and **med-tech** (medical sector with a high technological content).
- **Strengthening the sustainable solution offer** with new recyclable and recycled 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.

Suppliers

Disclosures 102-9, 102-10

"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.*
- *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 work with Suppliers according to principles of transparency, loyalty and fairness with a view to stable and enduring business relations.*
- *We require Suppliers to comply with the agreed conditions and we also adhere to them."*

- From the RadiciGroup Code of Ethics -

*Learn more about
the Supplier Code of Conduct.*



Strategic Materials and Logistics function

The Group production processes are extremely diversified and complex, starting with raw materials: caprolactam, phenol, olone (cyclohexanol-cyclohexanone mix), ammonia, adiponitrile, and polypropylene, polyethylene and polyester polymers, which are absolutely essential materials for RadiciGroup processes. The Strategic Materials & Logistics function is responsible for centralised coordination of the various procurement process phases and management of raw materials purchasing.

The tasks of the function thus include: negotiating contractual conditions, procurement logistics and distribution to RadiciGroup sites, safe storage and monitoring the risk of big suppliers. There are about 70 strategic raw materials Suppliers worldwide on framework agreements. They cover around 65% of the Group's procurement expenditure and are essential for all its activities.

Packaging and Transportation is another department of

the Strategic Materials and Logistics function. After raw materials, transportation is the second most important item purchased by the Group. The aim of the function is not only to optimise logistics flows, contributing to improvement in product lead times, but also to find lower environmental impact solutions, such as intermodal transport.

Real Estate & Services function

The Real Estate and Services function is assigned tasks that are part of supply chain activities, including coordinating at the corporate level and supporting the individual business areas on matters concerning service procurement, such as telecommunications and information technology, domestic and international shipping, car fleet management, handling of trade fair events and travel arrangements.

The suppliers related to this function are predominantly mid-sized domestic companies. For services used in the daily operations of Group companies, the suppliers may sometimes be local family-operated businesses. This choice has been made to retain value added within local areas by fostering development as much as possible. Among the main tasks of the function are the preservation and leveraging of the companies' real estate and the

monitoring of sites during decommissioning and renovation of brownfield sites. In all these cases, the function will usually seek the collaboration of mostly local companies and/or professionals, giving priority to professionalism and excellence in carrying out the assigned activities.

In 2021, a significant measure taken by Real Estate & Services involved the makeup of the corporate fleet, through the long-term leasing of increasingly greener cars. In fact, if in 2018 and 2019 only one employee out of four could travel in a low-environmental-impact car, in 2021, as the result of a new corporate policy directed at increasing the quota of electric and hybrid cars in its corporate fleet, the percentage of cars with electric motors ordered annually grew to 67%.

In anticipation of further growth in Plug-in and Full Electric vehicles, in 2021 RadiciGroup installed electric vehicle (EV) charging stations on the infrastructure at its main Italian sites. These EV charging points are powered by 100% renewable energy from the Group supplier-partner Geogreen. The EV charging infrastructure will accelerate the transition to electric vehicles and strengthen the Group's commitment to the environment, thanks to the special sensitivity of Group employees to such issues.

Table 12 | **The Group's Suppliers in relation to turnover and geographical location**

Breakdown of RadiciGroup supplier types by turnover in 2021	
Strategic raw materials	from EUR 800 to EUR 830 million
Packaging + transport	about EUR 68 million
Maintenance + utilities	about EUR 148 million
Other goods or services	about EUR 133 million
Geographical breakdown of RadiciGroup Suppliers by turnover in 2021	
Europe	about 85% of sales*
Asia	about 10% of sales
North and South America	about 5% of sales

* Of which, about twenty key Suppliers with sales over EUR 10 million.

A challenging two years for the Supply Chain

Disclosure 102-15

2020 and 2021 were challenging years for company supply chains globally, including the Group's.

- In **2021**, in particular, **the continued Covid crisis brought further logistic issues with the transport of goods and repeated and substantial restrictions on people's mobility.**
- This was compounded by **the Suez Canal being blocked and a number of unexpected and adverse events in the United States** which led to a **significant shortage in raw materials and marked disruption to global supply chains.** The situation continued throughout the year, in parallel with **the impact of the recovery which pushed demand up further** and, consequently, exacerbated **the shortage of raw materials and pushing their prices yet higher.**
- 2021 concluded with **significant disruption in the supply of natural gas and electricity too**, both of which were impacted by significant post-lockdown demand and **sharp price rises.** The situation had a significant impact on all production segments.
- **RadiciGroup acted proactively**, leveraging its **organisation and negotiating power in the supply chain**, where it enjoys deep-rooted relationships. The Group increasingly considers its Suppliers to be strategic partners, with whom it works not only for the continuity of its activities and service to Customers, but also for the planning of future solutions.
- It therefore builds long-lasting relations based on trust and transparency, selecting well-structured suppliers able to flexibly manage critical situations through a fundamentally solid organisation. RadiciGroup regularly monitors the market and Suppliers' organisational structure and assesses risks in order to protect against shortages and sudden variations in price.
- The **careful selection of Suppliers**, an excellent existing relationship with them and a **particular focus on risk management** have been behind the Group's success in **limiting, as far as possible, the negative effects of the shortage of raw materials and** maintaining production and Customer service levels above those of other players across relevant sectors. Supplementing this is **constant market oversight** by the Strategic Materials & Logistics function, in collaboration with partner Geogreen, to **monitor trends in energy prices** and maintain a resilient system in place which is capable of exploiting opportunities and optimising efforts by directing them towards the Group's more strategic and higher value-added products.
- In **addition to the supply chain-related challenges noted above, 2022 also began with an extremely complex international situation** which heightened market volatility and made the risk of structural shortages in raw materials more acute.

Disclosures 102-15, 102-40

RadiciGroup and Versalis, commitment to sustainable logistics

In a 2021 that saw the need to leverage every part of the supply chain to optimise it and react to the challenges posed by the global backdrop, RadiciGroup finalised a major investment project by opening the railway connection at the Versalis plant in Mantua for the transport of OLONE to Radici Chimica SpA in Novara.

OLONE (KA Oil) is one of the main chemical intermediates used in the production of adipic acid and in the polyamide 66 chain, Radici Chimica's core business. Versalis, Eni's chemical company, produces it at the Mantua plant from which RadiciGroup takes several tens of thousands of tons a year. Before construction of the junction, this intermediate left the Versalis site in Mantua by truck to the nearby railway yard and continued by rail to Radici Chimica where an internal hub has been in place for some time. As a result of this investment, the OLONE now travels exclusively by rail-tanker with increased safety in material handling and transport as well as undoubted environmental benefits. Since it became fully operational, by kilometres travelled, RadiciGroup and Versalis have achieved an 80% reduction in CO₂ emissions and a primary energy saving of 75% when compared to road haulage.

This is yet another sustainable logistics initiative implemented by Radici Chimica – this time supported by Versalis – as part of its strong commitment to rail transport which today accounts for more than 90% of incoming raw materials, in line with RadiciGroup's policy for a production system with low direct and indirect emissions.

Local Communities and Territories

Disclosures 102-40, 413-1 Disclosures 103-1, 103-2, 103-3

"RadiciGroup and Local Communities: a single entity. 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."*

- From the RadiciGroup Code of Ethics -

To better understand the relationships that RadiciGroup builds with the communities where its businesses are based, here are some informative details:

- **RadiciGroup is a family-owned-and-operated business.** Some members of the Radici family, including the shareholders, reside and are physically present in the areas where RadiciGroup was founded and operates.
- **All the historic RadiciGroup companies are located near urban areas, or are even part of the urban fabric itself.** In some cases, the name of the place has become synonymous with the name of the company, and vice versa.
- At the same time, **many of these companies are also situated in mountain areas, or in close contact with rivers, woods, protected areas and cultivated fields.**
- An internal survey conducted regularly, most recently in 2019, found that **about 80% of RadiciGroup workers in Italy actually reside within a 20-km radius from the Group company where they work.** Therefore, the workers are residents of the host communities.

The identity of RadiciGroup has thus been profoundly shaped by its local roots. The result of a daily, mostly informal dialogue, this relationship is nourished by pragmatism and mutual respect.

The same respect has distinguished RadiciGroup throughout its history of internationalisation, playing out in its approach to cultural diversity that includes progressive integration and exchanges with foreign cultures. RadiciGroup's contribution to local development can be measured not only in terms of economic growth, but also in terms of a production culture that its companies have spread throughout the world with their high health and safety standards.

RadiciGroup is supported by and is close to Local Communities and can also take advantage of the manufacturing know-how that exists locally and on the fact that the surrounding communities have always been characterised by an inclination for organisational and production flexibility.

Disclosure 415-1

Although it maintains political neutrality and does not support any political party, RadiciGroup is constantly in contact with the local authorities in the areas where its companies are located and maintains transparent collaborative relationships with them,

RadiciGroup and the Territory 2021

Disclosure 413-1

In a logic of active corporate citizenship, the Group is attentive to the needs of the Territories and responds through projects designed for different cultural contexts and needs.

- **Family**
Radici Novacips and Radici Yarn (Italy) support the community nursery.
- **Youth sport**
RadiciFil (Italy) supports Juvenes Gianni Radici
- **Inclusion**
Radici Chimica (Italy) actively responds to the integration needs of the S. Agabio district.
- **Training and education**
Radici Partecipazioni Spa (Italy) created and maintains the Education Project for relations with schools.
- **Employees**
Radici Chimica Deutschland GmbH (Germany) organises and supports sports events for Employees and the Territory.
- **Engagement and biodiversity**
Radici Plastics Ltda (Brazil) grows the first corporate orchard for biodiversity.
- **Social needs of the Territory**
Logit Sro (Czech Republic) supports the foundation of the same name and the Podborany community.
- **Healthcare**
S.C. Yarnea (Romania) through the Gianni and Luciana Radici Foundation is active in the prevention and treatment of serious illnesses of Employees and their families.
- **Public health, the fight against Covid**
Radici Plastics India Pvt. Ltd (India) contributes to the government's PM Cares fund for Covid to support research into the virus.
- **Youth competitive sport**
Radici Partecipazioni Spa (Italy) supports the RadiciGroup Ski Club, with more than 100 local athletes between the ages of 6 and 18.
- **Flowerbeds and public gardens**
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.
- **Child safety**
Radici Chemiefaser GmbH (Germany) supported, in cooperation with the police, the production of a colouring book to explain to children how to react correctly in different situations.
- **Help for families in difficulty**
Radici Plastics Inc. (USA), through the contribution of all employees, supports families in need with special help at Christmas with the Salvation Army's "Adopt a Family" project.

Radici Chimica Novara and the S. Agabio district: a special relationship.

The history of RadiciGroup in the chemical sector began in spring 1986, when Gianni Radici, the Group's founder, decided to purchase and return to use the former Montedison factory in Via Fauser in Novara, which had been inactive for around three years. The factory was part of an industrial estate, almost the size of a neighbourhood, and flanked by its own local area of Sant'Agabio.

In Novara, Radici Chimica SpA found significant local expertise in the chemical sector, which has always been a feature of the city. It also found a local area that was full of initiatives and cultural, social and sporting projects, with which the Company immediately established a special, two-way relationship.

Over time, the S. Agabio neighbourhood has increasingly become a multi-ethnic residential area of Novara, with 30 nationalities and numerous activities for families; it also has a strong sense of inclusiveness, a path that Radici Chimica has embraced for many years.

Among the cultural and social organisations present in the neighbourhood supported most closely by Radici Chimica is the Cassiopea Voluntary Association, which was set up in 1997 and whose activities are spread across four main areas: preventing school drop-outs, preventing bullying, promoting cultural improvement among the young and facilitating the social integration of resident families. To facilitate integration, for example, it once again organised a literacy programme for the Italian language in 2021. Conducted in person and virtually to ensure the highest levels of attendance, it helped integrate several Afghan families into the local neighbourhood.

School remedial and support activities are also carried out in coordination with the Istituto Comprensivo Statale C.T. Bellini, a primary and secondary school, which is located in the heart of the district. The most recent training initiative carried out by the institute in 2021, thanks in part to the support and contribution of Radici Chimica, was the "School Against Bullying and Cyberbullying" course: a wide-ranging training course, aimed at the institute's students and their parents, on the conscious use of the Internet and social media, in cooperation with the police. In addition, the institute has set up a psychological support desk for the children and their families and has appointed a teacher to act as contact point against bullying and cyberbullying to provide an active presence and real support.

The mutual recognition and respect between Radici Chimica and the Sant'Agabio district has been maintained and increasingly consolidated over time. On the one hand, the company has quickly embraced the significance of the local area's social needs and, on the other, the neighbourhood and its inhabitants see Radici Chimica as a reference point of growing importance.

Schools

RadiciGroup believes that its social role in local communities embraces schools and thus takes concrete steps to encourage collaboration between industry and education through dialogue, cooperation and codesign, in line with the United Nations' Goal 4: "QUALITY EDUCATION".

The RadiciGroup "Education" project stems from the role in the community the Group envisions for its companies. For years now, this project has created and strengthened collaboration relationships between the Group and schools in areas where its companies operate. The "Education" project is a sign of RadiciGroup's deep concern for young people, who represent the future of the communities and the future of the Group itself.

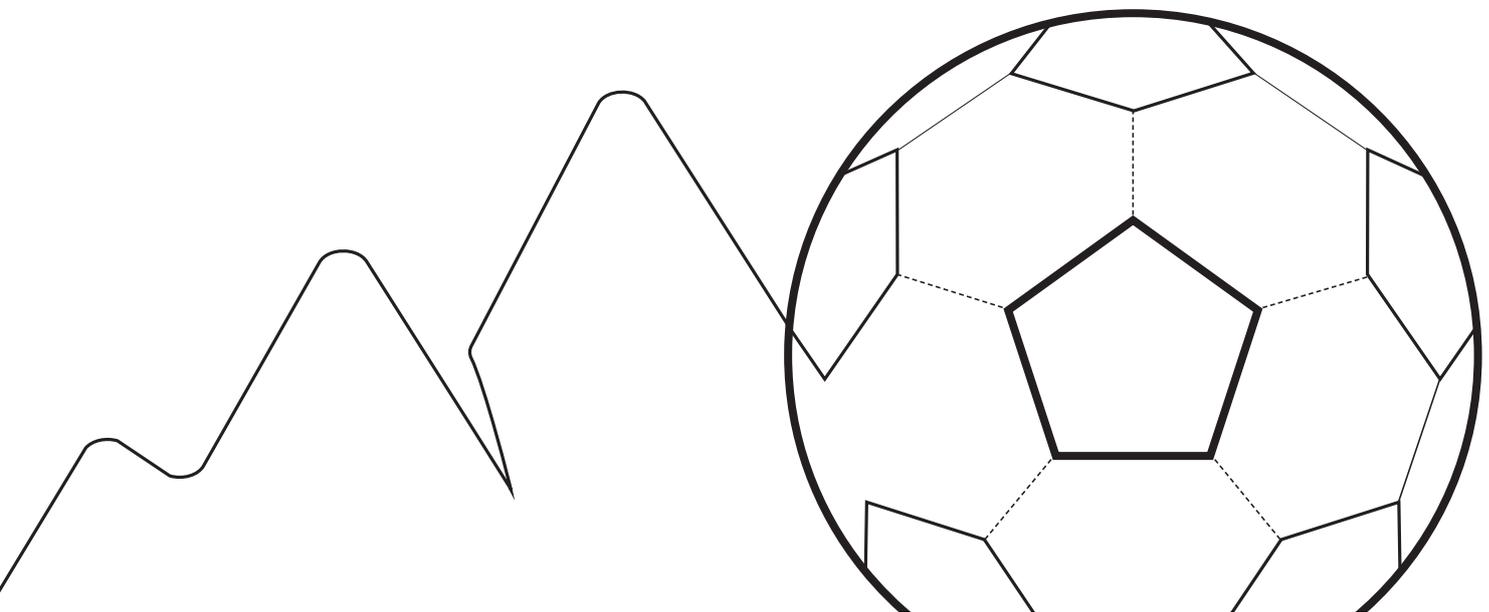
Even in 2021, despite the restrictions still in place, Education ensured that numerous students were able to get in touch with the Group, mostly online, to get to know the companies better. In particular, the Group's companies took part in Informagiovani, an initiative aimed at engaging with young people to help them understand the skills required by the labour market, and in SME Day, a day dedicated to telling the story of companies committed to creating a better future with a special focus on sustainability. Finally, the Group's HR representatives took part in the Job Festival, an initiative during which more than twenty individual interviews were conducted with final-year students from various technical institutes in the province of Bergamo to find out more about their abilities, aptitude and aspirations.

Sport associations

RadiciGroup is alive to the problems of the young generation and their education, which can also be delivered through sports. Sport and work activities are based on the same values: sacrifice, hard work and determination to improve and achieve ambitious goals.

RadiciGroup supports numerous sport associations: local associations, mostly for youths, which have the goal of teaching and training in a specific sport and, most importantly, pursue the objective of helping young people grow up.

The SciClubRadiciGroup [RadiciGroupSkiClub] is a good example of this kind of organisation, with over 100 athletes aged between 6 and 18. Furthermore, RadiciGroup is an official Sponsor of the Atalanta Bergamo Football Club, a team very close to the hearts of all Group Employees, who are invited to special engagement events featuring the participation of the Atalanta players.



A.S.D. Juvenes Gianni Radici, a high-value educational project through sport

A.S.D. Juvenes Gianni Radici is a sports club founded in 2016 with the aim of making sport one of the fundamental factors in the growth of local children. The company runs a modern sports centre directly opposite RadiciFil, a Group company specialising in yarns for textile flooring. The company chooses to support A.S.D. Juvenes not only because of its social and community value, but also in view of its cutting-edge mission. The cornerstone around which the Club's activities are developed is the Children's Charter of Rights in Sport, drawn up by Unesco in Geneva in 1992. The Juvenes Gianni Radici project offers families an educational and growth programme for young people through play and football. The goal is to continue growing the Club alongside the local area and its Communities.

Today, more than 140 youngsters between 6 and 14 are involved, led by highly qualified coaches who hold the UEFA A-B-C licence and degrees in sport science. The Club seeks out staff who are not only technically qualified but who have an aptitude for planning and the ability to teach youngsters the importance of setting goals and doing your best to achieve them. Sport teaches determination, sacrifice and the desire to constantly improve, values that have always been at the core of Gianni Radici's way of working as well – both personally and professionally. By putting children at the heart of the project, the Club is committed to a high-value, quality educational programme.

Media

Disclosure 103-1

RadiciGroup's media presence was significant in 2021. The press review and social media monitoring figures once again showed the strong interest among all stakeholders in the Group, its strategies, new product developments and the choices made for the environment, people and local areas. In the area of communication, along with a structured transparency strategy, RadiciGroup has also benefited from its well-established and excellent relationship with the generalist and trade press. Similarly to other stakeholders, the Group builds solid, long-term relationships with the media. During a complex 2021, it was also important to communicate on a regular basis, benefiting not only the press, but the entire value chain. As far as sustainability is concerned, in 2021, RadiciGroup again embraced the principles of balance and accuracy in communicating its performance and results, always making use of up-to-date data and information to demonstrate the validity of the choices made. It was particularly important to translate the complexity of the Group's sustainability choices into a comprehensible language, able to stimulate and engage stakeholders.

The following are some significant figures from the 2021 press review:

- **2,000 releases in online and print media**, both Italian and international.
- Focus on **Italian newspapers: about 1,000 releases**.
- Focus on **international newspapers: around 900 releases** in newspapers in various countries where the Group is present.
- **1,350 online posts and articles** in which RadiciGroup was mentioned, with a **daily average of 4 references**.

Among the main **keywords** detected were: **sustainability, environmental impact and circular economy**, consistent with the Group's communication and information strategy for stakeholders.

As far as **social media presence** is concerned, **LinkedIn, Facebook, Twitter, Instagram and YouTube** had **more than 200 posts** published in 2021. There has been a steady increase in followers and interactions on all the main platforms, an important sign of both interest in RadiciGroup's activities and the intention to directly contact the Group, often to express appreciation for its activities.

Focusing on **LinkedIn**, the main social media networking site used by RadiciGroup, it recorded an **increase of more than 7,600 followers compared to 2020**, a very good result for a business-to-business company. To improve the skills of teams using LinkedIn for customer contact, a major training course was organized in 2021, which is described in the training part of this report.

Trade Associations and Competitors

Disclosures 102-13, 102-4 Disclosure 103-1

RadiciGroup attaches ever-greater importance to being a member of trade, industrial and scientific associations. These organisations cover the whole production chain from upstream to downstream and are important pre-competitive resources, where it is possible to:

- **Collectively develop research projects and address key present and future challenges** related to products and systems.
- **Share competencies and potential risks in the development of common solutions** to meet new needs arising in 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 Group's presence in the various organisations, together with the presence of numerous competitors in an open and direct setting, testifies to RadiciGroup's full respect for all players on the scene and for the rules of commercial fairness.

Table 13

RadiciGroup memberships in trade and other associations in 2021	RadiciGroup company enrolled in 2021
CIRFS – EUROPEAN MAN-MADE FIBRES ASSOCIATION CONFINDUSTRIA SMI (Sistema Moda Italia) – TexClubTec Tessile e Salute ICESP – Italian Circular Economy Stakeholder Platform AICQ – Italian Association for Quality Culture Ellen Macarthur Foundation EPCA – European Petrochemical Association	RADICI PARTECIPAZIONI S.p.A.
Speciality Chemicals	
FEDERCHIMICA Confindustria Novara – Vercelli – Valsesia CEFIC – EUROPEAN CHEMICAL INDUSTRY IBIS Consortium SPRING	RADICI CHIMICA S.p.A.
NORDOSTCHEMIE IHK (Industrie- und Handelskammer)	RADICI CHIMICA GmbH
High Performance Polymers	
CHEMIE WIRTSCHAFTSFOERD. GMBH	RADICI PLASTICS GmbH
CONFINDUSTRIA FEDERCHIMICA PLASTICS EUROPE AISBL (BE) PLASTICS EUROPE Italy (through Plastics Europe Brussels) PINFA - Flame Retardants Association PROPLAST UNIPLAST - Ente Italiano di Unificazione delle Materie Plastiche TMP COMITATO ELETTROTECNICO ITAL.	RADICI NOVACIPS S.p.A.

ITALIAN CHAMBER OF COMMERCE in China	RADICI PLASTICS Suzhou Co. Ltd.
Association of Plastics Industry (formerly SPI) OMA – Ohio Manufacturer’s Association Wadsworth Chamber of Commerce	RADICI PLASTICS USA Inc.
Advanced Textile Solutions	
CONFINDUSTRIA EDANA	TESSITURE PIETRO RADICI S.p.A.
CONFINDUSTRIA	RADICI YARN S.p.A.
Neamt Chamber of Commerce and Industry Textile Patronal Federation	S.C. YARNEA Srl
VTB: Verband der Bayerischen Textil- und Bekleidungsindustrie	RADICI CHEMIEFASER GmbH
IHK: Industrie- und Handelskammern	
ABRAFAS – Associação Brasileira de Produtores de Fibras Artificiais e Sintéticas	RADICIFIBRAS INDUSTRIA E COMERCIO Ltda
SINDTEXTIL – Sinditêtil Sindicato Indústria Fiação Tecelagem Estado São Paulo	
CIESP – Centro das Indústrias do Estado de São Paulo	
CONFINDUSTRIA FEDERCHIMICA CON ASSOFIBRE	RADICIFIL S.p.A.
Italian-Czech Chamber of Commerce	RADICIFIL S.p.A. – LOGIT Sro

In 2021, thanks to its membership of the most recognised association and institutional venues, RadiciGroup actively participated in new industry projects to structure collection, management and recycling systems for end-of-life textiles and waste throughout the textile supply chain, in view of the EU Commission’s future regulatory interventions for the sector. Working with major stakeholders in the textile supply chain, always in compliance with fair competition regulations, is crucial for the achievement of objectives. RadiciGroup has been involved in the REHubs initiative, which promotes the creation of national hubs for sorting and recycling post-consumer textile waste and products at the European level.

The road to Sustainability - integration into corporate strategy

Disclosure 103-1

Ever since the 1950s the RadiciGroup's sustainability has passed many milestones, in parallel with the Group's evolution and the concept of sustainability itself. The Group's future challenges will increasingly encompass the key elements of circularity, emissions reduction, innovative products and valuing people for their differences and social and geographical background.

- **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. RadiciGroup 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 (Organization 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 the **circular economy** and continued to work towards the **creation of value** added shared with its stakeholders. It is in this spirit that Radici **InNova**, a RadiciGroup consortium for sustainability-driven innovation, was founded. This year, the Sustainability Report sees its 17th edition.
- **2021**
RadiciGroup uses **over 50% renewable electricity** for its plants.

Viewing the RadiciGroup Sustainability Strategy through the materiality matrix

The RadiciGroup materiality matrix, which was created as described in the section "Building the Report", explains how sustainability was incorporated into the daily operations at RadiciGroup on the basis of specific topics. The material topics are those environmental, social, economic and product issues that are of absolute relevance to the Group. The following sections will analyse these topics in detail, report the measured values for Group performance indicators, and highlight the numerous cases of excellence in company operations during 2020.

Table 14

RadiciGroup materiality matrix	
ENVIRONMENTAL DEVELOPMENT	Energy
	Emissions
	Water
	Waste
	Raw materials
	Product sustainable innovation and measurement of product environmental impacts
SOCIAL DEVELOPMENT	Employment
	Occupational health and safety
	Employee training and education
ECONOMIC & MANAGEMENT DEVELOPMENT	Economic performance
	Customer satisfaction
	Regulatory compliance
	Certifications and integrated management systems

Economic performance

Disclosures 103-1, 103-2, 103-3 Disclosure 201-1

2021 for RadiciGroup was marked by the **recovery after the Covid-19-related difficulties of the** previous period. Despite the **uncertain and volatile global economic situation**, the **acceleration in consumption** pushed sales in all Business Areas towards pre-pandemic levels. However, the **economic background** remained **challenging**: the multiple complications ranged from the **shortage of raw materials**, to the **increase in energy costs**, through to **logistics issues**. Tensions on the raw materials market led to significant price variations which the companies sought to transfer as far as possible to their end products; this meant margins were maintained at positive levels, with **the Group reacting quickly and effectively**, recording **growing sales volumes**.

RadiciGroup therefore ended **2021 on a positive note**, despite the difficulties mentioned previously. Sales of **EUR 1,508 million** were generated from more than 30 production and sales locations across Europe, Asia and America, all included in the reporting scope of this Sustainability Report. In 2021, the Group once more continued its strategy of focusing on the core business it considers strategic and synergetic. This included chemicals for nylon production, engineering polymers and advanced textile solutions. **EBITDA reached EUR 269 million** and **net income for the year was EUR 152 million**. At the same time, the Group **invested EUR 53 million funded from cash flow** with no impact on its **financial position**, which closed the year positively and **on a stronger footing compared to 2020**, as did all balance sheet indicators.

Investing in sustainability

For RadiciGroup, investing in sustainability means **nurturing the** inseparable combination of **competitiveness and responsible growth** and addressing many of the global challenges outlined in this Report by experimenting with new ways of doing business. A strategy that translates into **choices that favour innovation**, the **best available technologies**, **circular products**, **employee growth** or the strengthening of **partnership with local areas**. All this to secure their own future together with that of the generations to come.

The Group is increasingly conscious of **ESG** (Environmental, Social, Governance) criteria with a special focus on:

- the **climate**, giving significant attention to **reducing emissions** and selecting low-impact energy mixes.
- **people**, with important **training projects** and additional activities. The social aspect in the Group also finds expression in **product innovation and the transparency** in favour of the **value chain**;
- **efficient management**, working on structural capacity to **create stability and resilience** to cope with a world that has proven to be extremely unstable over recent years.

Below are several **significant figures regarding RadiciGroup's sustainability-related investments** and costs:

- **EUR 236 million Investments to support the competitiveness of Group companies** over the 2017-2021 five-year period. Of these, EUR 53 million was the amount invested in 2021.
- **EUR 3.1 million Environmental investments** made in 2021 related to the introduction of Best Available Techniques, efficiency improvement, emission abatement, and research and development activities directed at the development and adoption of low-impact processes and products.
- **EUR 5.4 million Costs for environmental management and protection** (certifications, waste disposal, wastewater treatment, etc.) at the Group companies in Italy.

Generation and distribution of value added

Added value is an important link between RadiciGroup's economic and financial strategy and its sustainability policy, as it enables quantifying the wealth produced and understanding how the wealth is distributed among its Stakeholders.

RadiciGroup works to generate lasting growth by creating income and jobs for its three thousand Employees. Mindful of the value of the pact of trust between its employees

and its companies, the Group identifies People, together with the environment, as important areas of investment. Workers' compensation has therefore also found a prominent position in the 2021 added value distribution table. Personnel wages and benefits and payments to government are proof of the Group's traditional correctness and contribution to the development of local communities.

Table 15 | **Generation of value added***

	Item	31/12/19	31/12/20	31/12/21
€	A) PRODUCTION VALUE	1,092,185,863	992,986,379	1,542,447,792
	Sales and service revenue	1,091,177,501	1,017,850,797	1,507,508,410
	Change in work progress, semi-finished goods and goods inventories	52,085	(25,189,105)	34,668,659
	Change in contract work in progress	-	-	-
	Increase in internally generated non-current assets	956,276	324,687	270,723
	Other revenue and income	-	-	-
€	B) INTERMEDIATE PRODUCTION COSTS	797,060,960	709,553,569	1,145,107,360
	Raw materials, supplies, consumables and goods for resale	611,032,681	489,678,028	880,164,220
	Services	171,448,387	204,011,759	302,281,015
	Lease and rentals	5,642,452	5,589,703	5,702,612
	Change in raw materials, supplies and goods for resale inventories	6,959,604	7,959,275	(46,864,856)
	Provision for liabilities and charges	200,277	215,640	503,550
	Other provisions	15,971	257,738	174,853
	Miscellaneous operating costs	1,761,590	1,841,425	3,145,967
€	GROSS VALUE ADDED FROM OPERATIONS (A-B)	295,124,902	283,432,810	397,340,432
	+/- Additional and extraordinary items	9,985,738	13,432,075	16,932,725
€	GROSS TOTAL VALUE ADDED	305,110,640	296,864,886	414,273,156
	- Depreciation and amortisation	45,621,065	43,726,957	57,470,025
€	TOTAL NET VALUE ADDED	259,489,575	253,137,929	356,803,131

Table 16 | **Generation of value added by region - 2021***

	Item	Italy	Rest of Europe	Asia	America	Tot. World
€	A) PRODUCTION VALUE	873,522,015	369,911,529	112,944,427	186,069,821	1,542,447,792
	Sales and service revenue	853,762,245	362,609,144	109,364,081	181,772,940	1,507,508,410
	Change in work progress, semi-finished goods and goods inventories	19,514,831	7,276,601	3,580,346	4,296,882	34,668,659
	Change in contract work in progress	-	-	-	-	-
	Increase in internally generated non-current assets	244,939	25,784	-	-	270,723
	Other revenue and income	-	-	-	-	-
€	B) INTERMEDIATE PRODUCTION COSTS	686,632,969	236,952,065	85,883,875	135,638,452	1,145,107,360
	Raw materials, supplies, consumables and goods for resale	476,609,774	193,230,061	82,849,219	127,475,167	880,164,220
	Services	226,047,296	50,378,765	5,550,539	20,304,416	302,281,015
	Lease and rentals	3,630,687	603,981	780,828	687,116	5,702,612
	Change in raw materials, supplies and goods for resale inventories	(22,352,573)	(8,217,399)	(3,343,490)	(12,951,394)	(46,864,856)
	Provision for liabilities and charges	152,458	351,091	-	-	503,550
	Other provisions	-	171,754	-	3,099	174,853
	Miscellaneous operating costs	2,545,328	433,812	46,778	120,049	3,145,967
€	GROSS VALUE ADDED FROM OPERATIONS (A-B)	186,889,046	132,959,464	27,060,552	50,431,369	397,340,432
	+/- Additional and extraordinary items	81,108,148	(46,010,665)	(6,504,597)	(11,660,162)	16,932,725
€	GROSS TOTAL VALUE ADDED	267,997,194	86,948,800	20,555,955	38,771,208	414,273,156
	- Depreciation and amortisation	35,946,003	16,880,360	989,102	3,654,560	57,470,025
€	TOTAL NET VALUE ADDED	232,051,191	70,068,440	19,566,853	35,116,648	356,803,131

Table 17 | **Distribution of value added***

	Item	31/12/19	31/12/20	31/12/21
€	A) PERSONNEL WAGES AND BENEFITS	143,530,512	132,331,564	149,042,091
	Contract workers	6,670,341	6,097,960	7,290,503
	Employees	136,860,170	126,233,604	141,751,588
	Direct compensation	110,024,451	101,210,043	114,086,091
	Indirect compensation	26,835,720	25,023,561	27,665,497
€	B) PAYMENTS TO GOVERNMENT	31,288,076	30,774,032	52,856,534
	Current taxes	32,044,656	37,184,830	56,091,602
	Direct taxes	28,757,519	34,314,961	52,754,312
	Indirect taxes	3,287,137	2,869,869	3,337,290
	Deferred taxes	(65,623)	(3,381,104)	(1,621,685)
	Revenue grants	(690,958)	(3,029,694)	(1,613,383)
€	C) PAYMENTS TO LOAN PROVIDERS	3,504,333	2,302,863	2,296,089
	Short-term loan interest	3,504,333	2,302,863	2,296,089
	Long-term loan interest	-	-	-
€	D) PAYMENTS TO SHAREHOLDERS	25,500,000	15,000,000	40,200,000
€	E) RETAINED VALUE ADDED	55,136,155	72,181,028	111,798,810
	+/- Changes in reserves	55,136,155	72,181,028	111,798,810
€	F) CONTRIBUTIONS AND DONATIONS	530,500	548,442	609,608
€	TOTAL NET VALUE ADDED	259,489,575	253,137,929	356,803,131

Table 18 | **Distribution of value added by region – 2021***

	Item	Italy	Rest of Europe	Asia	America	Tot. World
€	A) PERSONNEL WAGES AND BENEFITS	94,448,684	37,598,314	4,388,553	12,606,539	149,042,091
	Contract workers	5,126,259	789,715	125,403	1,249,125	7,290,503
	Employees	89,322,425	36,808,599	4,263,149	11,357,415	141,751,588
	Direct compensation	70,327,147	31,061,938	2,981,194	9,715,811	114,086,091
	Indirect compensation	18,995,278	5,746,661	1,281,955	1,641,603	27,665,497
€	B) PAYMENTS TO GOVERNMENT	36,668,918	5,688,381	4,113,443	6,385,793	52,856,534
	Current taxes	39,144,789	6,608,483	4,110,937	6,227,393	56,091,602
	Direct taxes	37,302,999	6,230,067	3,859,249	5,361,997	52,754,312
	Indirect taxes	1,841,790	378,416	251,688	865,396	3,337,290
	Deferred taxes	(1,624,153)	(158,438)	2,506	158,399	(1,621,685)
	Revenue grants	(851,719)	(761,664)	-	-	(1,613,383)
€	C) PAYMENTS TO LOAN PROVIDERS	1,272,775	52,428	1,172	969,713	2,296,089
	Short-term loan interest	1,272,775	52,428	1,172	969,713	2,296,089
	Long-term loan interest	-	-	-	-	-
€	D) PAYMENTS TO SHAREHOLDERS	40,200,000	-	-	-	40,200,000
€	E) RETAINED VALUE ADDED	58,910,405	26,670,117	11,063,685	15,154,602	111,798,810
	+/- Changes in reserves	58,910,405	26,670,117	11,063,685	15,154,602	111,798,810
€	F) CONTRIBUTIONS AND DONATIONS	550,408	59,200	-	-	609,608
€	TOTAL NET VALUE ADDED	232,051,191	70,068,440	19,566,853	35,116,648	356,803,131

* The above value-added schedules follow the method provided by GBS – Study Group for Social Reporting (www.gruppobilanciosociale.org). The data are from the Radici Partecipazioni S.p.A. consolidated financial statements. As noted in the consolidated financial statements, the economic flows related to intercompany transactions included in the scope of consolidation have been eliminated. Included in the consolidated financial statements, which the Group voluntarily has audited by Deloitte, are parent company Radici Partecipazioni S.p.A. and the Italian and foreign companies in which it directly or indirectly holds a majority of the share capital and management control, pursuant to Article 2359 of the Italian Civil Code.

In addition to the Group's positive performance in terms of **generation of value added, which is growing compared to 2021**, it is important to emphasise, as in previous editions of the Report, RadiciGroup's **financial soundness**, which is also demonstrated by the ratio of net financial debt to shareholders' equity.

Table 19 | **BREAKDOWN OF NET INVESTED CAPITAL 2021**

Net financial debt*	EUR/1000	-98,648
Net shareholders' equity	EUR/1000	793,228
Net invested capital	EUR/1000	694,580

* Positive net financial position, the minus sign represents increased liquidity to financial debt.

It is equally important to stress that both profits and economic and financial soundness are pursued by implementing targeted policies respecting the environment and natural resources. As reported in the tables below, the **ratios between total primary energy, water, waste generated and emissions and total net value added show a marked positive trend** [Tables 20 - 23]. This means that in 2021 the Group managed to **improve the usage rate of resources**, pursuing sustainable economic growth that is increasingly "light".

Disclosure 302-3

Table 20 | **GRI 302-3 Energy intensity – Total primary energy to total net value added**

		2019	2020	2021
GJ	Total energy consumption (GRI 302-1)	5,991,117	5,408,531	5,586,749
€	Total net value added	259,489,575	253,092,544	356,803,131
GJ/ €	Total primary energy (direct + indirect) to total net value added	0.023	0.021	0.016

Disclosure 305-4

Table 21 | **GRI 305-4 Emissions intensity – Total emissions to the atmosphere to total net value added**

		2019	2020	2021
tCO₂eq	Total emissions to the atmosphere (GRI 305-1 and GRI 305-2)	469,139	441,059	416,701
€	Total net value added	259,489,575	253,092,544	356,803,131
kgCO₂eq/€	Total emissions to the atmosphere (direct + indirect) to total net value added	1.81	1.81	1.17

As usual, in addition to the disclosures required by the GRI model, the ratios relating to water resources and the generation of waste for disposal (without recovery) to total net value added were also calculated in order to provide a measure of intensity for the main environmental impacts.

Table 22 | **Ratio – water resources to total net value added**

		2019	2020	2021
ML	Water resources (GRI 303-3)	86,029	77,010	83,100
€	Total net value added	259,489,575	253,092,544	356,803,131
ML/€	Water resources to total net value added	0.00033	0.00030	0.00023

Table 23 | **Ratio – waste directed to disposal without recovery to total net value added**

		2019	2020	2021
t	Waste subject to disposal without recovery (GRI 306-2)	3,390	3,504	5,003
€	Total net value added	259,489,575	253,092,544	356,803,131
Kg/€	Waste directed to disposal without recovery to total net value added	0.013	0.014	0.014

Tax policy

Disclosures 103-1, 103-2, 103-3 Disclosure 207-1

RadiciGroup is engaged at an international level in the production and sale of chemicals, engineering polymers and advanced textile solutions. The choice of the countries where the Group operates is guided by business considerations related to commercial opportunities and proximity to Customers, not by tax considerations. In the respect of and independence of its management choices and in line with its sustainability policy, RadiciGroup:

- pursues a **tax strategy founded on principles of honesty, fairness and regulatory compliance;**
- carries out this strategy **by behaving collaboratively and transparently in relation to the Tax Authorities and third parties;**
- puts in place this behaviour and **all necessary measures to avoid any substantial impact in terms of tax or reputational risk;**
- is fully aware that **tax revenues are one of the main sources of contribution to the economic and social development of the countries in which the Group companies operate.**

Responsibility in tax matters

The Board of Directors established the conduct principles of RadiciGroup. The Board promotes and ensures their application, guiding the dissemination of a corporate culture based on the values of honesty and integrity and the principle of legality.

At RadiciGroup, the management of tax issues falls under the responsibility of the "Administration" function of the individual companies reporting to the Group CFO, and is inspired by the principles of legality, responsibility and transparency also referred to in the Code of Ethics. The Group is attentive to strict compliance with national regulatory provisions and with the directives of national and international bodies on tax matters. The Group monitors and mitigates tax risks by managing them in the general context of risk management.

Strategy

Group companies must operate in accordance with the principle of legality, applying the tax legislation of the countries in which they operate in a punctual manner, to ensure respect for the letter, spirit and purpose of the law on the matters in question. Specifically, regarding its business operations, RadiciGroup:

- **has adopted a transfer pricing policy aimed at ensuring equity and respect for the market** in intercompany operations, thus guaranteeing the absence of erosion of its tax base, by aligning the location of the income subject to tax and the place where the business activity is carried on and by respecting the arm's length principle; according to which, as in the OECD Guidelines, the fair price applicable to intragroup transactions is the amount that would be agreed on for similar transactions carried out between independent companies.

- **annually prepares a Group Masterfile**, with the support of top professional consultants, and, in Italy and most of the countries where it operates, National Documentation for the companies that carry on important intragroup transactions. According to what is required in Italy by specific provisions of the Revenue Agency and in implementing Action 13 of the Base Erosion and Profit-Shifting (BEPS)* action plan, "transfer pricing documentation and country-by-country reporting", the Masterfile is considered to be a document providing an overview of the Group business, including the nature of commercial transactions at the global level, the general transfer pricing policies and the allocation of income and business activities at the global level.
- **annually prepares a Country-by-Country Report, as provided for by tax law, as well as BEPS* Action 13**, to report and communicate the income earned in the various countries in which the Group companies operate, together with a series of quantitative data subdivided by each country (see Disclosure 207-4);
- **does not use companies located in tax havens;**
- **does not adopt aggressive tax plans.**

* Base erosion and profit shifting (BEPS) – tax strategy that some companies use to erode their tax base and thus avoid paying taxes to the government.

Disclosure 207-4

In the table below are shown the data considered to be material by RadiciGroup. These data for 2020 were reported to the Italian Revenue Agency in 2021.

Table 24 | 2020 tax data in euros (Extract from official tax return filed with the Italian Revenue Agency on 20/12/2021)

Tax jurisdiction	Revenues: non-related party transactions	Revenues: related party transactions	Total revenues	Income tax paid (cash basis)	Number of employees
Argentina	14,414,381	2,702	14,417,083	515	36
Brazil	48,653,835	472,777	49,126,612	135,261	188
Switzerland	12,067,441	6,145,767	18,213,208	29,533	92
China	53,087,427	2,433,156	55,520,584	1,829,885	106
Czech Republic	92,566	8,402,125	8,494,691	40,470	187
Germany	187,378,385	8,390,783	195,769,169	2,317,406	317
Spain	5,436,124	31,761	5,467,885	0	3
France	26,932,514	279,694	27,212,208	350,060	6
UK	4,285,192	16,642	4,301,834	1,287	3
Hungary	1,390,468	0	1,390,468	30,656	8
India	6,600,740	59,242	6,659,982	128,557	12
Italy	622,247,670	183,058,739	805,306,409	16,063,008	1,613
Mexico	10,555,530	762,206	11,317,736	14,265	34
Romania	4,633,909	30,255,688	34,889,598	35,358	380
USA	57,070,708	6,440,474	63,511,182	835,967	91

Income taxes by country (in euros)

The Group is aware of the importance of the **resources drawn from the various geographical areas** in which it operates and how important it is **to return these same resources in the form of employment**, know-how, and **contributions** to sustainable and durable growth.

The following table highlights how in 2021 the Group also played an active part in the development dynamics of numerous geographical contexts by making an economic contribution, also in terms of income taxes paid.

Table 25

Country	
Argentina	527
Brazil	2,865
China	3,140
France	347
Germany	4,967
India	973
UK	103
Italy	36,669
Mexico	797
Czech Republic	66
Romania	29
Spain	4
Switzerland	141
Hungary	32
USA	2,197
Total	52,857

Data in EUR/1000

Relations with Government

Disclosure 207-3

The extract from the RadiciGroup Code of Ethics below highlights in a clear and exhaustive manner both the **importance of Government as a Stakeholder of the Group** and the necessary behaviour in relationships with Government officials.

"Government is a key stakeholder. We carry out relations with Government following the strictest principles of legality, fairness and transparency, in full respect of Government impartiality.

- *Our relations with government officials and representatives, including Supervisory Authorities, are maintained solely by trained and appointed Staff who act transparently, ensuring prompt replies, avoiding any ambiguous behaviour and guaranteeing completeness and verifiability in sharing the information requested.*
- *We guarantee complete traceability of relations with Government and maintain documentation regarding meetings and contact with officials (e.g. verbal statements and official communications via email and certified email addresses).*
- *As part of business negotiations, requests or relations with Government, we never, for any reason, behave in a way designed to give our Companies an unfair or illegal advantage."*
- *We never use grants, subsidies or funding from the State, public bodies or the European Union for purposes other than those for which they were intended, even if the amounts involved are of limited value.*
- *We carry out all the activities described here in full respect of current regulation, whether this applies to the Italian Government or to foreign authorities.*
- *We actively collaborate with judicial authorities and avoid any behaviour that could influence the actions of judicial authorities and their representatives."*

- From the RadiciGroup Code of Ethics -

Environmental performance

Disclosures 103-1, 103-2, 103-3

"Health Safety and the Environment are at the heart of our decisions. In carrying out our activities, our Group takes inspiration from the principle of safeguarding the Environment and Health.

- *We are committed to ensuring the continual reduction of our environmental footprint.*
- *We assess and measure the impact of processes and products and always consider the use of the best available techniques."*

- From the RadiciGroup Code of Ethics -

ESG principles are additional **parameters** to financial indicators. Taken together, they provide an all-round picture of a company's commitment to sustainability. RadiciGroup has for some time made ESG an added value, starting with the significant work on the environment it has carried out – in particular over the last decade. The RadiciGroup's environmental policy, which finds significant expression in its Code of Ethics, integrates environmental concerns into a series of practices, plans of action and projects. The Group:

- **Preserves the intrinsic value of resources** and makes best use of them.
- **Promotes energy transition** by using renewable source energy and **fighters against climate change by reducing emissions.**
- **Decouples the use of resources from its economic growth, as much as possible.**
- **Measures the performance of all its production sites on regular basis and communicates its environmental performance in a transparent manner.**
- **Engages in the ecodesign of reduced-impact products, which are safe for the manufacturer, the user and the environment.**

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). The topics covered will be as follows:

- Materials used (input) - Waste produced (output)
- Energy used (input) - Air emissions and quality (output)
- Water used (input) - Water discharged and quality (output)

The 2021 results are based on a different reporting scope from all previous editions, as they also include some manufacturing, financial, commercial and service companies not previously included. This is to increase the inclusiveness and representativeness of the Report. In the light of transparency, the change in results to the new reporting boundary is indicated at the bottom of each table.

Materials used

Disclosure 301-1

The 2021 figures show an overall increase in used materials, which is directly related to the increase in production activity back to 2018 levels. A figure that is matched by high production efficiency levels, even considering some unfavourable production

start & stops. Although it is not possible to give a precise figure due to the extremely heterogeneous type of processes of RadiciGroup companies, it is empirically possible to indicate a percentage between 90% and 95% for production yields. In this regard, the processes are always subject to control systems capable of reducing the batches of defective products and, consequently, the quantities of rejects [Table 26]. This is an important factor that, on one hand, demonstrates the close attention to the careful use of resources, especially virgin raw materials, and on the other, is a direct reflection of the progressive introduction of the best available technologies in all the Group's companies. In a logic of circularity and industrial synergy, the secondary raw materials of all the Business Areas, as repeatedly noted, are transformed into raw materials for the industries that generated them or for other industries in the Group, depending on the intrinsic characteristics of the materials and the expected performance of the secondary raw materials into which they will be transformed, meaning nothing is wasted. On of the distinctive and strategic elements in this regard is the intrinsic recyclability of the Group's thermoplastic materials and the choice of mechanical recycling as a technical solution requiring less energy use and reduced emissions compared to equivalent chemical recycling. From this point of view, a key role is played by Zeta Polimeri, a company that entered the Group's reporting scope in 2021 and is highly specialized in the recovery of synthetic fibers and thermoplastic materials with processing and trading on the Italian and international markets.

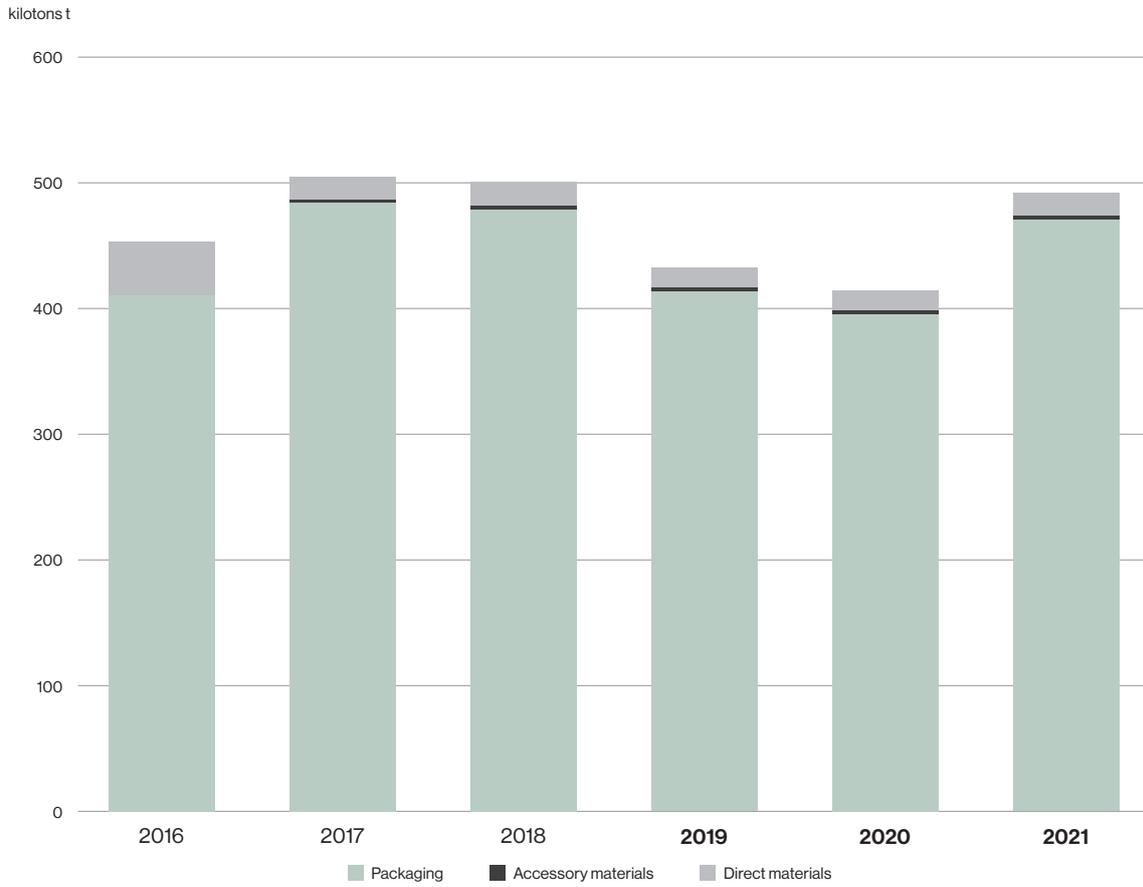
Table 26 | **Gri 301-1 Materials used by type and weight**

Materials used by type and weight		2019	2020	2021
t	Direct materials*	415,271	397,372	471,310
t	Accessory materials	2,348	1,936	3,102
t	Packaging	16,075	14,098	16,768
t	Total	433,694	413,406	491,180**
Non-renewable materials				
t	Direct materials	413,139	395,871	469,180
t	Accessory materials	2,347	1,934	3,099
t	Packaging	1,560	1,430	1,822
t	Total non-renewable materials	417,046	399,235	474,101
Renewable materials				
t	Direct materials	2,132	1,501	2,130
t	Accessory materials	2	2	3
t	Packaging	14,515	12,668	14,946
t	Total renewable materials	16,649	14,171	17,079
% renewable packaging to total packaging		90.3%	89.9%	89.1%
% renewable direct materials to total direct materials		0.51%	0.38%	0.45%
% renewable materials to total materials		3.84%	3.43%	3.48%

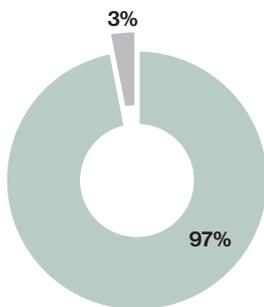
* Intra-group raw material flows, including recycled material processed by Zeta Polimeri, are not taken into account for the purposes of the indicator, as they do not represent resources taken from outside the Group and, in general, removed from the environment.

** No significant difference in results can be found with respect to the reporting scope of the previous editions of this Report. Sales companies, financial and service companies do not use materials in significant quantities, Zeta Polimeri uses the waste materials of RadiciGroup companies as its raw materials.

GRI 301-1 Materials used 2016-2021

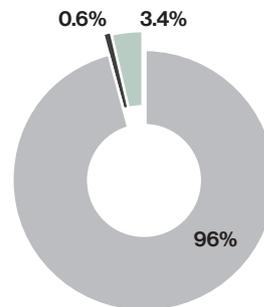


Materials used 2021



Legend: Total renewable materials (green), Total non-renewable materials (grey)

Materials used 2021



Legend: Packaging (green), Accessory materials (black), Direct materials (grey)

Waste

Disclosures 306-1, 306-2

Each phase of the production cycle of any Group company involves the generation of waste. In line with the UN Agenda 2030 Goal 12 (Responsible Consumption), RadiciGroup has long promoted an economic model capable of transforming waste into new opportunities.

Process waste

As highlighted previously, even when production efficiency is given the utmost attention, it is impossible to eliminate waste completely, due to the technological limitations typical of all plants. In addition to this, there is the waste related to the logistics process of incoming and outgoing materials entering and leaving the sites, such as packaging, and the waste generated by activities ancillary to actual production, for instance, office activities and canteens.

While it is not possible to eliminate waste completely, it is always possible to optimise waste management. More specifically, chemical processes, polymerisation, compounding, spinning and winding are the activities entirely under the Group's control that contribute most significantly to waste generation. Several strategies have been adopted over the years to limit the quantities of waste:

- Downstream of processes, **nylon-based recyclable scraps**, separately collected and carefully sorted according to chemical composition, are **transformed into secondary raw material through mechanical recycling**. The polymers obtained at the end of the recycling process are then directed to applications for which they are best suited by reason of their characteristics, independently of the business area that generated the original scraps.
- **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.

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.

The **process and production waste that is not recycled internally is stocked at the sites according the health**

and safety rules and applicable laws. These materials are then **handed over to authorise third parties** for proper disposal according to the local rules and laws of the host country. The head of the Waste Management function at each Group company periodically qualifies and verifies transporters, receivers and intermediaries, ensuring that they meet all the necessary requirements for waste management operations. Furthermore, second-party audits of environmental service Providers are also conducted on a regular basis. Lastly, each site has in place a traceability system that records and keeps track of all the relevant data concerning waste management.

Packaging

Along with production processes, the other major source of waste is the packaging that comes with the raw materials entering the Group sites. The type of packaging depends mainly on what the market offers and the type of products to be handled. However, steps have been taken over time to manage this type of waste, as well:

- RadiciGroup carefully selects its **Suppliers** and works with them to define the most technically, economically and environmentally **sustainable alternatives, compatible with the chemical and physical characteristics of the substances, for packaging and transport** of direct and indirect raw materials, which are generally transported in bulk in tanks, by train and by road.
- Where not transportable in other ways, the Group's policy is to transport non-bulk input material in octabins, big bags and, in general, **packaging that is optimised by shape and size**. Across sites it is common practice to make internal use of recyclable card and plastic packaging.
- Where possible, the Group also reuses other forms of packaging internally or transfers it to third parties who are specialised in its reuse.

- An interesting decision, which has gained ground in recent years, relates to renewable packaging, which has increased in use by 3% compared to 2019.

Lastly, a forward-looking solution – unique to the Group – was found many years ago for feeding the large quantities of polyamide 6 polymer produced by the Radici Yarn factory to the neighbouring Radici Novacips site for compounding. An underground pneumatic pipeline was designed and constructed, which totally eliminated the need for packaging.

Circular economy and packaging? It can be done

In 2021, Tessiture Pietro Radici was awarded the PRS Green Label, official recognition of the special focus the Company gives to the circular management of wooden pallets, the main form of packaging for the transport of the raw materials required for its production processes. At the end of their productive cycle, the wooden pallets, which are an organic, renewable and biodegradable material, can be recycled in the furniture or construction industries or used as biomass to produce energy. Before the end of their life, the pallets, particularly those managed by PRS, which are made from renewable FSC® C104882 or PEFC™/30-31-340-certified sources, can be recovered and reused several times if properly stored and returned.

To maximise pallet reuse, the involvement of all PRS partners is essential. This is the case with Tessiture Pietro Radici, which has been an active part of the PRS network for a number of years. The company separates the PRS pallets it receives, allowing them to be taken back and facilitating their reuse. There are three main environmental benefits of this packaging management. Firstly, the system prevents a large amount of packaging waste, because the latter, if poorly managed, has a major environmental impact. Secondly, the reuse of pallets creates a virtuous circle that reduces the use of new raw materials. Finally, reusing this packaging makes it possible to reduce to zero the emissions that would result from the pallet wood being sent to landfill, which would emit greenhouse gases as it degrades.

Production increases have inevitably brought with them an increase in absolute volumes of waste (+28% compared to 2019). When considering this result it should be noted that 2021 also saw some batch splitting due to raw material shortages and logistical difficulties, leading to an increase in waste that occurs whenever production lines are stopped and restarted or the types of materials produced are changed.

The Group has actually chosen to compensate as much as possible the difficulties of suppliers and meet customer needs by adapting its production to the fragmentation

of orders resulting from the scarcity of raw materials and the uncertainties of the scenario. In addition, the reclassification of waste in some production facilities meant that significant quantities of materials previously defined as second-choice or by-products entered the non-hazardous waste category for recovery in 2021, many of it reprocessed by Zeta Polimeri [Table 27].

Disclosure 306-4

In this regard, it is worth underlining that, in the category of non-hazardous waste destined to recovery, 53% is

recovered internally by the Group. Besides, the flooding which affected the Radici Chemiefaser production site in July 2021 led to a great deal of damage and a halt to operations with significant amounts of occasional non-process waste which needed to be disposed of. Fibrexnylon has also disposed of significant quantities of aggregates and ferrous materials from decommissioned plant parts.

In order to allow a correct interpretation of the following indicators, it is useful to recall here the concept of "quantity processed", that is the entire quantity of material that is subjected to the processing processes in the various departments and subsequently conveyed to the warehouse, including waste and second choices, used to calculate the reference "indexes".

Disclosures 306-3, 306-4, 306-5

Table 27 | **Total waste by type, disposal method and weight***

	2019	2020	2021
t Total (GRI 306-3)	17,015	15,917	21,818**
t Total hazardous waste	2,591	1,949	3,088
t Hazardous waste directed to recovery	690	561	817
t Hazardous waste directed to disposal	1,901	1,388	2,271
t Total non-hazardous waste	14,424	13,968	18,730
t Non-hazardous waste directed to recovery	12,935	11,852	15,998
t Non-hazardous waste directed to disposal	1,489	2,116	2,731
<i>of which</i>			
t Occasional non-process waste (building renovations, maintenance, etc.)	390	565	1,581
t Non-hazardous waste (formerly by-products) directed to internal recovery	7,966	6,494	8,487
t Process waste directed to external treatment	8,659	8,858	11,750
% Non-hazardous waste destined to internal recovery / total non-hazardous waste destined to recovery (GRI306-4)	61.6	54.8	53.1

Table 28

Ratio - process waste per unit produced	2019	2020	2021
kg/t	9.12	10.0	11.32

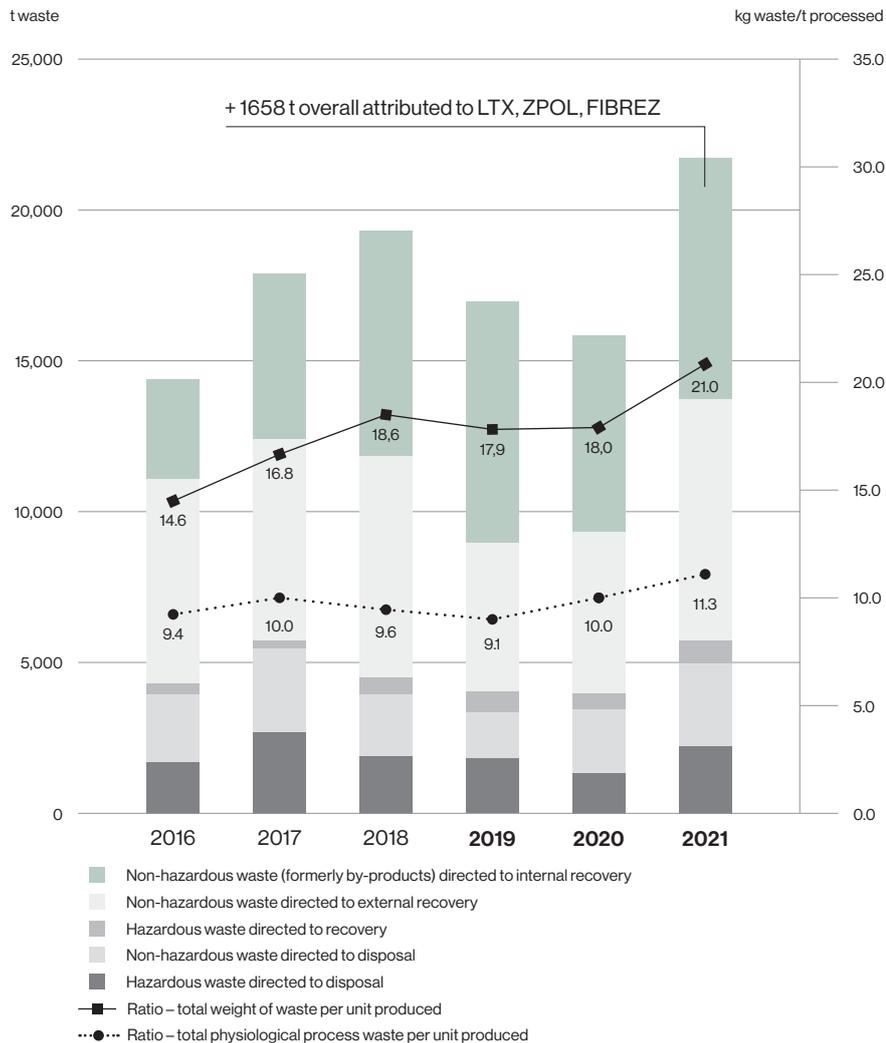
Table 29

Ratio - total waste per unit produced	2019	2020	2021
kg/t	17.92	17.96	21.02

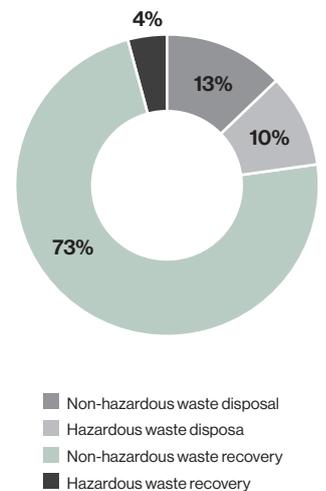
* Based on the documentation held by the Group and provided by the companies in charge of waste management and treatment, it is not possible to give more detailed information, as required by the GRI model, concerning the actual disposal method.

** In 2021, the new reporting perimeter had an impact of +7.6% compared to the perimeter of the previous editions of this Report.

GRI 306-2 Waste by type and disposal method 2016-2021



Waste 2021



Radici Plastics Ltda: Waste as a Resource

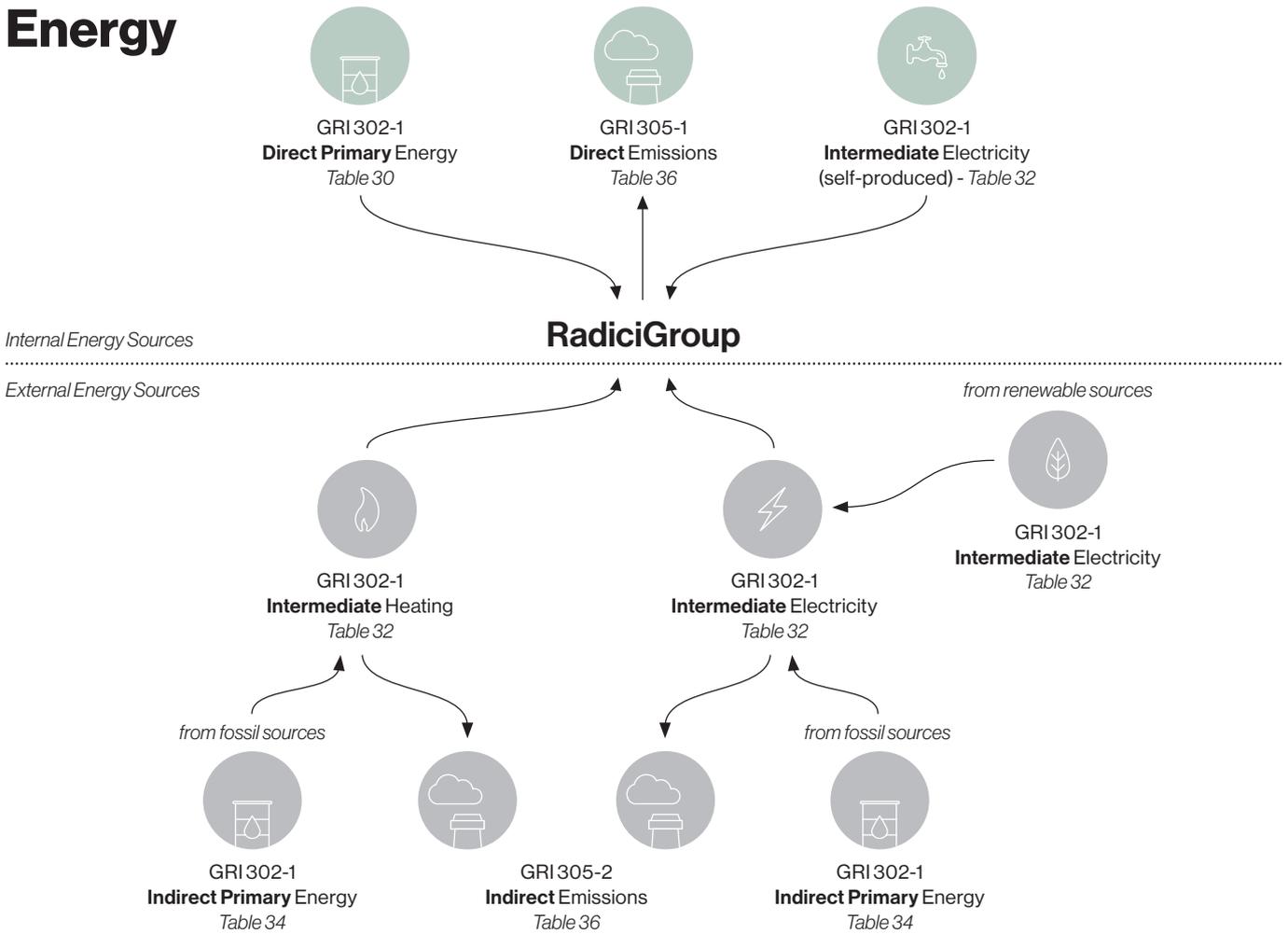
On 28 October 2021, Radici Plastics Ltda, a RadiciGroup production unit in Brazil active in the engineering polymers segment, achieved the "Aterro Zero" (Zero Waste) award, which certifies that no waste generated by the company ends up in landfill.

The "Aterro Zero" programme's goal is the correct and sustainable disposal of waste, avoiding, as far as possible, that any goes to landfill. Thanks to careful selection and management, waste can already be sent, using optimised transport methods, directly to recovery chains that can turn it into secondary raw materials, renewable fuels or, for the remaining, non-transformable part, managed as materials for waste-to-energy for producing thermal energy. As well as recycling, another benefit of belonging to the project is a reduction in the amount of greenhouse gas (GHG) caused by using landfill and fewer atmospheric emissions from transporting the waste.

The project implemented to achieve the goals of Aterro Zero required many phases involving the entire company. The key steps were mapping waste production, assessing possibilities to prevent or reduce it, classifying the waste itself and identifying the most suitable and environmentally sustainable disposal systems.

By achieving this important goal Radici Plastics Ltda has embraced several key circular economy concepts, turning its potential impact on the environment into a concrete advantage in terms of sustainability.

Energy



Consistent with Goal 13 of the UN Agenda 2030 (Climate Action), the reduction in greenhouse gas emissions and the adoption of renewable energy are the pillars of the Group's strategy in the fight against climate change. Aware of the fact that the main source of CO₂ is energy production, RadiciGroup constantly monitors its energy performance and promotes the rational use of energy. Many sites have integrated their Environmental Management System with the requirements of the ISO 50001 standard on energy management; Italian sites that consume large amounts of energy have a specific professional figure, the Energy Manager, in accordance with Law 10/1991. The task of the energy manager is to develop a real comprehensive company energy conservation policy.

The Group's total energy consumption for 2021 was at 2018 levels and up from 2019. The energy consumption indexes per ton processed are in line with the three-year

period and improved on 2020. The index for specific electrical energy per ton processed also improved by 3.2% compared to 2019, a very good result.

Less energy from fossil source is therefore being used to manufacture products than in 2019, despite several shutdowns in divisions, in line with the Group's efficiency policies, which have once again been shown to be effective [Table 34]. Analysing the index of total primary energy from fossil sources used per ton processed, the 2021 figure shows a decrease of 14.7% compared to 2019 [Table 35], demonstrating that RadiciGroup products are made using ever-increasing amounts of renewable energy. As far as the latter is concerned, it is useful to note that the Group's leading source of supply also in 2021, remains methane, the least polluting fossil fuel.

This means that the Group's products are becoming more "light", i.e. they carry increasingly less of an emission load. This is an undoubted competitive advantage for

RadiciGroup, but it also resonates with Customers, who can count on materials with limited and measured impact and high performance levels.

Similarly, consistent with the Group environmental policy, in 2021 the commitment to ecological transition continued through the purchase of significant amounts of renewable electricity. In particular, the green share of electricity exceeds 51.7% [Table 32] and allows a good number of production sites [Table 33] to be powered by 100% renewable sources, or slightly lower percentages.

The green energy needs of RadiciGroup's Italian companies are essentially met by Geogreen, a supplier-partner active in hydroelectric power and consulting and efficiency services. An important role for the Italian sites is also played by the two high-efficiency cogeneration units (a cogeneration unit involving Radici Chimica in Novara and a trigeneration unit involving Radici Yarn in Villa D'Ogna), which can optimise the use of natural gas, produce different energy vectors with a single primary fuel and reduce emissions.

Disclosure 302-1

Table 30 | **Direct primary energy (fuel) consumption**

		2019	2020	2021
GJ	Total direct primary energy	1,652,644	1,616,733	1,844.761**
GJ	Subtotal direct primary energy from non-renewable sources	1,610,126	1,580,423	1,807,715
GJ	from natural gas – non-renewable*	1,603,618	1,573,933	1,800,151
GJ	from diesel fuel – non-renewable	1,104	1,560	1,592
GJ	from LPG – non-renewable	4,897	4,217	5,298
GJ	from fuel oil – non-renewable	507	713	674
GJ	Subtotal direct primary energy from renewable sources	42,518	36,310	37,046
GJ	from biogas – renewable	42,518	36,310	37,046

* To convert natural gas from Nm³ to GJ, a factor of 39.01 (source mod. GRI 3.1) was used for all companies, observing the precautionary principle.

** In 2021, the new reporting perimeter had an impact of +0.13% compared to the perimeter of the previous editions of this Report.

Table 31 | **Ratio – direct primary energy (fuel) consumption per unit produced**

		2019	2020	2021
GJ/t	Non-renewable direct primary energy	1.70	1.78	1.74
GJ/t	Total renewable + non-renewable direct primary energy	1.74	1.82	1.78

GRI 302-1 Direct primary energy (fuel) consumption

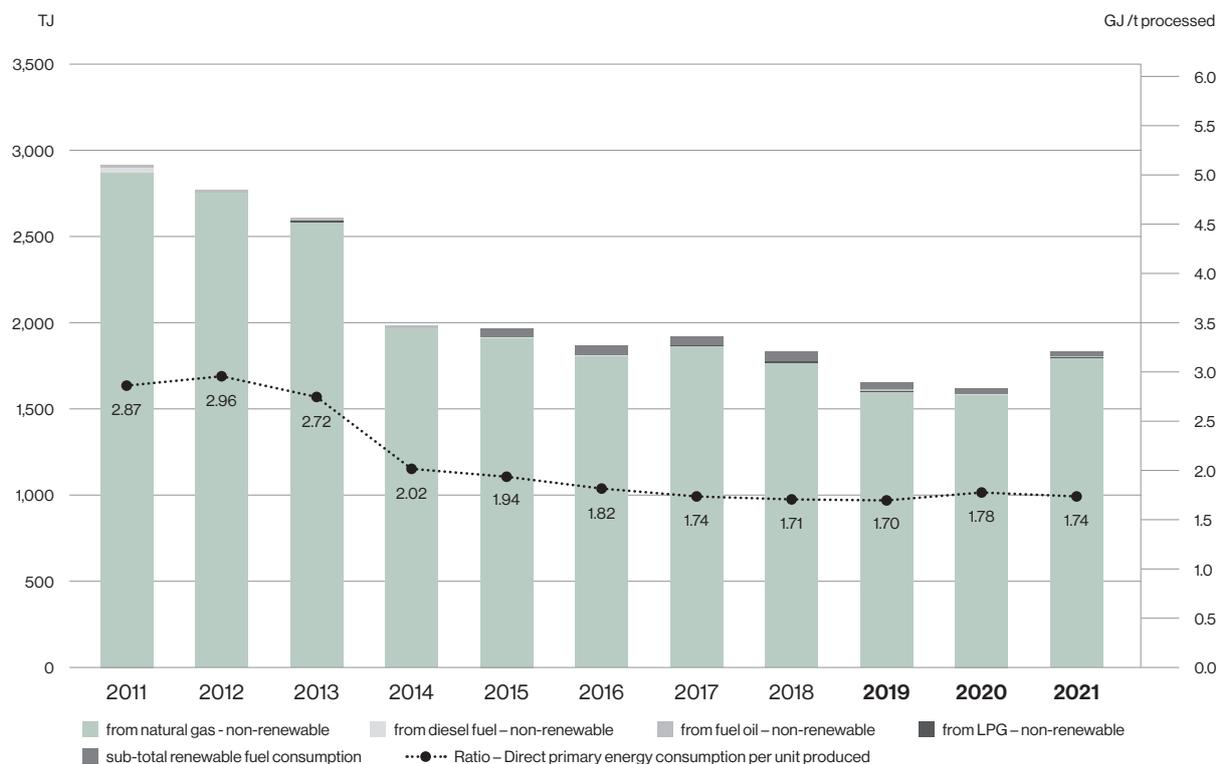


Table 32 | Intermediate energy consumption by primary energy source (indirect)

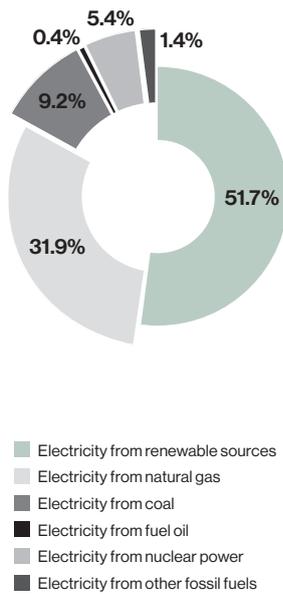
		2019	2020	2021
GJ	Total intermediate energy (indirect)	3,466,922	3,198,812	3,582,988**
GJ	Subtotal electricity consumption	1,674,011	1,441,580	1,770,346
GJ	electricity consumption from renewable sources	704,927	712,498	915,146
	of which self-produced from hydroelectric power*	(57,244)	(57,647)	(60,768)
GJ	Electricity consumption from renewable sources to total electricity	42,1%	49,4%	51,7%
GJ	Subtotal electricity consumption from non-renewable sources	969,084	729,082	855,200
GJ	from natural gas – non-renewable	612,305	485,050	564,795
GJ	from coal – non-renewable	189,772	133,661	163,614
GJ	from fuel oil – non-renewable	10,819	7,300	7,246
GJ	from nuclear power	99,848	74,448	95,429
GJ	from other fossil fuels – non-renewable	56,340	24,623	24,116

* Electricity from renewable sources is self-produced by a RadiciGroup site, while the remainder is purchased from Geogreen.

** In 2021, the new reporting perimeter had an impact of +0.65% compared to the perimeter of the previous editions of this Report.

GJ	Subtotal steam consumption	1,792,911	1,757,232	1,812,642
GJ	from natural gas – non-renewable (data from Radici Chimica S.p.A., which purchases steam from Novel)	1,792,911	1,757,232	1,812,642
GJ	Subtotal heating consumption	0	0	0
GJ	from non-renewable sources	0	0	0
GJ	Subtotal cooling consumption	0	0	0
GJ	from non-renewable sources	0	0	0
GJ	Ratio – intermediate energy consumption per unit produced (refers to electricity)	1,76	1,63	1,71
GJ	Ratio – total intermediate energy per unit produced	3,65	3,61	3,45

GRI 302-1 Electric energy mix 2021



GRI 302-1 Electric energy mix 2016-2021

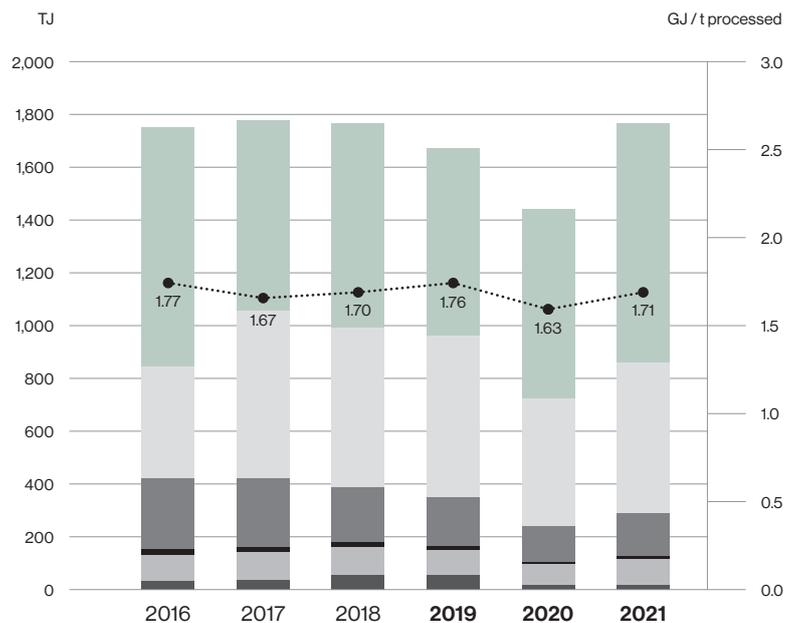


Table 33

Companies and sites using renewable energy – 2021

100% renewable energy

- Radici Novacips - Villa d'Ogna - Italy
- Radici Novacips - Chignolo d'Isola - Italy
- Radici Yarn - Ardesio - Italy
- Radici Partecipazioni - Gandino - Italy
- Tessiture Pietro Radici - Gandino - Italy
- Radici Plastics GmbH - Germany
- Radici Plastics Ltda - Brazil
- Polimerizzazione Radici Yarn - Villa d'Ogna - Italy
- Polimerizzazione RadiciFil - Casnigo - Italy

>80% renewable energy

- RadiciFibras Ltda - Brazil

Table 34 | **Primary energy (direct + indirect) consumption from non-renewable fossil sources**

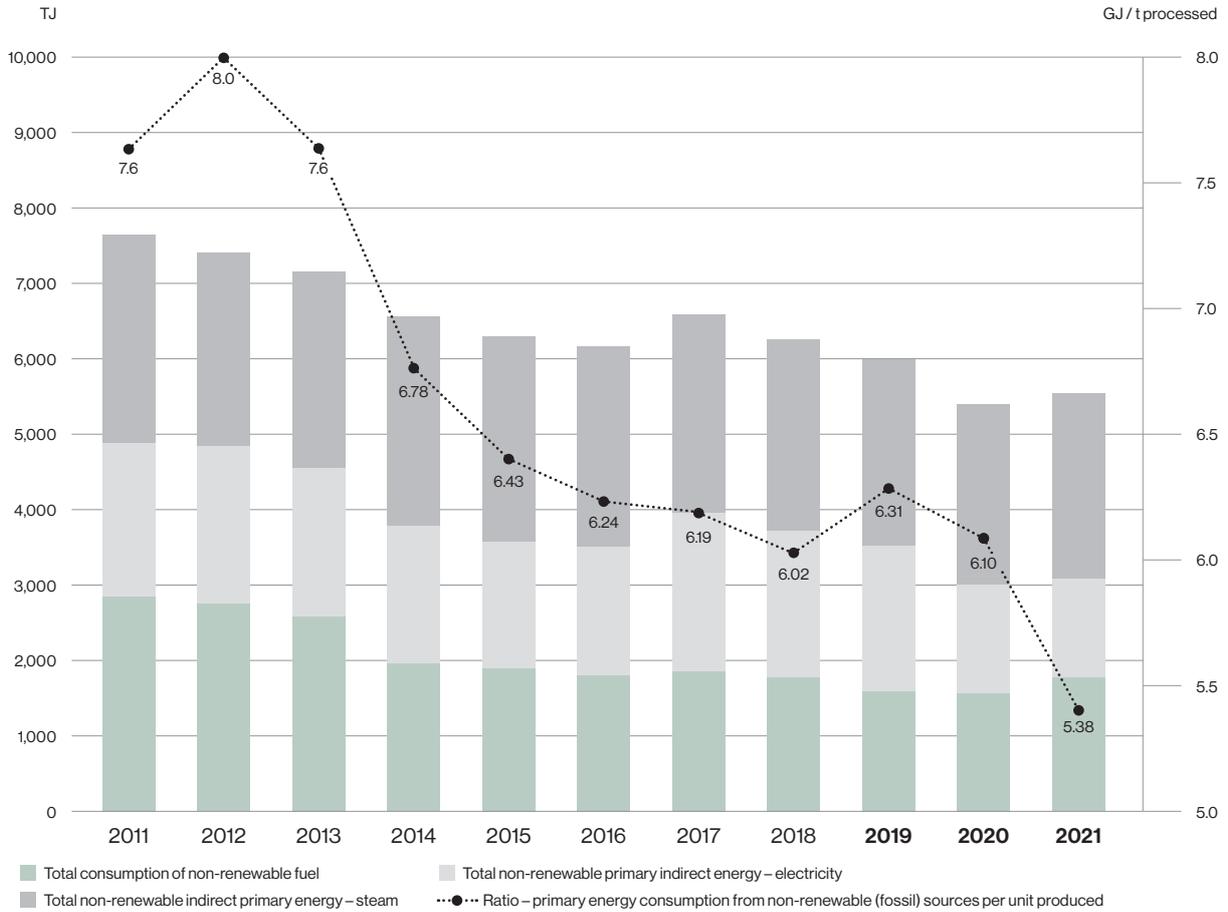
		2019	2020	2021
GJ	Total primary energy from fossil sources	5,991,117	5,408,531	5,586,749*
GJ	Subtotal indirect primary energy consumption from fossil sources	4,380,991	3,828,108	3,779,034
GJ	Total non-renewable indirect primary energy – electricity	1,925,378	1,431,053	1,305,329
GJ	Total non-renewable indirect primary energy – steam	2,455,613	2,397,055	2,473,705
GJ	Total non-renewable indirect primary energy – heating	0	0	0
GJ	Total non-renewable indirect primary energy – cooling	0	0	0
GJ	Subtotal fuel consumption from fossil fuels [Table 30]	1,610,126	1,580,423	1,807,715

* In 2021, the new reporting perimeter had an impact corresponding to 0.30% compared to the perimeter of the previous editions of this Report.

Table 35 | **Ratio – primary energy (direct + indirect) consumption from non-renewable sources**

		2019	2020	2021
GJ/t	Total primary energy from fossil sources	6.31	6.10	5.38
GJ/t	Indirect primary energy from non-renewable fossil sources	4.61	4.32	3.64
GJ/t	Non-renewable indirect primary energy – electricity	2.03	1.62	1.26
GJ/t	Non-renewable indirect primary energy – steam	2.59	2.71	2.38
GJ/t	Non-renewable indirect primary energy – heating	0	0	0
GJ/t	Non-renewable indirect primary energy – cooling	0	0	0
GJ/t	Direct primary energy (fuel) from fossil sources [Table 31]	1.70	1.78	1.74

GRI 302-1 Total primary energy consumption within the Group



Trigeneration at RadiciGroup: energy and innovation helping the environment

An innovative high-efficiency trigeneration plant at Radici Yarn, a plant in the RadiciGroup ATS area, was installed in 2019, and became fully operational in 2020. The plant, which runs on methane gas, is used for the simultaneous production of steam and electricity, typical cogeneration factors, plus the production of chilled water used for the industrial process. Trigeneration offers significant advantages, firstly the use of a single fuel for the production of three different energy vectors (electricity, heat and cooling) in a single plant with optimised efficiencies, thus far higher than three separate productions, and with significantly reduced emissions.

Radici Yarn's trigeneration, which has rated electric power of 4,404 kW, saturated steam generation of 1,297 thermal kW and produces refrigerated water at 3.3 °C, complies with the stringent emission constraints of the Lombardy Region, among the most rigorous in Italy. Because it is a high-performance plant it allows the company to obtain TEEs, the negotiable energy efficiency certificates, awarded by the Gestore Servizi Energetici only for technological and performance excellence. The role of Geogreen, RadiciGroup's clean energy supplier-partner, was fundamental to the trigeneration plant, playing an advisory role in the choice of the plant, high-efficiency recognition and TEE management.

GHG emissions

Disclosures 305-1, 305-2, 305-4, 305-7

RadiciGroup generates greenhouse gas emissions into the atmosphere: both direct emissions from the consumption of energy from sources within the boundaries of its sites and indirect emissions from the consumption of electricity and heat purchased from third-party Suppliers. In 2021, the Group's emissions per ton processed fell by 18,7% compared to 2019 [Table 37]. A very good result achieved mainly thanks to the major investment in the chemical sector. An additional nitrous oxide abatement plant was installed in the latter to abate nitrous oxide from the chemical reactions in the production of nitric acid and adipic acid, among Radici Chimica's core products. As a result, the Novara plant was able to reduce direct emissions by 38.42% compared to 2020, with an absolute decrease of 42.6 kt and a reduction in the index per ton processed from 0.31 to 0.18. The Radici Plastics Suzhou plant in China also reduced direct emissions by 70.6% compared to the year 2020 thanks to the adoption of electric forklifts over diesel-powered models. This is undoubtedly a smaller decrease in absolute numbers, but nonetheless an important step towards reducing the site's environmental impact. The overall result delivered by the Group in 2021 is fully in line with European decarbonisation goals. It was supported not only by the investments mentioned above, but also by an energy mix aligned to responsible and established environmental choices. As noted above, the Group chooses an energy mix for electricity that makes use of 51.7 per cent renewable energy endowed at 29% with guarantees of origin; by comparing the emissions generated by this specific mix with those that would result from the standard national energy mixes of the countries where RadiciGroup companies are located, it emerges that in 2021 the Group avoided 42.6% of greenhouse gas emissions into the atmosphere (23.8% in 2019) [Table 38].

Disclosures 305-1, 305-2

Table 36 | **GRI 305-1, GRI 305-2 – Total direct and indirect greenhouse gas emissions**

		2019	2020	2021
tCO ₂ eq	Total emissions (direct + indirect)	469,139	441,059	416,701**
tCO ₂ eq	Direct emissions (GRI 305-1)*	213,323	214,867	182,616
tCO ₂ eq	Indirect emissions (GRI 305-2)	255,816	226,193	234,085
tCO ₂ eq	Indirect emissions – electric energy	118,989	92,629	96,250
tCO ₂ eq	Indirect emissions – steam	136,827	133,56	137,835
tCO ₂ eq	Indirect emissions – heating	0	0	0
tCO ₂ eq	Indirect emissions – cooling	0	0	0

* The values shown include CO₂ from combustion and N₂O from the production of adipic acid and nitric acid.

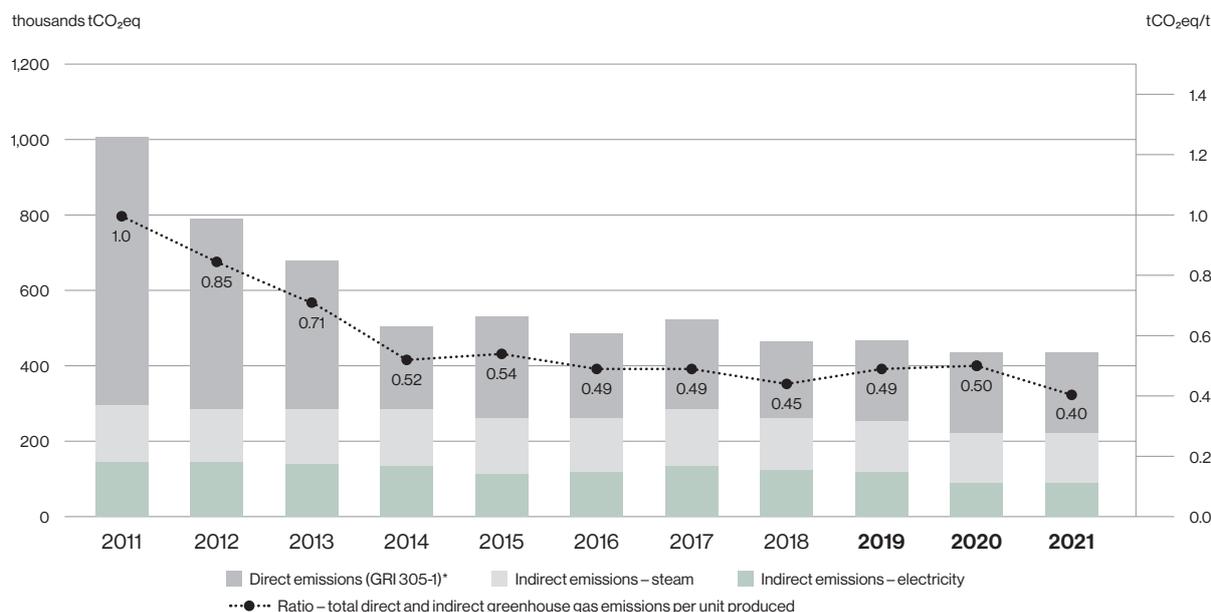
** In 2021, the new reporting perimeter had an impact corresponding to 0.25% compared to the perimeter of the previous editions of this Report.

Disclosure 305-4

Table 37 | **GRI 305-4 Ratio – direct and indirect greenhouse gas emissions per unit produced**

	2019	2020	2021
tCO ₂ eq/t	0.494	0.498	0.402

Total direct and indirect greenhouse gas emissions



* The values shown include CO₂ from combustion and N₂O from the production of adipic acid and nitric acid.

Table 38 | Benchmark indirect emissions from electricity – national standard mix vs RadiciGroup mix

		2019	2020	2021
tCO ₂ eq	Indirect emissions from electricity – standard national mix* (local based)	156,236	135,734	167,700
tCO ₂ eq	Indirect emissions from electricity – RadiciGroup mix [Table 37] (market based)	118,989	92,629	96,250
tCO ₂ eq	difference	37,247	43,105	71,450
%	difference	23.8%	31.8%	42.6%

* The national standard mix is calculated on the basis of annual data from www.iea.org (world balance) for the energy mixes of the countries where RadiciGroup production sites are located.

Other emissions

With regard to emissions quality, the compounds predominantly present are those typically coming from the burning of fuel and the processing of raw materials. Emissions at Group sites are controlled on a regular basis to check for compliance with the limits set by the national legislation in the countries where the Group companies are located [Table 39].

Disclosure 305-7

Table 39 | **GRI 305-7 Emissions quality**

		2019	2020	2021
t	Total	167	128	148
t	NOx	108	81	108
t	SOx	0	0	0
t	VOC	17	20	10
t	HAP	0.10	0.10	0.00
t	Stack and Fugitive	0	0	4
t	PM	19	8	8
t	Other emissions	23	19	18

Water used and returned

Disclosure 303-1

Due to the rising population, demand for water is growing exponentially worldwide. In addition, climate change is exacerbating existing water stress levels with frequent droughts, making water an increasingly precious commodity.

In the UN 2030 Agenda for Sustainable Development, water is by definition a right and a determining factor for economic, social and environmental development. The United Nations 2030 Agenda includes a specific sustainable development goal (SDG 6 - Clean Water and Sanitation) to ensure the availability and sustainable management of water.

RadiciGroup has always recognised the value of natural resources and considers water to be an asset that belongs to everyone and should be protected. Two-thirds 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, through constant analysis.

While the Group's products contain little or no water, the production processes are heavily dependent on it: the water consumed by the Group is mainly used for

industrial plant cooling. In consideration of the fact that the RadiciGroup sites both in Italy and around the world are located in areas ranked as "medium to high water stressed areas" by the World Resources Institute, it is essential to set down a plan to rationalise the use of water resources, also for the benefit of the host communities and respecting their interests. None of the Group sites create long-term water reserves (dams, reservoirs, etc.) for their production activities that could deprive local communities of water supply. On the contrary, the same water withdrawn from the sources is recycled and used several times within the plants.

Considering the water stress situation related to countries in which the reported sites operate, 44% of the water used by the Group comes from areas with low stress. On the other hand, 50% of the water used comes from areas with high water stress. Almost all these quantities (98.8%) relate to water supplied from Industrie Park Zeitz to the company Radici Chimica Deutschland via a ring channel, water reused up to 60.5 times before being discharged. The water used as a thermal fluid in the Group is approximately 40% of surface derivation, in particular

from rivers and canals. The water from the aqueducts, i.e. subtracted from human consumption is equal to only 0.17% of the quantity used.

In 2021, the percentage of water saved through recycling was confirmed at 71% (+1% compared to 2020, or 4.7 million litres) [Table 42]. The water utilisation index in relation to the units produced improved by 11.6% compared to 2019 [Table 41].

As in previous years, Radici Chimica Deutschland GmbH followed a special water management policy. For the operation of its plants, the German company draws water from a water loop managed by the industrial park where the company is located, which also handles the recycling of output water. Formally, water recycling happens

outside the company premises and, thus, the contribution of Radici Chimica Deutschland GmbH to the "saving ratio" is set to zero. Excluding the German company from the scope, the percentage of water saved in 2021 rises to 142%. After being used for industrial purposes, the water is returned to the environment, mainly into surface streams, with the exception of the Group sites in Mexico and Brazil, where wastewater is treated as regular waste, collected and disposed of by third parties in accordance with the legislation in force in those countries. Only a small part of the output water is directed to public sewers. In any case, outgoing water is always subjected to chemical analysis to check the parameters for acceptability, according to the applicable legislation in the various countries.

Disclosure 303-3

Table 40 | **Water withdrawal by source***

		2019	2020	2021
ML	Total	86,029	77,010	83,100**
ML	Total surface water	38,279	32,056	32,811
ML	other water	0	0	0
ML	freshwater	38,279	32,056	32,811
m³	<i>from rivers/canals</i>	<i>37,755,178</i>	<i>31,452,056</i>	<i>32,230,090</i>
m³	<i>from springs</i>	<i>523,829</i>	<i>603,606</i>	<i>581,306</i>
ML	Total groundwater	9,436	8,085	8,542
ML	other water	0	0	0
ML	freshwater	9,436	8,085	8,542
m³	<i>from wells</i>	<i>9,436,032</i>	<i>8,084,676</i>	<i>8,542,491</i>

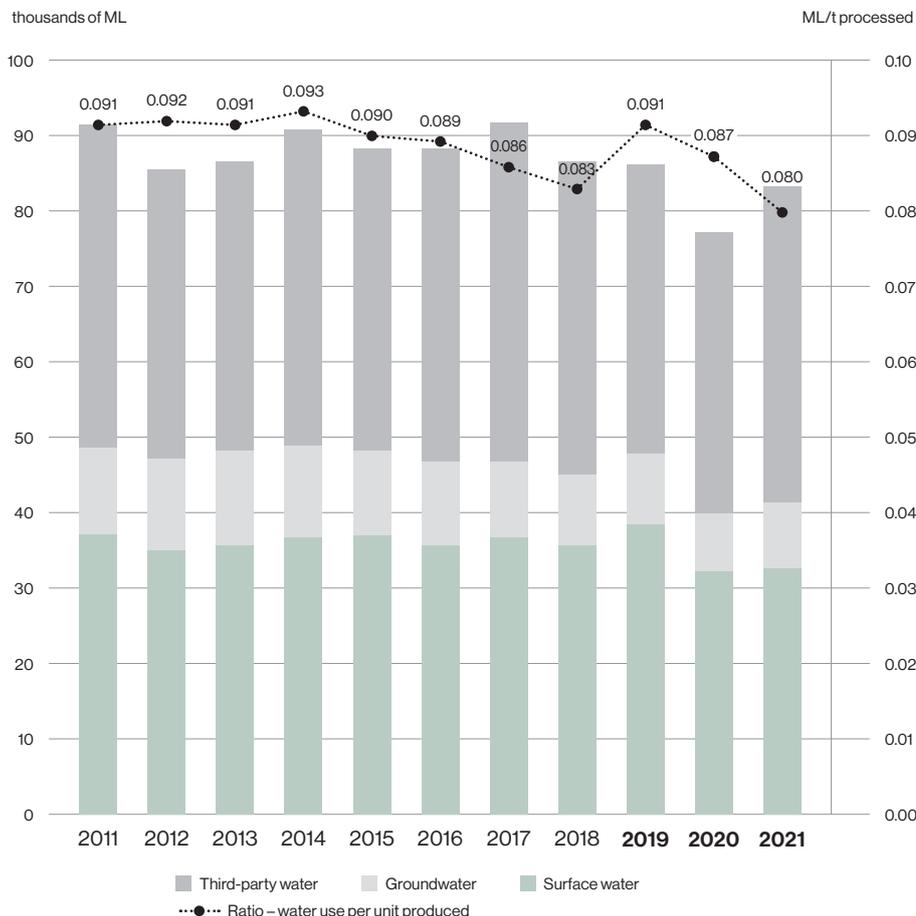
ML	Total third-party water	38,314	36,870	41,746
ML	other water	0	0	0
ML	freshwater	38,314	36,870	41,746
m³	from aqueducts	135,576	126,942	141,125
m³	from private utilities	38,178,805	36,743,061	41,605,352

* For sites where the quantity of water discharged is not measured, such quantity is set equal to the water withdrawn. Similarly, in those cases where only water discharged is measured, the water withdrawn is generally set equal to the water discharged.
 ** In 2021, the new reporting perimeter had an impact of +0.07% compared to the perimeter of the previous editions of this Report.

Table 41 | **Ratio – use of water resources per unit produced**

	2019	2020	2021
ML/t	0.091	0.087	0.080

GRI 303-1 – Water withdrawal by source



**GRI 303-1
Water withdrawal by source
2021**

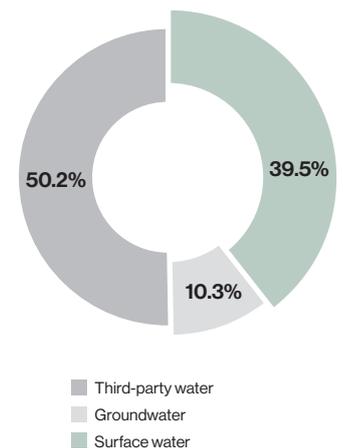


Table 42 | **Water saved and reused**

		2019	2020	2021
Water saving				
m ³	Water withdrawn	86,029,420	77,010,361	83,100,363
m ³	Water recycled	60,192,287	54,006,168	58,753,205
%	Water saved	70%	70%	71%
n	Saving ratio	1.70	1.70	1.71
Water saving not including Radici Chimica Deutschland				
m ³	Water withdrawn	47,846,410	40,263,781	41,491,467
m ³	Water recycled	60,192,287	54,006,168	58,753,205
%	Water saved	126%	134%	142%
n	Saving ratio	2.26	2.34	2.42

Disclosure 303-4

Table 43 | **Water discharge by destination***

		2019	2020	2021
ML	Total	85,707	76,647	82,726**
ML	Into surface water	47,533	39,882	41,028
ML	into surface water	47,533	39,882	41,028
ML	Private utilities	38,174	36,765	41,698
ML	into sewer systems	243	256	352
ML	into industrial canals for reuse	37,931	36,509	41,346

* For sites where the quantity of water discharged is not measured, such quantity is set equal to the water withdrawn. Similarly, in those cases where only water discharged is measured, the water withdrawn is generally set equal to the water discharged.

** In 2021, the new reporting perimeter had an impact of + 0.07% compared to the perimeter of the previous editions of this Report.

Tabella 44 | **Water discharge by type**

		2019	2020	2021
ML	Total	85.707	76.647	82.726
ML	<i>water returned to third parties in the industrial channel and destined for reuse</i>	37.931	36.509	41.346
ML	Water discharge subtotal	47.776	40.138	41.380
ML	<i>of which water discharged directly</i>	46.508	38.884	40.120
ML	<i>of which treated in internal purification plant</i>	1.268	1.254	1.260

Table 44 bis | **Ratio – water discharge per unit produced**

		2019	2020	2021
ML/t		0.050	0.045	0.040

Disclosure 303-5

Table 45 | **Water consumption (delta between incoming and outgoing water)**

		2019	2020	2021
kg	COD	323	363	374
kg	Metals	5.6%	5.6%	5.6%

Table 46 | **Water discharge quality**

		2019	2020	2021
kg	COD	1,539,325	1,811,725	1,769,482
kg	Total nitrogen	1,121,289	999,951	1,138,022
kg	Suspended solids	13,132	15,515	21,722
kg	Metals*	8,795	8,976	8,101

* Metals include: Aluminium, chrome, iron, nickel, copper, vanadium and zinc.

Radici Novacips: preventing hydrogeological risk to the benefit of the company and the local area

Radici Yarn and Radici Novacips, among RadiciGroup's main production sites, are both located along the Serio River, the area's main waterway.

Between March and April 2021, Radici Novacips, in cooperation with Geogreen and in agreement with competent bodies, carried out extraordinary maintenance work on the Serio riverbed to improve hydraulic runoff in the vicinity of its plant. However, the works, whose main purpose was to protect the site from possible flooding after the incident that affected the company in October 2020, also had a significant positive side effect: the cleaning and landscaping of a long-neglected section of the riverbed. The project resulted in the removal of 3,170 m³ of inert material. The Serio river bed was thereby cleaned up and made safer in the event of possible future floods.

As a further measure to protect against the risk of flooding, work to rebuild the embankment wall was completed between January and May, 2022, protecting both the farm and the surrounding land and provincial road. This is land and road heavily affected by the 2020 flooding, with traffic disruption, the evacuation of some families and considerable damage to homes.

Social performance

Disclosure 103-1

At RadiciGroup, people and thus social sustainability are the basis for its sustainable development policies. Some of the principles upholding the pact of trust between the Group and its employees can be stated as follows::

- **View employment as a primary asset** across all companies and **Worker health and safety** as not only a regulatory requirement, but as a **deeply important moral commitment**.
- **Respect the human rights of workers everywhere in the world.**
- **Implement continuous training programmes** that aim at developing the skills of each employee in accordance with his/her aptitudes, work duties and professional career, as indicated in the section of the Report dedicated to workers.
- **Support a balance between work and family life**, by implementing complementary welfare measures at most of its production sites.
- **Engage workers through internal discussions and other engagement initiatives** aimed at raising team spirit.

"Health Safety and the Environment are at the heart of our decisions. In carrying out our activities, our Group takes inspiration from the principle of safeguarding the Environment and Health. In managing our business activities, and regarding Health and Safety particularly, we adopt a risk-based approach and regularly assess, with reference to the context, the actions required to identify, analyse, mitigate and monitor risks."

- From the RadiciGroup Code of Ethics -

Health and Safety

In line with its Code of Ethics and its values, RadiciGroup deems **the Health and Safety of its Workers to be a priority**. It therefore first **ensures the safety standards laid down by the regulations in force** and regularly checks that they are respected, with the aim of increasing prevention and control in order to reduce the risk of accidents. *Disclosure 403-2*

To this end, **a risk assessment is regularly conducted at every site**. At each company, the people responsible for occupational health and safety generally prepare risk, RAD (assessment documentation) for every task in normal, abnormal and emergency conditions, based on the risks that are identified, assessed, monitored and mitigated.

Alongside this, RadiciGroup promotes active safety policies through **Worker training and involvement**, which place a premium on the individual contributing to collective safety.

Disclosures 403-1, 403-2

At the beginning of 2019, the RadiciGroup GRI team developed a questionnaire to supplement the monitoring systems already in place, based on Disclosure 403 (Occupational Health & Safety) and submitted it to the sites included in the reporting boundary. The objective was to gather qualitative data to complement and help contextualise the quantitative data collected for the Report. The following main elements distinguish the Group:

- **All Group companies have a health and safety management system in place**. For the **Italian sites**, the main normative reference for occupational health and safety is **Legislative Decree 81/2008**, which offers incentives for the implementation of an organisation and management model. Many of the Group plants have a management system based on the voluntary ISO 45001 standard for occupational health and safety management. The ISO 45001

standard has a business-oriented approach; it not only assesses risks but also considers management opportunities, includes both external and internal stakeholders, and promotes their engagement.

- A **key role is assigned to the heads of the management system**, who are for the most part employees working at the various sites.
- With regard to the Italian sites other key persons are, the head of the prevention and protection service (RSPP) and the employer who **have the specific duty to organise and manage a risk prevention and protection system, in compliance with Legislative Decree 81/2008**.
The duties of these professional figures, who also have the responsibility to keep their skills up to date, include the **identification and assessment of risk factors, the development of preventive and protective measures, and Worker training and information**. In performing their tasks, the RSPPs may be assisted by the managers of the Occupational Health & Safety (SSL) Management Systems and by the employer itself. **At other Group company sites, management responsibility** is given to people in **different internal positions**, depending on the applicable legislation. Often nominated to the position are employees from Human Resources, who may be assisted, at times, by external consultants.
- In most cases, health and safety management is **based upon recognised risk management standards and guidelines**, which are applied to all company workers. In the pursuit of continuous improvement of their performance, all Group sites are equipped with monitoring, risk assessment and performance evaluation systems and/or full-fledged improvement plans.

Disclosure 403-4

- **All workers are called upon to develop and improve management systems**. The Group sites have mechanisms in place to engage workers on this issue, on top of the legislative requirements. As already mentioned, **training has a primary role**: about **55% of the total hours of employee training were dedicated to health and safety topics**. In addition to training courses, the most common means of engagement are operating instructions, circulars and instructional materials.

- Furthermore, at **all RadiciGroup production sites in Italy, a Worker Safety Representative (RLS) is either appointed or elected**.

The task of this role is to collect and **report complaints, problems and requests for information and clarification submitted by Workers**, in order to **generate a spirit of active participation** in the practice of health and safety principles in the workplace.

The role of the Worker Safety Representative is to get workers engaged in the decision-making process in the development phase of protective and preventive measures by having them express their ideas, opinions and worries. Similar figures, although with different titles and slightly different roles, **exist at all Group plants**.

- **At all RadiciGroup sites**, in a more or less formalised manner and at intervals established by current legislation or site requirements, **joint meetings are held with the company officers and Employees to analyse the situation regarding accidents, monitoring and risk management**.

At the Italian Group plants, in compliance with Legislative Decree 81/2008, a meeting is held at least once a year, with the participation of the employer, the heads of the prevention and protection services (RSPPs), the worker safety representatives and the appointed medical doctor. At numerous Group sites, other meetings may be held on a regular basis.

A Safety Committee has been set up at the Radici Chimica - Novara, a plant subject to the Seveso Directive (Italian Legislative Decree 105/15).

It is a collegial body composed of the company head, RSPP, RSGI (Head of Integrated Management Systems), RSGS (Head of Safety Management System), function managers and RLSSA (Workers' Representatives for Health, Safety and Environment) whose duties are to support the company head in deciding strategies to be implemented as for prevention and protection from major accidents and the implementation and maintenance of an adequate Safety Management System.

Finally, **at some sites, real internal inspections** are conducted at set intervals to bring out and correct potential risk situations.

The results of these inspections and the measures put in place are part of the input for review by Group Management.

- **All Workers** at every Group company **can report a risk situation** at any time through a variety of tools, from specific reports to communication with their supervisor or the Worker Safety Representative.

Disclosures 403-1, 403-2, 403-4, 403-9, 403-10

The numerical indicators that describe the state of occupational health and safety relative to the reporting year are reported below. Considering total Group Workers and total hours worked (both of which grew, partly due to the extension of the reporting scope to all Group production and sales companies), the number of injuries in 2021 was 69, of which 16 were serious. The number, beyond the difference in the list of companies reviewed, grew compared to 2020 (47 cases in 2020 with 12 serious injuries), but in this case

the number of hours worked, with the consequent risk exposure, was lower due to the pandemic, the large-scale use of smart working and periods of paid layoffs. The 81 injuries in 2019, with 14 serious incidents, constitute a more appropriate comparison.

The reduction in absolute terms of injuries in 2021 compared to 2019 is associated with a falling frequency index (2.49 in 2021 and 2.96 in 2019), but at 76.11, a growing rate of seriousness.

This last factor, which expresses the relationship between days lost to injury and number of hours worked during the year, multiplied by 200,000, requires special attention. A more detailed analysis of the information provided by Group sites showed that the main types of injury followed the trend of previous years, with cuts, grazes, sprains and fractures the most common [Tables 47 - 52].

Occupational health services

Disclosure 403-3

In the area of health, all companies have implemented, at different levels, occupational health services in accordance with current regulations, delegating responsibility for the service to the roles with responsibility for safety.

Occupational health services are always carried out by qualified personnel, possessing nationally recognised qualifications. In Italy, this role is carried out by the appointed medical doctor and in other countries by those holding similar roles and responsibilities. The main duties of the doctor in Italy are: inspecting the workplace, establishing a plan for medical supervision, carrying out regular check-ups, compiling assessments of the suitability of the Workers and sharing the results of his/her activities with the company.

Multiple Group companies offer integrated medical insurance or perform activities related to promoting the health of Workers on selected issues in response to Employees' needs. These include free flu vaccinations, courses and meetings offered by companies to promote a healthy diet, training for stress management and combating addiction. Sometimes these services are freely available to Workers' families with a view to maximum engagement. In the reporting year, no fatal injuries were recorded, while four work-related diseases were recognised related to hearing, the epidermis and the musculoskeletal system respectively [Tables 53 - 54].

Disclosure 403-9

Table 47 | **General overview of injury situation**

		2019	2020	2021
n	Total Workers*	3.348	3.227	3.428
hours	Total hours worked	5.481.290	4.880.086	5.552.211
n	Number of fatal injuries	0	0	0
n	Total number of injuries	81	47	69
n/200.000 h	Injury rate	2.96	1.93	2.49
days	Total injury lost days	2.058	1.891	2.113
d/200.000 h	Injury days lost rate	75.09	77.49	76.11

* At 31/12/2021 - Workers include self-employed Workers (who carry out continuous activities in RadiciGroup), temporary Workers and Employees.

Table 48 | **Detailed injury situation – total workers**

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Total Workers*	2,497	2,416	2,559	851	811	869	3,348	3,227	3,428
hours	Total hours worked	4,219,289	3,731,119	4,230,331	1,352,001	1,148,967	1,321,880	5,481,290	4,880,086	5,552,211
n	Number of fatal injuries	0	0	0	0	0	0	0	0	0
n	Number of high-consequence injuries	11	12	15	3	0	1	14	12	16**
n/200,000 h	High-consequence injury rate	0.53	0.64	0.71	0.44	0	0.15	0.51	0.49	0.58
days	Total injury days lost	923	1,380	1,356	207	0	67	1,130	1,380	1,423
d/200,000 h	High-consequence injury days lost rate	44.7	74.0	64.1	30.6	0	10.1	41.2	56.6	51.3
n	Number of non-high-consequence injuries	59	31	47	8	4	6	67	35	53
n/200,000 h	Injury rate	2.86	1.66	2.22	1.18	0.70	0.91	2.44	1.43	1.91
days	Total injury days lost	811	449	599	117	62	91	928	511	690
d/200,000 h	Injury days lost rate	39.3	24.1	28.3	17.3	10.8	13.8	33.9	20.9	24.9

* At 31/12/2021 - Workers include self-employed Workers (who carry out continuous activities in RadiciGroup), temporary Workers and Employees.

NOTE

Below are the rules followed for data processing related to the health and safety **disclosures**:

- a) the **disclosures** cover all the Workers of the organisation divided into employees, temporary workers and self-employed contract workers on a coordinated and continuous collaboration contract with a Group site.
- b) hours worked is the number of hours of actual presence (the sum of regular plus overtime hours).
- c) an injury is an incident that resulted in at least one workday away from work, not counting the day of the incident itself.
- d) commuting incidents are not taken into account;
- e) the days away from work after an injury are the number of full calendar days of absence starting from the day the injury occurred up to the day of return to work, and not the number of workdays. The day the injury occurred is not included;
- f) the indicator takes into account any relapse from previous injuries;

- g) injuries are classified into fatal, high-consequence and non-high-consequence.

High-consequence injuries are incidents that cause injuries with a prognosis of > 40 days (total prognosis including any relapses) and/or injuries causing permanent damage (based on information that the employer can legitimately ascertain) or with a recovery time of > 6 months. All other injuries are considered **non-high-consequence** injuries;

- h) injuries have been classified according to the following list:

- Contusion, abrasion, wound, cut
- Distortion, displacement or sprain
- Fracture
- Amputation
- Burns, chemical or physical
- Intoxication
- Anoxia / asphyxiation (drowning, strangulation)
- Electrocutation

** As for injuries at work, the parameter adopted by RadiciGroup establishes a particularly strict classification and considers as high-consequence injuries those exceeding a 40-day prognosis. The criterion adopted by the GRI 403 disclosure instead classifies as high consequence injuries those exceeding a 6-month prognosis. By adopting this last parameter, 2021 records only one high-consequence injury. The table below also shows the stratification of injuries according to their severity. In 2021 the report lists only injuries that do not involve permanent damage.

Table 49

Item	2021 High-consequence injuries	RG parameter > 40 days of prognosis (number)	GRI parameter > 180 days of prognosis (number)
CEF	Contusion, abrasion, wound, cut	4	0
DLS	Distortion, displacement or sprain	8	1
FRA	Fracture	4	0
AMP	Amputation	0	0
UCF	Burns, chemical or physical	0	0
INT	Intoxication	0	0
AAA	Anoxia / asphyxiation (drowning, strangulation)	0	0
ELT	Electrocutation	0	0
	Total	16	1

With reference to the **list of (potential) hazards** that could lead to high-consequence injuries, the following cases have been identified:

Table 50

Item	Type	Hazard
AMP	Amputation	Movement of vehicles, handling of railway wagons
UCF	Burns, chemical or physical	Chemical agents, hot materials (steam, diathermic oil, molten polymer), flammable substances (fire, explosive atmosphere)
INT	Intoxication	Chemical agents (inhalation of gases classified as toxic)
AAA	Anoxia / asphyxiation (drowning, strangulation)	Presence of water supply channels, retention basin, industrial water intake tank
ELT	Electrocution	Electrical maintenance

Table 51 | Detailed injury situation – Employees

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Total Employees	2,249	2,155	2,233	825	787	832	3,074	2,942	3,065
hours	Total hours worked	3,692,336	3,367,513	3,726,901	1,309,177	1,113,349	1,274,275	5,001,513	4,480,862	5,001,176
n	Number of fatal injuries	0	0	0	0	0	0	0	0	0
n	Number of high-consequence injuries	9	12	11	3	0	1	12	12	12
n/200,000 h	High-consequence injury rate	0.49	0.71	0.59	0.46	0	0.16	0.48	0.54	0.48
days	Total injury days lost	766	1,380	902	207	0	67	973	1,380	969
d/200,000 h	High-consequence injury days lost rate	41.5	82.0	48.4	31.6	0	10.5	38.9	61.6	38.8
n	Number of non-high-consequence injuries	56	26	44	8	4	6	64	30	50
n/200,000 h	Injury rate	3.03	1.54	2.36	1.22	0.72	0.94	2.56	1.34	2.00
days	Total injury days lost	754	431	547	117	62	91	871	493	638
d/200,000 h	Injury days lost rate	40.8	25.6	29.4	17.9	11.1	14.3	34.8	22.0	25.5

Table 52 | Detailed injury situation – external (temporary and contract) Workers

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Total external Workers	248	261	326	26	24	37	274	285	363
hours	Total hours worked	436.953	363.606	503.430	42.824	35.619	47.606	479.777	399.224	551.036
n	Number of fatal injuries	0	0	0	0	0	0	0	0	0
n	Number of high-consequence injuries	2	0	4	0	0	0	2	0	4
n/200.000 h	High-consequence injury rate	0.92	0	1.59	0	0	0	0.83	0	1.45
days	Total injury days lost	157	0	454	0	0	0	157	0	454
d/200.000 h	High-consequence injury days lost rate	71.9	0	180.4	0	0	0	65.4	0	164.8
n	Number of injuries	3	5	3	0	0	0	3	5	3
n/200.000 h	Injury rate	1.37	2.75	1.19	0	0	0	1.25	2.5	1.09
days	Total injury days lost	57	18	52	0	0	0	57	18	52
d/200.000 h	Injury days lost rate	26.1	9.9	20.7	0	0	0	23.8	9.0	18.9

Disclosure 403-10

Table 53 | Cases of recordable work-related ill health among Employees

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Total Employees	2,249	2,155	2,233	825	787	832	3,074	2,942	3,065
hours	Total hours worked	3,692,336	3,367,513	3,726,901	1,309,177	1,113,349	1,274,275	5,001,513	4,480,862	5,001,176
n	Number of deaths from work-related ill health	0	0	0	0	0	0	0	0	0
n	Number of cases of work-related ill health	2	0	3	0	0	1	2	0	4
d/200,000 h	Work-related ill health rate	0.11	0	0.16	0	0	0.16	0.08	0	0.16

Table 54 | **Cases of recordable work-related ill health among external Workers (self-employed and temporary)**

		Men			Women			Total		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
n	Total self-employed Workers	248	261	326	26	24	37	274	285	363
hours	Total hours worked	436,953	363,606	503,430	42,824	35,619	47,606	479,777	399,224	551,036
n	Number of deaths from work-related ill health	0	0	0	0	0	0	0	0	0
n	Number of cases of work-related ill health	0	0	0	0	0	0	0	0	0
d/200,000 h	Work-related ill health rate	0	0	0	0	0	0	0	0	0

Reconciling private and work life

"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."

- From the RadiciGroup Code of Ethics -

In addition to Health and Safety protection, RadiciGroup also promotes the best possible balance between private and work life by implementing the measures and tools provided for by law, mainly reduction in working hours (part-time), parental leave and leave to assist family members, if provided for by the laws of the host country.

RadiciGroup's choice to be an active participant in welfare solutions continued in 2021, for example, pension funds, health funds and, for some companies, the supplementary welfare system.

RadiciGroup also promotes special initiatives for its employees aimed at improving their physical and psychological well-being. Since 2015, the Group has carried on a project called "StoBene", (formerly called Workplace Health Promotion or WHP), originally

conceived by the Bergamo Local Health Unit and the Region of Lombardy to encourage workers to adopt a healthy lifestyle and a positive mental attitude. The "StoBene" project is actively being extended to Group companies in Italy and worldwide. Even in these difficult times, RadiciGroup has successfully promoted and engaged its workers in new and old initiatives. For example, once again in 2021, the canteens of the Group's sites continued the nutrition education campaign for a balanced diet through the illustrated "storytelling" of the best combination of foods on the paper placemats of food trays. At Christmas, solidarity initiatives were launched to collect used toys in good condition and tools and accessories for drawing and creative activities for children in difficult situations.

Radici Chimica Deutschland: In business as in sport, team spirit wins

Radici Chimica Deutschland, the German site of RadiciGroup's Specialty Chemicals business area, boasts a special tradition as far as corporate sports teams are concerned. The company, which in early 2022 celebrated the 20-year anniversary of production of its first bag of adipic acid, has long supported the sports activities of its Employees and organized teams to participate in local and regional trophies. It does so in the belief that sport, especially team sport, not only contributes to well-being and health, but also to trust and cooperation between people, which are also essential factors in business success.

In 2021, for example, two mixed teams from Radici Chimica Deutschland took part in Firmenlauf, the popular regional relay race for company Employees. Voluntary participation was encouraged by the company as one way to reconnect with sport after the Covid period. Riders of the two teams sported special limited edition 'Radifix' t-shirts in the traditional corporate "Speciality Chemicals blue", earning very respectable placings. Also in 2021, Radici Chimica Deutschland offered its employees discounted access to a local gym to get in shape after the long period of inactivity due to the pandemic. The annual dragon boat races are also famous in Radici Chimica Deutschland, held in the area's old lignite quarries, which have been converted into artificial lakes. A crew from Radici Chimica Spa, the Italian counterpart of Radici Chimica Deutschland, also participated in the last editions of the competition held before the pandemic, along with German and international teams. This marked the special closeness and friendship – including in sports – of these two companies, which are already closely interconnected for production reasons in the Radici world.

Planting the seed of sustainability: Radici Plastics Brazil and the Fruit Belt Project

In 2021, Radici Plastics Brazil Employees engaged in a very special activity on the occasion of World Environment Week, a Brazilian initiative to coincide with World Environment Day: planting and growing fruit trees in the lawn in front of the company as a way to experience firsthand the importance of biodiversity and teamwork, conducted in compliance with safety regulations, after the social isolation imposed by Covid-19.

The "Fruit Belt Project" involved more than 70 people from all company departments, who tended the seeds for months, which turned into plants and created a true "green belt" for the site. Radici Plastics workers gained practical experience of the importance of soil and natural resource conservation and regeneration, which has also been demonstrated by the appearance of several bird species.

The result? The first orchard grown by RadiciGroup, with 13 species of plants and trees that produced blackberries, oranges, pomegranates, plums, cashews and tangerines, among other fruits. The project continued in 2022 and even expanded; it is now home to 28 species, including some rare and indigenous ones, which are monitored daily by those who planted them. The orchard has also turned into an opportunity to socialise and have unexpected contact with nature at a business site.

Innovation

Disclosure 103-1

Radici InNova (Consorzio Radici per la Ricerca e l'Innovazione s.c.a.r.l) became fully operational in 2020 with the aim of further establishing innovation as the main driver of development for the Group. Indeed innovation – especially in sustainable terms – is a key element that over the years has enabled RadiciGroup to successfully engage with the most diverse sectors and offer the market competitive, cutting-edge solutions. Below are some of the main strategically important projects that met their initial targets during 2021. A common and distinctive feature of all these projects is that they are based on collaboration. Customers, Suppliers, Scientific Partners and Group Companies have made significant contributions in terms of know-how and vision, with a view to mutually supporting and improving Radici InNova's activities.

- In the area of **new applications**, acquired health sector knowledge and expertise, strongly influenced by three years of the Covid-19 pandemic, was an important starting point for the development of **innovative materials**. In particular, **advanced filter materials for the environmental and automotive sector, and materials for the technical and textile-clothing sector were researched**. In addition, to support the new business related to personal protective equipment, **recyclable and circular textile solutions** were put in place for the medical and workwear sectors.
- In 2021, Radici InNova began an important partnership in **a new area for the RadiciGroup**: the design of **prototype clothing for the space sector, capable of being comfortable to wear while being able to detect the wearer's physiological and vital parameters**. This project was the first experience in developing "smart clothing" capable of collecting, storing and exchanging information such as heartbeat, respiration, body temperature from and to the surrounding environment. It marked **a first important goal at the beginning of 2022 with the realisation and test use of the first space clothing prototypes** made with Group materials.
- Another important activity led to the research and development of **alternative processes to obtain the chemical intermediates** needed to manufacture the Group's polymers from **renewable raw materials**. The patent application filed in 2020, for **RadiciGroup's process for the purification of bicarboxylic acids**, was **granted** in Italy and Europe in 2021.
- As has been the case for some years now, **research into the development of polyamides from renewable sources continued**. Numerous **Customers have expressed an interest** in both chemical intermediates and polyamides from renewable sources. Therefore, an exploratory phase of possible **application collaboration** was launched.
- In relation to the **circular economy**, one of **Radici InNova's core objectives**, projects for the research and development of recycling processes (mechanical, chemical and by dissolution) from post-industrial and post-consumer waste continued. At the same time, **ecodesign** activities continued to assist Customers in their **design** process, one of the main results of which was the production of the **first recyclable racing ski suit** in 2021.
- The **strengthening of the internal structure for the life cycle analysis** of products and processes designed or manufactured by RadiciGroup has enabled Radici InNova to meet the ever-increasing **needs** of Group Customers to **measure the environmental performance** of products and processes to **demonstrate their commitments to sustainability**. This is a significant recognition of RadiciGroup's decision to systematically base its assessments on **scientific and reliable measurement systems**.
- At the same time, for each of the **Group's Business Areas**, the activities necessary for the **improvement/performance development of products** continued, with a focus on optimising **costs, improving quality standards and reducing the environmental impact** of production processes.

Sustainability as high as the Bergamo mountains: the first circular ski suit is born, the result of innovation and a zero-km supply chain

At the end of 2021, RadiciGroup launched the first "circular" ski suit, coinciding with the start of the winter sport season. Virtually mono-material, it is made according to ecodesign principles and with a zero-kilometre design in collaboration with DKB, a Bergamo company specialising in technical sportswear.

the suit (including jacket and trousers) features a fabric made of Renycle, a RadiciGroup yarn derived from the mechanical recycling of polyamide (nylon), which allows significant savings in terms of water and energy, as well as reduced CO₂ emissions. The suits padding and range of accessories, including zips, velcro straps and buttons are also made of polyamide. This milestone was achieved thanks to the vital supply chain partnership with entrepreneurial excellences in the area, for the research and development of chemically related materials that can be used in an innovative application requiring high technical performance.

The virtually mono-material composition of the suit, currently being used by the Sci Club RadiciGroup significantly facilitates the recycling of the garment at end-of-life, through its mechanical transformation into new polymeric material to produce, for example, ski boots and binding components for applications in other demanding sectors such as automotive or furniture.

RadiciGroup and its partners began with an ambitious aim: building a solid example of sustainability and circularity at the height of the Bergamo mountains, where the project was launched and implemented.

The goal was achieved.

Circular Economy

Disclosure 103-1

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 for process and product innovation**, especially when implemented by adopting ecodesign, that **creates opportunities for product development in unexplored sectors**, such as the Group's range of 100% recyclable products and portfolio of products made from recycled and bio-based materials.
- **a stimulus for production and system efficiency**, through the reduction of waste and operating costs, that **utilises the industrial synergy** already available among the Group business areas, broadening business opportunities;
- **an important lever for the transformation and integration of the Value Chain**, through partnerships for the adoption of best practices, support of best technologies and optimisation of transport.
- **a contribution to the creation of highly specialised and resilient local production chains**, which are "light" because they are local and flexible and capable of reacting swiftly in a changing context, as happened in the case of the production of personal protective equipment for medical use during the Covid-19 crisis.

On the basis of the type of processes and know-how that characterise its production, RadiciGroup has adopted some the principles of the circular economy and incorporated them into projects:

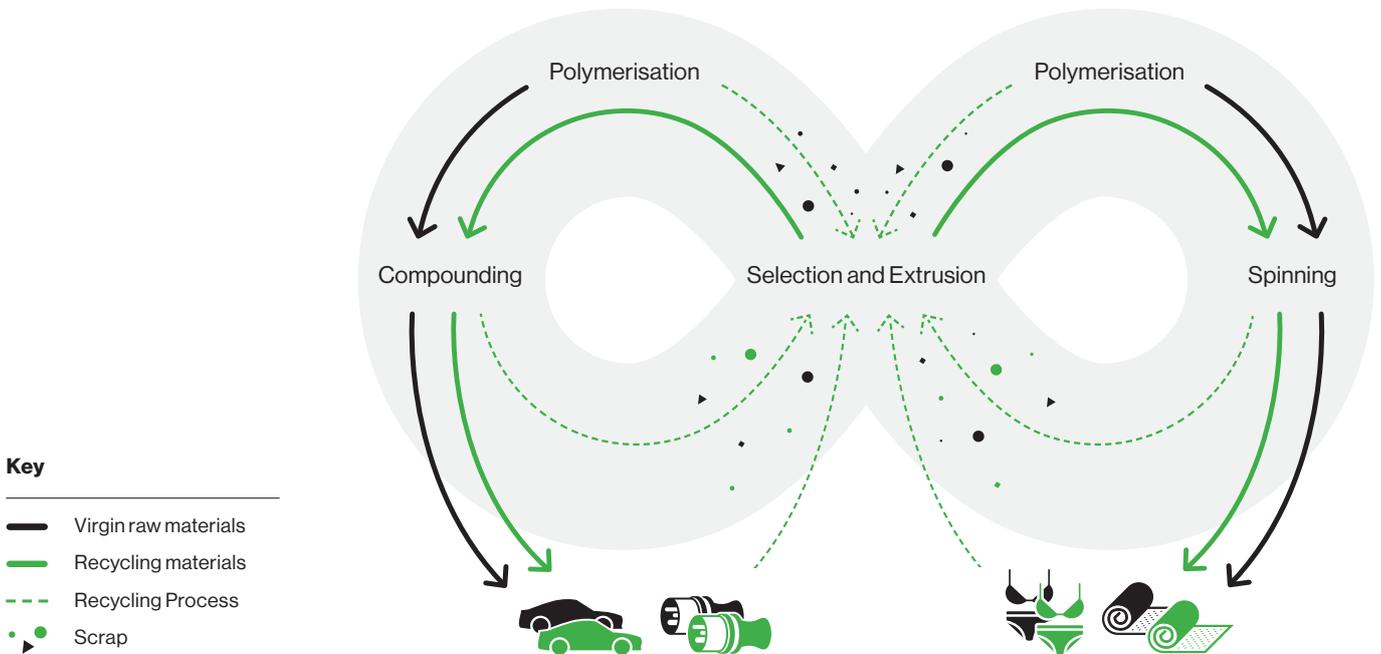
- **Ecodesign:** RadiciGroup is increasingly working with Customers and Suppliers to design circular products. There is a particular focus on the concept of monomateriality.
The concept is based on the realisation of objects using a single material, or very few chemically related ones, that can meet 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:** Durable, recyclable and recycled materials are widely represented in RadiciGroup's product offering. The creation of Radici InNova opened up a new field of action in which the Group is already investing: new sources of raw materials, including bio-based materials and others obtained through innovative and technologically pioneering processes.
- **Processes:** The Group invests to optimise every aspect of production. Scientific and rigorous measurements are carried out on a regular basis to verify the environmental impacts of the processes. The latter are managed using certified Quality, Environmental and Energy Management Systems, which help to keep Group companies in step with the world's best practices.
- **Durability:** RadiciGroup products are based on carefully selected, high-performance raw materials originating from traceable, 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, thanks to their thermoplastic nature, are intrinsically recyclable and, if used alone or in combination with different but compatible materials, can be recycled at the end of their life through mechanical processes with limited energy and environmental impact. Recovered materials can thus be processed into new polymers for the most challenging sectors, from automotive to technical textiles.

- **Quality recycling:** Thanks to RadiciGroup's recognised experience in waste recovery and re-utilisation, waste is processed into new resources. The Group is able to sort the various waste materials, thus enhancing their intrinsic qualities and directing them to the most appropriate second life, based on the desired technical, environmental and market performance.

The Nylon Recycling System for Circularity

RadiciGroup, by virtue of its know-how in materials formulation and recycling, is able to **channel waste to the industry of origin or a different one** depending on the specific characteristics of the materials and the expected performance of the final applications, **choosing the most sustainable solution.**



On the nylon side, the full integration of Zeta Polimeri into the Group has expanded the range of recyclable polyamide waste for the purpose of high-tech applications. The type of equipment provided to this company enables it to process post-consumer materials while ensuring controlled output, with performance levels suited for use in highly specialised application areas. As a result, RadiciGroup's range of recycled materials has expanded to also allow for blends with varying percentages of different recycled materials and now makes it possible to offer sustainable solutions to even the most demanding markets.

- **Extended producer responsibility:** RadiciGroup adopts extended producer responsibility schemes and thus contributes to implementing structured, controlled and efficient circular economy models.

- **Renewable resources:** Renewable resources, especially energy resources, besides having intrinsic circularity are a key factor in RadiciGroup's sustainability policy. Thanks to its 20-year partnership with Geogreen, the Group has long had more than 40% clean energy in its mix, and in 2021 this figure reached 51.7%.

radipeople®

Recyclable personal protective equipment: when eco-design meets safety

In October 2021, RadiciGroup unveiled its new entity dedicated to personal protective equipment (PPE) for industrial use: overalls, gowns, headgear, shoe covers, and footwear. Radipeople® was launched, the brand that identifies these garments, as the result of a traceable and entirely Italian supply chain, with a focus on raw materials and product quality. Radipeople® equipment offers excellent defence against external agents, high protection against biohazard and infectious agents and high robustness and lightness to optimise protection and comfort.

The focus on health and safety, which is one of the pillars of the Group's sustainability strategy, alongside the environment, finds tangible expression in the Radipeople® range and in particular in Radipeople® Eco, the first, innovative "circular" protective suit, immediately recyclable at the end of its life because it is made of 100% polypropylene.

All its parts, from the fabric to the lamination, from the zipper to the thread used for stitching, are produced from a single type of material: polypropylene. This allows immediate recycling of the garment at the end of its life, without the need to separate the different components, through a mechanical recycling process with limited environmental impact.

With a view to all-round circularity, the packaging of Radipeople® PPE was also designed according to ecodesign principles, with small, fully recyclable packaging.

REPETABLE®

RadiciGroup's sustainable products rise to the top with the Maratona Dles Dolomites

A valued partnership to expand the range of products made from recycled materials, the result of a traceable supply chain that applies the principles of circularity and sustainability.

This was the idea that guided RadiciGroup in its contribution to the sustainability of the Maratona dles Dolomites-Enel, the historic cycling event scheduled for July 2021, which as usual took place on the paths of the Dolomites. RadiciGroup and Carvico, Italian textile companies of excellence, combined their know-how to develop and produce 10,000 eco-friendly gilets. Made of Carvico's "special edition Maratona 2021" fabric in 100% recycled polyester from recovered PET bottles, the gilets were gifted to all race participants.

To make the fabric for the gilets, Repetable®, RadiciGroup's polyester yarn obtained through the post-consumer recycling of plastic bottles, was used. Compared to virgin polyester, Repetable® provides for lower CO₂ emissions (-45%) and reduced water consumption (-90%) and energy consumption (-60%), while ensuring high technical performance.

In addition, more than 102,000 bottles were recovered to package the 10,000 gilets for the participants of the Maratona dles Dolomites-Enel.

Product performance

Disclosure 103-1

RadiciGroup **lower impact products** are developed in the context of specific sustainability commitments:

- **Develop circular products** with a **life cycle thinking approach**, that is, thinking of the end-of-life from their origins, favouring the use of recyclable raw materials with limited environmental impact and designing formulations that ensure long durability and high performance, as well as high value-added recyclability, during the full life cycle of products.
- **Make the best use of raw materials, select renewable source materials, reduce scraps and waste.**
- **Optimise processes and measure their impacts** using scientific methods that put the Group's choices on solid ground, while ensuring transparency and traceability.
- **Work with suppliers, customers, associations and scientific partners to contribute to a sustainable value chain.**

Why choose RadiciGroup low-environmental impact products?

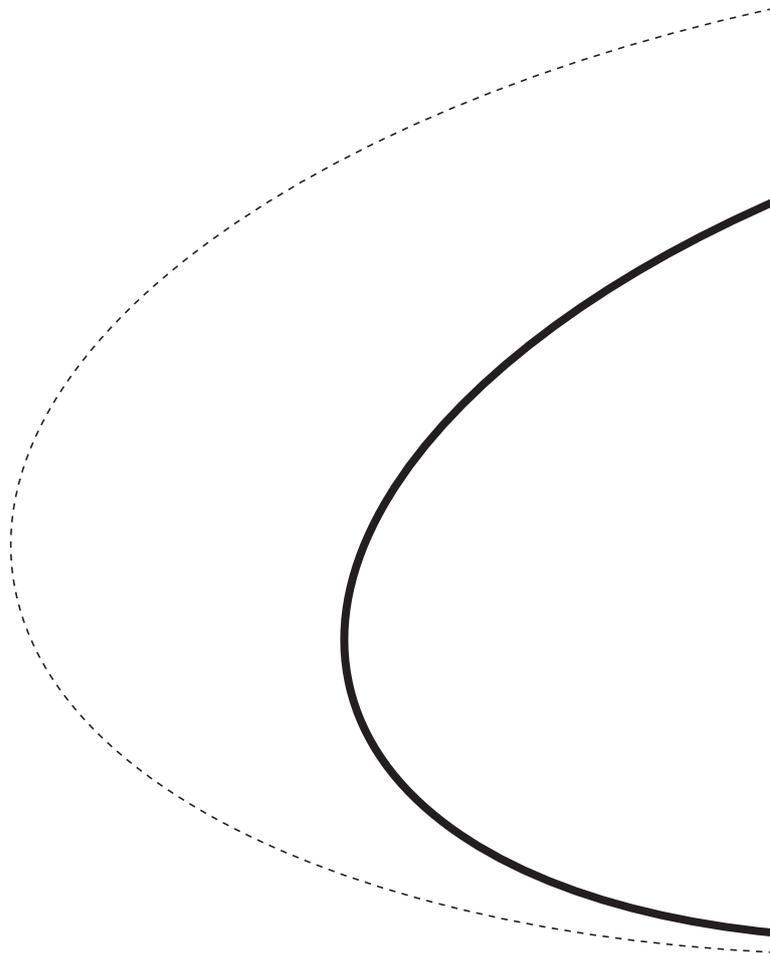
Because the materials are all recyclable and durable, key factors in circularity.

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.
- manufactured using **green energy**, which decreases dependence on fossil fuels.
- bio-based, i.e. made wholly or partly from **natural raw materials**, making use of plant waste that does not compete with food crops.
- biodegradable: i.e. **able to be broken down into their different components** through biochemical processes.

The Group products resulting from this philosophy have two main characteristics in common, **durability and recyclability**, which make them an important choice in terms of impact reduction for downstream customers and end users.

In addition, there are a number of specific features for any single product.



RadiciGroup low-environmental impact products

Table 55

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			●	●	●	
Responsible®	Cross-Business Area	●		●	●	●	
Biofeel®	Cross-Business Area		●	●		●	
Biofeel® PLA	Cross-Business Area		●	●		●	●

Fashiontech: underwear and sportswear in an ethical circle

In June 2021, Fashiontech, a major two-year technical eco-design project, was completed at Radici Yarn (a company in RadiciGroup's Advanced Textile Solutions sector), aiming to produce hosiery, underwear and sports garments using circular knitting technology. All by making use of recycled – and possibly also recyclable – raw materials, developed to reduce environmental impact as much as possible while maintaining the performance required by this type of application. Several design phases and results were achieved, first the development of polyamide yarns mass dyed by adding the dyes directly during the extrusion phase. This solution made it possible to significantly reduce the environmental impact by eliminating the dyeing step, which requires significant water consumption. The reduced impact of the garments was measured objectively in the second phase of the trial, thanks to a PEF (Product Environmental Footprint) study comparing a mass-dyed product designed within the project, a black sock, with a similar garment-dyed product (via the classic dyeing step). The latter was found to have more significant environmental impacts than black socks made from mass-dyed yarn across all impact categories, particularly the most significant ones. For example, the mass-dyeing led to a 60% reduction in water use, a 53% reduction in emissions and a 47% reduction in energy use compared to garment-dyeing.

With a view to circularity, the following design phase, i.e. the development of a totally mono-material 100% polyamide, recycled, solution-dyed and textured item, used for hosiery and garments, also had encouraging results. Thanks to the synergy between Radici Yarn and its partners, prototype garments with a degree of elasticity that meet user expectations were made, while cutting the use of elastomer. This was an excellent solution that, above all, does not compromise the fit of the garments. It also allows them to be mechanically recycled at the end of their life without the need to split the components and without having to deal with the issue of splitting off the elastic component, because only a small amount is used.

Life Cycle Assessment

Life Cycle Assessment (LCA) is a scientific, analytical and systematic methodology that assesses the environmental footprint of a product throughout its entire life cycle, from the extraction of raw materials, to production, distribution, use and final disposal or second life, giving the environmental impact values associated with each phase. It is an important technical foundation, allowing targeted actions to increase product sustainability through precise impact quantification. A methodology that has been widely used by RadiciGroup for more than a decade, it was also used by numerous companies in 2021. Below is an overview of the LCAs, or LCA-based environmental impact studies, carried out on strategic products for the Group till 2021:

- **Radici Chimica SpA**
Third-party verified PEF study for nitric acid, adipic acid, hexamethylenediamine, bicarboxylic acid mixture (RADIMIX), PA66, PA610, PA66/6 5% CPL, PA66/6 10% CPL, PA XT.
- **Radici Chimica Deutschland GmbH**
Third-party verified PEF study for KA oil, adipic acid, bicarboxylic acid mixture (RADIMIX).
- **Radici Novacips SpA**
EPD (Environmental Product Declaration) certified for Radilon® A and S 25%, 30% and 35% glass fibre compounds, for Heramid® A tenacious and 30% glass fibre compounds.
- **Radici Yarn SpA**
Third-party verified LCA study for Radipol® - polymer PA6 SD for POY, Radipol® - polymer PA6 SD for staple, Radilon® - PA6 POY 55F10 SD, Radilon® - PA6 SO 44F10 SD, Radilon® - PA6 staple 3.3 dtex SD, Renycle® - POY 55F10 SD, Renycle® - staple 3.3 dtex SD, Renycle® - SO 44F10 SD.
Comparative PEF study of garment-dyed PA6 socks compared with PA6 socks made from solution-dyed yarn.
PEF study on a PA6 and elastane jacket in cooperation with Customers.
PEF study on PA510 DTY 40F30 SD and PA66 DTY 40F30 SD in the framework of the Lombardy Region POR FESR 2014-2020 call: Smart Fashion and Design.

- **RadiciFil SpA**

EPD third-party certified for PA6 and PA66 BCF yarns;
Third-party certified LCA for Renycle BCF 50%.

- **Noyfil SA**

LCA study for unbleached and coloured PET and r-PET Starlight®, Radyarn® and Repeating® yarns.

In relation to the High Performance Polymers area, in addition to the above, around a hundred predictive LCA studies were carried out, in cooperation with Customers, to assess the impact of a particular type of compound before its actual production and to assess the best choices from an environmental performance point of view.

Transparency

Disclosure 103-1 Disclosure 417-1

Accessibility to relevant information concerning a product is essential to ensure greater user safety. Furthermore, such accessibility is also key to communicating product characteristics and performance, which must always be stated in a clear, precise and non-misleading manner.

RadiciGroup has long worked for transparency in product formulation and communication at all levels:

- **all Group products must meet the general safety and labelling regulations** of the European Union and the laws of the countries where they are produced or sold;
- **in many cases, the products can also be subjected, on a voluntary basis, to additional safety specifications or provisions**, more restrictive than the mandatory provisions in force.

Concerning the **Group's Specialty Chemicals Business Area**, all the chemicals produced at the Novara (Italy) and Zeitz (Germany) plants comply with the requirements of the REACH regulation. This European Union regulation was adopted to improve the protection of human health and the environment against risks from chemicals; it is implemented by ECHA, the European Chemicals Agency. The product registration dossiers of the two plants are kept constantly updated in accordance with new regulatory requirements and guidance from ECHA. Product safety sheets sent to users downstream contain the instructions for proper and safe use, consistent with the registration dossiers. Radici Chimica Deutschland has also joined Eco Vadis, an international sustainability rating platform, distinguishing itself among customers and the market as an ethical, environmental company that is conscious of its supply chain and of human rights.

Regarding the **Advanced Textile Solutions Business Area**, all products comply with the obligations set forth by the REACH regulation. Moreover, yarns with a PA6/PA66 polymer matrix for textile applications are certified to the international Oeko-tex® Standard 100, Annex 6, Class I, while fibres with a PET and PLA polymer matrix are certified to Oeko-tex® Standard 100, Annex 4, Class I. Furthermore, in the two-year period 2018-2019, the yarns of the Renycle® (nylon) and Repeating® (polyester) families of products were certified to the Global Recycled Standard (GRS), a certification of the recycled content in products. The GRS includes the Zero Discharge of Hazardous Chemicals (ZDHC) provisions and requires that, for each item sold, a declaration of actual recycled content be provided. The nonwovens with recycled content in the Responsible® product family were certified as "circular" products in 2020, according to the International Sustainability and Carbon Certification (ISCC) system.

A safety sheet in accordance with REACH provisions is also issued for all products manufactured by the RadiciGroup **High Performance Polymers Business Area**.

Additionally, a REACH Compliance Statement (1907/2006), is issued attesting to the fact that all the substances contained in the product have been registered or are exempt from registration, as well as a declaration of absence of dangerous substances (annex XIV, XVII and SVHC). A statement is also provided pursuant to EU Directive 2011/65/EU (RoHS) on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Products destined for the automotive sector are entered into the IMDS portal of the automotive producers, which

allows Suppliers to access information on all materials used in the vehicle in relation to the hazardous substances contained (GADSL list) especially with a view to future recycling. Products that come in contact with food are accompanied by declarations of conformity, as required by the international regulations (EU Regulation 10/2011, FDA, etc.) on materials coming into contact with food.

In matters of product environmental communication, the Group's job is facilitated most of all by the Environmental Product Declarations (EPDs), based on ISO standards and Life Cycle Assessment (LCA) studies, completed and prepared according to the related Product Rules, which, as mentioned above, aid the Group in maintaining

a high level of transparency. In particular, the registered EPDs cover products of the High Performance Polymers BA Heramid A (PA66), Radilon® S (PA6) and Radilon® A (PA66) and Advanced Textile Solutions BA Radifloor® (PA6 and PA66) Bulk Continuous Filament and Refined Yarns.

Disclosures 417-12, 417-3

Thanks to the effort spent on environmental labelling and communication, in the reporting period no Group company reported either incidents of non-compliance concerning product and service information and labelling, or incidents of non-compliance with rules concerning marketing communications.

Traceability

Disclosure 103-1

During recent years, as a result of an increased awareness of the importance of each production stage with regard to quality, health, safety and conformity to current laws and regulations, a key element of the RadiciGroup sustainability strategy has become the ability to precisely trace the different steps and sources in material procurement and processing.

With regard to the **traceability of Group products**:

- **Total traceability of virgin materials and internally handled post-industrial recycled scraps and rejects.** RadiciGroup acquires the raw materials and polymers from large companies of international repute, which are able to provide detailed information on the materials supplied.
- **Total traceability of post-consumer recycled materials purchased on the market.** In fact, **GRS certification** or **Oeko-tex® certification** require **total traceability**. In addition, the implementation of ISO 9001:2015 at all major Group sites, with its **requirement for the identification and traceability of outputs** is an additional guarantee. In addition to conformity to the requirements of the above certification schemes, **laboratory tests are carried out on incoming materials** for qualification and identification of their chemical composition with a view to processability, health and safety.
- **Every step of the production chain at each production site is managed by process management software**, which monitors and coordinates the various procurement chains, planning, production and logistics, as well as documentation and reporting for each process. Thus, **for each lot of materials, it is always possible to find detailed information** concerning the raw material, the production line and the various processes, together with data on packaging and shipping.
- Products that move among Group companies for processing purposes also have **a sizeable traceability history**, precisely because of the system used, which contributes to improving the efficiency and quality of production and processing.

Systemic sustainability

Disclosure 103-1

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 and valuable tools for sustainable management. RadiciGroup has made management systems a pivotal part of its strategy, which goes far beyond mere compliance. For the Group, the advantages of having management systems in place, in terms of sustainability and beyond, are numerous:

- **Management systems** are built with a risk-based thinking approach, which entails an accurate analysis of the business context and processes in order to measure, monitor and manage risks and opportunities with a view to, by way of example, the environment, energy, and use of resources.
- **They bring to the organisation a systemic and process-oriented approach that streamlines procedures and creates synergies** between different companies or business areas for a shared management of objectives, related, for example, to Health and Safety matters.
- Through documented and verified process management and the common language of the systemic approach, management systems allow for the **evaluation of the results achieved over time both by individual companies and across the various functions**, as part of strategic planning.
- **Through the tool of system certifications**, which are increasingly a sine qua non for accessing certain markets and highly specialised applications, **management systems can be an important element for acquiring new business opportunities**.

Certifications, in particular, attest to and strengthen RadiciGroup's commitment to quality, safety and the environment, as well as to transparent and third-party-verified product environmental impact communication.

Table 56 | **RadiciGroup certifications** (updated 30/05/2022)

RadiciGroup Site	ISO 9001	IATF 16949	ISO 14001	ISO 45001	ISO 50001	VDE
Corporate						
Radici Partecipazioni S.p.A.	●					
Business Area: Speciality Chemicals						
Radici Chimica Novara S.p.A.	●		●	●	●	
Radici Chimica Deutschland GmbH	●		●	●	●	
Business Area: High Performance Plastics						
Radici Novacips S.p.A. - Villa d'Ogna	●	●	●	●		●
Radici Novacips S.p.A. - Chignolo d'Isola	●		●	●		
Radici Plastics GmbH (Germany)	●	●	●	●	●	
Radici Plastics Ltda (Brazil)	●	●	●	●		
Radici Plastics (Suzhou) Co. Ltd.	●	●	●	●		
Radici Plastics Usa, Inc.	●	●	●	●		
Radici Plastics Mexico S. De R.l.	●	●	●	●		
Business Area: Advanced Textiles Solutions						
RadiciFil S.p.A.	●		●	●	●	
Logit Sro (Czech Republic)	●		●	●	●	
Radici Yarn S.p.A. - Villa d'Ogna	●		●		●	
Radici Yarn S.p.A. - Ardesio	●		●		●	
S.c. Yarnea Srl (Romania)	●		●	●		
Radici Chemiefaser GmbH (Germany)					●	
Radicifibras Ltda (Brazil)	●					
Noyfil S.p.A. - Chignolo d'Isola	●			●		
Noyfil S.p.A. - Andalo Valtellino	●			●		
Noyfil Sa - Stabio (Switzerland)	●		●			
Cordonsed Sa (Argentina)						
Tessiture Pietro Radici S.p.A.	●		●	●		

In addition to the above, these are the **other product certifications**: were attained, namely the **Environmental Product Declarations for individual products and other certifications** mentioned in the section of the Report dedicated to the product.

Certifications and contribution to SDGs

Disclosure 103-1

The certifications held by companies are among key factors in achieving the United Nations Sustainable Development Goals (SDGs) in the context of global sustainability. Below is a table showing how the ISO standards align with the specific SDGs.

Table 57

ISO certification	Sustainable Development Goals to which the certification contributes
ISO 14001:2015 – Environmental Management	6 - 7 - 9 - 13 - 14 - 15
ISO 50001:2018 – Energy Management	7 - 11 - 13
ISO 45001:2018 – Occupational Health and Safety	3 - 8 - 11
ISO 9001:2015- Quality Management Systems	9 - 12
ISO 14044:2006 – Environmental Management – Life cycle assessment	9 - 12 - 13 - 14 - 15
ISO 14024:2018 – Environmental Labels and Declarations	9 - 12



The ISO 26000 standard on the social responsibility of organisations underlies the Group's entire sustainability process, and the philosophy it promotes is the same one that inspires the UN Sustainable Development Goals.

To learn more: www.iso.org/sdgs.html

Reporting principles

Disclosure 102-1

This document is the Sustainability Report of Radici Partecipazioni S.p.A. and its associated companies, herein jointly referred to as "RadiciGroup" or "the Group".

Disclosure 102-54

This Report has been prepared in accordance with the GRI Standards 2016: Core Option.

Disclosures 102-45, 102-46

The data for this Report were provided by the following companies:

Holding:

- Radici Partecipazioni S.p.A.

SUBSIDIARIES:

Production companies (subsidiaries):

- Radici Chimica S.p.A.
- Radici Chimica Deutschland GmbH
- Radici Novacips S.p.A.
- Radici Plastics GmbH
- Radici Plastics Ltda
- Radici Plastics Mexico S. de R.L. de C.V.
- Radici Plastics (Suzhou) Co. Ltd.
- Radici Plastics USA Inc.
- Cordonsed Sa
- Logit Sro
- Noyfil S.p.A.
- Noyfil Sa
- Radici Chemiefaser GmbH
- RadiciFibras Ltda
- Radici Yarn S.p.A.
- Radicifil S.p.A.
- S.C. Yarnea Srl
- Tessiture Pietro Radici S.p.A.
- Zeta Polimeri S.r.l.

Commercial companies:

- Radici Chem Shanghai Co. Ltd
- Radici Plastics UK Ltd
- Radici Plastics Iberica SI
- Radici Plastics France Sa
- Radici Plastics India Pvt. Ltd

Financial and service companies:

- Compagnia de Acrilico - (Comacsa Sa)
- Fibrexnylon Sa
- Lurotex Textilipari Kft
- Radici InNova S.c.a.r.l.

The production companies have provided data for 2021 and the two preceding years. The service companies provided the entire data set related only to 2021. The commercial companies – which are included in the reporting boundary from this edition and bring the totality of RadiciGroup's revenues and Employees within the scope of the Report – only provided social and financial data for 2021. These companies, which are small and have no production aspects, provided a small environmental

dataset that will be refined for the 2022 edition, consistent with the nature of their activities. Radici Partecipazioni provided 2021 data on environmental impacts, in addition to personnel and financial data. Radici InNova avails itself of the services and work by personnel of other Group companies, the impact of which is already disclosed in the Report. The Noyfil-Andalo Valtellino site will no longer provide data starting from 2022. The difficult situation characterizing the Italian and European textile sector in recent years has affected also Noyfil business situation. The international economic context and competition scenario, accelerated by the effects of the pandemic, led to structural market conditions under which the site was no longer able to maintain its business activities.

The material topics identified and the related indicators apply to all the companies listed included in the reporting boundaries. The reporting principles adopted to compile this Report are stated below. They are the premises substantiating the intentions of the Group to prepare a document that is representative of the Group sustainability strategy, the goals achieved and the goals still to be achieved. These principles are important instruments because they enable the Group to share its results and expectations with its stakeholders in a transparent and balanced way, allowing for debate.

Stakeholder inclusiveness

Disclosure 102-43

In 2018, RadiciGroup revised the mapping of its stakeholders and surveyed their legitimate expectations, as reported in the table 58 "Mapping of Stakeholders, their expectations, risks and opportunities, and engagement methods". The 2018 revision is also considered valid for 2021.

Disclosure 102-43

Some stakeholder groups — particularly employees, members of local communities and suppliers — were actively engaged in the materiality analysis according to the procedures described below. Their contribution was valuable in that it created a more complete and shared vision of the sustainability topics that are essential to the Group. Furthermore, in numerous instances described in the section, "Stakeholders", these groups engaged in initiatives fostering dialogue and collaboration on sustainability topics and their promotion. Lastly, year after year, both the full and summary versions of the Sustainability Report are circulated to the stakeholders through internal briefings and training sessions, as well as traditional and social media. Together, these initiatives cover a wide communicative spectrum, thus ensuring that the Report, and all the ideas and information contained in it, can potentially reach all the Stakeholders.

Sustainability Context

Each material topic is included in the wider context of the RadiciGroup sustainability strategy aimed at actively working towards sustainable development for its production businesses, and thus contributing to the more general United Nations Sustainable Development Goals mentioned above in the introductory pages of this Report. An analysis of the context in which RadiciGroup operates has also been included in this edition of the Report to aid in capturing the characteristics and the strategies of the various Group business areas.

Materiality

The Corporate Mission, Vision and Values, along with an analysis of the context and the legitimate expectations of stakeholders, have guided the Group in identifying its material topics. The thorough process used to identify the material topics followed a specific established corporate procedure and is described under "*Materiality Analysis*". This process allowed to clearly identify the topics on which RadiciGroup has to focus its strategies and resources in the context of sustainability.

Completeness, accuracy and balance

This Sustainability Report reports on material topics that apply to the totality of the companies providing data. As in every year, numerical data were collected in disaggregated form. Each site or company provided its results, which were then aggregated at the central level. Data over the last three years are shown in the Report. Wherever reference is made to data over a several year period, the relevant data can be found in previous editions of the Sustainability Report posted on the RadiciGroup website in the Sustainability section. Numerical data are presented and commented on in a transparent and balanced manner. Computation methods and measurement units are shown, where appropriate, and any estimates and assumptions made are also indicated. The uncertainty margin is less than 5%. A similar method was implemented for collecting

information for non-numerical indicators. Questionnaires in the English and Italian languages were sent to the production sites and the results were restated in summary form so as to highlight what was common to the various sites group-wide.

Comparability

Disclosures 102-48, 102-49

This Report has been prepared in accordance with the GRI Standards 2016: Core Option. The above-described change in the reporting boundary means that this Report is not fully comparable with previous ones. Relevant differences in disclosures are due to changes in the reporting boundary and, where necessary, are highlighted in the text.

Clarity

Special effort has been made to organise the information for every version of the Report with the objective of ensuring the clarity and accessibility of the document. The full text of the Report will be released in Italian and English. Abridged or shorter versions will also be made available, which are intended for wider circulation to stakeholders and will allow them to become familiar with the most relevant results of the Group on economic, environmental and social topics in simplified form.

Reliability

The strategic and operational processes that bring the Sustainability Report to life are illustrated and documented in the text, with special reference to the corporate sustainable development strategy procedure that describes the processes for defining the RadiciGroup context, mapping stakeholders and their expectations, and identifying material topics.

Disclosure 102-56

The Sustainability Report has been externally assured by the independent certification body CertiQuality to be in accordance with the GRI Standards: Core Option. The economic and financial figures for DISCLOSURE 201-1 underwent a voluntary audit by Deloitte, as part of the annual audit of the Radici Partecipazioni S.p.A. consolidated financial statements.

Timeliness

Disclosures 102-50, 102-51, 102-52

This Sustainability Report covers data and events for the calendar year 2021 (Disclosure 102-50) and is being released about one year after the release of the previous version, published in November 2021 (Disclosure 102-51). Any data that do not refer to the reporting year, but were included to bring the document up to date, are duly pointed out. RadiciGroup publishes its Sustainability Report on an annual basis.

Precautionary principle

Disclosure 102-11

RadiciGroup is fully aware of the potential risks of its business activities to the environment and people. Extensive and accurate risk analysis work is carried out within the management systems in all Group companies, with the collaboration of the various functions. RadiciGroup consistently conducts extensive monitoring, prevention and mitigation actions, and realizes the precautionary principle using numerous tools, including the ISO 14001 Environmental Management System and the ISO 45001 Occupational Health and Safety Management System at all its main sites.

Building RadiciGroup Sustainability Strategy

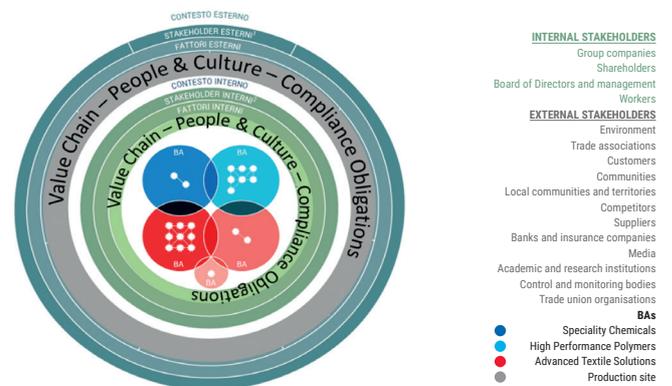
The RadiciGroup strategy in relation to sustainability is defined based on the principles formulated in the Group Vision, Mission and Values, the Policies and the Business Plan, and is implemented through a multi-function approach with the engagement of Group top management, the GRI Coordination Group, RadiciGroup sites and the stakeholders. In particular, the strategy is structured around:

- **Analysis of the organisation’s context**, to make decisions based on an overall and well-thought-out view of the scenario in which RadiciGroup operates.

- **Stakeholder mapping** and understanding of the legitimate expectations and interests of the stakeholders, together with risks, expectations and opportunities arising from the relationship with the stakeholders.
- **Engagement with stakeholders** and the expectations expressed by them.
- **Materiality analysis**, a fundamental tool to objectivize the process used to identify the most relevant topics, including the process of stakeholder engagement in the assessment of materiality itself, and to incorporate the vision of management related to each potentially material topic.

Context analysis

In 2018, extensive context analysis work, jointly managed by the heads QHSEE (Quality, Health, Safety, Energy and Environment) Management Systems and the sustainability team, led the main RadiciGroup companies to take a closer look at all the factors, both external and internal, that could influence their strategy and operations or could be influenced by the companies themselves. The context analysis highlighted the characterising factors for each site, business area and the Group as a whole, which can be concisely represented by the figure shown here.



Context & Risks/Opportunities

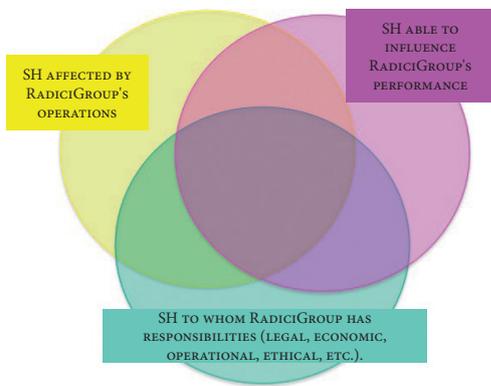
Context analysis is carried out taking into consideration the main areas that can affect the company performance, namely: the value chain (market / customers/ supply chain/ economic factors/ etc.); **people and culture** (human resources and civil society); and compliance with **normative obligations**. For each area, the analysis identifies current and forecast performance and related risks and impacts. The analysis produces a list of the actions that have been identified and a brief description of each (supported by business plans, projects, investments, etc.).

Mapping of Stakeholders, engagement methods and analysis of risks and opportunities

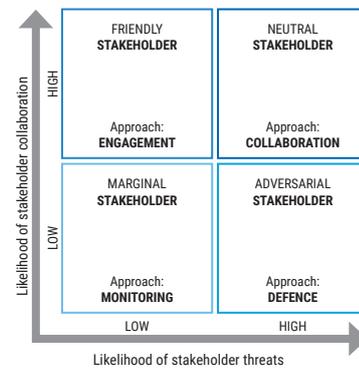
Disclosures 102-15, 102-40, 102-42, 102-43, 102-44

Together with the analysis of the context and the inherent risks, in 2018 RadiciGroup also undertook a review of the Stakeholder Mapping, created by the GRI Coordination Group set up every year, and linked to an in-depth analysis of the context that brought out ideas (and stakeholders) not previously considered. Some categories have been added, while others have been modified to better reflect the reality of the Group. In addition, a weighted mapping of Stakeholders has been built based on their level of interaction with RadiciGroup (diagram #1) and the way the Group wishes to relate to them (diagram #2).

Stakeholder Assessment Grid #1



Stakeholder Assessment Grid #2



Here is the list of Stakeholders deriving from the work described above:

- Environment
- Trade associations
- Group companies
- Shareholders
- Board of Directors and management
- Customers
- Communities
- Local communities and territories
- Competitors
- Suppliers
- Banks and insurance companies
- Workers
- Media
- Academic and research institutions
- Control and monitoring bodies
- Trade union organisations

For each of these categories of stakeholders, the expectations, risks and opportunities related to their engagement have been taken into consideration, as already reported in numerous previous Sustainability Reports. This is a table that summarises the relevant points regarding RadiciGroup’s relationship with its stakeholders.

Table 58 | Mapping of Stakeholders, their expectations, risks and opportunities, and engagement methods

Stakeholders	Stakeholders' Legitimate Expectations	RadiciGroup Response	Risks for RadiciGroup*	RP Reference Process	Risk Mitigation	RadiciGroup Opportunities	RP Reference Process	Engagement Method	RP Reference Process
Workers	<ul style="list-style-type: none"> Ethical employment relationship Stable employment relationship Health and Safety Fair compensation Career path Training and education 	<ul style="list-style-type: none"> Compliance with legal obligations RadiciGroup Code of Ethics Policies and procedures of voluntary management systems (QSE) Training and education programmes and assessment of competencies and performance Succession plans Assessment plans 	<ul style="list-style-type: none"> Demotivation^{RR+OR+FR} Disengagement^{OR} Absenteeism^{OR} Corruption^{RR+FR+PR} Fraud^{RR+FR+PR} Reputational risk^{RR} 	Ethics committee HR	<ul style="list-style-type: none"> Code of Ethics RadiciGroup Human Resources policies Adoption of voluntary management systems (QSE) MBO and benefits Career management Engagement Training and education activities 	<ul style="list-style-type: none"> Retention Motivation Efficiency 	HR	<ul style="list-style-type: none"> Training, development and assessment programmes Internal communications Engagement Targeted special events "Sto bene [I feel good]" (WHP) 	HR
Customers	<ul style="list-style-type: none"> Products and/or services meet expectations Fair and transparent relations Collaboration and relationship continuity Joint R&D projects Consulting on end customer needs, global problem solving and compliance obligations 	<ul style="list-style-type: none"> Clarity of specifications Quality consistency and quality improvement policies Implementation of Code of Ethics principles Teams dedicated to joint projects Dedicated and professionally competent staff 	<ul style="list-style-type: none"> Complaints^{OR} Insolvency^{FR} Customer losses^{OR+FR} Ineffective customer approach strategy^{RO} Reputational risk R&D work delayed or inadequate^{OR} Supply chain risk due to disappearance of market and/or product substitution^{OR} 	MKT - AFC	<ul style="list-style-type: none"> Management and technical assistance Complaint management Credit management Controlling activities Strategic and operational marketing activities R&D activities CRM activities Cultivation of customer loyalty Search for new customers Customer satisfaction activities Monitoring of supply chain Monitoring of production and replacement processes 	<ul style="list-style-type: none"> Market leadership Reputation Retention Business continuity and profitability Conquest of new markets 	MKT - AFC	<ul style="list-style-type: none"> Networking and business meetings Knowledge sharing Partnerships and joint projects Communication Targeted special events and trade fairs 	MKT
Suppliers	<ul style="list-style-type: none"> Fair value (price) Stable relationship Fair and transparent relations RadiciGroup solvency Joint development projects/activities 	<ul style="list-style-type: none"> Supplier Code of Conduct Procurement procedures General procurement terms and conditions Compliance with purchase specifications 	<ul style="list-style-type: none"> Non-conforming products / services^{OR} Business continuity not guaranteed^{FR} Corruption^{RR+FR+PR} Fraud^{RR+FR+PR} Abuse of RadiciGroup intellectual property^{PR} Failure to comply with legal requirements^{RR+PR} Failure to comply with the Supplier Code of Conduct^{RR+PR} Reputational risk^{RR} 	P&L - Ethics Committee	<ul style="list-style-type: none"> Business risk analysis Controlling activities Supplier Code of Conduct Procurement procedures and purchase specifications Risk surveillance activities 	<ul style="list-style-type: none"> Reputation Business continuity Synergies Development 	P&L	<ul style="list-style-type: none"> Networking and business meetings Knowledge sharing Partnerships Acceptance of the Code of Conduct Communication 	P&L - MKT
Group companies	<ul style="list-style-type: none"> Products and/or services meet expectations Fair and transparent relations Collaboration and strengthening of value chain 	<ul style="list-style-type: none"> Guidelines and procedures Assistance and consulting Network building Synergies Knowledge sharing 	<ul style="list-style-type: none"> Misalignment of parent company and subsidiary policies^{OR} Reputational risk^{RR} 	Q&P	<ul style="list-style-type: none"> Integrated management systems Group-wide projects and work groups Coordinating activities 	<ul style="list-style-type: none"> Synergies Optimisation Business opportunities 	Q&P	<ul style="list-style-type: none"> Networking and business meetings Group-wide teams Knowledge sharing Communication 	Q&P

Shareholders	<ul style="list-style-type: none"> Return on invested capital Business profitability Increase in intangible value 	<ul style="list-style-type: none"> Strategic plans and related budgets Management systems Acquisitions Reorganisations 	<ul style="list-style-type: none"> Market risk^{SR} Financial risk^{FR} Reputational risk^{RR} 	AFC	<ul style="list-style-type: none"> Risk prevention and response^(FCO1) Controlling activities^(FCO1) Marketing and communication policies^(PRI10) 	<ul style="list-style-type: none"> Business continuity and profitability 	AFC	<ul style="list-style-type: none"> Daily strategic and operational engagement Reporting activities and programme meetings Communication 	AFC
Board of Directors & Management	<ul style="list-style-type: none"> Business profitability Increase in intangible value Fair and transparent relations Collaboration and strengthening of value chain 	<ul style="list-style-type: none"> Strategic plans and related budgets Management systems Acquisitions Reorganisations Guidelines and procedures Network building Synergies Knowledge sharing 	<ul style="list-style-type: none"> Market risk^{SR} Financial risk^{FR} Reputational risk^{RR} Misalignment of parent company and subsidiary policies^{OR} 	AFC – COM&ER	<ul style="list-style-type: none"> Controlling activities Marketing and communication policies Integrated management systems Group-wide projects and work groups Coordinating activities 	<ul style="list-style-type: none"> Business continuity and profitability Synergies Optimisation Business opportunities 	AFC	<ul style="list-style-type: none"> Daily strategic and operational engagement Reporting activities and programme meetings Knowledge sharing Group-wide teams 	BA Managers – Q&P
Banks and insurance companies	<ul style="list-style-type: none"> Profits Stable relationship Fair and transparent relations RadiciGroup solvency 	<ul style="list-style-type: none"> Short- and medium-term economic plans and policies Clear economic/ financial reporting compliant with laws and regulations Third-party audited financial statements Policies for reducing financial indebtedness 	<ul style="list-style-type: none"> Increase in interest rates^{FR} Lack of financing^{FR} Bank bankruptcy^{FR} 	AFC	<ul style="list-style-type: none"> Direct ongoing collaboration with banks Policies and plans aimed at strengthening RadiciGroup financial soundness and reputation^(FCO1) Controlling activities^(FCO1) Search for financing at best interest rates^(FCO1) Careful monitoring of banks 	<ul style="list-style-type: none"> Reputation Trust Business continuity 	AFC	<ul style="list-style-type: none"> Networking and business meetings Sharing information Partnerships Communication 	AFC
Environment	<ul style="list-style-type: none"> Continuity Protection Respect Equilibrium 	<ul style="list-style-type: none"> Sustainable development 	<ul style="list-style-type: none"> Lack of raw materials^{OR} Catastrophic events^{FR} Accidental events^{OR} 	GRI team – P&L	<ul style="list-style-type: none"> Compliance with legal obligations Prevention activities Voluntary plans and actions for environmental protection 	<ul style="list-style-type: none"> Business continuity New markets 	MKT	<ul style="list-style-type: none"> Policies as per Sustainability Report 	GRI team
Trade union organisations	<ul style="list-style-type: none"> Freedom of association Dialogue Trust Collaboration Communication 	<ul style="list-style-type: none"> Compliance with legal obligations RadiciGroup Code of Ethics Presence of trade unions Regular meetings with trade union organisations 	<ul style="list-style-type: none"> Strikes^{OR} Reputational risk^{RR} Legal proceedings^{OR+FR+RR} 	HR	<ul style="list-style-type: none"> Concerted arrangements Joint projects Legal action 	<ul style="list-style-type: none"> Reputation Corporate climate 	HR	<ul style="list-style-type: none"> Concerted arrangements Development of joint projects 	HR
Local Communities & Territories (schools, etc.)	<ul style="list-style-type: none"> Environmental protection and safety Local community-friendly employment policies (local resources, people with disabilities, youth, etc.) Economic and social support Transparency and communication Leadership in training local resources 	<ul style="list-style-type: none"> Responsible medium- to long-term environmental policies Employment policies favouring local human resources^(PRO3) Sustainability Report and constant communication^(PRO8) Social and philanthropic marketing 	<ul style="list-style-type: none"> Environmental risks^{PR} Health and safety^{PR} Less employment in community^{PR} Risk of social context degradation^{PR} Reputational risk^{RR} 	GRI team – MKT-HR	<ul style="list-style-type: none"> Compliance with legal obligations RadiciGroup Sustainability policies and integrated management systems Implementation of RadiciGroup employment policies Cultivation of relationships with local communities (e.g., open factories) 	<ul style="list-style-type: none"> Reputation Mutual support Local professional pool 	GRI team – MKT-HR	<ul style="list-style-type: none"> Communication Targeted special events Activities as per Sustainability Report RadiciGroup Education Programme Career days 	GRI team – MKT-HR
Control and monitoring bodies	<ul style="list-style-type: none"> Compliance with legal and regulatory obligations 	<ul style="list-style-type: none"> Compliance with legal and regulatory obligations 	<ul style="list-style-type: none"> Sanctions^{OR} Sequester and closing of plants^{OR} Conviction and sentencing^{OR+RR} Reputational risk^{RR} 	CEO-AFC	<ul style="list-style-type: none"> Adoption of certified management systems Prevention activities Training and education Organisational model 231 	<ul style="list-style-type: none"> Business continuity Continual improvement of management systems Saving Reputational solidity Innovation 	AFC – HR – Q&P – L&P	<ul style="list-style-type: none"> Communication Sharing and cooperation Transparent information 	MKT – AFC

Competitors	<ul style="list-style-type: none"> Fair and transparent relations Fair competition Joint action to protect common interests 	<ul style="list-style-type: none"> Application of the Code of Ethics Implementation of RadiciGroup Vision, Mission and Values Active participation in production chain/sector programmes and projects 	<ul style="list-style-type: none"> Loss of market share ^{OR+FR} Ineffective joint marketing-R&D strategy and management systems ^{OR} Reputational risk ^{RR} Ineffective communication strategy ^{OR} 	MKT	<ul style="list-style-type: none"> Strategic and operational marketing activities Membership in industry and sector associations Monitoring of internal activities CRM activities 	<ul style="list-style-type: none"> Collaboration through trade associations to safeguard the market Industry-wide innovation Reputation 	MKT	<ul style="list-style-type: none"> Networking and business meetings Social events Communication 	MKT
Media	<ul style="list-style-type: none"> Clarity Transparency Ongoing relationship Mutual trust 	<ul style="list-style-type: none"> RadiciGroup marketing policies ^(PRIO) Consistent communication policies 	<ul style="list-style-type: none"> Reputational risk due to lack of information or spread of misleading information ^{RR} 	MKT	<ul style="list-style-type: none"> Ongoing media communication activities of corporate and BA functions 	<ul style="list-style-type: none"> Reputation 	MKT	<ul style="list-style-type: none"> Press Office activities Active social media presence Engagement in initiatives 	MKT
Academic institutions	<ul style="list-style-type: none"> Knowledge sharing Employment opportunities Support 	<ul style="list-style-type: none"> Internships Education days Sponsorships 	<ul style="list-style-type: none"> Misalignment of skills offered vs skills required by RadiciGroup ^{OR} Reputational risk ^{RR} 	I&R	<ul style="list-style-type: none"> Strong relationships with schools and universities Joint projects and training programmes 	<ul style="list-style-type: none"> Reputation Pool of competencies and professional profiles 	I&R	<ul style="list-style-type: none"> Targeted special events Career days Collaboration (training and profile selection) Communication 	I&R
Trade associations	<ul style="list-style-type: none"> Collaboration Trust Innovation proposals 	<ul style="list-style-type: none"> Dialogue and participation Transparency and communication Training and information Sharing of knowledge and experiences 	<ul style="list-style-type: none"> Risk of conceding to unshared decisions ^{OR} Weakened network and loss of lobbying capacity ^{RR} Reputational risk (e.g., activist organisation) ^{RR} 	MKT – I&R	<ul style="list-style-type: none"> Active presence of RadiciGroup representatives as influencers in associations Transparent communication about sustainability results: GRI, PCRs, EPDs, LCAs, etc. 	<ul style="list-style-type: none"> Reputation Public relations and influencer activities 	MKT – I&R	<ul style="list-style-type: none"> Participation in activities and decision-making processes Communication 	MKT – I&R
Communities	<ul style="list-style-type: none"> A better world Meeting their needs 	<ul style="list-style-type: none"> Sustainable development 	<ul style="list-style-type: none"> Market risk ^{SR} Reputational risk ^{RR} 	MKT – I&R	<ul style="list-style-type: none"> Attention Knowledge 	<ul style="list-style-type: none"> Innovation New markets 	MKT – I&R	<ul style="list-style-type: none"> Communication Dialogue Networking and business meetings Policies as per Sustainability Report 	MKT – I&R

* Some risks are related to a failed or incomplete response to the stakeholders' legitimate expectations and are reported in order of probability of occurrence. Furthermore, risks are classified by category as follows:

Table 59

Description	Risk category	Category code	Examples
Risks related to events likely to increase or decrease the value of the business (i.e., give rise to net income or loss). A risk can be positive or negative.	STRATEGIC Risk	RS	Sales budget, raw materials procurement, etc.
Risks related to events only likely to decrease the value of the business (i.e., give rise to a loss).	Operating Risk	RO	Process, technology, complexity of rules and regulations, human resources, information systems and infrastructure, control and quality systems, contractual liabilities (related to specific products, penalties, etc.).
Risks related to events only likely to decrease the value of the business (i.e., give rise to a loss).	Financial Risk	RF	Overdraft, financial exposure, payments, solvency, etc.
Risks related to events only likely to decrease the value of the business (i.e., give rise to a loss).	Reputational risk RR	RR	Ability to stay in the market, trust, reliability, image and ability to ensure product standards, communication processes, COMM-ER and CSR.
Risks related to events only likely to decrease the value of the business (i.e., give rise to a loss).	Pure Risk	RP	Owned property, work-related injuries, production continuity, natural disasters, social and political events, illegal acts, environmental pollution, etc.

At the basis of all RadiciGroup's responses to these expectations and risk mitigation policies is constant assessment of performance and the principle of continual improvement established in ISO 9001, illustrated in procedure PR09 and implemented daily in the Group's businesses. At the basis of stakeholder engagement activities are the principles illustrated in the RadiciGroup Sustainability Report, namely the principles of inclusiveness, dialogue, transparency and clarity.

Along with this analysis, in 2019 some specific risk analyses were also conducted dealing with the Group's market scenario and the economic and financial context in which it operates. The results of the targeted analyses are summarised below:

Market risk

The Group is exposed to risks resulting from competition and fluctuations in volumes and prices. Against such eventualities, in 2019 it continued to monitor the market so as to promptly catch any signal the market might have sent out both in terms of potentially risky situations and opportunities.

Financial risk

RadiciGroup is exposed to certain financial risks associated with its operations. These risks are kept under constant review by the centralised function of Finance, Credit Management and Procurement, an approach

aimed at anticipating potential negative scenarios and taking appropriate action to mitigate them. In particular, in 2019 the Group had the need to monitor the following potential risks:

- Credit risk;
- Liquidity risk
- Interest rate risk
- Exchange rate risk

Such analysis supplements the process of identifying material topics. The analysis revealed that the organisation is not exposed to particularly risky situations, either internal or external, and the topics illustrated above may be ranked as relevant but not strategic, albeit worthy of continual close monitoring.

Risks related to commodity price change

A final category of risk to which the Group is exposed is that of changes in commodity prices. The Group's results, as also indicated above, are affected by the change in the price of certain raw materials, which affects profitability aspects in the short term and strategic-competitive aspects in the medium term. This risk is mitigated – with the help of the corporate Strategic Materials and Logistics function – through careful monitoring of existing market conditions, targeted procurement initiatives and agreements with Suppliers.

Materiality analysis

Disclosures 102-43, 102-46

To further strengthen its sustainability strategy, during 2018 and 2019, RadiciGroup also conducted a substantial revision of the materiality analysis system, basing it on the context analysis and the stakeholder mapping described above and on the materiality analysis for the years 2015, 2016 and 2017.

Through a questionnaire, the members of the Sustainability Team were asked to express their assessment of the general importance of each topic, the potential impacts of the topic on the Group (economic, reputation or any other kind of impact) and how the topic was being managed by the Group. **This assessment constituted the internal materiality analysis, validated by Group top management.**

The strengthening of the method has led to greater clarity in the objectives, a more group-wide approach and the concrete involvement of some categories of stakeholders: local communities, suppliers and employees. These stakeholders have been selected on the basis of their proximity, either physical or strategic, to RadiciGroup and their growing degree of interaction with the Group.

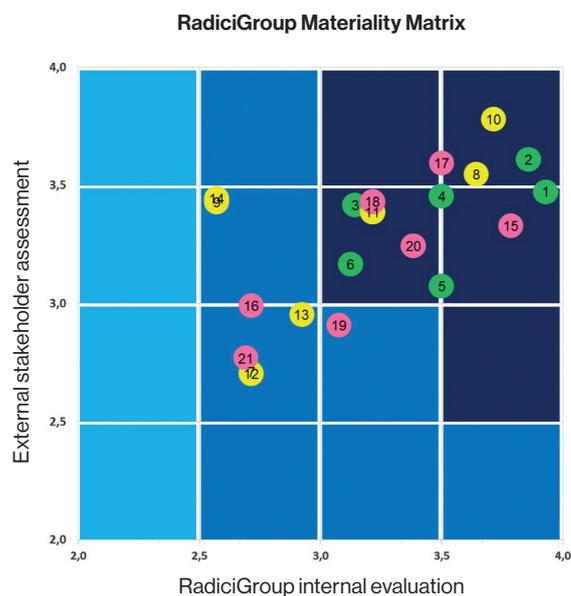
An assessment questionnaire, similar to the one submitted to the sustainability Team, was extended to some key RadiciGroup Suppliers, to a representative group of the inhabitants of the Province of Bergamo, diversified by place of residence, age group, employment and educational level, and to the approximately 170 Employees who had attended a training course on the Sustainability Report held in 2018. **This assessment constituted the external materiality analysis.**

Table 60 | **Topics on which Stakeholders were asked to give their assessment**

Environmental Development	1	Energy
	2	Emissions
	3	Water
	4	Waste
	5	Raw materials
	6	Product sustainable innovation and measurement of product environmental impacts
	7	Supplier environmental assessment
Social Development	8	Employment
	9	Equal opportunity and non-discrimination
	10	Occupational health and safety
	11	Employee training and education
	12	Supplier social assessment
	13	Interaction with local communities
	14	Consumer health and safety
Economic & Management Development	15	Economic performance
	16	Labelling and marketing communications
	17	Customer satisfaction
	18	Regulatory compliance
	19	Value chain traceability
	20	Certifications and integrated management systems
	21	Listening to the communities

The topics brought to light by the internal and external materiality analyses are shown in the following Materiality Matrix, which was kept valid also for the year 2021.

Disclosure 102-47



Materiality Criteria

A = Relevant and strategic (i.e., material) topics

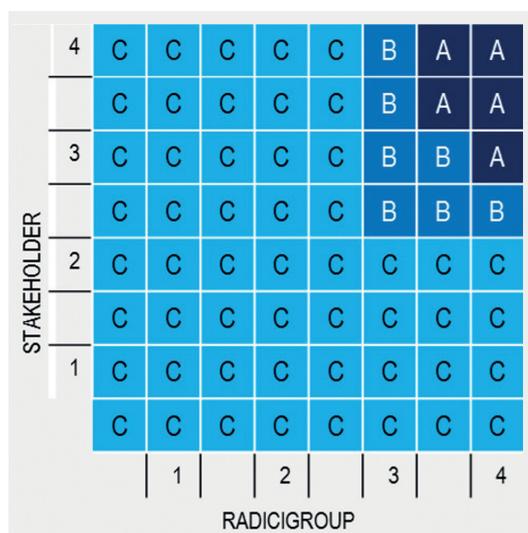
Areas of interest and operation critical for both RadiciGroup and the stakeholders that need to be taken into consideration by management as strategic.

B = Relevant but non-strategic topics

Areas relevant to corporate performance and stakeholders, but not central to business strategy (some topics may be considered material in view of future strategies, especially those on which stakeholder attention is growing).

C = Non-relevant topics

Low-priority areas for RadiciGroup and its stakeholders, but which must be monitored in any case.



(Source: PR 08 - "Approach to management for sustainable development", ed. 2 - 2019)

The topics considered material were subject to reporting and included in this Sustainability Report, objectivised through the indicators and illustrated by case histories. The table below allows the reader to identify the material topics in the various chapters.

Table 61 | **References to material topics in the report**

Environmental Development	1	Energy	Page 65
	2	Emissions	Page 71
	3	Water	Page 73
	4	Waste	Page 61
	5	Raw materials	Page 58
	6	Product sustainable innovation and measurement of product environmental impacts	Pages 88 and 96
Social Development	8	Employment	Page 25
	10	Occupational health and safety	Page 79
	11	Employee training and education	Page 31
Economic & management development	15	Economic performance	Page 47
	17	Customer satisfaction	Page 34
	18	Regulatory compliance	Page 96
	20	Certifications and integrated management systems	Page 98

Assurance Statement

Disclosure 102-56

This Sustainability Report is validated by the third-party certification company CertiQuality to be in accordance with the reporting model "Global reporting Initiative" – GRI Standards: Core Option.



CertiQuality Srl
Via G. Giardino, 4
20123 Milano - IT
Ph. +39 02 8069171
certiquality.it

C.F. e P.I. 04591610961
R.L. MI 04591610961
R.E.A. MI 1759336
Cap. Soc. € 1.000.000 I.v.
info@certiquality.it

VERIFICATION OF THE 2021 YEAR SUSTAINABILITY REPORT OF 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 2021 (Italian version), in order to assess its consistency with the guidelines of the GRI (Global Reporting Initiative) Standards, with reference to the option "core", which indicates that the report contains the minimum information needed and the quantification of at least one performance indicator for each identified material topic. This letter describes the activities carried out, it reports on the audit findings and the recommendations for improvement.

The verification has been carried out with reference to the "GRI Standards" published in 2016 by the Global Reporting Initiative and partly updated at a later time, and it has concerned in particular:

- the verification of the definition principles of the report content (stakeholder inclusiveness, sustainability context, materiality, completeness);
- the correct definition of the report boundary;
- the verification of the principles for guaranteeing report quality (balance, comparability, accuracy, timeliness, clarity, reliability of the data and information management system);
- the compliance of the report contents with the ones set out by the GRI Standards guidelines for the "core" implementation level.

The verification has been carried out in compliance with the procedures implemented by CertiQuality for audits 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 in accordance with the following operating methods:

- analysis of the "2021 Sustainability Report of Radici Group" Italian version document, with particular reference to the principles and contents set out by the GRI guidelines (definition of the report boundary, standard information and performance indicators);
- interviews with the positions directly or indirectly involved in the drawing up of the document and in the processing of data and information (from collection to further processing);
- examination of documents and records in place at the operative site of Radici Partecipazioni S.p.A. in Gandino and at a representative sample of production sites included in the report boundary: S.C. Yarnea Srl (Romania); Radici Yarn S.p.A. (Italy); Radici Chimica S.p.A (Italy).; Logit Sro (Czech Republic); Radici Novacips S.p.A. (Italy); Radici Plastics Mexico S. de R.L. de C.V;
- the analysis has concerned both the procedures implemented for the collection, filing and processing of data and the technical-normative aspects of the activities carried out.

The economic-financial data are taken from the consolidated balance sheet of Radici Partecipazioni S.p.A., that already underwent a voluntary auditing of accounts (as per letter by Deloitte & Touche of 31/05/2022), therefore they have not been further checked.

The verification activities concerning the management of the data and information contained in the report have been carried out on samples, taking care of ensuring that all the aspects handled in the document have been adequately covered.

Results and recommendations

The "2021 Radici Group Sustainability Report" (Italian version), extended for the first time to the entire scope of consolidation of the economic-financial report, 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 picture of the relationship of the group companies with the context in which they operate.



ORGANISMO
NOTIFICATO
0546



Member degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC;
Signatory of EA, IAF and ILAC Mutual Recognition Agreements.
SRI n. 0004 - SCF n. 0010 - SCR n. 0027 - FSM n. 0001
FRD n. 0008 - DAP n. 0030
SSI n. 0076 - SRE n. 0018 - ISF n. 0082 - EHG n. 0100
EMAS n. 000P - ITX n. 0041 - PRS n. 100C



Certiquality Srl
Via G. Giardino, 4
20123 Milano - IT
Ph. +39 02 8069171
certiquality.it

C.F. e P.I. 04591610961
R.L. MI 04591610961
R.E.A. MI 1759336
Cap. Soc. € 1.000.000 i.v.
info@certiquality.it

Numerical performance indicators are represented over the 3 years 2019-2021, with some references in the text to a wider period, in order to enable an evaluation of the trend of performances since the start of the GRI project. The information is reported in a clear and balanced way and the language used, supplemented where necessary by some explanatory notes, allows it to be understood even by a not strictly technical public. The treatment of environmental aspects is organized according to thematic strands (materials used - waste; energy consumption - atmospheric emissions; water consumption – waste water) which make reading more effective. As far as the report boundary is concerned, there are no significant exclusions, especially after the extension of the scope to commercial, financial and service companies; the closure of one of the factories, which took place at the end of 2021, has no impact on the reporting period and the same is therefore reasonably included until the end of the period, also with regard to personnel data. Both the standard disclosure and the representation of the indicators show a good degree of consistency with the requirements of the GRI Standards guidelines, with further progress compared to previous years, although there are still some limited margins for improvement.

In some cases the indicators are reported in a more exhaustive and complete way than the minimum requirement of the Standards (e.g. energy, waste water), referring to previous and more articulated versions of the GRI standards or, as in the case of the 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 the reference standard.

With regard to some indicators, characterized by the absence of certain facts or events (e.g. absence of party funding, absence of various types of sanctions, absence of discrimination cases), given the difficulty in verification, it was requested to produce declarations the management of the companies or BAs being audited. The data collection and data processing system is sufficiently well-structured and documented at the central level and has been improved at the local level, even if from the verifications carried out on the sample sites some margin for improvement is confirmed, especially with respect to foreign sites.

The audits carried out confirm some specific margins for improvement of limited relevance, inherent, for example, to the homogeneity in the collection of data in different contexts even in the face of very different regulations (e.g. classification and destination of waste, accidents) or to some insubstantial details on the reporting methods (eg water stress, training by employee categories). More generally, it is recommended to pursue further the constant improvement of the data management system, especially as regards the information transmitted to foreign sites regarding the criteria for data collection and the checks to be carried out on the collected data.

Conclusions and asseveration

The verification of the "Sustainability Report of Radici Group" (Italian version) concerning the year 2021 has not given rise to any significant issues, neither as regards compliance with the principles of the guidelines of the GRI Standards, nor as regards its content in terms of reported information or Performance Indicators, while still leaving some room for improvement.

In view of the above, the Sustainability report of Radici Group relating to the year 2021 is declared to be asseverated to the "core" option requirement level of the GRI guidelines.

July 21st, 2022

Certiquality S.r.l.
The President
Cesare Puccioni



Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC,
Signatory of EA, IAF and ILAC Mutual Recognition Agreements.
SQC n. 004A - SGA n. 010D - SCTI n. 002F - FSM n. 004H
PRD n. 008B - DAP n. 003H
SSI n. 009G - SRE n. 001M - ISF n. 006E - SRA n. 010O
EMAS n. 006P - ITX n. 004L - PPS n. 100C

Contacts and useful addresses

Disclosure 102-3

Registered Office
(Parent Company)
Radici Partecipazioni S.p.A.
Via Verdi 11
24121 - Bergamo, Italy

Administrative Head Office
(Parent Company)
Radici Partecipazioni S.p.A.
Via Ugo Foscolo, 152
24024 - Gandino (BG) – Italy

Operating Head Office
(Parent Company)
Radici Partecipazioni S.p.A.
Via Ca' Antonelli, 55
24024 - Gandino (BG) – Italy

To learn more about the Sustainability Report:

Disclosure 102-53

Communication & External Relations
Via Ca' Antonelli, 55 - 24024 - Gandino (BG), Italy
tel: +39 035 7154 11 - communication@radicigroup.com

Follow us on:

GRI Content Index

Disclosure 102-55

Table 62

GRI standard	Disclosure	Page	Omissions
General			
GRI 102 General disclosures 2016	102-1 Name of the organisation	101	
	102-2 Activities, brands, products, and services	10 - 13	
	102-3 Location of headquarters	112	
	102-4 Location of operations	10 - 43	
	102-5 Ownership and legal form	20	
	102-6 Markets served	10 - 13 - 34	
	102-7 Scale of the organisation	10	
	102-8 Information on employees and other workers	25 - 26	
	102-9 Supply chain	35	
	102-10 Significant changes to the organisation and its supply chain	35	
	102-11 Precautionary Principle or approach	103	
	102-12 External initiatives	4 - 5 - 7	
	102-13 Membership of associations	43	
	102-14 Statement from senior decision-maker	9	
	102-15 Key impacts, risks, and opportunities	37 - 104	
	102-16 Values, principles, standards, and norms of behaviour	5 - 8 - 24 - 34	
	102-18 Governance structure	20 - 24 - 25	
	102-40 List of stakeholder groups	23 - 37 - 38 - 104	
	102-41 Collective bargaining agreements	29	
	102-42 Identifying and selecting stakeholders	104	
	102-43 Approach to stakeholder engagement	23 - 24 - 25 - 101 104 - 108 - 118	
	102-44 Key topics and concerns raised	104	
	102-45 Entities included in the consolidated financial statements	101	
	102-46 Defining report content and topic Boundaries	101 - 108	
	102-47 List of material topics	109	

GRI 102 General disclosures 2016	102-48 Restatements of information	102	
	102-49 Changes in reporting	102	
	102-50 Reporting period	103	
	102-51 Date of most recent report	103	
	102-52 Reporting cycle	103	
	102-53 Contact point for questions regarding the report	112	
	102-54 Claims of reporting in accordance with the GRI Standards	101	
	102-55 GRI content index	113	
	102-56 External assurance	102 - 111	
Economic performance			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	47	
	103-2 The management approach and its components	47	
	103-3 Evaluation of the management approach	47	
GRI 201 Economic performance 2016	201-1 Direct economic value generated and distributed	47	
Tax			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	53	
	103-2 The management approach and its components	53	
	103-3 Evaluation of the management approach	53	
GRI 207 Tax 2020	207-1 Approach to tax	53	
	207-3 Stakeholder engagement and management of concerns related to tax	57	
	207-4 Country-by-country reporting	54 - 55	
Employment			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	31	
	103-2 The management approach and its components	31	
	103-3 Evaluation of the management approach	31	
GRI 401 Employment	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	31	
Materials and waste			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	58	
	103-2 The management approach and its components	58	
	103-3 Evaluation of the management approach	58	

GRI 301 Materials 2016	301-1 Materials used by weight or volume	58	
Waste			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	61	
	103-2 The management approach and its components	61	
	103-3 Evaluation of the management approach	61	
GRI 306 Waste 2020	306-1 Waste generation and significant waste-related impacts	61	
	306-2 Management of significant waste-related impacts	53 - 61 - 64	
	306-3 Waste generated	63	
	306-4 Waste diverted from disposal	62 - 63	
	306-5 Waste directed to disposal	63	
Energy			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	65	
	103-2 The management approach and its components	65	
	103-3 Evaluation of the management approach	65	
GRI 302 Energy 2016	302-1 Energy consumption within the organisation	65	
	302-3 Energy intensity	52	
Emissions			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	71	
	103-2 The management approach and its components	71	
	103-3 Evaluation of the management approach	71	
GRI 305 Emissions 2016	305-1 Direct (Scope 1) GHG Emissions	71	
	305-2 Energy indirect (Scope 2) GHG Emissions	71	
	305-4 GHG emissions intensity	52 - 71	
	305-7 Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	71	
Water and effluents			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	73	
	103-2 The management approach and its components	73	
	103-3 Evaluation of the management approach	73	
GRI 303 Water and effluents 2018	303-1 Interactions with water as a shared resource	73	
	303-3 Water withdrawal	53 - 74	
	303-4 Water discharge	76	

Occupational health and safety			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	79	
	103-2 The management approach and its components	79	
	103-3 Evaluation of the management approach	79	
GRI 403 Occupational health and safety 2018	403-1 Occupational health and safety management system	79 - 81	
	403-2 Hazard identification, risk assessment, and incident investigation	79 - 81	
	403-3 Occupational health services	81	
	403-4 Worker participation, consultation, and communication on occupational health and safety	80 - 81	
	403-5 Worker training on occupational health and safety	31 - 32	
	403-9 Work-related injuries	81 - 82	
	403-10 Work-related ill health	81 - 85	
Training and education			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	31	
	103-2 The management approach and its components	31	
	103-3 Evaluation of the management approach	31	
GRI 404 Training and education 2016	404-1 Average hours of training per year per employee	31 - 32	
Local Communities			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	38	
	103-2 The management approach and its components	38	
	103-3 Evaluation of the management approach	38	
GRI 413 Local Communities	413-1 Operations with local community engagement, impact assessments, and development programs	38 - 39	
Public policy			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	38	
	103-2 The management approach and its components	38	
	103-3 Evaluation of the management approach	38	
GRI 415 Public policy 2016	415-1 Political contributions	38	
Marketing and labelling			
GRI 103 Management approach disclosure 2016	103-1 Explanation of the material topic and its Boundary	96	
	103-2 The management approach and its components	96	
	103-3 Evaluation of the management approach	96	

GRI 417 Marketing and labelling 2016	417-1 Requirements for product and service information and labelling	96	
	417-2 Incidents of non-compliance concerning product and service information labelling	97	
	417-3 Incidents of non-compliance concerning marketing communications	97	

Table 56 | **Additional disclosures index**

GRI standard	Disclosure	Page	Omissions
GRI 207 Tax 2019	207-1 Approach to tax		
	207-3 Stakeholder engagement and management of concerns related to tax		
	207-4 Country-by-country reporting		
GRI 302 Energy 2016	Tab INDEX - direct primary energy consumption in relation to quantities processed		
	Tab INDEX - intermediate energy consumption in relation to quantities processed (value referred to electricity)		
	Tab INDEX - total consumption of primary energy from fossil sources in relation to quantities processed		
GRI 303 Water 2016	Tab INDEX - water resources (GRI 303-1) to total net value added		
	Tab INDEX - use of water resources in relation to quantities processed		
GRI 303 Water and effluents 2016	Tab INDEX - waste subject to disposal without recovery (GRI 306-2) to total net value added		
	Tab INDEX - water discharge in relation to quantities processed		
	Tab INDEX - total weight of process waste in relation to quantities processed		
	Tab INDEX - total weight of waste in relation to quantities processed		
Training and education	Tab INDEX - training hours per capita		
	Tab INDEX - training hours by region		
Certifications and integrated management systems			
Product sustainable innovation and measurement of product environmental impacts		See product sections and sections on transparency and traceability	

Sustainability Report collaborators

Disclosure 102-43

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.

Nicola Agnoli	Maurizio Cerina	Mauro Invernizzi	Gerhard Pfeiffer
Stefano Alini	Gianluca Cesco Frare	Michael Jordan	Sergio Plascencia
Guillermo Ambrosio	Claudia Ciurcan	Susan Krause	Matteo Poma
Pierluigi Arrighetti	Teresa Chen	Jiří Kubica	Enza Prisco
Tiziana Arrighetti	Paola Corbani	Miroslav Kuthan	John Rae
Fabio Artimiak	Mauro Corsellini	Aliz Lassar	Alessandra Ramos
Luca Arzuffi	Edi Degasperi	Stefania Locatelli	Shelly Ray
Violeta Avram	Francesca Dellino	Walter Locatelli	Arianna Restelli
Petra Bannert	Massimo De Petro	Zaira Locatelli	Angela Reuther
Rita Barbaini	Sara Di Fiore	Andrea Longhi	Miguel Rodrigues
Roberta Beltrami	Doria Dong	Camilla Lorenzi	Davide Roncato
Elias Bernardo	Silvio Dorati	Marco Lupato	Antonio Rottigni
Maria Teresa Betti	Daniele Dossi	Rachel Ma	Erivaldo Santos
Matteo Bettinaglio	Janina Egger	Eros Madaschi	Alfonso Sanz
Simone Bispo	Lucas Estefani	Michele Magnati	Stefano Savoldelli
Filippo Bona	Humberto Estrada	Alessandro Manzoni	Nicole Seidel
Flavio Bonandrini	Chiara Ferraris	Franco Maretoli	Abele Servalli
Alessandro Bonarini	Pamela Fleischer	Fabrizio Mastandrea	Alberto Sessolo
Raffaele Bonodio	Paulo Freitas	Elena Matei	Carlos Sotelo
Brian Boyle	Andrea Galla	Maria Mazzoleni	Juliana Souza
Kumar Brajesh	Marco Gamba	Silvia Meloncelli	Rafael Sousa
Enrico Buriani	Pio Gazzini	Jens Metzner	Aaron Sun
Martina Caccia	Elisa Gelmi	Danilo Micheletti	Katia Sutil
Stefano Cagninelli	Luigi Gerolla	Paolo Nava	Mariagrazia Tateo
Francesco Calamina	Alberto Giana	Junior Oliveira	Marta Uglietti
Ottavio Calia	Cristina Giromini	Giorgio Ongaro	Gabriela Ursache
Alessandra Campana	Ettore Grassi	Ervedo Oprandi	Valentina Verratti
Jane Campos	Laura Grassini	Maddalena Orsini	Vanessa Villasenor
Paola Capella	Marzia Gritti	Carlo Sante Paganessi	Uwe Wedekind
Susanna Caprotti	Alessia Guadagni	Monica Paganoni	Lu Xian
Marisa Carrara	Marco Guerini	Alessandro Pagnini	Antonella Zaffaroni
Sara Carrara	Riccardo Guerini	Fabio Pandolfi	Cristian Zanchi
Ana Caroline	Felix Hua	Martina Pandolfi	Marius Zavada
Alessandra Cassera	Bertrand Honneger	Paola Panzeri	Chiara Zilioli
Antonella Castelli	Gritt Hultsch	Federico Percassi	Daniela Zulato
Claudia Castelli	Antonella Imberti	Anderson Pernambuco	Laura Zulato
Lucie Cecrlova	Maida Indigeno	Giorgio Pezzoli	



www.radicigroup.com