



Sustainability Report

ABSTRACT 2023



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Our business

FIS is a privately owned company which has been operating for more than 60 years, **Europe's leading contract manufacturer (CDMO) of Active Pharmaceutical Ingredients (APIs) and Intermediates.**

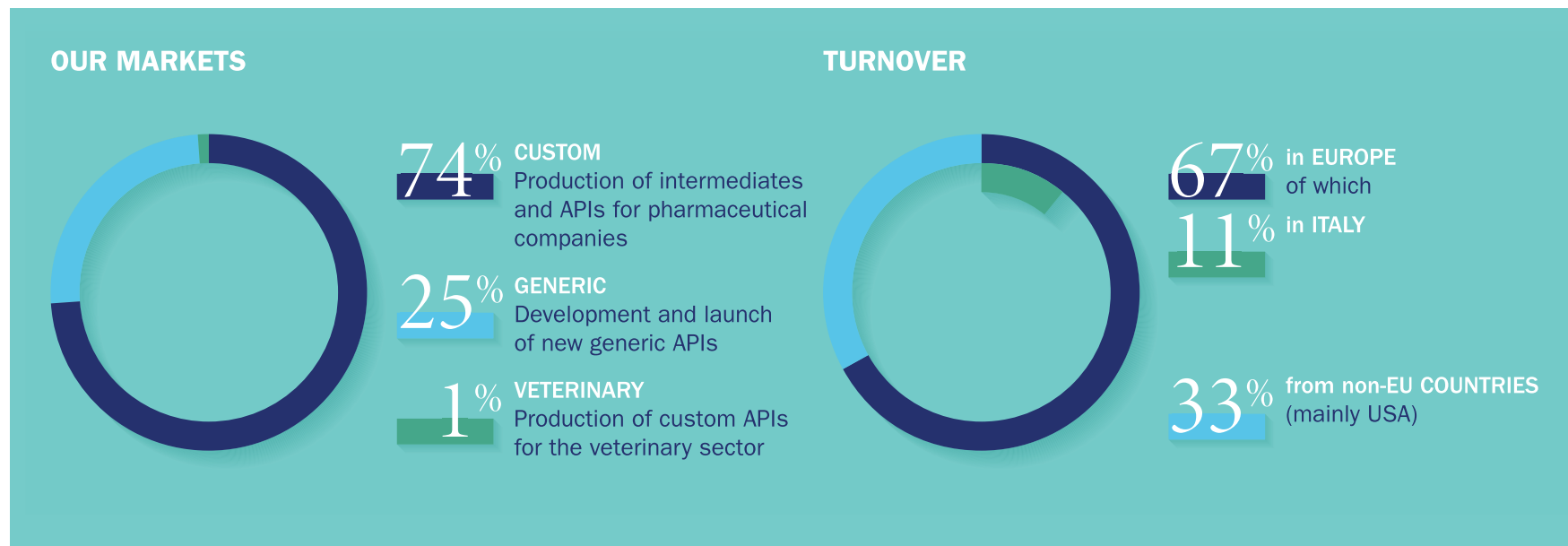
The company sustainably develops and produces **active pharmaceutical ingredients**, the essence of the beneficial effects for people, from the development stage to commercial production it is an **experienced partner** for major international pharmaceutical industries.

FIS is **authorized by the AIFA (Italian pharmaceutical agency) and the Italian Ministry of Health** to produce **more than 100 APIs** of various therapeutic classes including anticancer, steroids, psychotropics, non-beta lactam antibiotics and APIs for veterinary use.

Our core business is comprised of:

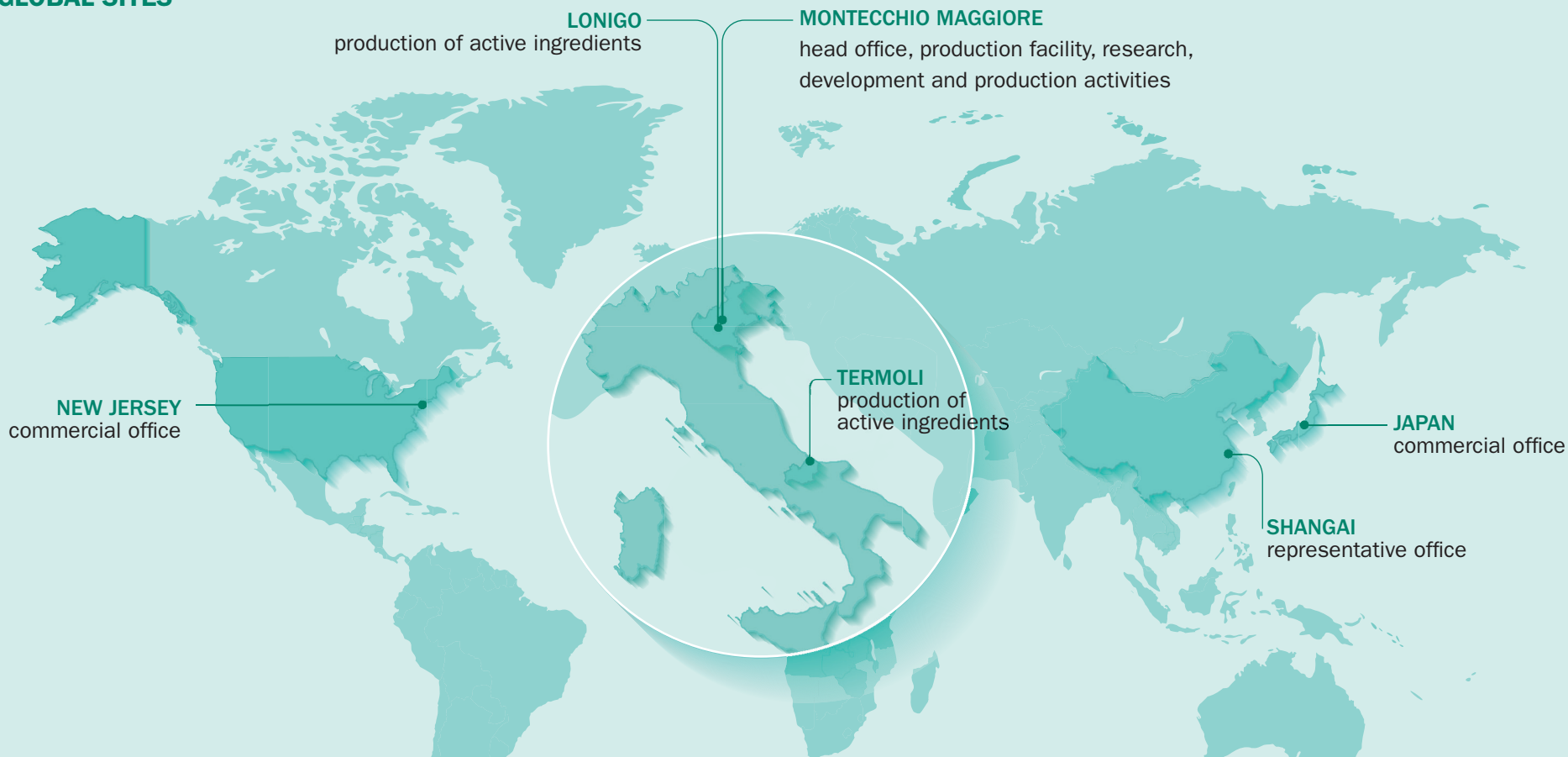
- custom synthesis, the exclusive production of intermediates, advanced intermediates and active ingredients for patent-holding pharmaceutical companies;
- the generic market, for which we develop and sell active ingredients of various types;
- the veterinary market with both generic and custom products.

The number 1 in Italy and one of the leaders in Europe for the production of active ingredients for the pharmaceutical industry



Our locations

OUR GLOBAL SITES



3

Production sites



672

Turnover € mn



65

Years of activity



1900

Employees



70

Countries reached



300+

Customers



14

of the Top 20
pharmaceutical
companies

Our commitment

Sustainability is one of the pillars of our Strategic Plan, and every investment project must include an impact and outcome assessment in this regard: this focus must involve everyone, beginning with everyday activities.

We are making the **manufacturing processes** at our production sites even more **efficient** in terms of the environmental impact of our activities, but not only that.


The company has put together a **Sustainability Plan** (2023-2025) under the guidance of the **Sustainability Manager** and with the cooperation of all company departments, to achieve the three targets set in 2022 through the issuance of the **Sustainability Linked Bond. Specific Improvement Plans** at a corporate and site level have been implemented for **continuous improvement of performance** in relation to certified management systems for **Quality, Environment, Safety** and **Health**.


THE PLANNED ACTIONS

Investments linked to the NRRP (National Recovery & Resilience Plan) include the adoption of **Best Available Technologies (BAT)** for the Lonigo incinerator and the **Zero Liquid Discharge (ZLD)** project for Montecchio Maggiore. We need to start thinking about new technologies and investments into **technological research** and **green chemistry**: cost and price increases will have to be accepted with a view to more sustainable future production.



SUSTAINABILITY HIGHLIGHTS SINCE 2020


+32%
 Electricity consumption from **renewable sources**


-13%
 Water abstraction per ton of product (continuously decreasing)


+36%
 Waste sent for recovery

The Sustainable Development Goals

OUR GOALS FOR 2026



-20%
CO₂ emissions
(Scope 1 & 2)



-20%
Water consumed



-20%
Waste sent to **external disposal**/waste sent to **external recovery**

To integrate sustainability into our business vision, we have signed up to the United Nations **Sustainable Development Goals (SDGs)**, specifically Goals **3, 4, 5, 6, 7, 8, 9, 12** and **13**, which are closest to our values.

In September 2021, the Board of Directors approved the proposed **Corporate Strategic Plan: 3** ambitious but achievable **environmental sustainability targets** most relevant to our business have been identified and we are committed to achieving them by **2026**.

SUSTAINABILITY MANAGER

This role is **responsible for developing the Sustainability Plan**, supporting the implementation of strategies in this area, and coordinating activities for the preparation of the Sustainability Report.

SUSTAINABILITY-LINKED BOND (SLB)

Issued in 2022 with a total nominal value of **EUR 350 million**. Issuing these bonds is an effective action that **creates shared value** by integrating this operating approach into the business.



Our stakeholders

We cultivate a rapport with stakeholders that are built on **collaboration and respect**, to grow fruitful relationships for sharing **values, principles and a common idea of sustainable development**, which today is a cru-

cial issue for society and requires the company to play a central role, which increasingly has to effectively govern its processes whilst balancing its own legitimate interest with a **duty to return value to the community**.



Our success is the result of dialog with our partners. We have always listened to the needs of our stakeholders to generate shared value.

Our stakeholders

Our success is the result of **dialog with our partners**. We have always listened to the needs of our stakeholders to generate **shared value** and we establish **collaborative partnerships** with a small number of key customers.

CUSTOMERS

Our management approach to quality is formalized in the **Quality Manual** and is defined in the **Quality Management System** (QMS) in accordance with UNI EN ISO 9001:2015 and GMP (Good Manufacturing Practices), which define the **methods, means and procedures for managing the production** of pharmaceutical products in order to ensure they comply with appropriate quality standards.

QUALITY AND SAFETY

We supply our products with **continuity and timeliness**, in accordance with the highest international standards, guaranteed by the quality and **health and safety certifications** present at all our production sites.

SUSTAINABILITY AND NEW CHALLENGES



In recent years we have made **real progress** in terms of sustainability, and we hope this is another reason for our clients to choose us.



We are anticipating new challenges related to the effects of the pandemic and the situation in Ukraine: we are listening to the needs of our customers to **adapt our product offer** accordingly.



We are putting all of our resources into **customer-centricity**, striving to strengthen our offer, creating partnerships with our customers and ensuring sustainable growth.

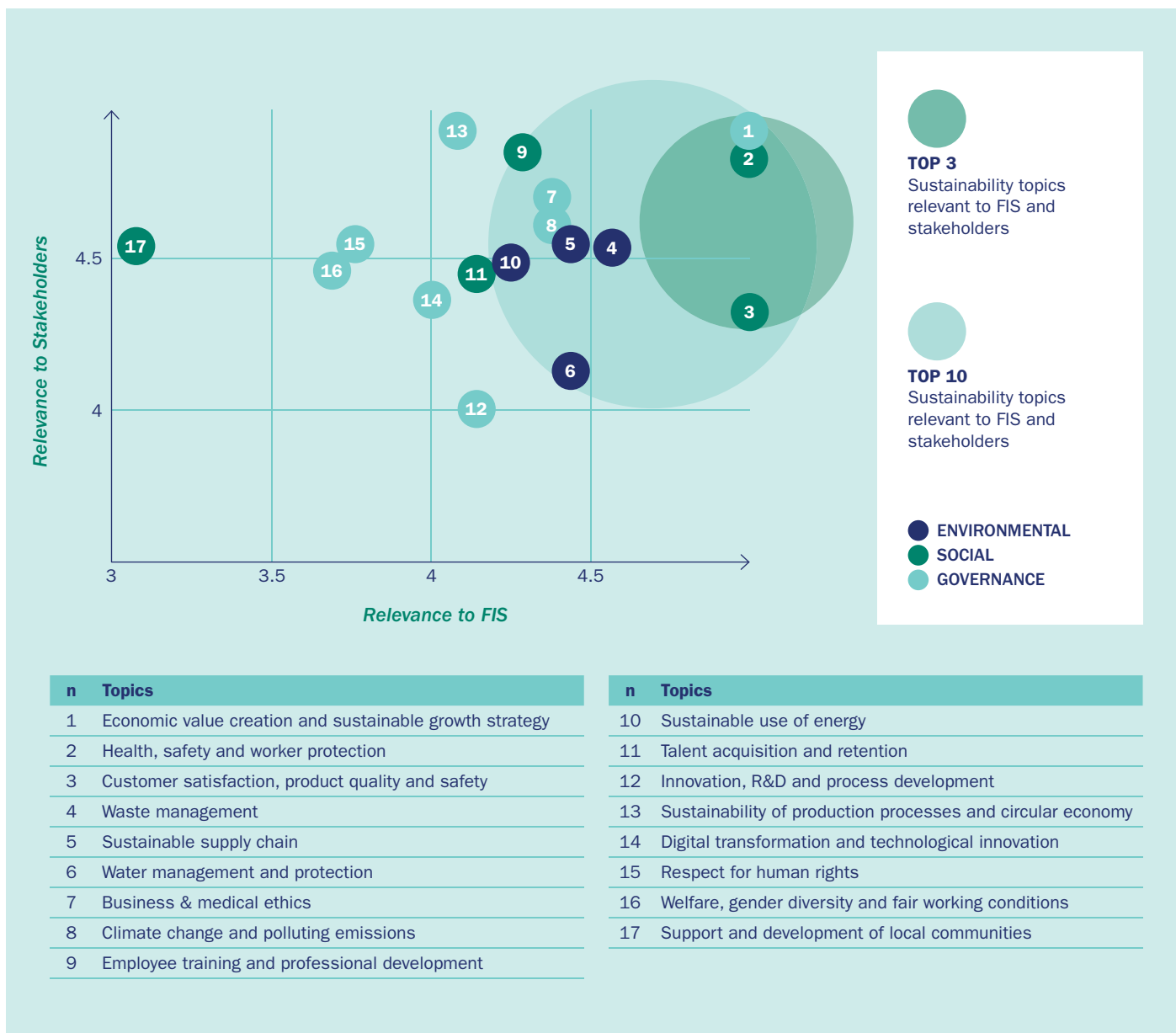
Some highlights from the interview with **Luca Parlanti**, Custom Sales Director and **Gianluca Schiavoni**, Generic Sales Director

Materiality matrix

The materiality analysis has identified the **17 reporting issues which are most relevant to the company** and its internal and external stakeholders, with reference to the GRI Standard.

The most important material topics (Top 3) are **"Economic value creation and sustainable growth strategy", "Health, safety and worker protection" and "Customer satisfaction, product quality and safety"**.

Our materiality matrix, showing the most relevant material topics (top right corner)



Public bodies and institutions

We are always very conscious of what is outlined by the **major national and international health authorities** (including the AIFA and the Italian Ministry of Health).



We are part of the **confederation of Italian industry system** and are in contact with **local regional bodies** (ARPA environmental agency, Provinces, Municipalities, Civil Protection, etc.) in the regions where our plants are located.



For many years we have been members of **professional associations and organizations**, which enable us to stay abreast of industry trends.



In 2018, we joined the **Pharmaceutical Supply Chain Initiative** (PSCI), an association that aims to improve the social, environmental, and health and safety aspects of supply chains.



We are a member of the **Drug, Chemical & Associated Technologies Association, Inc.** (DCAT), an association that develops partnerships and expertise among corporate members.



We are also members of the Italian network of sustainability professionals, "**Sustainability Makers**".

Engagement with the educational sector:

- distribution of the **School Diary** (+4,000 families reached in the region);
- school **visits** to production sites, **guidance** for college choice, **donations of** educational materials, **internships** and **school-to-work** programs;
- Introduction of **six PhDs** (EU Horizon 2022 program);
- **three doctoral programs** introduced at the Faculty of Chemistry and Physics of the University of Trieste.

REGION

The relationship with local communities

In 2022, we provided financial support for your sports activities, cultural events and charities. We are delighted to report our presence, in line with the resumption of many social and group activities which had been placed on hold during the pandemic.

In the coming year, we also plan to renew our commitment by nurturing dialog and discussion with local communities, which always provides opportunities for growth and improvement.

Suppliers and supply chain

Our supply market for purchasing raw materials is global: **over 40 countries**, with a strong concentration in China. We have a representative office in Shanghai and one in India.

At FIS we develop sustainable partnerships with suppliers based on shared values related to **ethics** and the **environment** and backed up by a **Supplier Portal** and a performance **evaluation plan**.

Relations with suppliers are governed by **specific company procedures**. The engagement of suppliers is **subject to verification of the quality** of supplies. We directly manage shipments of the **most critical and highest value raw materials**.

TRANSPORTATION

Transportation is mainly **by sea**. In 2022, the company **expanded its supplier base** (+ 100 new vendors), for both raw materials and the major products. A real-time shipment tracking system is planned for 2023.

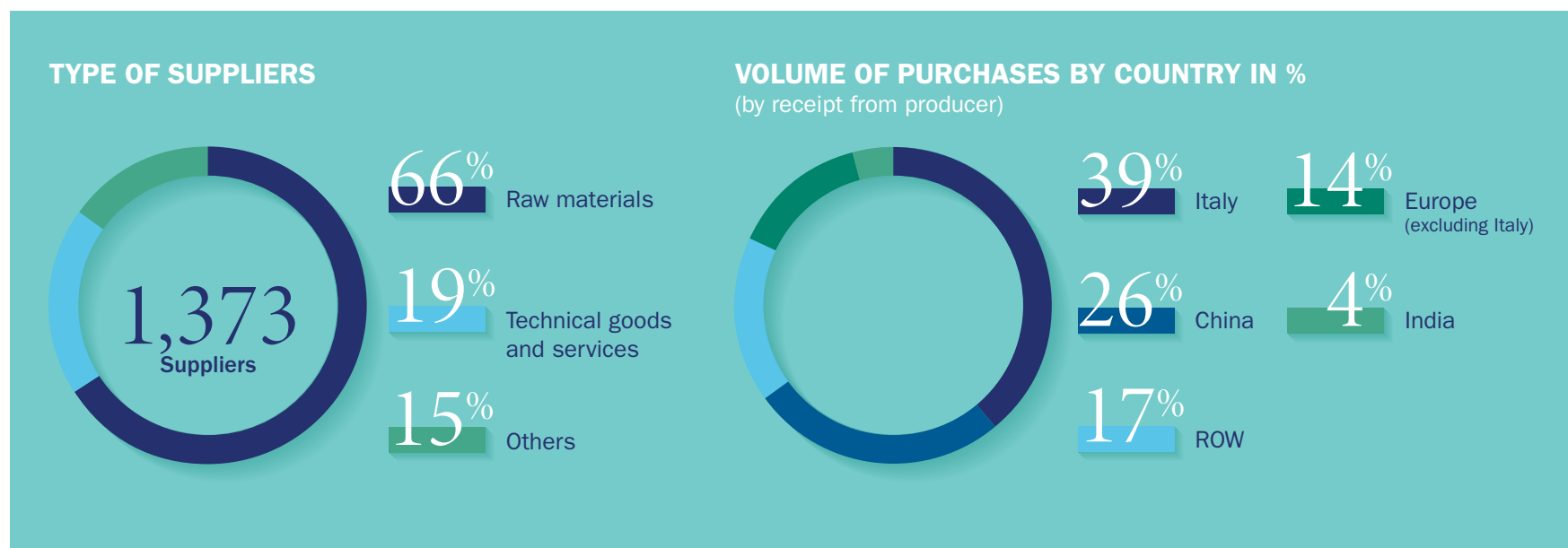
IMPROVED RELIABILITY OF DELIVERIES



From **30%**

to more than the **50%**

An international supply chain designed to create value for our customers





Our people

Investing in our people
Training and work-life balance
Health and safety



Investing in our people

Some highlights from the interview with Corrado Biumi, director of human resources



Empowering human capital is at the heart of our way of working, as is a **focus on values, culture and identity**.



Remote working has been extended to all categories of employees whose roles enable them to work remotely.



We provide our employees with an **inspiring working environment** marked by **trust, fairness and equity**.



We are able to **identify each employee's potential** and determine whether their current role is in line with their skills.



We have measured employees' satisfactions levels with our **welfare/wellbeing services**, activated the new welfare platform and approved the platform for the **renewal of the 2nd level collective contract**, now being finalized, unified across the three production sites.



We have introduced a **talent program** in order to develop an enterprise school within the company.



Our **Strategic Plan** identifies **sustainability** as a factor in strengthening corporate growth, including in terms of **promoting the health, well-being and engagement of our people**.



We focus on workplace **governance** that strikes a **balance between digitization, people, skills, and work-life balance**.

OUR ACTIONS

Work and private life

- Measures to balance **work and family life**;
- measures to support **social security and supplementary health care**;
- measures providing **economic support** in special personal situations;
- provision of **goods and services** (e.g. free canteen).

Investing in our people

Our goal is to continuously consolidate the foundations of our business by attracting **new talent** and **protecting the current employment level**.

Our main goal is to **ensure high standards of health, safety and quality of work**, including through **ongoing training and providing an inspiring environment**.

We have implemented **inclusive policies** and have paid keen attention to **gender equality** and **diversity & inclusion** issues.

HIGHLIGHTS



1,900
FIS people

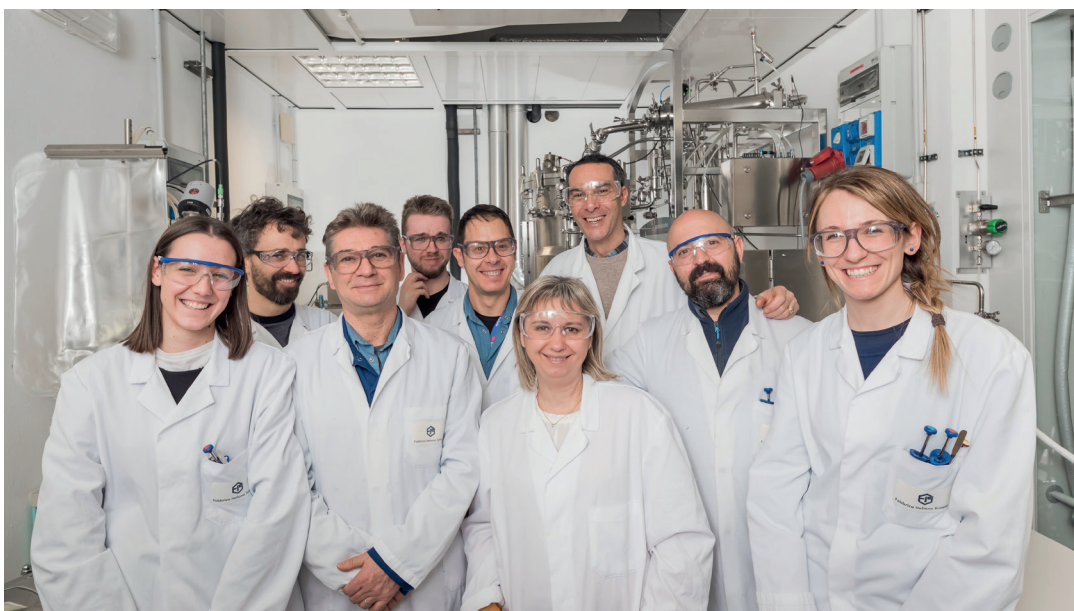
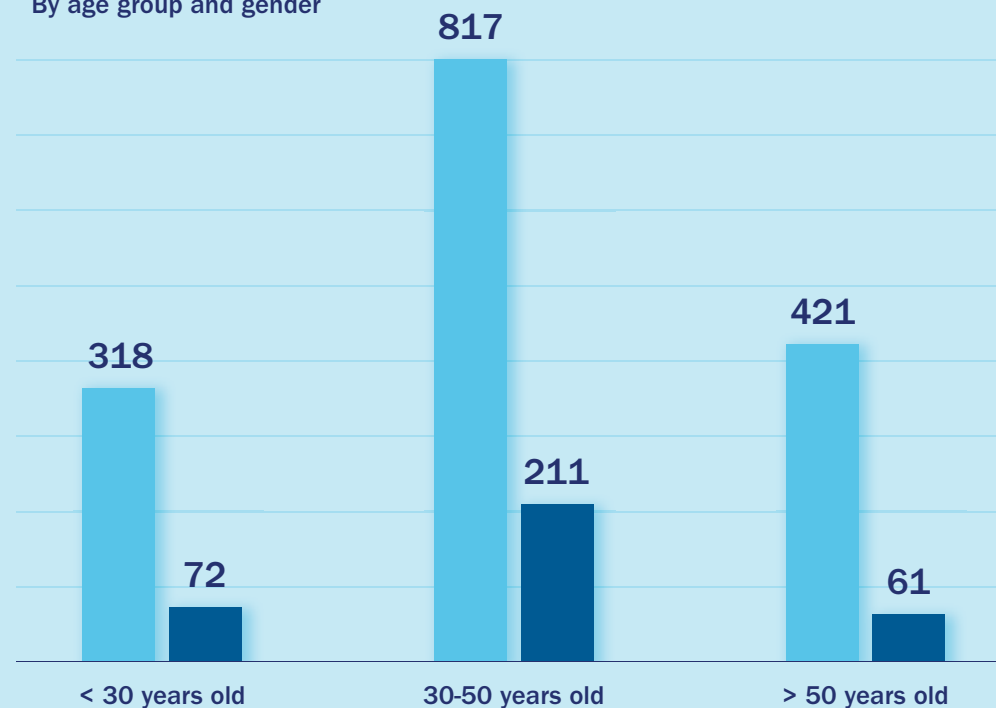


+48%
Increase in the
workforce
since 2016

DISTRIBUTION OF WORKFORCE

By age group and gender

● Male ● Female



+70%

Increase in
female staff since
2016

121

New
recruits
in 2022

90%

Permanent
employees

Training and work-life balance



66,204
Hours of training

provided, totaling more than 4 days of annual training per person



+50%

Increase in the number of training hours in the past two years

Training is a subject that is central to our goals of developing the talents and careers of our employees.

Higher education apprenticeship: an employee will be able to attain an academic degree (undergraduate or post-graduate degree or doctorate) while retaining their job.

Talent management: a team of HR specialists who are responsible for attracting and retaining talent in the company and avoiding a talent shortage.

Initiatives for employees aged under 35 include a master's degree in business administration in partnership with CUOA Business School.

WORK-LIFE BALANCE

Option for our employees to look after children up to age 18 in case of illness through additional paid leave (maximum 40 hours/year).

Solidarity Hours Fund: allows employees to transfer their additional leave hours for reduction of working hours to colleagues who need them.

Flexible working: a corporate policy extended to all categories of workers who, by virtue of their role, are able to work from home.

Welfare 4 you: a platform that will allow us to manage initiatives for employees and their families, granting benefits and concessions in the form of goods and services.



Health and safety

We promote the health and safety of our workers as core and foundational values of our business and **have invested heavily in protecting health, safety and the environment** in our plants.

Our production sites are **classified as major accident hazards** and have occupational health and safety (UNI ISO 45001) and environmental (UNI ISO 45001) management systems to allow us to **effectively manage risks** related to accidents, injuries and occupational illnesses.

For us, it is of paramount importance to **minimize the risk of injury, occupational illnesses and emergency situations** through prevention programs. Total injuries for FIS have decreased compared with the previous year's total.

Professional training of our employees is a prerequisite for increasing the **safety culture**.

From 2023, we will develop a policy which incentivizes anyone making **reports** and proposals to resolve EHS-related problems.

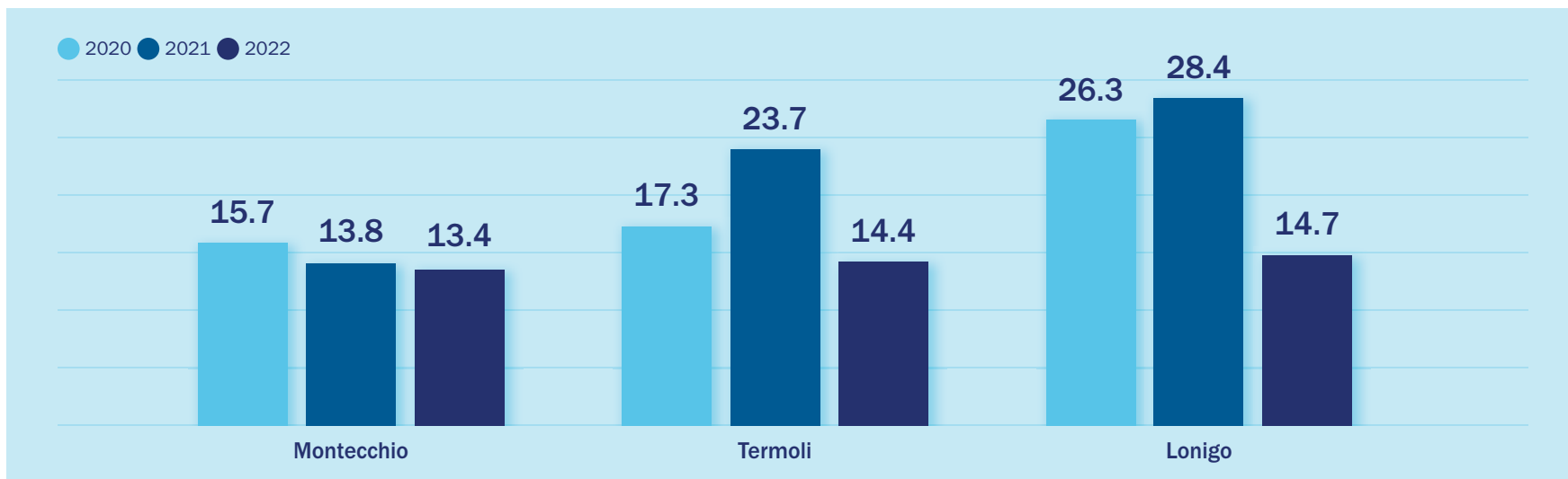
We have a permanent healthcare department on all three sites, with doctors and nurses.

EHS AUDIT

The annual plan also includes **Health, Safety, and Environmental for the three sites in Montecchio, Termoli and Lonigo**. The plan covers all points relating to the existing certifications, with **additional security audits** by external companies added during 2022.

Health, safety and environmental training, hours per person

13.8
Average total FIS 2022



FIS and the environment

Sustainable production processes
Research and development
Our green strategy
Water
Circular economy and waste



Sustainable production processes

Our process innovation is also intended to find solutions for the **reuse of solvents and precious catalyst metals**, including **palladium**. To do this, we introduced a new carbon filtration system, which separates palladium directly from the reaction flow. This allows us to improve the efficiency and safety of the process.

Homogeneous **palladium** is **difficult to recover**. Two initiatives have been put into place:

- **expand the range of outside firms** to recover these materials;
- perform **specific in-house treatments** to improve the recovery of the metals.

From 2023, it is expected to achieve at least **50% recovery** for these metals.

FIS can **recover solvents** at all three sites. In addition, we are developing **Lean** projects to achieve **financial savings and reduce the environmental impact**.

FIS RESEARCH AND DEVELOPMENT

For the past two years, the R&D function has been monitoring the **PMI** (Product Mass Intensity), to reduce this index.



In 2022, we **reduced the use of raw materials and energy by 25%** in 63% of our projects.



Customer satisfaction index: monitors satisfaction with processes through questions to customers about R&D activities.



In 2023, we implemented a **mobile system** that melts and allows raw materials to flow inside the reactor. This has allowed us to **reduce the PMI**.



We pursue an **innovative approach** in our processes, seeking **new sustainable solutions** that we offer to customers. In 2022, we implemented **42 Custom R&D projects**, and in 27% of cases we have **improved the sustainability** of processes.

Some highlights from the interview with Alfredo Paio, director of research and development

Research and development

Investing in research and development R&D is **essential** for us to ensure **the technological development of the company and to remain competitive in the industry.**

The R&D function is based on the integration of Process Chemistry and Analytical Development.

From 2020, the development and industrialization of **continuous flow processes**, and the application of "in-line process" analytical controls, i.e. **Process Analytical Technologies (PAT)** have made it possible to reduce analysis time and reaction control compared with standard methodologies.

R&D Department:

- **new business;**
- **better monitoring** of residual substances in water discharges from our production sites.

Our laboratories:

- 12 synthesis;
- 8 analytical;
- 2 calorimetry laboratory suites;
- 1 dedicated to fermentations/biocatalysis;
- 5 class ISO8 Kilolabs.



27
Laboratories

FLOW CHEMISTRY

In June 2022, an investment was approved for the construction of a **multipurpose skid** which can be positioned and coupled with existing systems for conducting the steps of a production sequence in continuous flow. This delivers some advantages, such as reduced system size, improved process yields and energy savings.

570

Total patents

~45

Projects per year from 12 different research teams

23

€ mn invested in R&D (2022)

Our green strategy

To achieve our sustainability targets, we have put together an action plan through **targeted investments** and allocating the necessary resources for assessing the **positive impacts** of our investments.

Our commitment to environmental sustainability is embodied in the **careful and sustainable management of consumption and emissions**.

DECARBONIZATION STRATEGY

With the aim of realizing **new plant projects** in accordance with high **energy efficiency** standards and making **improvements** to generate electricity and heat at production sites.

Objectives:

- **recovery** of existing energy which is used inefficiently;
- **improvement** of existing technological equipment.

Areas of intervention for achieving our sustainability goals:

- the **modernization of** key facilities (ex: Lonigo incinerator);
- **investments** to increase our solvent recovery capacity;
- **delivery of** a major investment in water protection;
- **combating** climate change (reducing greenhouse gas emissions).

GOALS BY 2026



Absolute emissions Scope 1 and 2 (tCO₂)

-20% vs 2020



Water consumption (m³)

-20% vs 2020



Ratio of waste disposed to waste recycled

-20% vs 2020

Our green strategy

Some highlights taken from the interview by Massimo Morgano, Industrial Operations Management

We are analyzing **new technological solutions** for **de-carbonization** and developing targeted actions to drive **electrification**, reducing **CO₂ emissions**.

Under assessment:



the creation of **solar farms** at the three sites;



self-sufficiency of supply of energy from renewable sources through PPA contracts. We cover 100% of our **electricity demand with power generated from renewable sources**;



the identification of **solutions for improving** energy efficiency.

Technological innovation is essential to **replace natural gas with electricity** in our plants and to use them in the most efficient way possible: we are at the forefront of finding practical and competitive solutions.

On the topic of water:

- we reduce consumption;
- we preserve water quality by reducing or eliminating the presence of micro-pollutants in wastewater.

Our industry has seen a sharp **increase in the cost of energy**; this has been a driver for the **planning** of energy generation and energy efficiency **projects**:

- refurbishment of the oxidation system of the Termoli bio tower (reduction of compressor energy consumption);
- use of the most energy-efficient filters for Air Handling Units;
- reduced energy consumption for the refrigeration unit in Termoli's sector B.

Objective:

deliver **100% of electricity** from renewable sources by 2026. We are working to improve the sourcing strategy for electricity from **renewable sources** and **technological innovation**.



Our green strategy

REDUCED CONSUMPTION



400
MWh saved



100
tons CO₂ saved



-6%

Our overall electricity consumption (versus the previous year)

Our actions to **diversify sources**:

- in-house power generation;
- feasibility assessments for the implementation of solar power systems at the three FIS sites (now under evaluation);
- self-sufficiency of supply of energy from renewable sources through VPPA contracts;
- electrification of heating energy.

In January 2022, we installed a **new system to continuously monitor** emissions (SME) at the Lonigo site. This system provides us with the same emissions performance but gives **more accurate data**.

THE NEW COMBINED COOLING, HEATING AND POWER GENERATION PLANT IN LONIGO

In 2023, we built a new **trigeneration** plant that will contribute to the **generation of electricity, heat and cooling, helping to improve the energy efficiency** of the Lonigo production site and diversify its production.

THE ENERGIZE® PROJECT

In November 2022, we joined the **Energize® international program**, which aims to promote **access to the use of renewable energy and reduce greenhouse gas emissions** in the chemical and pharmaceutical sectors.

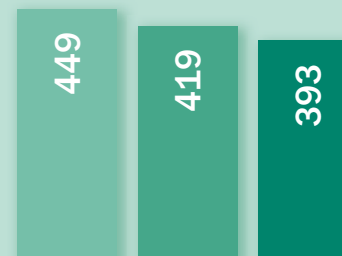
FIS has entered into a multi-year bilateral contract to access the power purchase agreement market (VPPA). In addition, it has created a "buying group" of pharma supply chain suppliers (new renewable generation plant).

TOTAL ENERGY CONSUMPTION (GJ)

● 2020 ● 2021 ● 2022




Total energy consumption



Energy consumption/ton of product

Water

RESOURCES SAVED


-13%
 of the total water abstraction per ton of product, compared to 2020 (continuously decreasing)

We recognize the **importance of water** in all our production activities and are committed to **using it properly** in a rational and sustainable manner at all production sites.

Water abstraction for the three FIS sites is for:

- **production processes**, i.e., chemical synthesis;
- **washing, cleaning and decontamination** of equipment;
- **cooling** and steam production.

Projects to **reduce water consumption**:

- elimination of small consumers with heat-loss thermal regulation;
- improvement of the quality of water treated in the wastewater treatment plants for reuse.

Our actions:

- a focus on **controlling micro-pollutants** in wastewater from the Montecchio Maggiore and Lonigo sites, areas contaminated (not because of us) with PFAS (chemicals hazardous to humans and the environment);
- we have extended the **monitoring** of APIs and related metabolites found after physical, chemical and biological treatment;
- to minimize subsurface contamination, we have constructed a more modern **containment tank** for process water in Montecchio.

NEW ZERO LIQUID DISCHARGE (ZLD) PLANT

The Montecchio ZLD project will deliver a **decrease in water consumption** by refining the **internal treatment of wastewater**, which will remove the residual pollutants: they will produce **water suitable for internal reuse**.



Saving of at least 20% of the total amount of water used by FIS: zero site water discharge to the municipal sewerage network.



Thermal energy recovery from the incineration plant.



Circular economy and waste

Our industrial sector plays a key role in the **generation of waste** because of chemical synthesis processes that generate large quantities of waste.

Our model for **achieving circularity** allows us to improve the efficiency of our operations by adopting **more sustainable practices** at all stages of production.

Waste prevention should be implemented through:

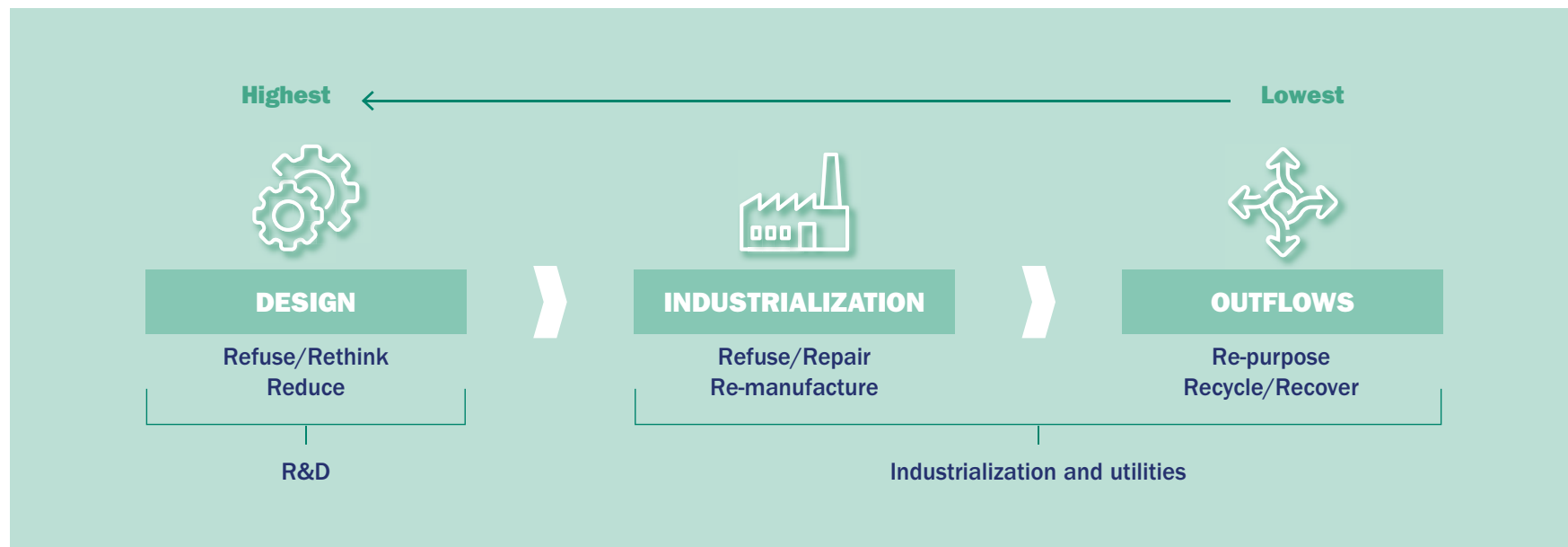
- reducing the quantity and hazardousness of waste;
- support for reuse, recycling and other forms of recovery.

Reaction mother liquors account for most of the waste we produce. Therefore, we have to **manage them carefully, both for the environment and for the economy**. Our initiative involves diverting flows from destruction to recovery.

TERMOLI SITE

At the Termoli site, we have implemented a conversion project from belt press to sludge centrifuge. This has allowed us to **reduce the amount of sludge to be disposed of by almost one-third**.

Our approach to circularity



Circular economy and waste

Our lean manufacturing team promotes a **continuous improvement** approach with a focus on manufacturing processes and services, particularly those related to waste, water, and energy utilities.

We are pleased with the **progress toward our 2026 waste targets** (increasing the share of waste going to external recovery), but there are some **constraints which limit the scope for increasing recovery**.



THE NEW INCINERATOR IN LONIGO

The modernization of the Lonigo incinerator will enable more **effective waste management** by limiting the amount disposed of in external incineration facilities.

We will introduce **bi-fuel technology**, which uses solvent-waste in the combustion phase: this will deliver a more modern technology for managing waste, offering **increased efficiency**.

This type of burner **reduces methane consumption for the same amount of waste treated**.

Our commitment is to:

- **improve our CO₂ emission index** per ton of waste incinerated;
- be **more flexible** in feeding the furnace;
- **a reduction in heavy goods traffic** for external waste disposal;
- ensure **business continuity** by reducing FIS's dependence on third-party market operators.



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