



# TECHNOPROBE

**Sustainability Report 2021**  
**Technoprobe Italia**

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# Innovation Begins With Us

Technoprobe is a technological hub for research and innovation in the world of semiconductors.

With 2,280 employees worldwide and three research and development centres, Technoprobe is a large company committed to innovation and the constant growth of its technical skills.

It has 11 branches around the world, but the heart of the research, design and production remains in Italy, in a corner of Silicon Valley just outside Milan, where more than 1,300 people work, including temporary workers. Ever-growing numbers.

Technoprobe develops testing solutions for chips, the electronic hearts that give life to today's world and build tomorrow's.

It is a leader in the design, development and production of probe cards for the biggest technology brands.

Probe cards are hi-tech devices for testing the operation of chips during their construction process.

They are therefore technological designs and solutions that ensure the operation and reliability of devices that play a crucial role in computers, smartphones, 5G, Internet of Things, home automation, cars, etc.

Technoprobe is the second largest manufacturer of probe cards in the world in terms of volume of units sold and revenue.



# Technoprobe in numbers

**1996**

Year of birth

**11**

Branches worldwide

**2280**

Employees worldwide

**1316**

Employees in Italy

**3**

Research centres

**+500**

Proprietary patents

# 1.

# HISTORY OF TECHNOPROBE

# 1.1 Birth of Technoprobe



The origins of Technoprobe go back well before the formal years of the company's establishment and are attributed to the ingenuity and great entrepreneurial spirit of its founder: **Giuseppe Crippa**.

Throughout his career, which saw him grow and make a name for himself in a large company like ST Microelettronics, Giuseppe Crippa had a strong desire to open his own business and pursue his technical and entrepreneurial passions. It was only his love for his work that held him back and led him to postpone starting his own business until the last years before his retirement.

In 1989, with the help of his son **Cristiano Crippa**, he set up a small business producing probes for the probe card market (at the time, probe cards used to test chips were technologically immature and only produced in the United States).

After a few years the business intensified and in 1993 the first structure of the company began to take shape in the Crippa family home in Merate (LC), taking over the garage and attic.

At this time, the nucleus of the company was formed by Giuseppe and Cristiano, with the administrative help of Giuseppe's wife, **Mariarosa Lavelli**, and two initial employees.

In 1996, Giuseppe Crippa retired and was able to devote himself full-time to the technological aspects of the company, while Cristiano made a positive contribution to the commercial development.

It was no longer possible to continue working in the family home, so in 1997 the company purchased its first building in Cernusco Lombardone (LC) and moved in with about 10 employees. The first company headquarters was created which would gradually expand over the following years.

In the early 2000s, the company not only expanded in Italy but also opened its first international offices to be closer to customers; first in France, then Singapore and from 2007, in the United States.

Giuseppe's nephew, **Stefano Felici**, took over the management of the US office. He had previously worked alongside his uncle on the technological side of the business and later became the strategic point of contact for customers in the USA.

In the meantime, Technoprobe continued to evolve its technologies in the world of probe cards: the EPOXY technology was followed in 2007 by the first VERTICAL MEMS probes and, in 2011 by the proprietary TPEG™ MEMS technology which would become the new industry standard for wafer testing and lead Technoprobe to great growth, with an increase in sales and patents. The number of employees in Italy also grew, going from 129 in 2011 to 1300 ten years later.

Year after year, Technoprobe began collaborating with some of the most important companies in the world of microelectronics, gaining even bigger slices of the market until it became the world's second largest manufacturer of probe cards, winning several awards as best supplier from its customers.

Branches are opened in the Philippines, Korea, Taiwan, Japan and China, as well as new large industrial buildings in Italy, which remained the country where the Crippa family decided to keep not only its headquarters, design and R&D departments, but also the entire production. This was to keep the Italian character of the company and the strong link with its territory.

Meanwhile, in 2002, Giuseppe's youngest son, **Roberto Crippa**, joined the family group and quickly took over the management of Technoprobe Italia, giving the company a strong imprint with his own managerial leadership style, fully in line with the vision of his father, brother and cousin.

During the years of the Covid-19 pandemic, Technoprobe more than doubled the number of its employees and at the same time put itself at the service of its community by opening at its own expense a vaccination hub for the local population inside its premises. It was the first company in Italy to do so.



# 1.2 Timeline

1996

## Birth of Technoprobe

Technoprobe was born in 1993 in the garage and attic of the Crippa's family home in Merate (LC). It grew quickly and in no time at all made a name for itself as a company that designs and manufactures highly complex probe cards for the fast-growing microelectronic market. Technoprobe is officially founded near Milan, Italy in 1996.

1997

## Opening of the first headquarters in Cernusco Lombardone

Technoprobe purchases its first building in Cernusco Lombardone (LC) and moves in with about 10 employees. The first nucleus of the company headquarters is created which gradually expands over the following years.

2000

## Delivery of the first Vertical Probe Head

Technoprobe produces its first Vertical Probe Head (PH), COBRA needle technology, with 960 needles and a minimum pitch of 240  $\mu\text{m}$ .

2001

## Technoprobe France

Technoprobe's first expansion outside of Italy is Technoprobe France based in Rousset (Provence, South of France).

2003

## Technoprobe Singapore

As the Asia-Pacific area becomes increasingly strategic for the microelectronics industry, Technoprobe seizes the opportunity to establish a new production facility and service centre in Singapore. Technoprobe Singapore is Technoprobe's second largest factory, employing 120 people at the end of 2019.

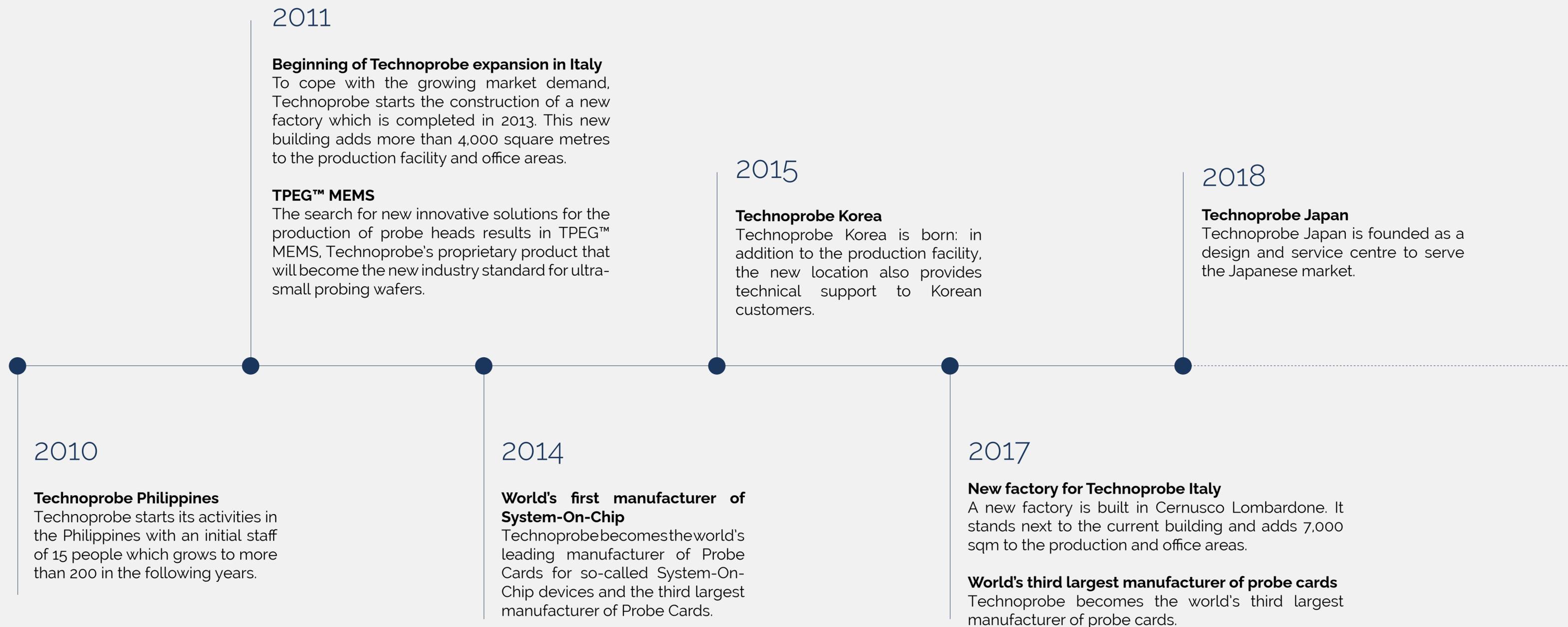
2007

## First probe with VERTICAL MEMS technology ever sold on the market

In 2007, Technoprobe receives the "Most Innovative Technology" award at the Semiconductor Wafer Test Conference (SWTest) in San Diego (CA) for presenting a revolutionary manufacturing approach for the construction of probe heads, based on MEMS needles assembled in a vertical configuration.

## Technoprobe America

Expansion into the United States, a primary market for technological research and development, marks a significant turning point in Technoprobe's history. Technoprobe America is founded in San José, California, to serve the largest semiconductor industry based in the Silicon Valley.



## 2021

### **TPI Agrate**

A new 3500-sqm plant opens in Agrate Brianza to act as a research and development centre for Microfabrica technologies.

### **TPI 5 and the Technoprobe Covid-19 vaccination hub**

A new factory is built in Cernusco Lombardone: TPI5. Due to the pandemic emergency, Technoprobe decides to temporarily convert the space into a hub for mass vaccination against Covid-19 in collaboration with ASST ATS Lecco. It is the first company in Italy to open a vaccination hub for everyone inside its premises. In a space of 4,300 square metres, almost 160,000 vaccine doses were administered to the local population over the course of six months.

## 2019

### **Technoprobe acquires Microfabrica**

Technoprobe acquires Microfabrica Inc., a leader in high-volume, micro-scale, additive manufacturing. Technoprobe plans to further invest in Microfabrica to help the company expand its capabilities and capture a large global market.

### **New Technoprobe repair centre in Taiwan**

To further enhance its presence in Asia and the Pacific, Technoprobe opens a repair and assistance centre for Taiwanese customers.

### **Technoprobe China**

Opening of the Chinese factory to provide support to the world's largest market.

### **World's second largest manufacturer of probe cards**

Technoprobe becomes the world's second largest manufacturer of probe cards.

## 1.3 Manifesto

**Technoprobe has two cornerstones: customer satisfaction and the “ability to do” which is represented by the company’s proprietary skills and technologies.**

**Quality, people, ethics and responsibility are the foundations on which Technoprobe builds every day.**





# Quality

## Customer satisfaction

Customer satisfaction and product quality are at the heart of Technoprobe's values and corporate strategy.

Technoprobe's commitment is to develop products of the highest quality.

Technoprobe strives to meet the needs of customers and is committed to anticipating their expectations, sharing them in advance and enabling joint decisions to be made on the quality of the product.

All the Technoprobe sites share the same international quality standards.

## Quality at Technoprobe

Quality at Technoprobe has an all-encompassing meaning: customer satisfaction.

Everyone in the company has a customer to satisfy.

Every company process must be carried out to the end.

## Quality is not a structure, but a culture.

Quality is made by the workers.

Each department is responsible for the quality of its work, everyone must have in mind the recipient of their outputs, identify the root causes of defects and implement corrective actions.

Quality cannot be compromised; the derogation process must be controlled.

# People

## The key to success

Technoprobe considers its people to be the key to its success.

Technoprobe accompanies the development and participation of its personnel, encouraging everyone to make an active contribution whatever their hierarchical level.

Company guideline: "to develop the ability to do and to pursue perfection."

## Proactive behaviour

Technoprobe requires all managers to behave proactively.

Managers must manage, control and improve their process; identify problems and anomalies, search for the cause and propose corrective actions.

They must involve and encourage the participation of all employees.

## Respect for Dignity

Technoprobe respects the dignity, privacy and personal rights of every individual, combating all forms of discrimination based on origin, nationality, religion, race, gender, age and sexual orientation.

Appropriate behaviour is required of all employees.

Employees can rely on the HR department for any support they need to improve their job performance.

Technoprobe promotes free association and free exchange of ideas and opinions in the workplace.

The personal data of each employee are considered strictly confidential.

## Health and Safety of Personnel

Physical and mental health and safety are considered fundamental and should be monitored and improved continuously.





# Ethics

## Compliance with laws, rules and regulations

Technoprobe ensures that its activities comply with all laws and regulations, without making any compromises.

## Honesty

Technoprobe requires its employees to behave honestly; no gifts may be accepted or offered in connection with their professional duties.

## Confidential information

All company information that is not in the public domain is considered confidential; employees are bound to maintain confidentiality.

Likewise, Technoprobe shall consider confidential any third-party information that comes to its attention in the course of business, whatever its nature.

## Competition

Technoprobe conducts its business based on fair competition.

# Responsibilities

## Organisation and management of processes

Technoprobe manages its organisation and monitors its processes in order to constantly identify inefficiencies and plan improvements.

Particular attention is paid to the analysis of NCs (Non-Conformities), especially when they arise from customer complaints.

## Corporate Responsibility

Technoprobe believes that corporate responsibility also means respecting, protecting and improving the environment in which it operates.

Production processes and facilities are constantly reviewed to identify all possible improvements that reduce environmental impact.

## Charitable projects

Technoprobe recognises the importance of its role in the community and is therefore committed to the development of charitable projects.

## Code of business conduct

The same vision and responsibility for quality, ethics, people, environment and community, formally expressed in the Code of Business Conduct, is required of all business partners, beginning with suppliers.

All employees are required to explicitly accept the internal regulations, which summarise the main aspects of the Code.



## 1.4 Awards and recognitions

Some of the awards and recognitions Technoprobe has received in recent years.

### Customer Satisfaction - VLSIresearch 2018 - 2021

From 2018 to 2021, for four consecutive years, Technoprobe has been the probe card supplier with the highest score in the VLSI Research Customer Satisfaction Survey.

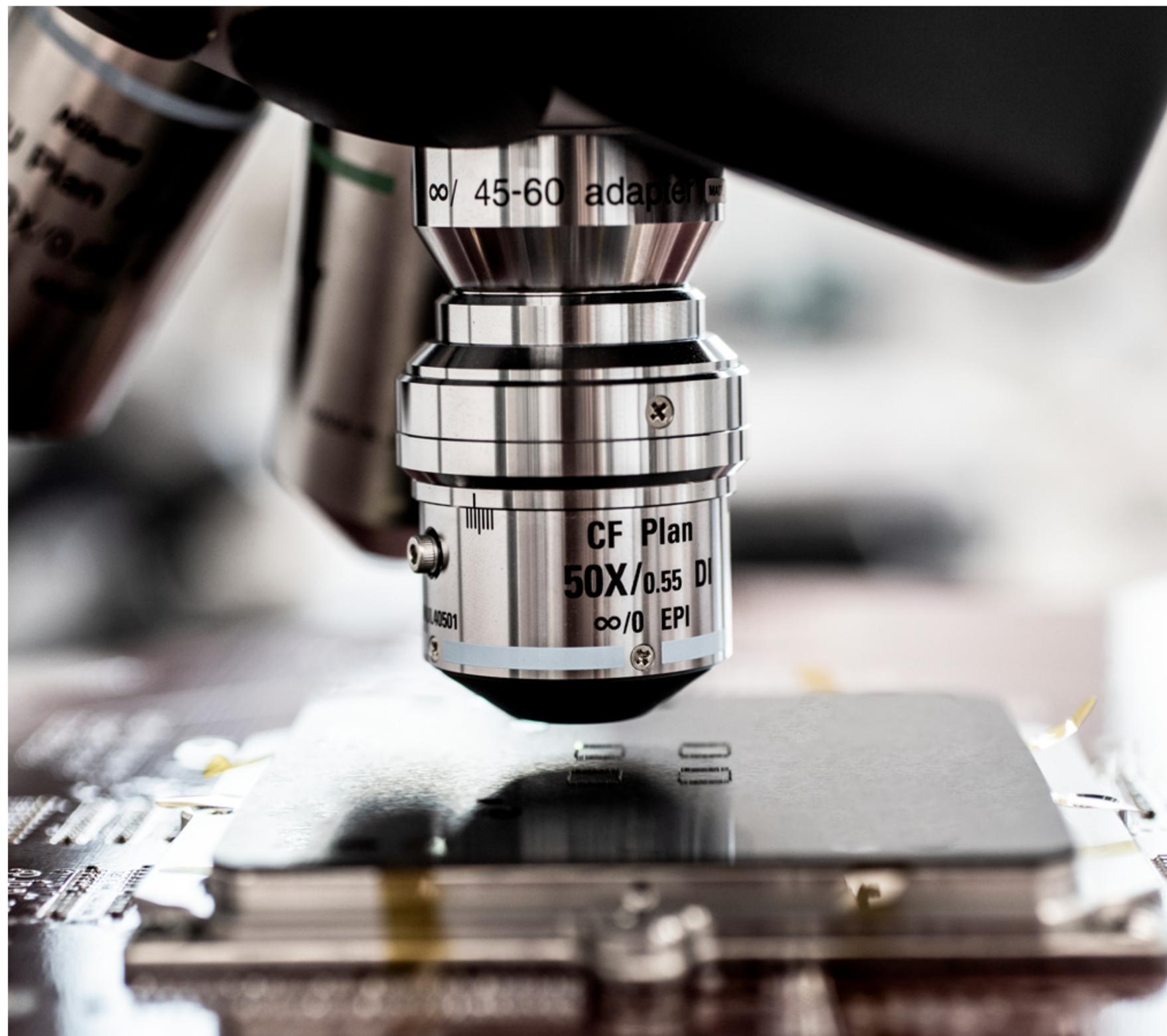
In the 2021 survey, Technoprobe was awarded five VLSI stars as **Highest-Rated Test Connectivity Supplier** in the VLSI Research Customer Satisfaction Survey.

Technoprobe has placed first for four consecutive years by earning the highest scores in the Technical Leadership and Partnering categories.

### Intel "Preferred Quality Supplier Award 2020"

In 2021, Intel honoured Technoprobe with the "Preferred Quality Supplier 2020."

The award is presented by Intel to the supplier that has best distinguished itself in 2020 *"in the pursuit of excellence through continuous improvement, and flawless execution in meeting commitments and continuous research and innovation."*



# 1.5 Leadership



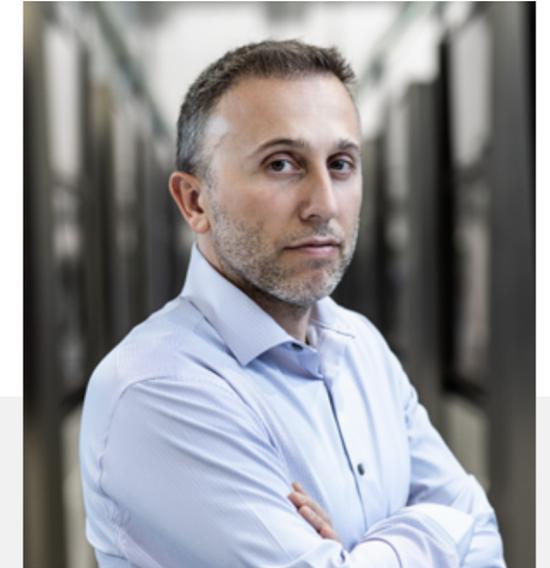
**Giuseppe Crippa**  
Founder and Honorary  
Chairman



**Cristiano Crippa**  
Chairman of the Board of  
Directors



**Roberto Crippa**  
General Manager



**Stefano Felici**  
Chief Executive Officer



**Fabio Morgana**  
Chief Technology Officer



**Marco Prea**  
Chief Commercial Officer



**Andrea Tornaghi**  
Chief Financial Officer



**Marita Villarreal**  
Chief Business Development  
and Marketing Officer



**James McGuire**  
Chief Strategy Officer

# 2.

## OUR RESPONSIBILITIES

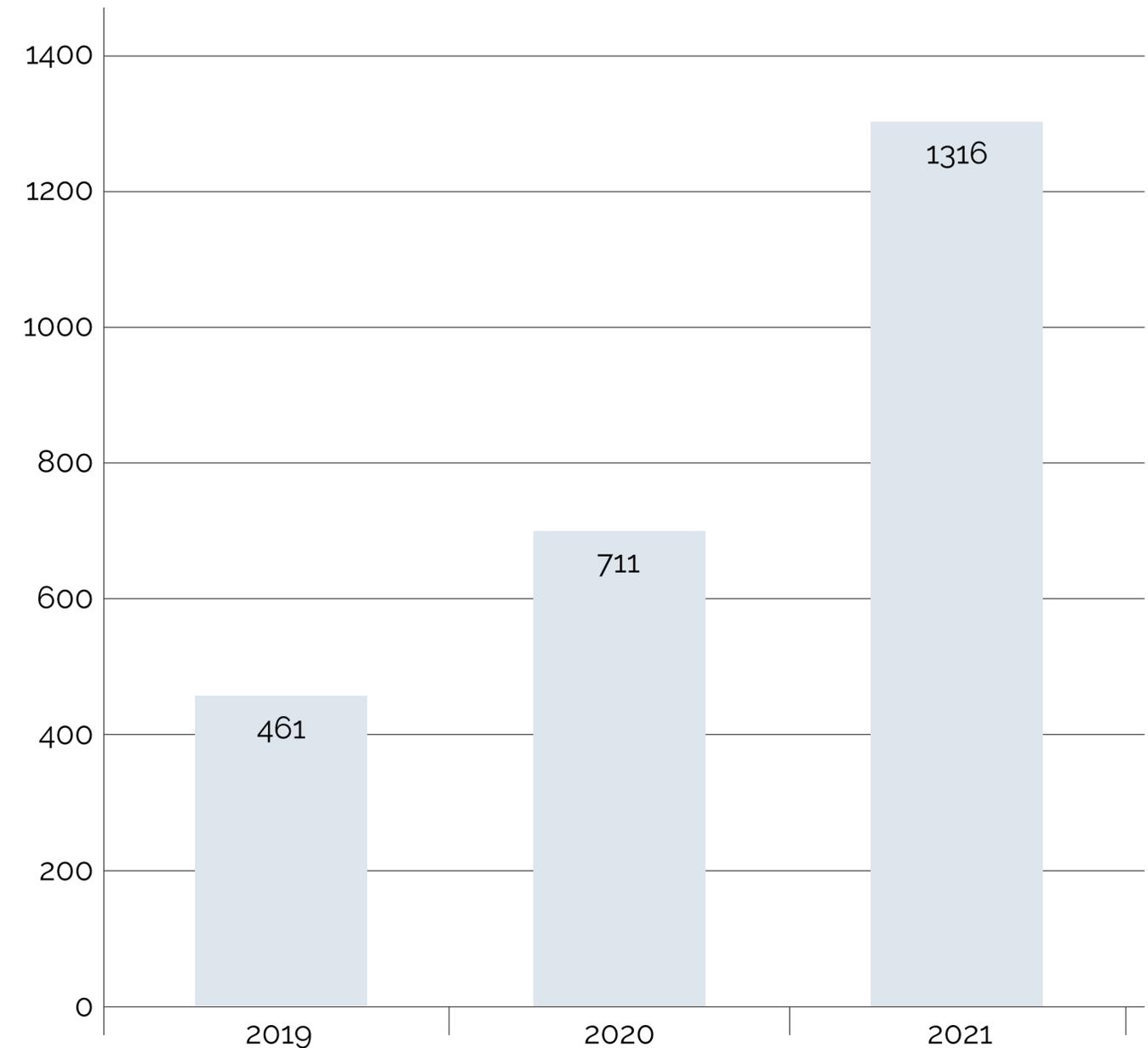
## 2.1 Our people

Technoprobe's focus on people is an integral part of the company's DNA. In fact, people are the "core asset" of the company thanks to their portfolio of skills, creativity and aptitudes that can be applied in the various operational areas.

Enhancing these skills therefore means bringing added value to the company, establishing lasting and transparent relationships with employees.

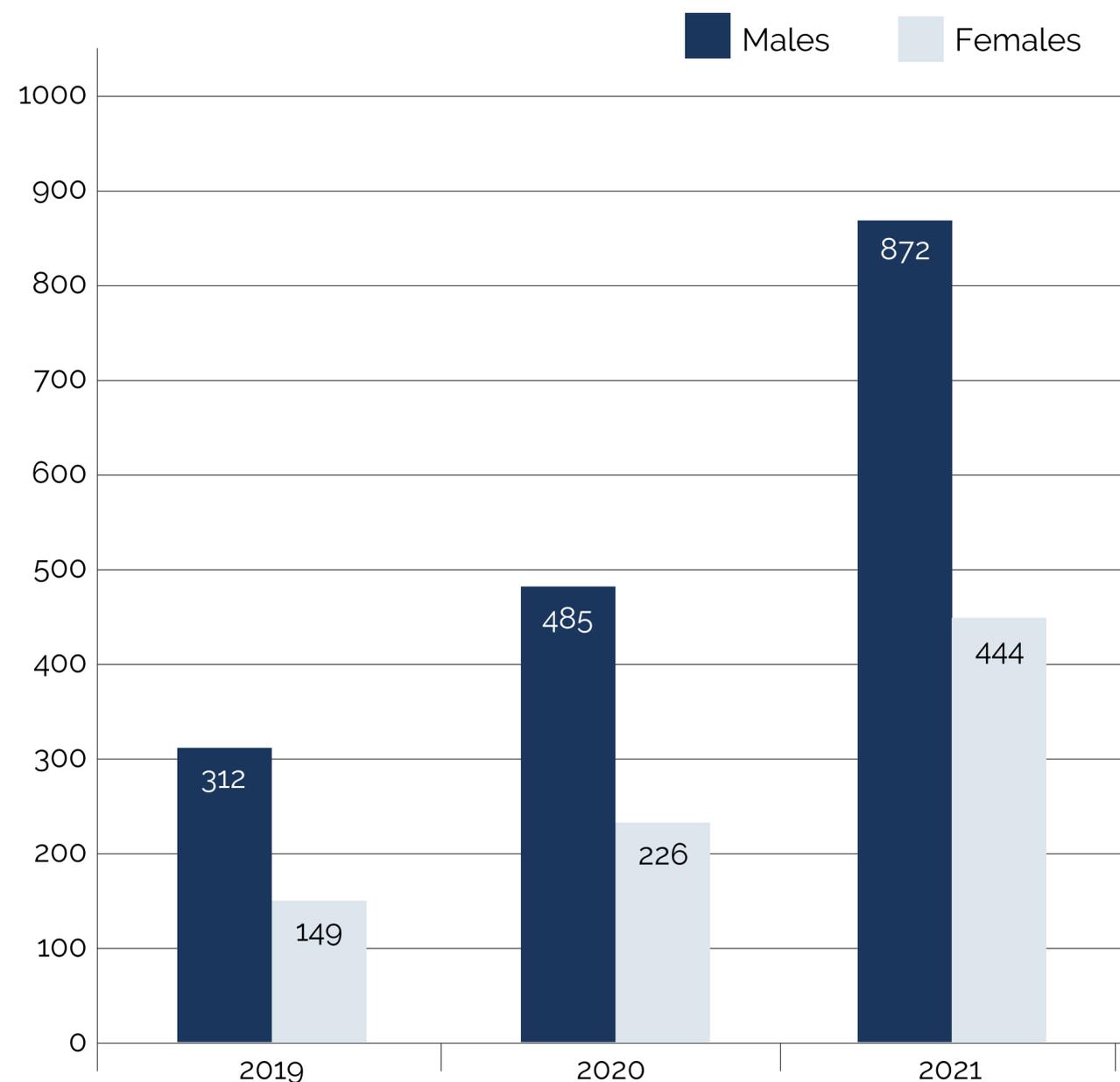
The company population as at 31/12/2021 was made up of 1,316 workers, including temporary staff, which has grown dramatically compared to previous years. The graph on the side highlights the rapid growth.

No. of employees (as at 31/12)



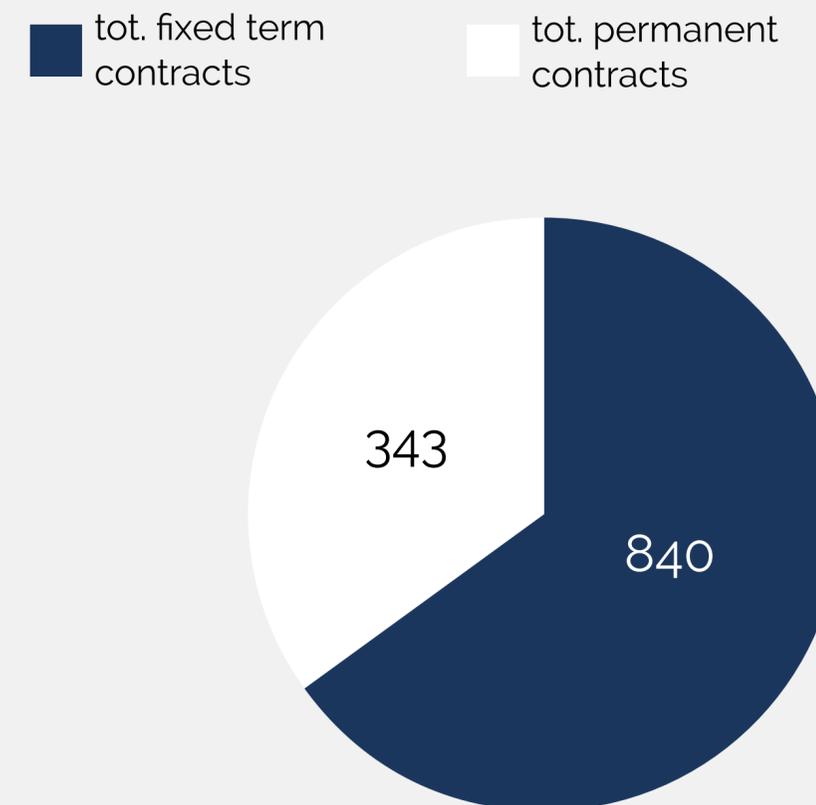
Graph: company population in absolute terms in the three-year period 2019-2021

Women account for 34% of the company's total workforce, the growth trend of their presence follows the progressive increase in the company population.



**Graph:** company population divided by gender in absolute terms in the three-year period 2019-2021

Data on the company population, with direct employment, divided by contract type are shown below.



**Graph:** company population divided by contract - absolute terms as at 31/12/2021

As at 31 December 2021, approximately 26% of the company's workers were employed under a fixed-term contract. This makes it possible to cope quickly with the growth in production volumes and at the same time allows for a timely assessment of candidates for subsequent placements.

## 2.2 Inclusion of talent



**“There is professionalism and loyalty of the people. We struggle to find specialised professionals, but when we find them we realise how talented Italian personnel are.**

**Roberto Crippa**

The development of talent is the best prospect for the future, and this is the path Technoprobe wants to take to plan its future.

The constant search for personnel leads the company to favour hiring policies aimed at young people: in fact, “young” resources **meet the growing need for technical skills**, they tend to be **more flexible and innovative and open to training, updating and digitalisation**.

It should also be emphasised that, with a view to **contributing to collective social change**, hiring young talented people contributes to **reducing the gap in access to employment equity**.

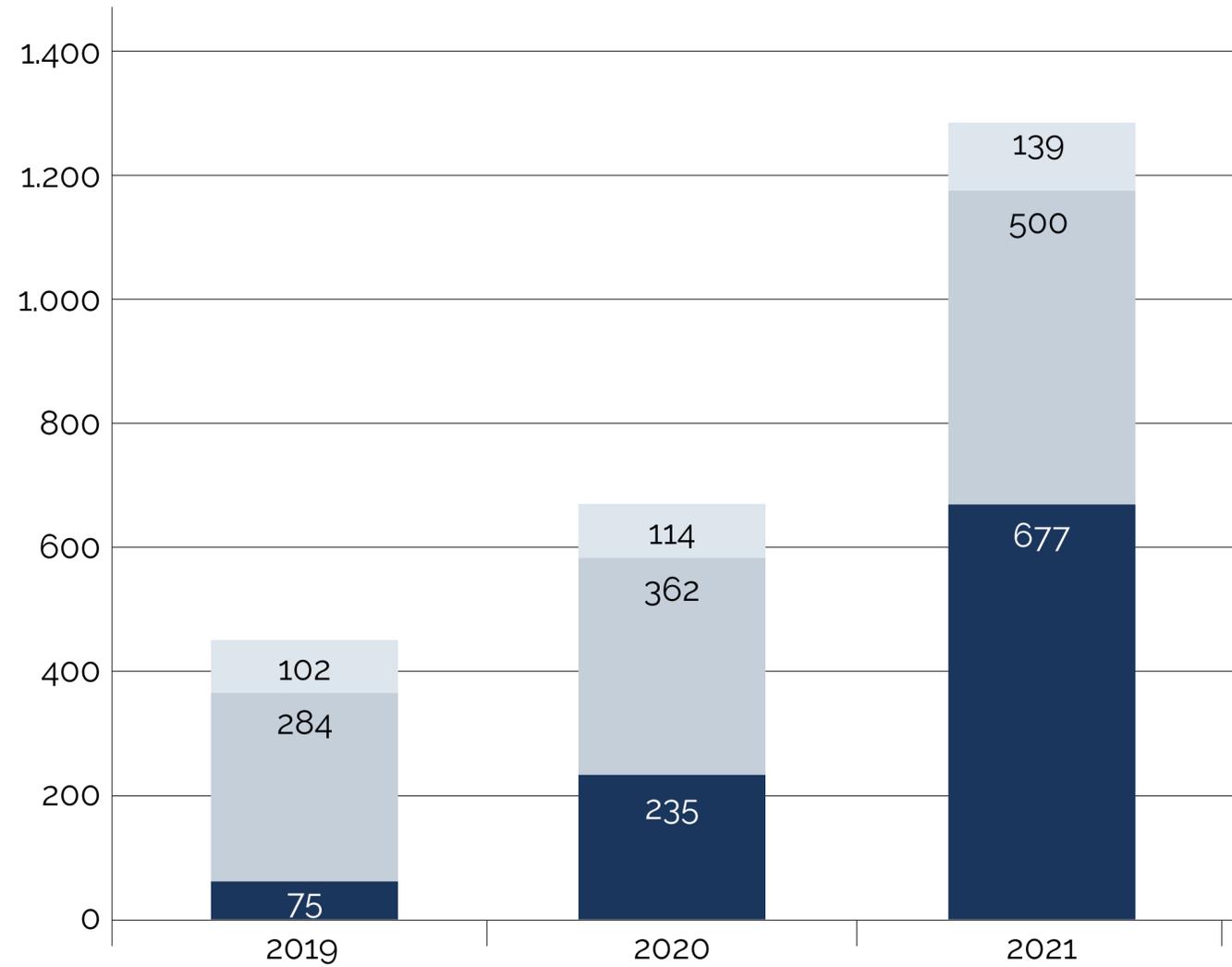
For this reason, Technoprobe immediately and resolutely embarked on a path of enhancing the value of young employees, focusing strongly on their empowerment and involvement in decision-making processes.

In fact, **51% of the company's workforce is made up of people under the age of 30**, a percentage that has risen sharply since 2020 when young people accounted for 33%. While the growth of the 30 - 50 age group remains substantially stable over the three-year period 2019-2021, it should be noted that **the presence of young people has increased significantly from 2020 to 2021, going from 235 young people in 2020 to 677 in 2021**.

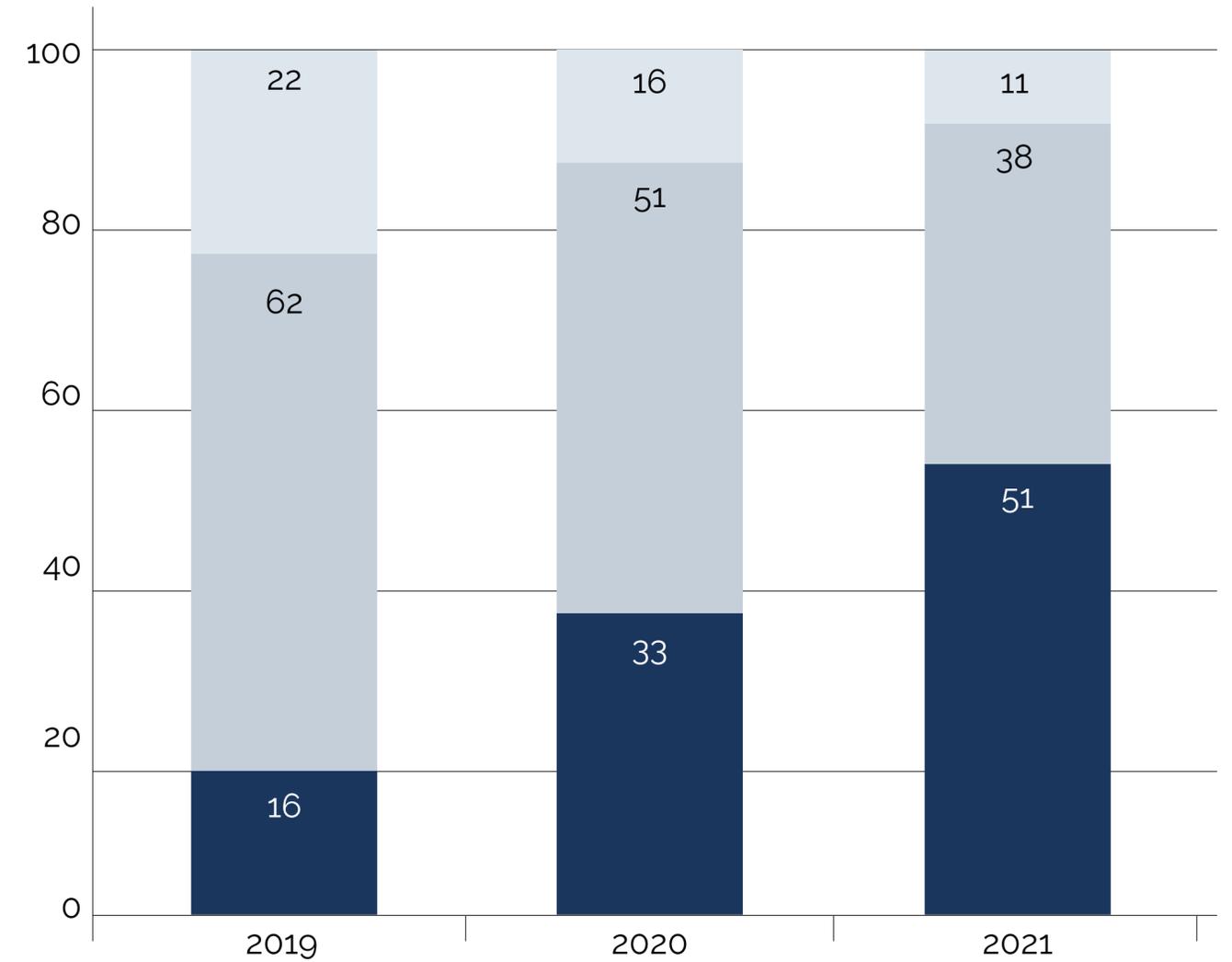
The two graphs below show this in absolute and percentage terms.

### Company population by age group

under the age of 30 years
  between the ages of 30 and 50 years;
  over the age of 50 years



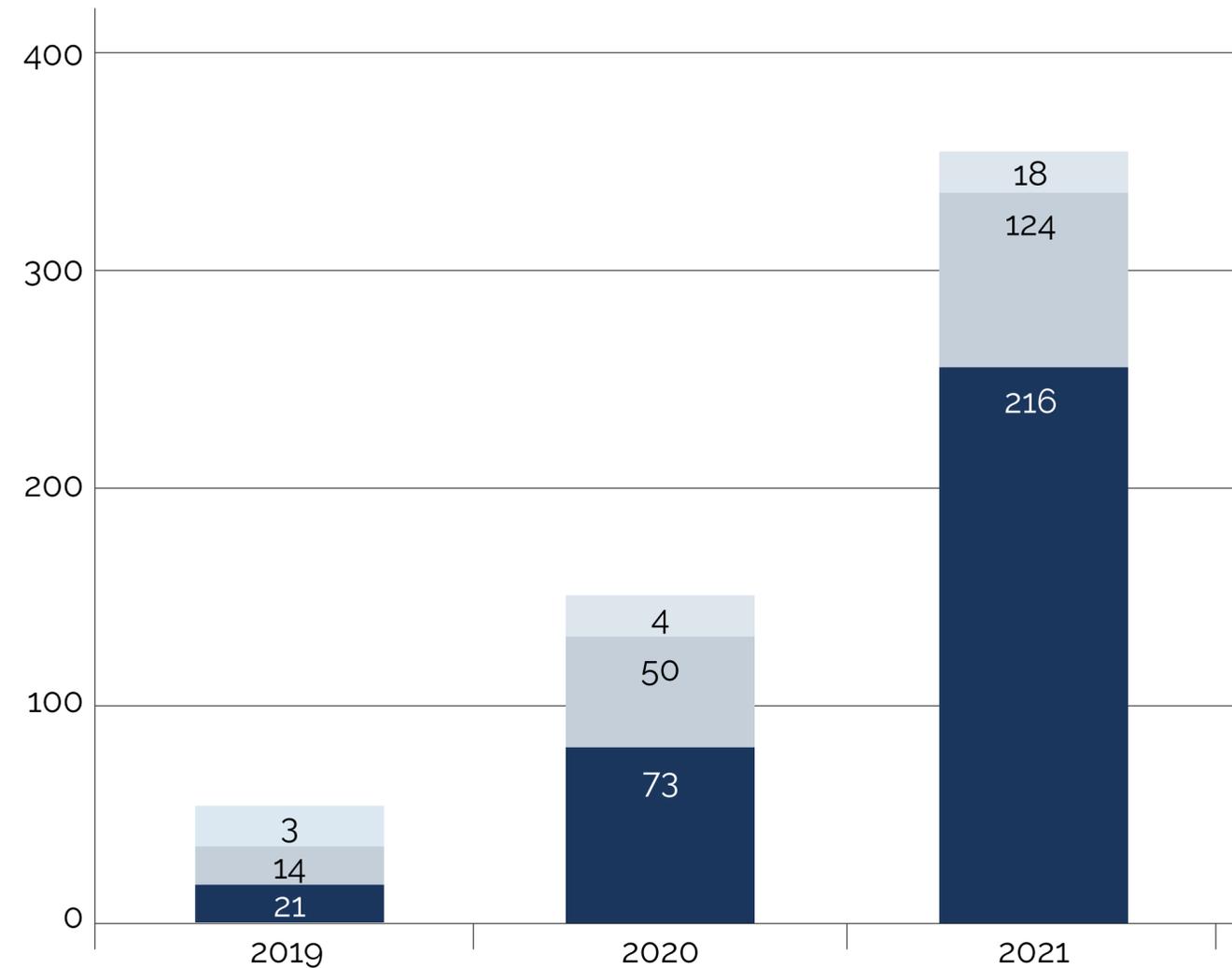
**Graph:** company population divided by age in absolute terms in the three-year period 2019-2021



**Graph:** company population divided by age in percentage terms in the three-year period 2019-2021

### New hires by age group

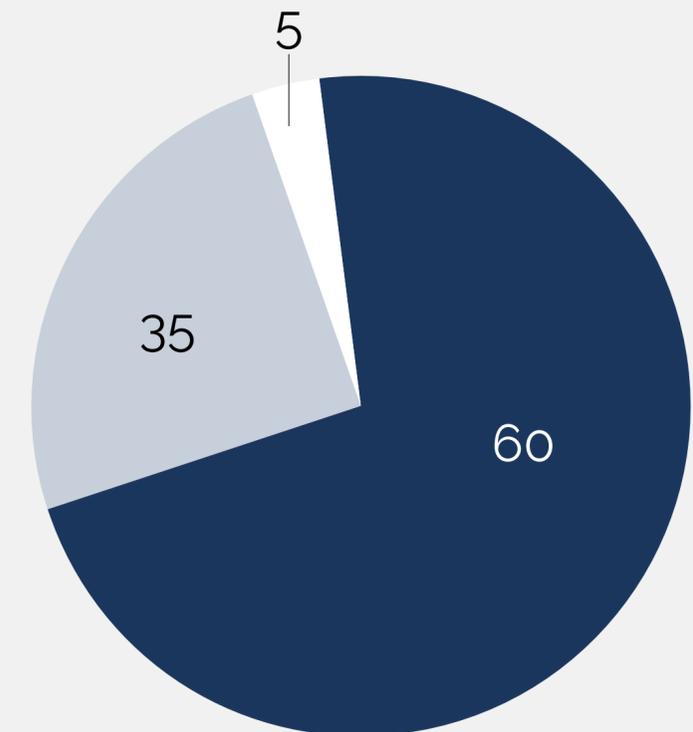
ENTRIES - under the age of 30 years
  ENTRIES - between the ages of 30 and 50 years
  ENTRIES - over the age of 50 years



**Graph:** new hires divided by age in absolute terms in the three-year period 2019-2021

An analysis of **new hires per year** broken down by age group also confirms the constant focus on the inclusion of young people; as shown in the graph below, the highest percentage of people hired in the three-year period 2019-2021 was under the age of 30. In fact, 55% of young people were hired in 2019, 57% in 2020 and 60% in 2021.

under the age of 30 years
  between the ages of 30 and 50 years
  over the age of 50 years



**Graph:** new hires divided by age in percentage terms in 2021

One of the challenges Technoprobe must face is not only attracting young people to the company, but also and above all, keeping them. In fact, so-called **Job Hopping**, i.e. the tendency of new generations to often and easily “hop” from one job to another, is becoming increasingly widespread.

The tables in this page highlight this phenomenon, showing the data for the three-year period 2019-2021 relating to new hires and the annual departures, broken down by age group and gender:

		2019	2020	2021
no. of hires/year	n/year	38	127	358
under 30 years of age;	n/year	21	73	216
between 30 and 50 years of age;	n/year	14	50	124
over 50 years of age;	n/year	3	4	18
male	n/year	22	84	108
female	n/year	16	43	250

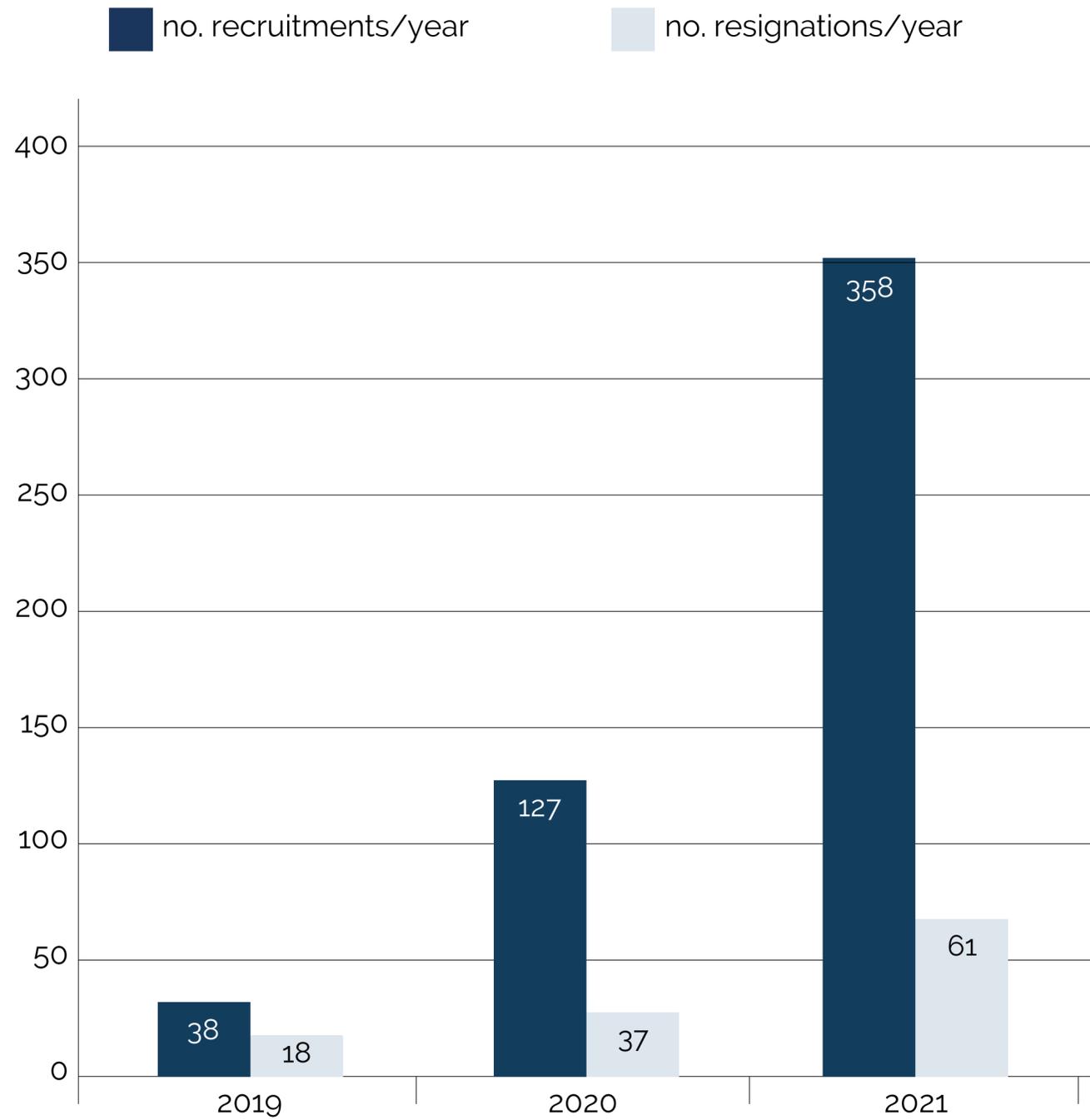
**Table:** new hires divided by age and gender in absolute terms in the three-year period 2019-2021

		2019	2020	2021
no. of resignations/year	n/year	18	37	61
under 30 years of age;	n/year	8	28	34
between 30 and 50 years of age;	n/year	8	5	20
over 50 years of age;	n/year	2	4	7
male	n/year	11	29	44
female	n/year	7	8	17

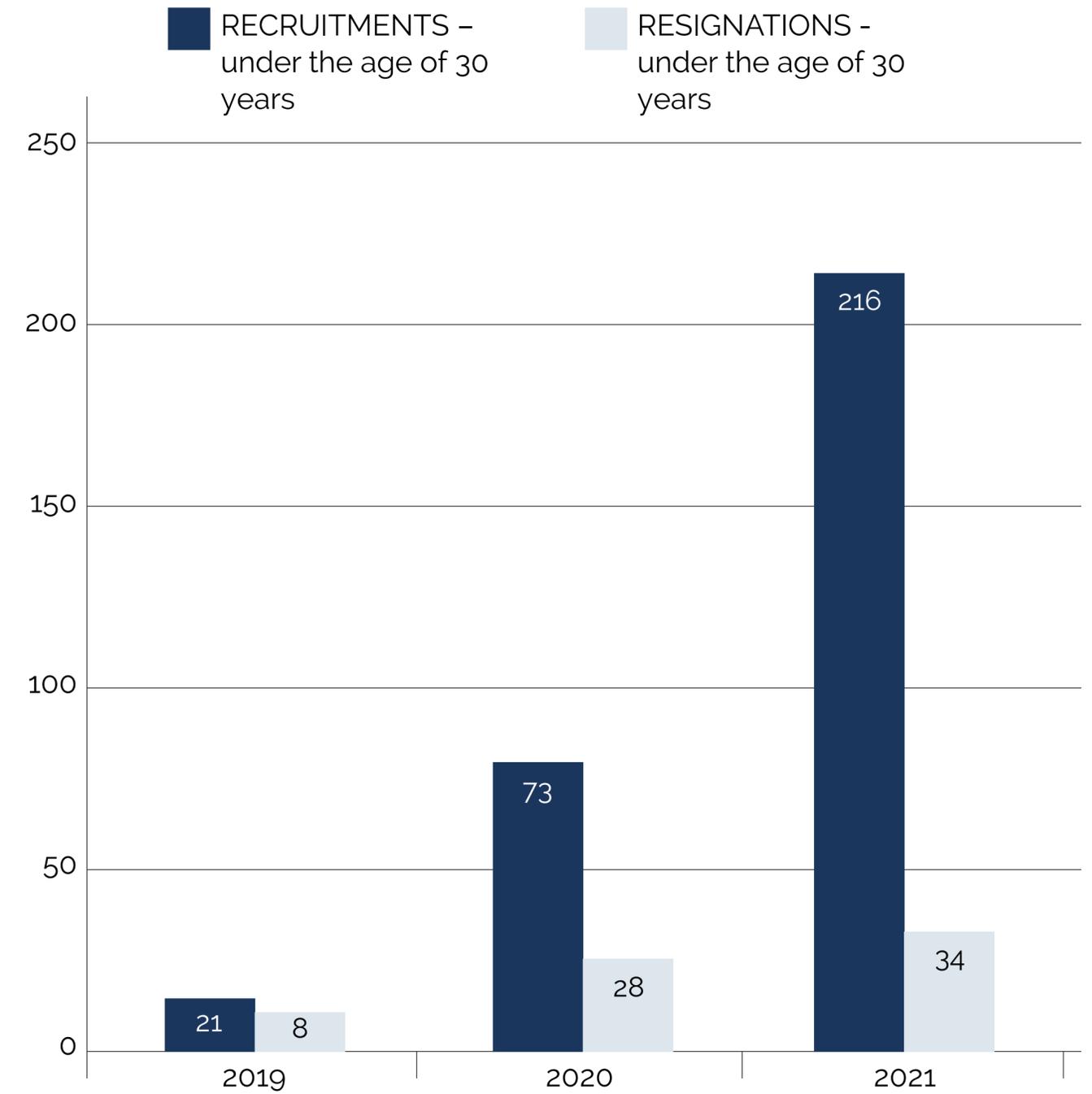
**Table:** resignations divided by age and gender in absolute terms in the three-year period 2019-2021

It is evident that, while there is a steady growth in new hires, there is also a growing trend in employees leaving the company, especially among the younger age groups.

The table above also shows that **70% of new hires in 2021 were made up of women. This figure is even more significant since the three-year reporting period coincided with the COVID-19 pandemic, a particularly difficult period for the female working population throughout the country.**



**Graph:** comparison of recruitments and resignations in absolute terms in the three-year period 2019-2021



**Graph:** comparison of recruitments and resignations under 30 years of age in absolute terms in the three-year period 2019-2021

An analysis of the **turnover rate** provides evidence of this phenomenon.

A result above 100% indicates that the company's workforce is growing. The analysis of the trend over the three-year period confirms that the number of employees entering the company represented by new hires is much higher than the number of resignations

	2019	2020	2021
<b>turnover rate</b>	211%	343%	587%
under 30 years of age;	263%	261%	635%
between 30 and 50 years of age;	175%	1000%	620%
over 50 years of age;	150%	100%	257%
male	200%	290%	245%
female	229%	538%	1471%

**Table:** Turnover rate by age and gender in the three-year period 2019-2021

## Job Hopping: the strategies put into place to retain talent

The tendency to "hop" from one job to another is now extremely common among Millennials and can be a serious drawback for organisations that focus on recruiting young talent. Previous generations, such as Baby Boomers and Generation X, were honoured to have a job for life, however, this is no longer the case for today's workers. Whether for reasons of context or of their own choice, new talent is not content with the idea of spending the rest of their working life in one place.

Technoprobe has nevertheless seized the advantages

and opportunities arising from this situation by deploying all possible strategies aimed at retaining young talent in the company: welfare policies and customised benefits (as described in more detail in the "Engaging Employees" chapter), open-space offices to make the workplace even more attractive and dynamic, a constant increase in training hours for personnel, policies and incentives for a better work-life balance, and a growing focus on Social Responsibility and corporate values.

## 2.3 Growth and development of people



All companies derive their strength from people. Skills, experiences, abilities and talents of employees are the driving force of the company which, if properly managed, creates the conditions for achieving the company's objectives.

For a **highly innovative** sector such as the one in which Technoprobe operates, it is essential to focus on the distinctive **expertise** of its resources and to have the ability to evolve rapidly.

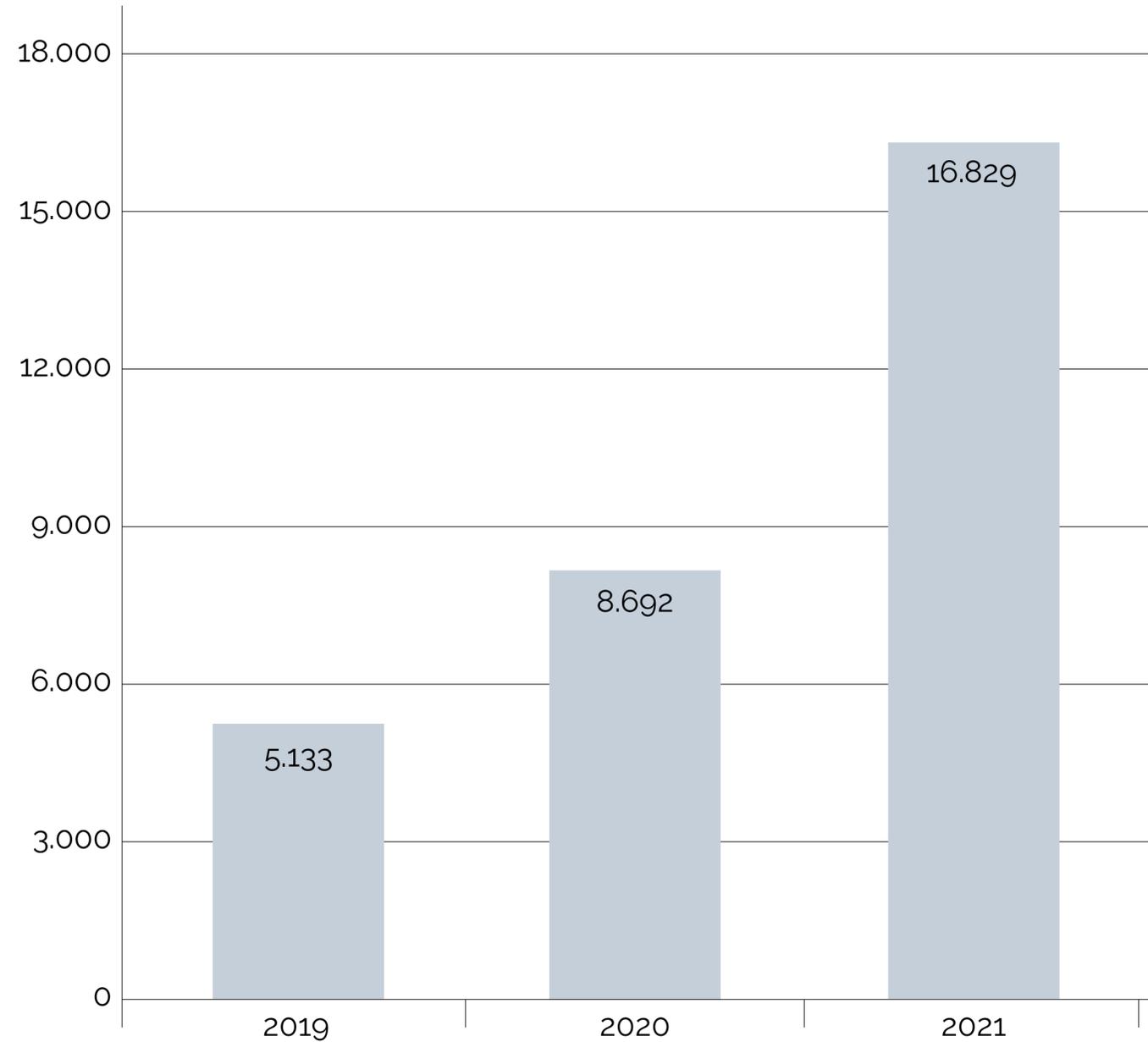
To this end, a decisive role is played by the construction of an **effective corporate training programme**, which aims to maintain a high level of competence and enables employees to perform in the best way possible way.

For this reason, Technoprobe launched a major training programme in 2021, strongly desired by the owner, aimed at giving each employee the correct tools to be able to carry out their job competently and professionally.

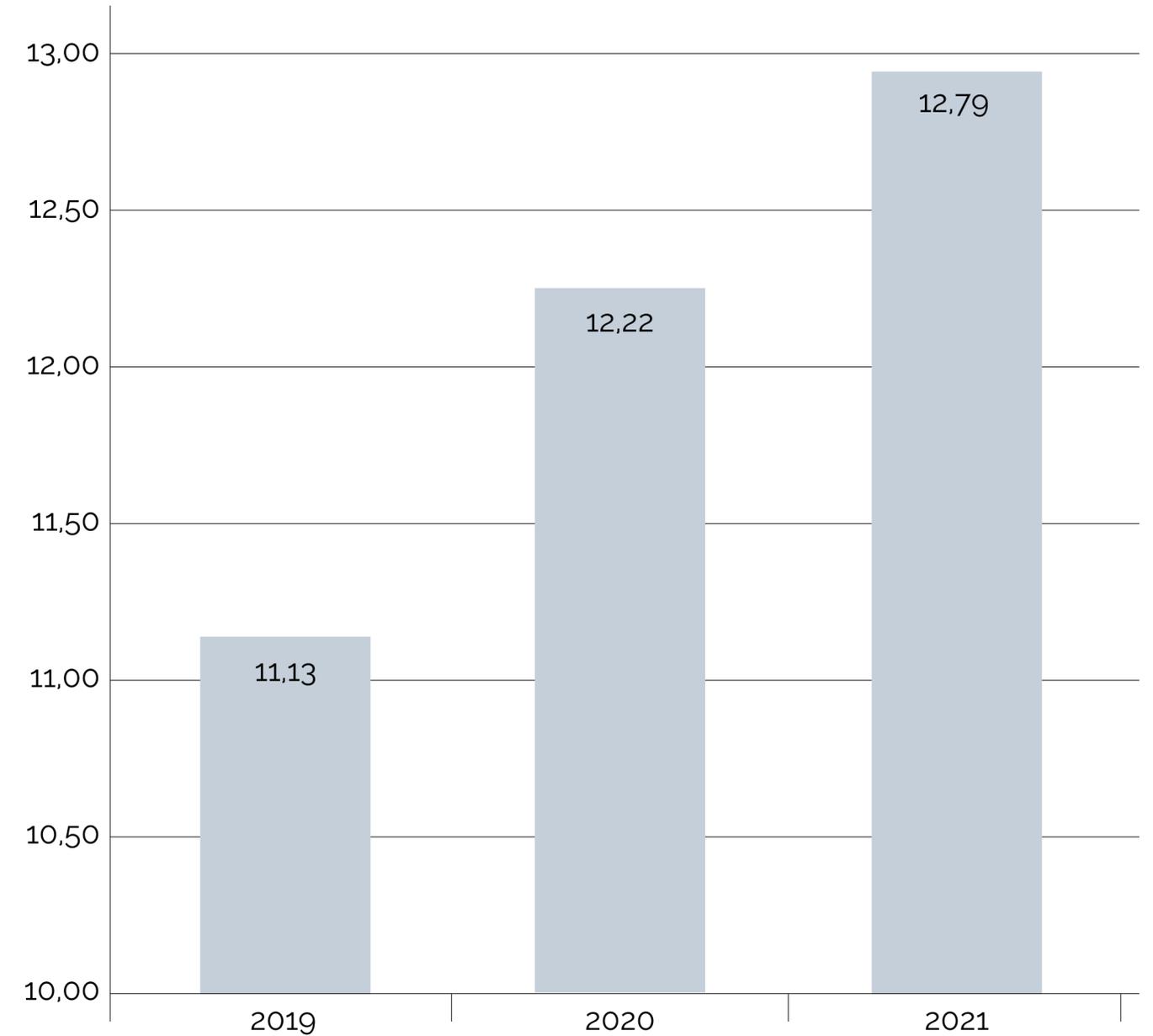
### The training programme was divided into different areas:

- An initial induction phase for new hires
- A job-specific training programme for the various functions
- Method-based training for more efficient control of the processes
- Cross-functional knowledge training to encourage the sharing of skills between the various functions

Despite the complicated situation deriving from the Covid-19 pandemic, compounded by organisational difficulties in providing certain types of training activities, the company managed to significantly increase the total number of training hours provided in 2020 compared to the previous year, both for compulsory and non-compulsory training hours. The upward trend is further confirmed by the figures for 2021, where **the total number of training hours rose to 16,829**, equal to an average of about 13 hours per employee.

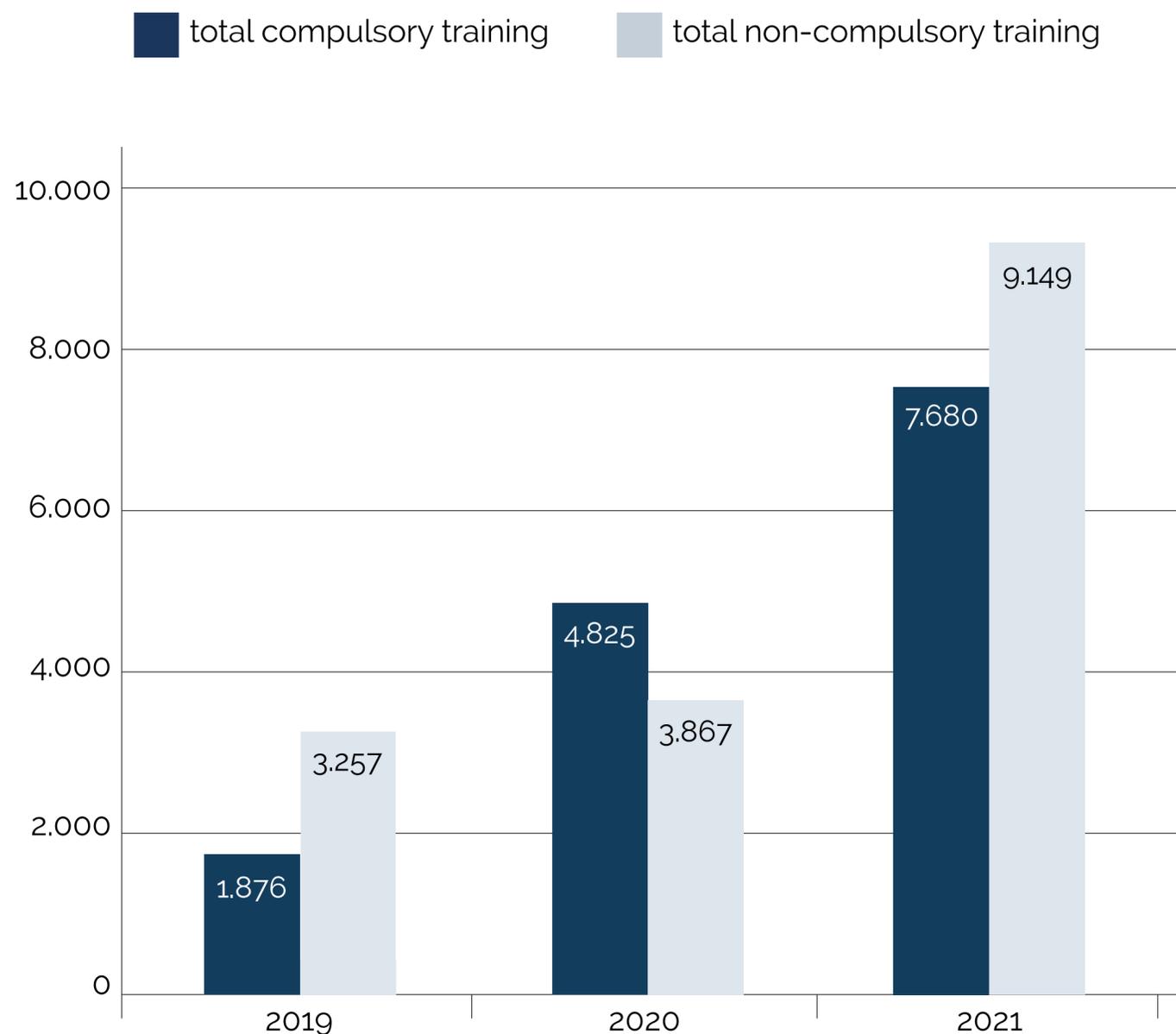


**Graph:** total number of training hours in absolute terms in the three-year period 2019-2021



**Graph:** average number of training hours per employee in the three-year period 2019-2021

## Compulsory and non-compulsory training



**Graph:** total number of compulsory and non-compulsory training hours in absolute terms in the three-year period 2019-2021

Below is a detailed summary of training hours broken down by type.

The main distinction can be made based on the training obligations required by law as opposed to training carried out based on a process for the development of company talent, aimed at improving the specialisation of workers, for their professional growth depending on their tasks, and for continuous improvement of the culture of the environment, health and safety and sustainability as a whole.

	2019	2020	2021
compulsory training	1.876	4.825	7.680
non-compulsory training	3.257	3.867	9.149
<b>total training</b>	<b>5.133</b>	<b>8.692</b>	<b>16.829</b>

Compulsory training is defined by current legislation and laid down by the main training requirements of health and safety legislation (mainly deriving from the State-Regions Agreement of 21/12/2011), which form the basis of employee training.

Other types of training are also defined, linked to the correct management of work processes and regulatory compliance on other issues: Confidentiality, Privacy, Production Behaviour, and ESD.

		2019	2020	2021
compulsory health and safety training	h/year	1.780	4.716	5.736
equipment training	h/year	96	109	117
other compulsory training	h/year	--	--	1.827

		2019	2020	2021
other health and safety training	h/year	289	838	3.277
environmental training	h/year	47	81	449
quality training	h/year	99	44	225
other training	h/year	2.822	2.904	5.198

Also considered are the hours of non-compulsory training provided in various areas such as courses for the use of specific machinery, training in the use of personal protective equipment, emergency management, environmental training and quality training.

Also included are training hours on sustainability such as RBA, CDP and Business Ethics

## 2.4 Health and safety



Technoprobe has always been active and committed to protecting the Health and Safety of workers with the aim of minimising risks by developing initiatives for employees and people who, in any capacity, work within the various technological buildings.

The culture of health and safety is shared at all levels thanks to the support of the EHS Office and the Head of the Prevention and Protection Service (RSPP) and involves the entire company organisation, from top management down to employees.

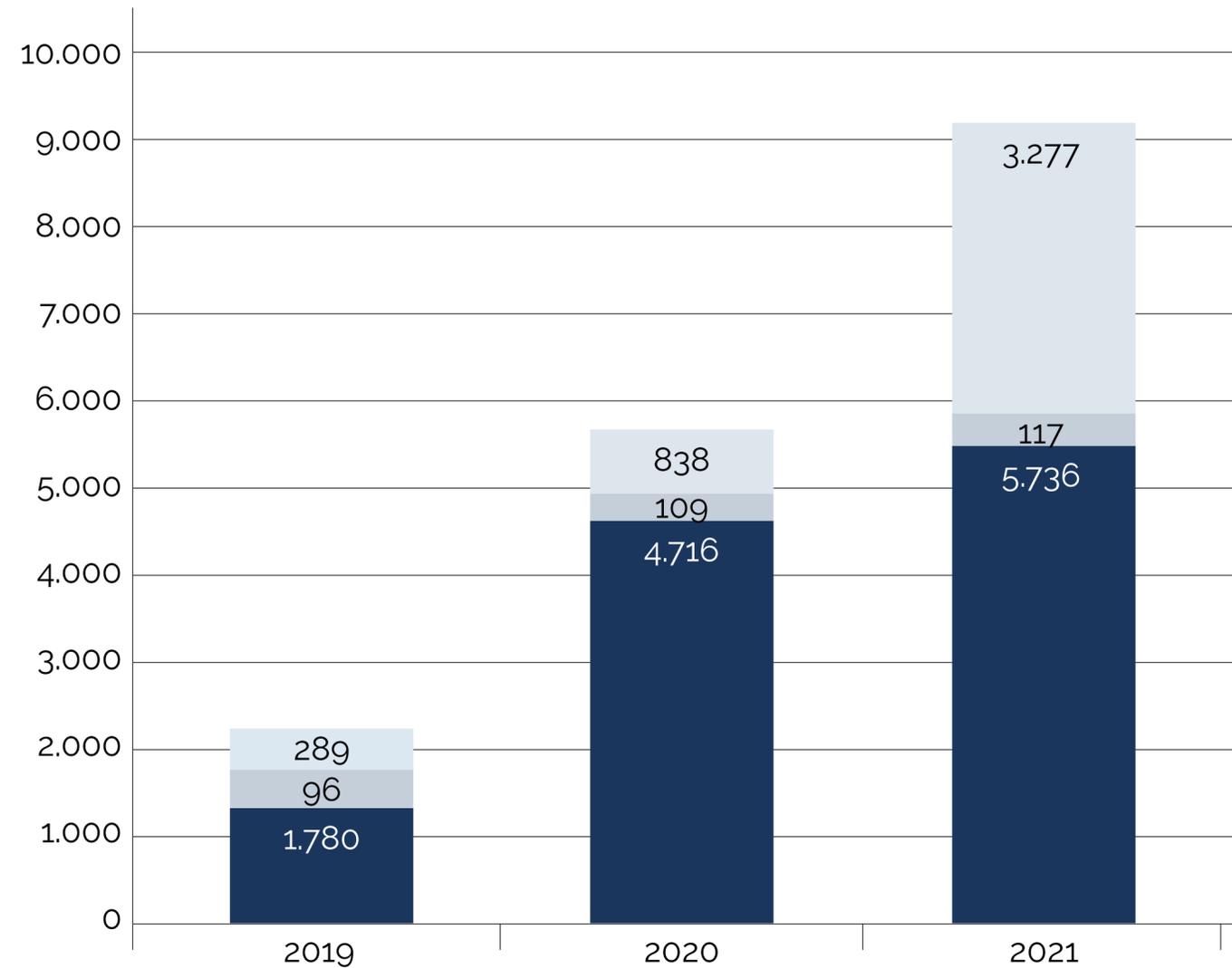
In accordance with the regulations, the company has made use of dedicated software to develop a very specific assessment of risks associated with occupational health and safety.

The risk assessment document is detailed for each department and production process, and is constantly being updated. This assessment has made it possible to identify the most critical areas and processes, for which continuous improvement actions are implemented.

Given the diversity of the production processes within Technoprobe, the risk identification activity is extremely complex and requires careful analysis based on the different tasks and behaviour of the workers. In this process, the contribution of the Company Doctor and discussion with the Workers' Safety Representatives (RLS) is fundamental to ensure that the risk assessment process is effective and in line with the company's specific nature, thus guaranteeing maximum protection of workers and better levels of health and safety protection.

## Health and Safety training

Compulsory safety training
  Compulsory equipment training
  Complementary safety training



**Graph:** total number of health and safety training hours in absolute terms in the three-year period 2019-2021

All processes are thoroughly mapped and assessed, identifying associated risks and defining measures to mitigate them.

All activities related to Health and Safety management are supported by constant training, education and learning, which has resulted in a constantly increasing number of training hours provided over the years.

Health and Safety training includes compulsory training sanctioned by specific State-Regional agreements, and training courses designed and organised internally, in order to make training and education on individual processes more widespread and tailored to the specific nature of the company.

		2019	2020	2021
TOTAL injuries	n/year	6	6	7
On-site injuries	n/year	2	3	2
Commuting injuries	n/year	4	3	5
Injuries > 40 days	n/year	0	1	1
Days of absence due to injuries	n/year	54	120	123
Average duration of injuries in days	n/year	9	20	18
Medical treatments	n/year	--	5	9
First aid requests	n/year	--	--	7
Reported incidents	n/year	--	5	2
Near misses	n/year	3	2	3

**Table:** injuries characterisation in absolute terms in the three-year period 2019-2021

One of the most significant Health and Safety indicators monitored by Technoprobe is the trend of events (accidents, injuries, near misses), with the aim of analysing the causes behind them and introducing continuous improvement actions to prevent them from recurring.

The table on the left shows the accident indexes in the three-year period under review.

The number of accidents has always been extremely low, despite the significant increase in the company's workforce, testifying to the constant attention paid to health and safety conditions in the workplace.

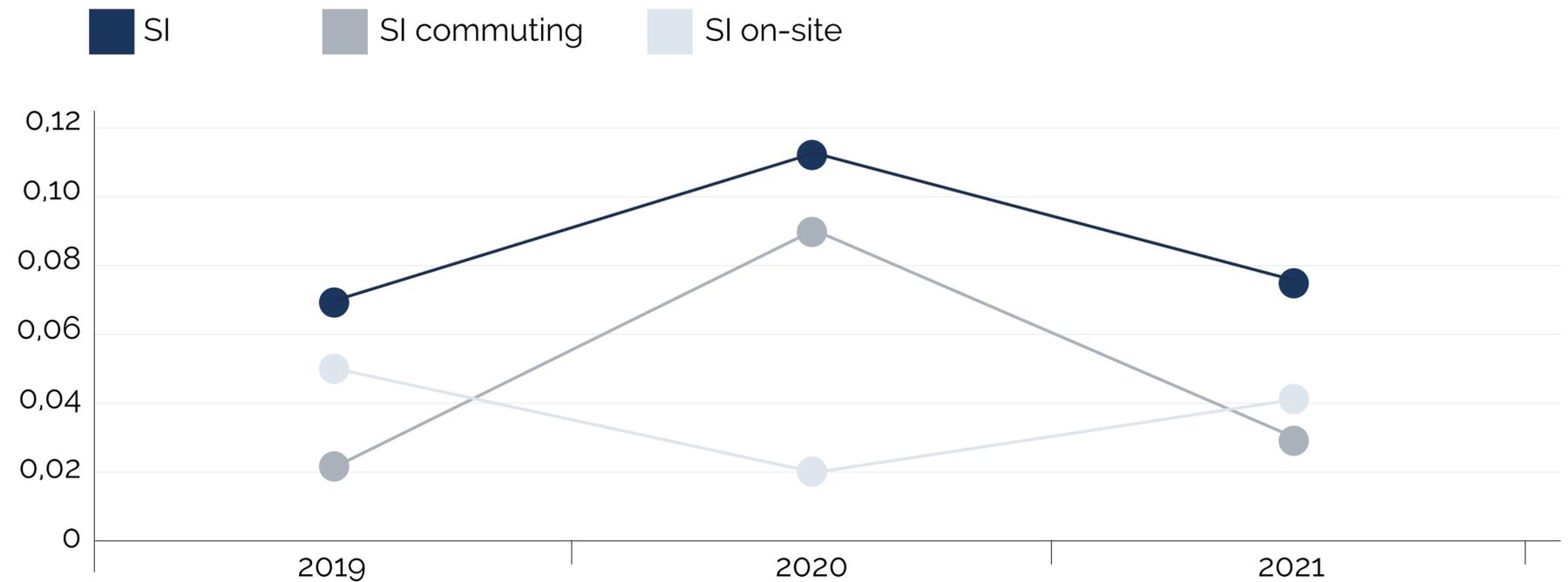
The indicators in the left side show that there was a decrease in the number of accidents in the company in 2021. Only two accidents were recorded for the year, one of which was serious (resulting in an increase in the number of days of absence in absolute terms and average duration).

	2019	2020	2021
Hours worked/year	760.952	1.062.976	1.695.079
Injuries Severity Index <small>no. of accident days X 1,000 / no. of hours worked</small>	0,07	0,11	0,07
Injuries Frequency Index <small>no. of accidents X 1,000,000 / no. of hours worked</small>	7,88	5,64	4,13

**Table:** severity index and frequency index in the three-year period 2019-2021

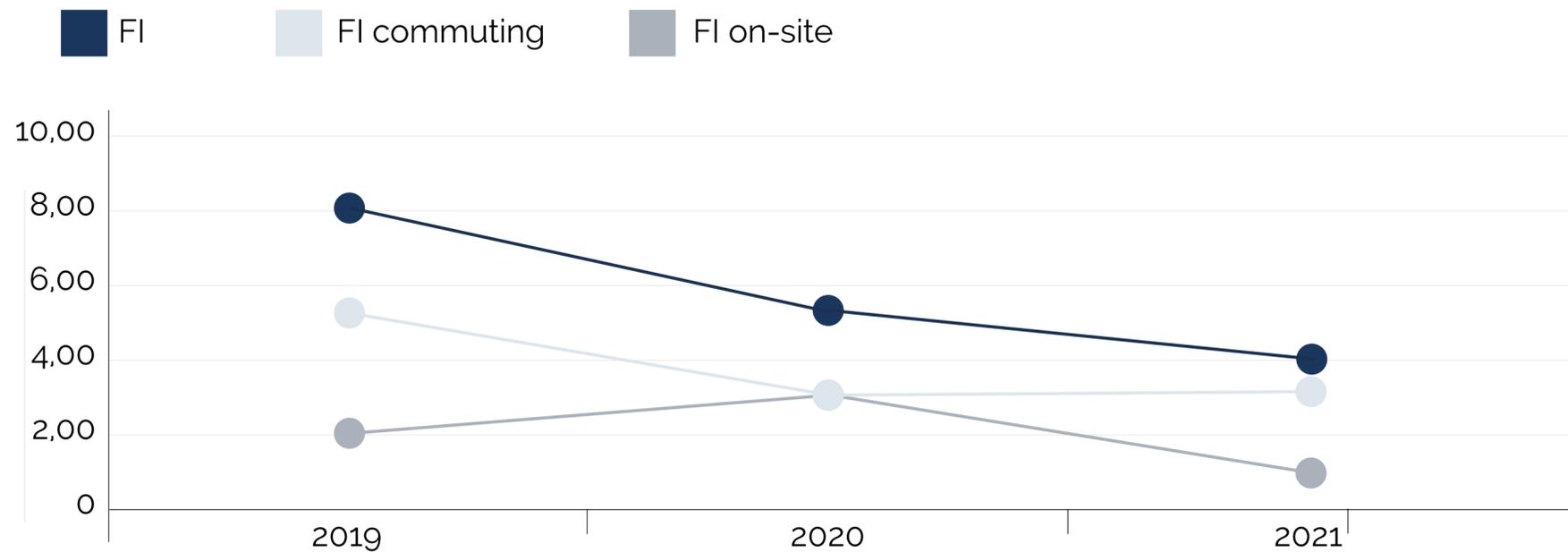
The graphs below outline the severity and frequency indexes of on-site accidents over the three-year period compared to commuting accidents. A progressive decrease in the frequency indexes was observed, while the severity indexes were affected by a single commuting accident that caused the worker to be absent for 72 days.

### Severity Index (SI)



**Table:** Severity index in the three-year period 2019-2021, broken down by on-site and commuting accidents

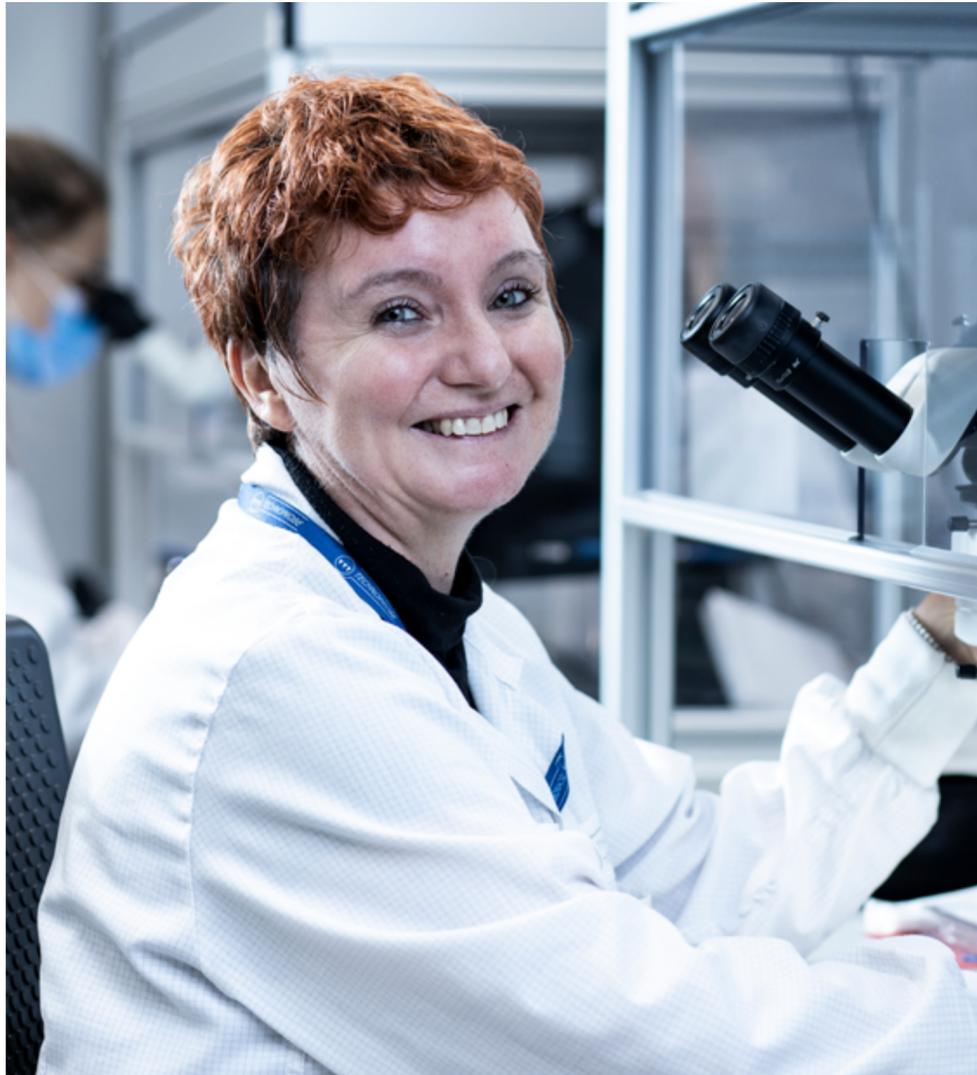
### Frequency Index (FI)



**Table:** frequency index in the three-year period 2019-2021, broken down by on-site and commuting accidents

The trend of both indexes in the table on the previous page shows how the conditions of the working environment and Technoprobe's commitment to health and safety are constantly guaranteed and continuously improving. In fact, while there has been a gradual and significant increase in the number of hours worked over the three-year period in question, both the severity and frequency of accidents have decreased.

## 2.5 Employee involvement



Enhancement of human capital has always been crucial for Technoprobe: a strong commitment demonstrated by the **numerous hirings**, but also by numerous other projects that the company carries out to increase the sense of belonging of its employees, thus giving them the opportunity to enjoy their time at work and perform better..

Each employee can take advantage of a well-defined **Corporate Welfare Plan**, which allows them to convert all or part of their performance bonus into various services present on a digital platform, thus benefiting from full tax exemption. The company also provides an **on-top increase of 30%** on the part spent on the platform.

The services offered to workers include babysitting vouchers, purchase of school textbooks, gym memberships, travel vouchers, reimbursement of education and canteen expenses, or allocation of the bonus to pension funds.

### Baby bonus

A concrete help to support better work-life balance.

A company concerned and attentive to the health of its employees has a duty to support and help them in the difficult task of balancing work and family life.

This is the main aspect of Technoprobe's Welfare Policies. In fact, the company decided to offer all employees who have a baby in 2021 the possibility to take advantage of a €1,000 Baby Bonus, thus allocating € 22,000 of bonuses for new parents.

The project is becoming increasingly popular and the company plans further communication initiatives to increase membership even more in the coming years. In 2021, the initiative was more successful with a significant increase compared to 2020 (+37%).

In addition to the services available on the digital platform, Technoprobe has activated a number of **welfare support** services, such as agreements with sports facilities (and with the local **tyre dealer** for seasonal tyre changes). Technoprobe personnel are also given the opportunity to receive personal deliveries in the company. Employees can also take advantage of **subsidised current accounts** at Banca Intesa Sanpaolo.

For years, the company has promoted a theatrical campaign at the Cernusco Lombardone Theatre, which has featured shows and performances coming from the Milan theatre scene and the participation of renowned Italian actors. As part of this initiative, a number of free seats were reserved for company employees.

## Free consulting service in the company: towards a new concept of Welfare

A particularly popular initiative offered by Technoprobe is the possibility for employees to benefit from free consultation with **qualified tax and legal advisors**.

Employees thus have the opportunity to benefit from free advice on completing their tax returns. The initiative resulted in 209 people joining the project in 2021 alone.

In addition to tax advice, employees can also benefit from free legal advice. In this case, 160 people made use of the service for a total of 80 hours.

## Flu vaccination for employees

In line with the policies adopted by Technoprobe to promote the health of its employees, the company has been providing a free flu vaccination service since 2019.

About 100 people made use of the service in 2019, about 200 in 2020 and about 150 in 2021.

The company's aim is to protect individual health, minimise any risk of infection and ensure the continuation of production activities.

# Social Highlights

**1316**

total workers in Italy  
(+85% over 2020)

**34%**

of women present in  
the company

**51%**

of the company  
workforce is made up  
of young people under  
30.

**+188%**

increase in the  
presence of young  
people under 30 in  
2021 compared to 2020

**16.829**

total hours of training  
in 2021

**13**

training hours on  
average in 2021

**+454%**

increase in  
environmental training  
hours over 2020

**80**

total hours of free legal  
advice for employees

**369**

employees who  
benefited from free tax  
and legal consulting  
services

**70%**

of new hires are  
women.

# 3.

## OUR APPROACH TO ENVIRONMENTAL SUSTAINABILITY

Technoprobe is aware of the role it plays in protecting people and the environment. The corporate vision sees the company acting as a leader in the promotion of sustainability policies. For this reason, the involvement of people at all levels is fundamental to carrying out the projects in which the company believes.

With this in mind, the company has invested significantly in **environmental training** for both new employees and employees involved in processes of environmental importance. In fact, Technoprobe considers environmental training for new employees to be important in raising awareness of environmental issues and providing the rules for good environmental management of plants and equipment.

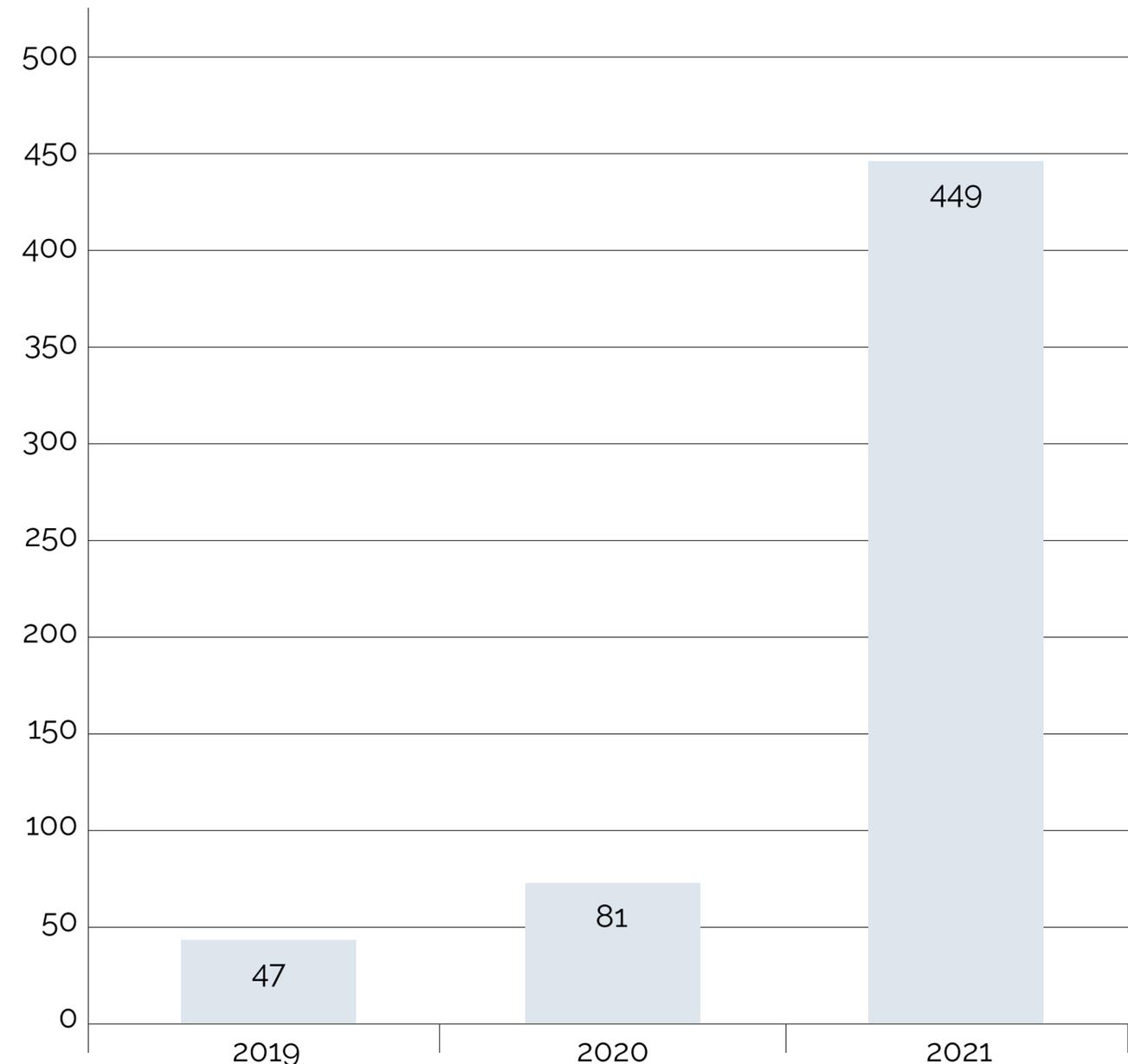
Even more important is the training provided to ensure that company personnel dedicated to managing environmentally-relevant processes are aware of their fundamental role in the correct implementation of environmental practices to ensure the prevention of pollution and maintain continuous compliance with laws and internal rules.

The training carried out focused mainly on

the management of waste, wastewater, refrigerant gases and atmospheric emissions. The purpose of the training measures planned in this three-year period was to increase the skills of the people involved in order to give a decisive boost to the environmental management process, acting primarily on the technical and legislative skills applicable to Technoprobe's production activities.

As far as environmental management is concerned, Technoprobe is constantly committed to **reducing the environmental impact** of its production-related activities. For this reason, it has initiated constant monitoring of the significant environmental aspects, according to which improvement actions are planned.

With a view to total transparency, this chapter was prepared with the intention of outlining Technoprobe's environmental impacts and the actions implemented to reduce them. A fundamental element for the company is the monitoring carried out through **indicators created specifically for this purpose.**



**Graph:** hours of environmental training in absolute terms in the three-year period 2019-2021



The company has been steadily growing for several years, and this aspect must be taken into account when interpreting the data relating to environmental monitoring. In fact, the consumption of resources in absolute terms has increased significantly over the years, but the same figure in relation to turnover makes it possible to understand the effort that goes into the continuous improvement of performance.

Technoprobe is active in a process of identifying its environmental aspects deriving from production activities and assessing their significance. The process is fundamental for managing environmental impacts and is part of the overall approach to preventing the risk of committing environmental crimes, as defined by Legislative Decree no. 231/2001.

**“The real challenge lies in being able to overturn the system, we should learn to work and produce by generating environmentally friendly effects.”**

**Giuseppe Crippa**

### **Below is a summary of the environmental aspects considered:**

- Consumption and use of raw materials  
Risorse idriche
- Water resources  
Gestione energia
- Land occupation/biodiversity/soil and subsoil contamination
- Energy management
- Emissions
- Waste
- Organisation's products (end-of-life)

## 3.1 Raw materials

Technoprobe mainly purchases the following types of raw materials: printed circuit boards (PCB), metal alloy materials, electronic components, silicon nitride, precious materials, screws, and process solutions for chemical surface treatments.

Auxiliary materials to the production process are also used such as chemicals, pastes, resins, welding wires and technical gases.

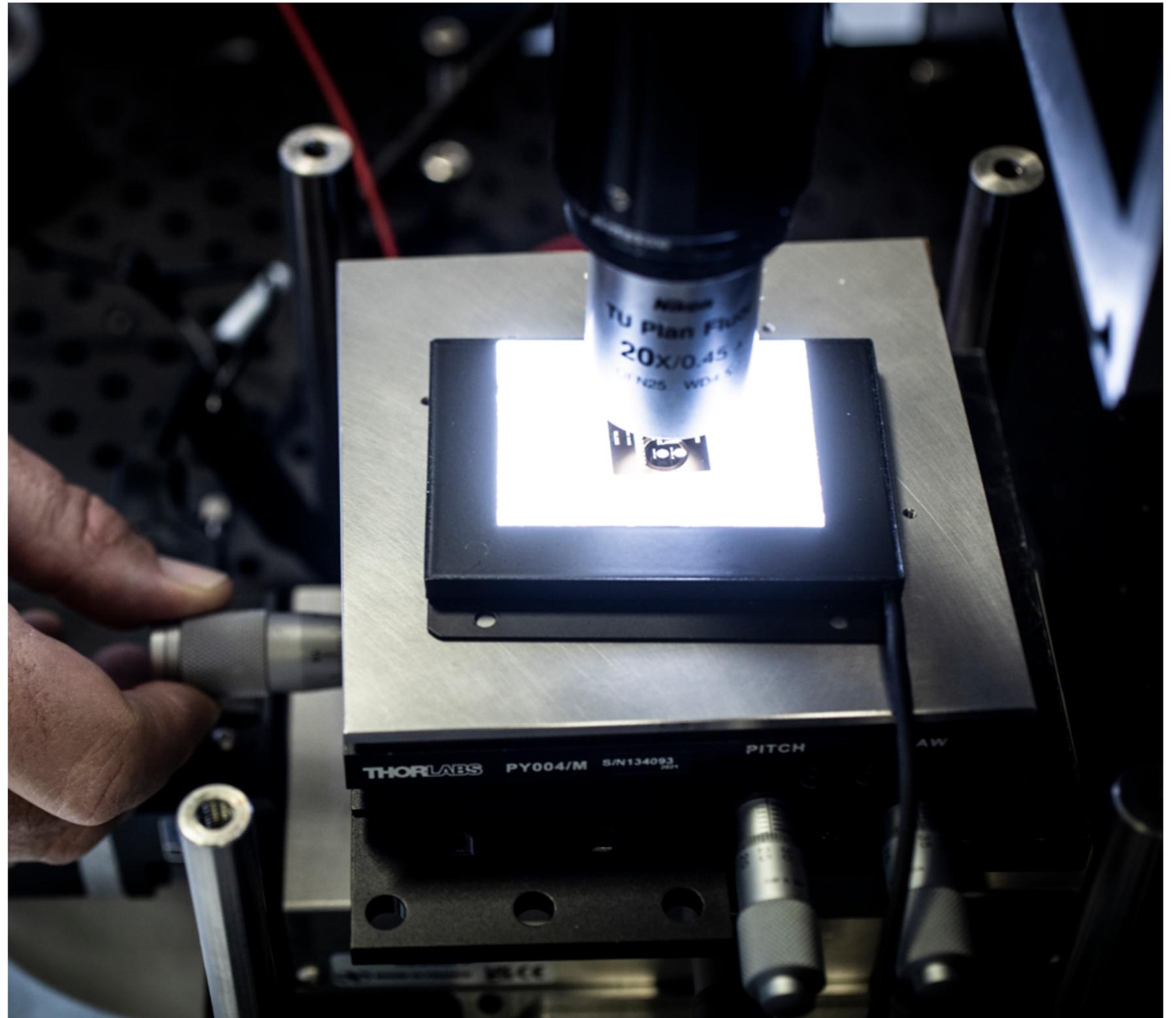
Over the years, there has been a steady growth in the volume of incoming products due to the continuous **increase in sales figures**, the opening of **new production lines** and the expansion of production areas, which required the construction of **new buildings**.

This is demonstrated by the more than 50% increase in raw materials ordered for purchase in the two-year period 2019-2020.

During 2021, the trend continued to grow so much so that in the first half of the year alone the number of parts ordered exceeded the quantities for the whole of 2020.

This growth trend was also recorded in the consumption of chemical products.

Raw materials entering the sites are sourced from Italy and abroad. **From a Life Cycle Perspective**, the impact deriving from the transport of raw materials was quantified in terms of CO<sub>2</sub> equivalent emitted, through an analysis of Scope 1, 2 and 3 GHG emissions.

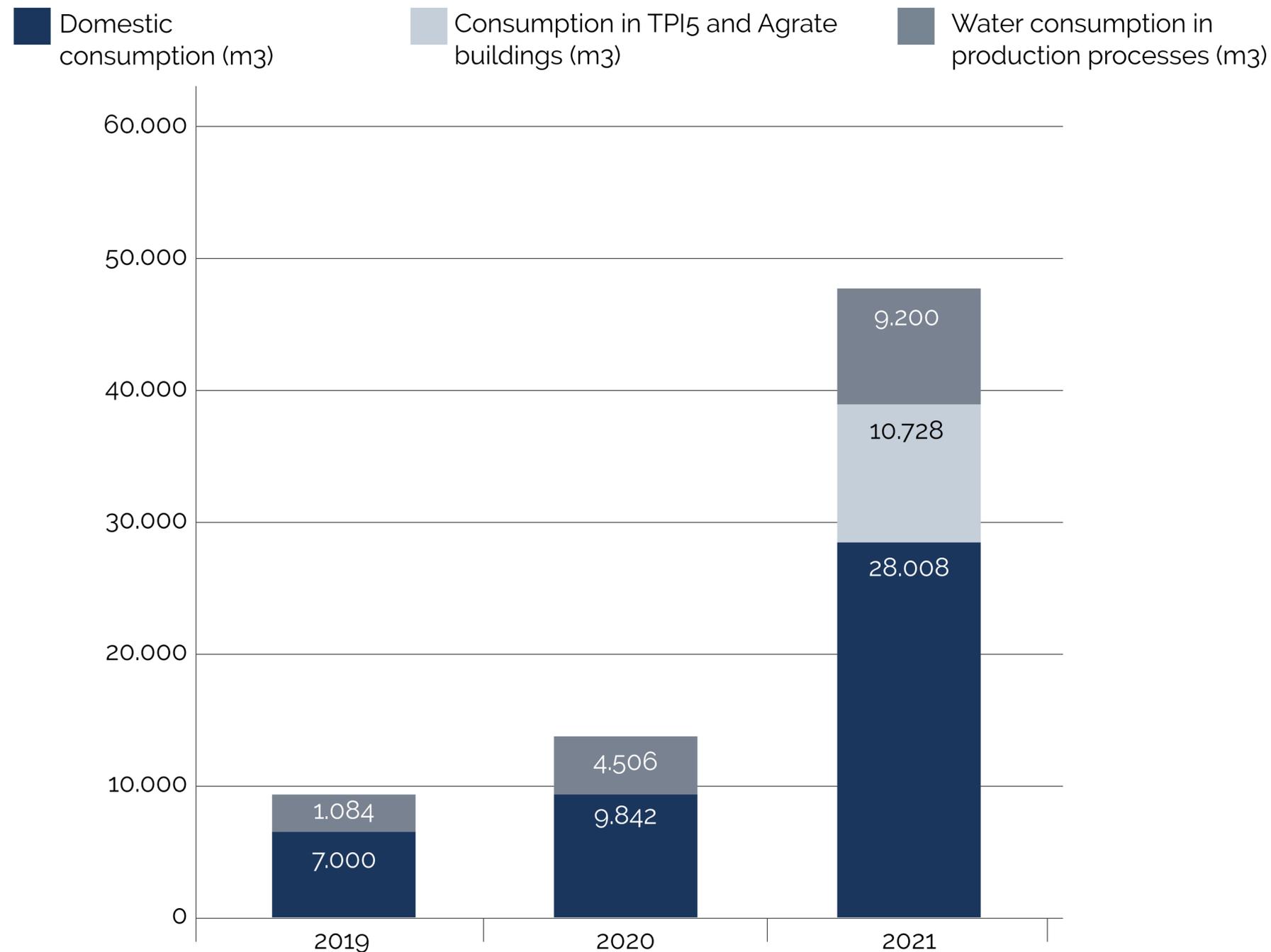


## 3.2 Water consumption and discharge

Technoprobe is aware that water is a common asset and therefore a precious resource to be preserved; for this reason, all possible efforts have been made to reduce its consumption.



### Details of water consumption



Graph: water consumption in cubic metres

The production process does not require the consumption of copious amounts of water. Consider that in 2021, the entire water requirement remained below 50,000 cubic metres and that about **65% of the annual consumption is attributable to domestic use.**

Below is a graph on water consumption in absolute value:

The graph above shows the contribution of water consumed by the TP15 and Agrate Buildings in 2021, which is equal to 10,728 cubic metres. It is important to make this distinction because during 2021, the above-mentioned buildings were not used for production purposes and their consumption is therefore mainly due to construction activities.

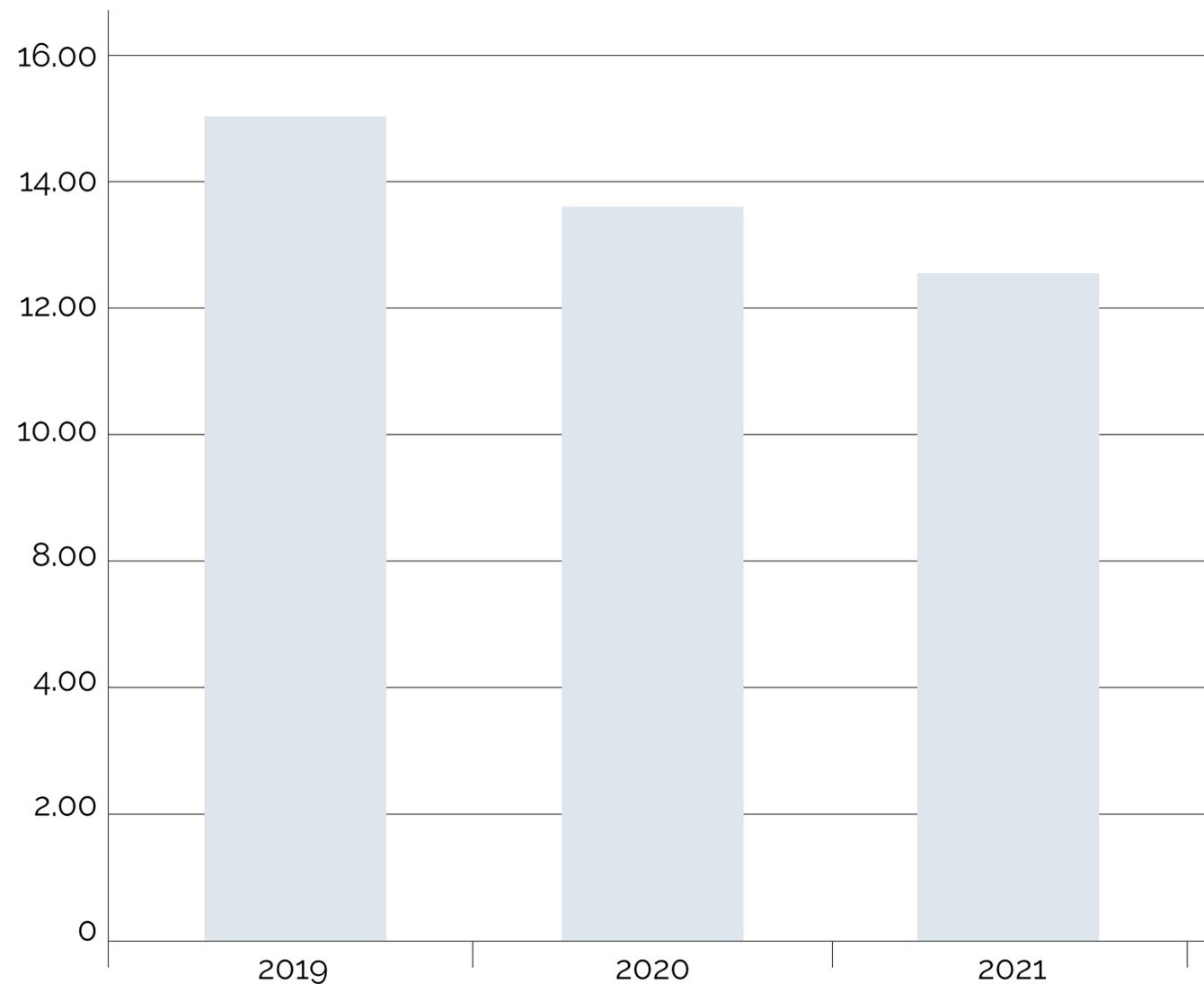
From the graph, it can also be seen that the volumes of water consumed for domestic purposes are the main contribution. In 2021, they accounted for 65% of total water consumption and overall are directly proportional to the number of employees.

Water consumption for domestic purposes was compared to the company population. As can be seen from the graph, **water consumption for domestic use has decreased by 2 cubic metres per person** over the last 3 years. The decrease is mainly due to the adoption of smart-working solutions.

Part of the Cernusco site's water consumption is due to the irrigation of the green areas and the community garden ("Orto di Cernusco"). In 2021, 3,052 cubic metres of water were used for irrigation purposes.

Water discharges are mainly attributable to domestic effluents, as represented by the following graph showing details of the volumes discharged in 2021.

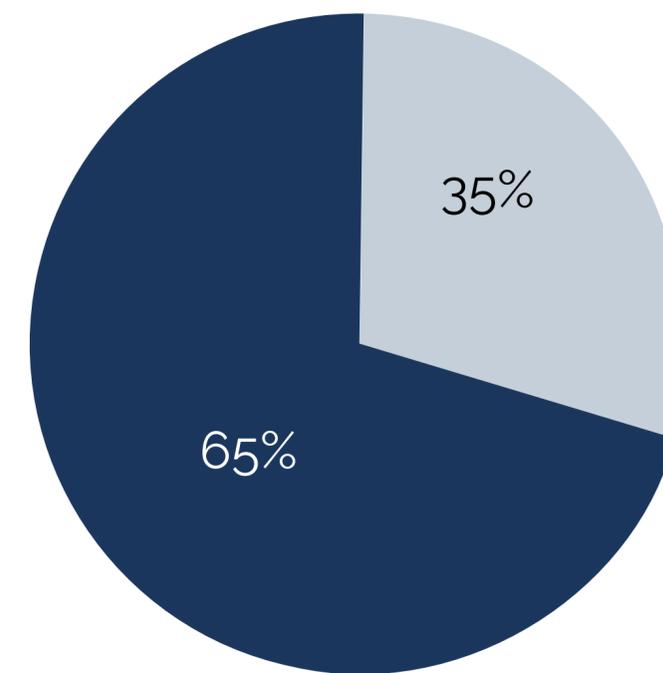
### Water consumption for domestic use per person



Graph: water consumption in cubic metres per person

### Water discharges in 2021

- Non-industrial discharges (m³/year)
- Industrial discharges (m³/year)



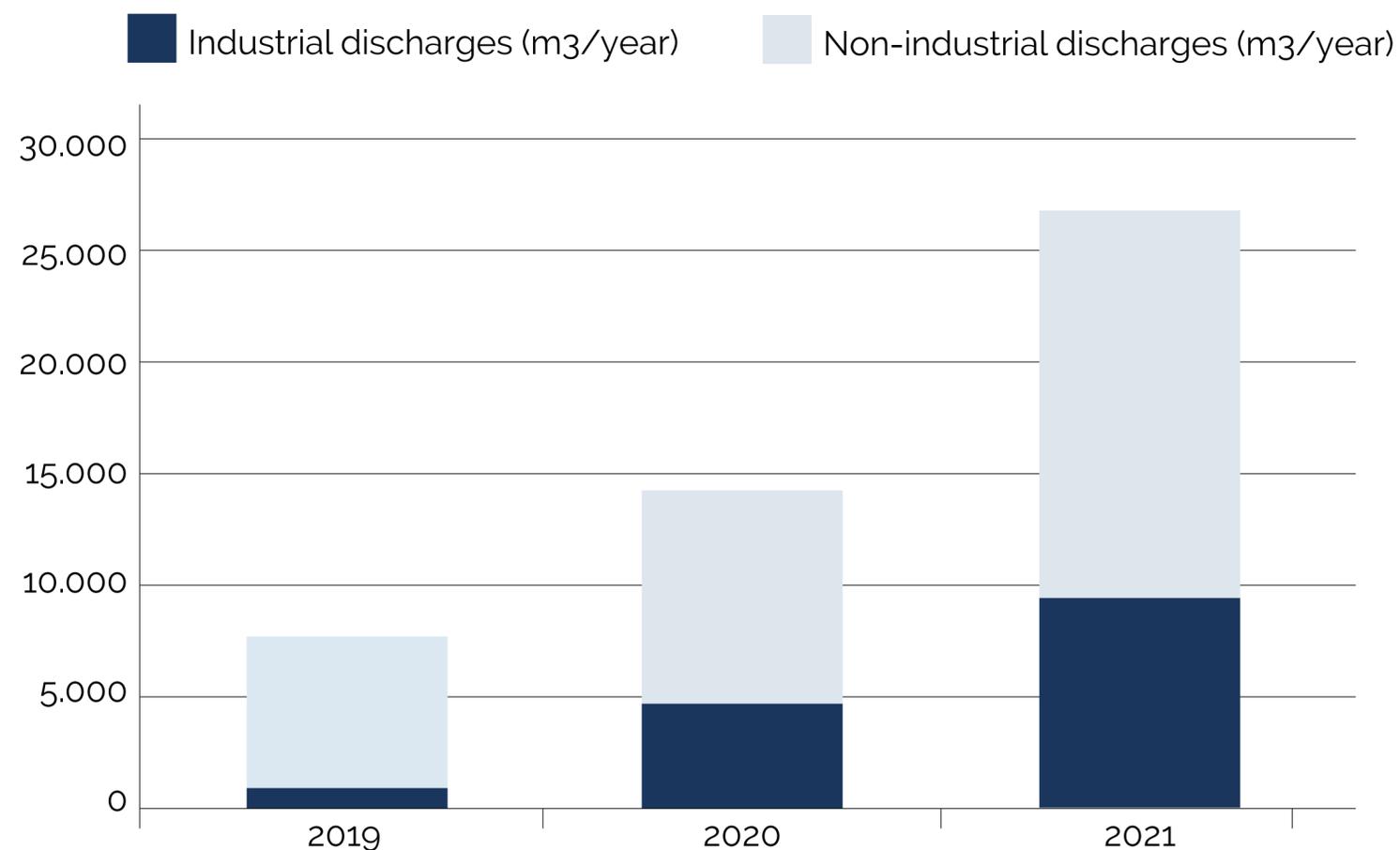
Graph: type of water discharges

The water supplied for the production process is mainly used for washing or diluting activities and is not dispersed by evaporation. The volumes discharged are therefore equal to the incoming volumes (the volumes of water used by TPI5 and Agrate have been excluded from the final count).

Industrial water discharges are sent to a well-managed water treatment plant, which allows wastewater to be sent to the sewers in full compliance with the discharge limits

In addition to passing through the company's treatment plant, the wastewater flows into the sewerage system and then into the consortium purification plant, which allows the water to be completely purified before being introduced back into the water system

### Water discharges



**Graph:** volumes of wastewater sent to the sewers in cubic metres

### Sustainable packaging

Technoprobe is also attentive to the consumption generated indirectly by its activities. For this reason, it has launched a project to replace cardboard packaging in use with packaging made of unbleached paper, thus generating significant

advantages on the supply chain in terms of reducing water consumption for the production of the packaging itself.

## 3.3 Land Use and Biodiversity

Technoprobe is very attentive to the impact its buildings have on the landscape and surrounding natural areas.

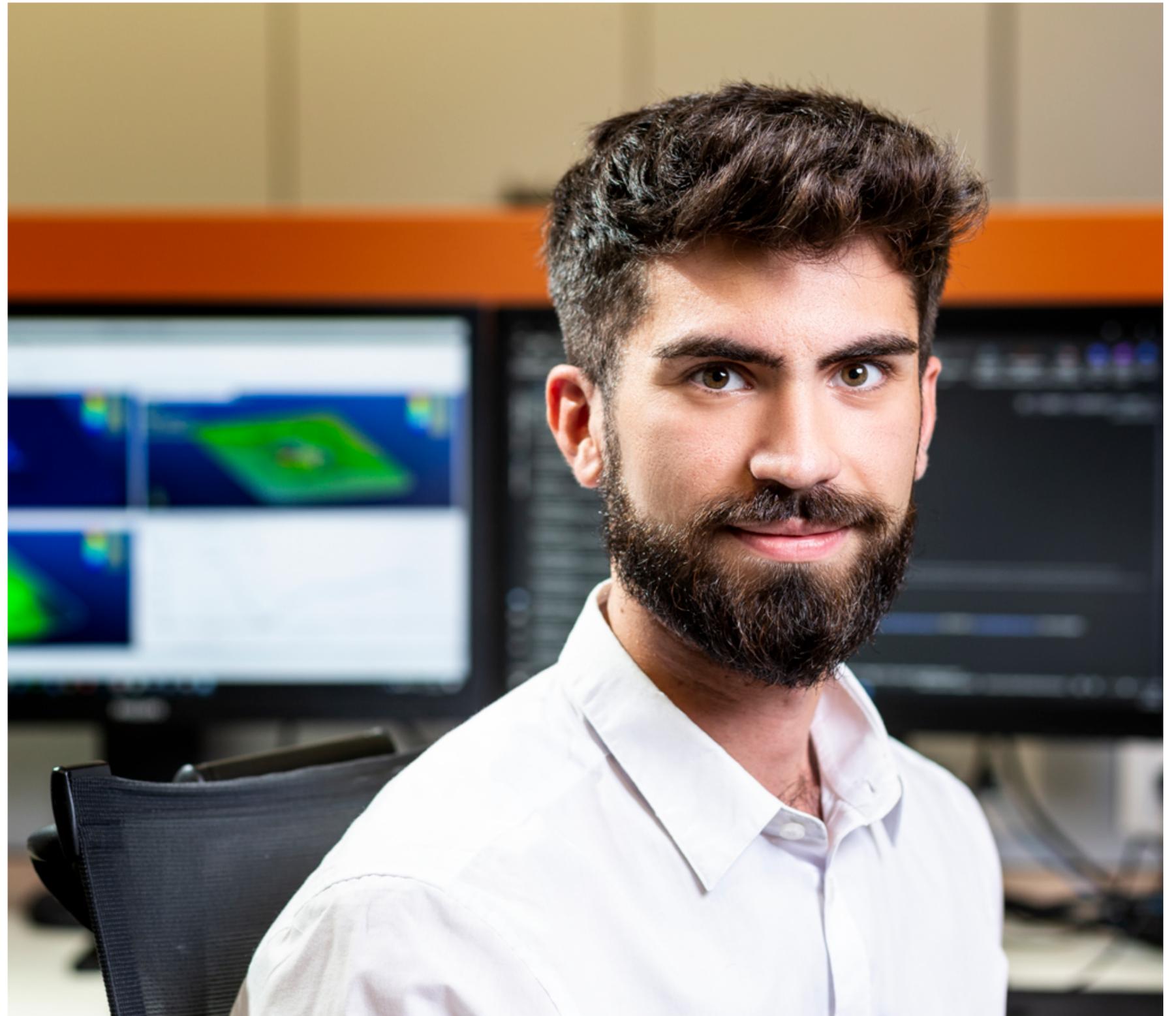
For this reason, new buildings are built with architectural solutions that allow them to **fit in perfectly with the surrounding landscape**. The aesthetics of the workplace are very important for the company to ensure the well-being of employees.

When constructing its sites, with a view to preventing the concreting-over of natural areas, Technoprobe has chosen to re-qualify some industrial areas previously in use, maintaining the existing buildings and only making improvements in terms of the energy-efficiency and aesthetics of the buildings.

Green areas have also been created at the Agrate site, even though the area is not particularly large.

To demonstrate the attention paid to the landscape and the conservation of natural areas, Technoprobe manages about **70,000 sqm of green areas** at its Cernusco Lombardone headquarters.

Of these, about 4,500 sqm are destined for **community vegetable gardens**, while the remaining areas have been planted with native tree species, such as oak, beech and chestnut trees that form a real woodland area.



In 2021, **200 trees** between 3 and 5 years were planted. These species contribute to the conservation of the landscape, to the thermoregulation of the surrounding environment and the absorption of carbon dioxide.

The absorptions of CO<sub>2</sub>-equivalent of the tree species planted were calculated and quantified as 1 tonne of CO<sub>2</sub> eq. for 2021. The result must take into account the young age of the trees and the low absorption of CO<sub>2</sub> in the period of the initial planting.

It was estimated that in 2022, when most of the trees planted will have reached adulthood (over 5 years old), the absorption of CO<sub>2</sub> will be significantly higher and will amount to about 18 tonnes each year.

The areas occupied by the Organisation are continuously increasing due to the need to acquire more and more production areas.

In 2020, the site saw the expansion of the production areas of the Cernusco Lombardone Headquarters, while the Agrate Brianza site became operational in 2021.

Further expansions are planned for 2022, and operations will begin at the new Osnago site, purchased in 2021.

The table below details the total surface area of the site over the three-year period under review:

		2019	2020	2021
Total site surface area	mq	8.745	16.132	22.632*

\* It is important to note that the total area for 2021 does not include building TPI5, equal to 7,000 square metres, as this area was not used for production purposes during 2021.

## Technoprobe, greener and greener

Given the continuous expansion of the production sites and the results achieved, Technoprobe is proceeding with plans to create new green areas. In 2022, new green areas will be created at the Cernusco and Agrate sites.

## 3.4 Energy



Energy consumption is one of the main environmental aspects of the Organisation.

In particular, electricity consumption depends essentially on powering production machines, lighting and air-conditioning systems in the work areas.

Most of the buildings owned by Technoprobe have been recently built and are therefore already equipped with the best available **energy-saving** technologies.

With regard to the lighting of the work areas, presence detectors and twilight systems have been installed that allow lights to be switched on only when necessary.

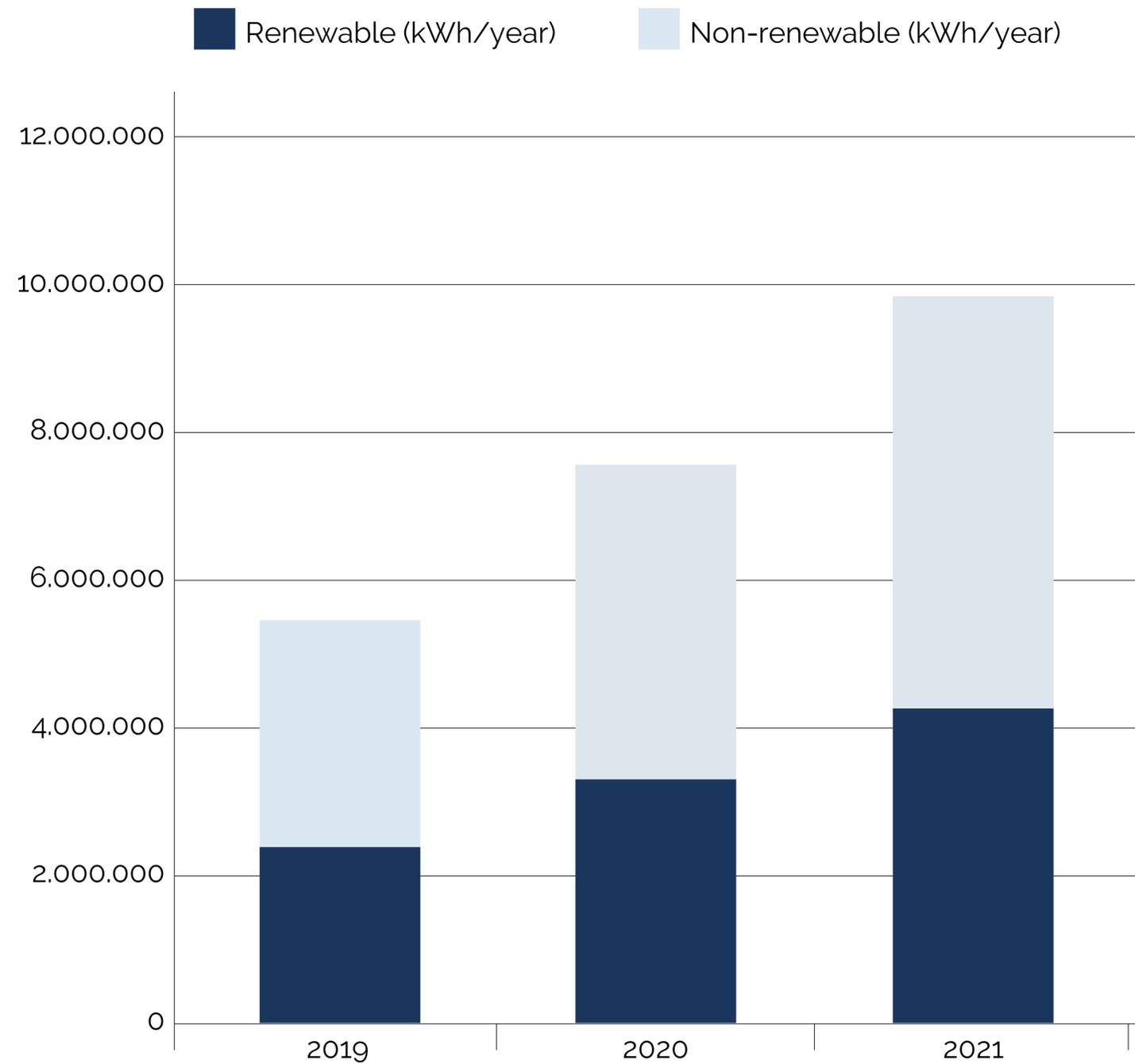
### Efficiency

In 2019, also to comply with the legislative requirements of Leg. Decree no. 102/14, a targeted energy audit was carried out on the TPI1 and TPI2 Buildings in Cernusco Lombardone, which was presented to the ENEA United Department for Energy Efficiency that deals with these issues on behalf of the Ministry of Ecological Transition.

Given the company's rapid and continuous growth in productivity, new buildings and consequent energy consumption, an Energy Manager was appointed on a voluntary basis in 2021, tasked with deepening the analysis of energy consumption and evaluating possible **efficiency measures**. This appointment is intended to be the Organisation's first step towards increasing its focus on efficiency and on reducing resource consumption.

For several years now, Technoprobe has been focusing on **technical and behavioural improvements to reduce energy consumption**, with investments in updating and modernising facilities and implementing new technologies to increase energy efficiency in production. Investments over the years have included not only the purchase of innovative machinery and equipment but also improvements in the energy efficiency of the lighting systems, with the installation of lighting fixtures with LED technologies in a large part of the company areas.

## Energy Consumption



**Graph:** energy consumption in kilowatt-hours

### Energy consumption trend

The energy consumption trend for the three-year reporting period is illustrated below:

The energy consumption trend over the three-year period shows a steady increase.

Electricity is completely supplied from the grid, but it is important to emphasise that the company relies on energy brokers who guarantee a significant and ever-growing mix of energy supplied from renewable sources; in particular, this share has grown by 5% in the three-year period, reaching 43.4% of the total in the year 2021.

The second energy source used at the site is methane gas, which is used exclusively for the air-conditioning of the rooms. The Cernusco sites have 8 boilers fuelled by methane gas, the consumption of which varies according to the heating season and the volumes of the rooms to be heated.

The absolute figures show a progressive increase in the consumption of natural gas. In view of the fact that this is mainly used for heating buildings, the volumes of the TPI5 and Agrate buildings were deducted from the total volumes, as they were not used for production purposes in 2021.

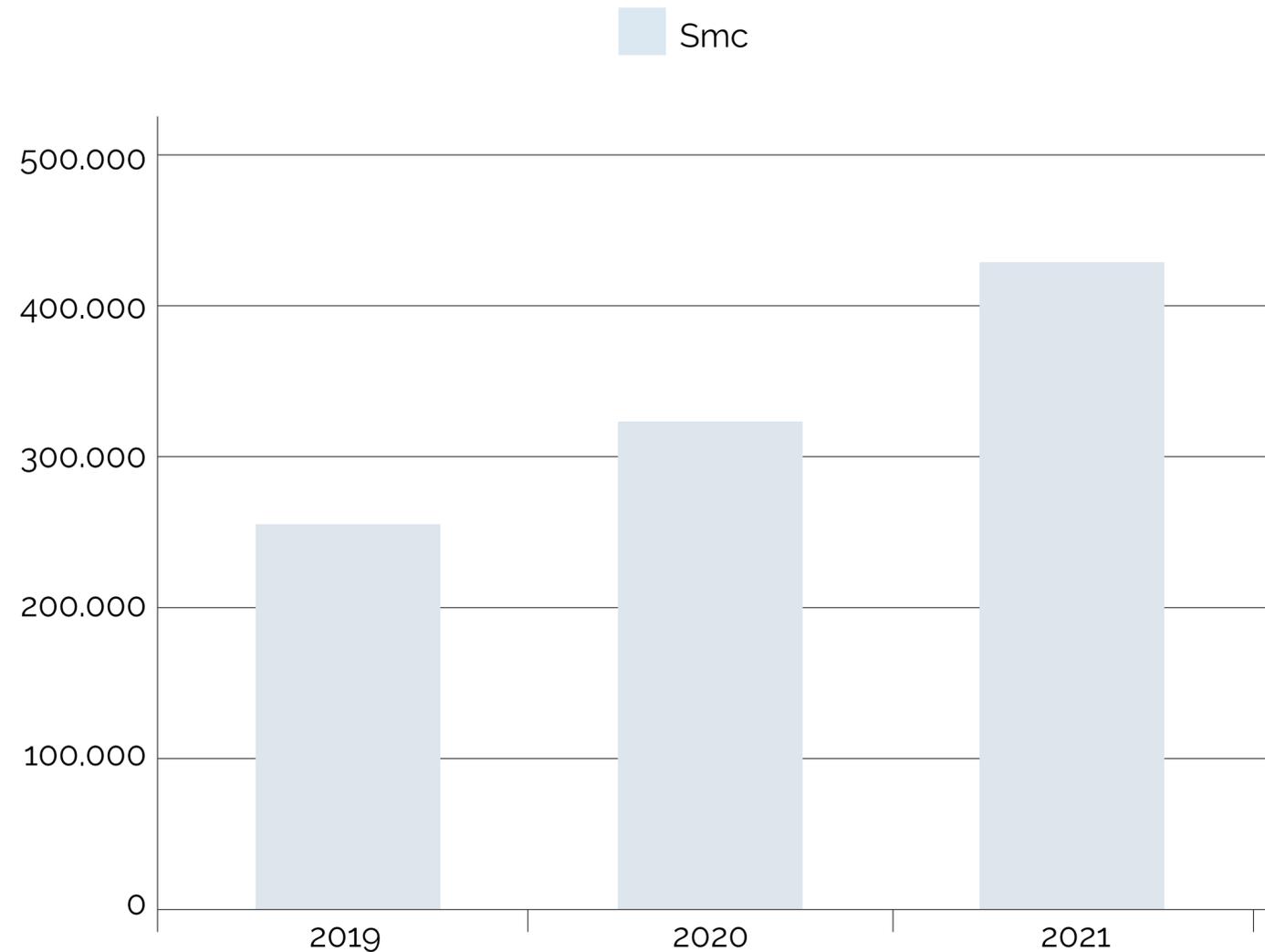
The consumption figure was compared to the total volumes of the buildings to be heated, showing a progressive decrease in consumption per cubic metre (see graph below).

This result is mainly attributable to the installation of plants and systems equipped with the best available energy-efficient technologies.

The significant decrease recorded in 2020 can be attributed to reduced staffing levels in the company due to the Covid-19 pandemic.

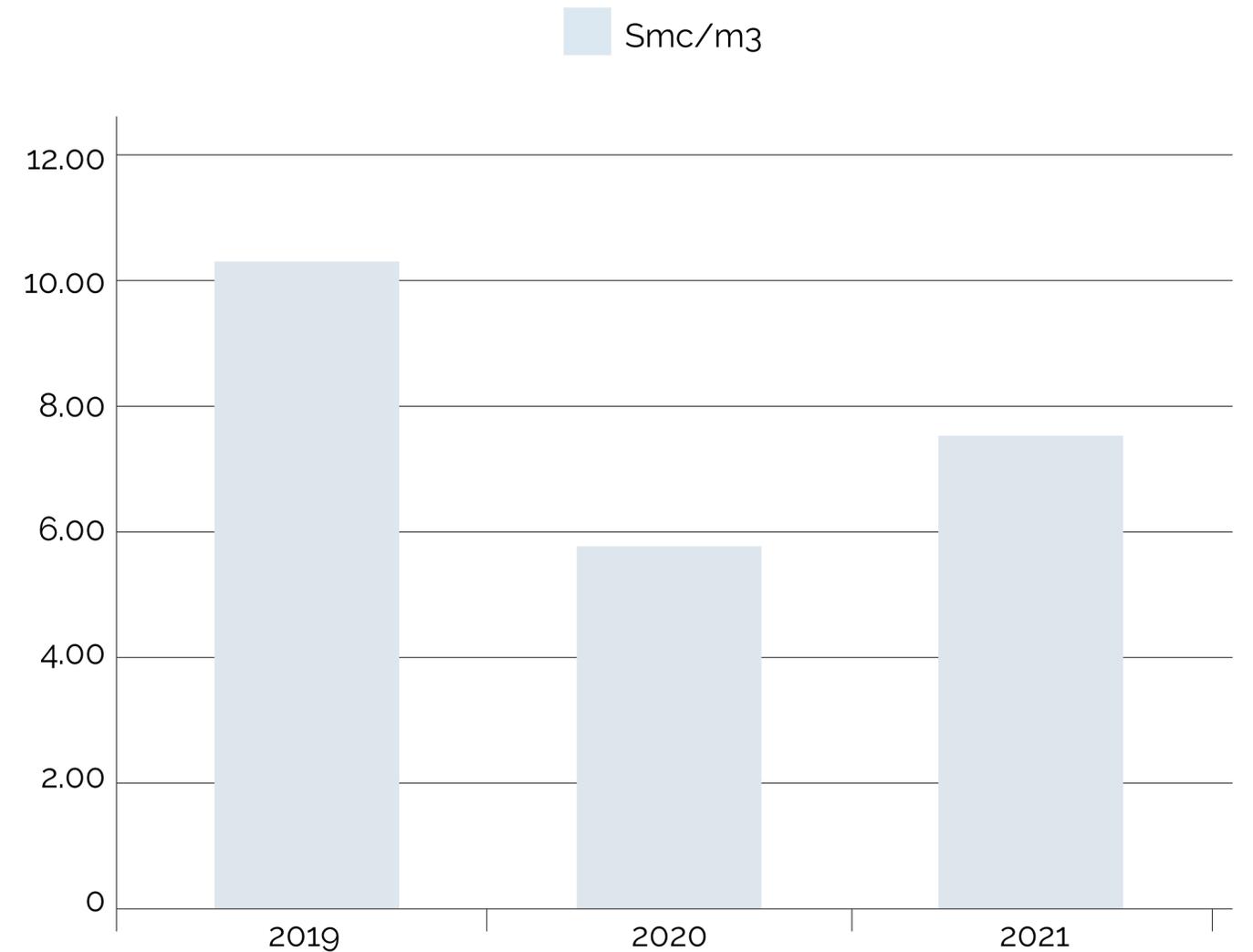
Over the three-year reporting period, the **volumes of natural gas used to heat buildings fell by 2.9 cubic metres for every cubic metre of building heated.**

### Consumption of natural gas



**Graph:** natural gas consumption in standard cubic metres

### Natural gas consumption per volumes to be heated



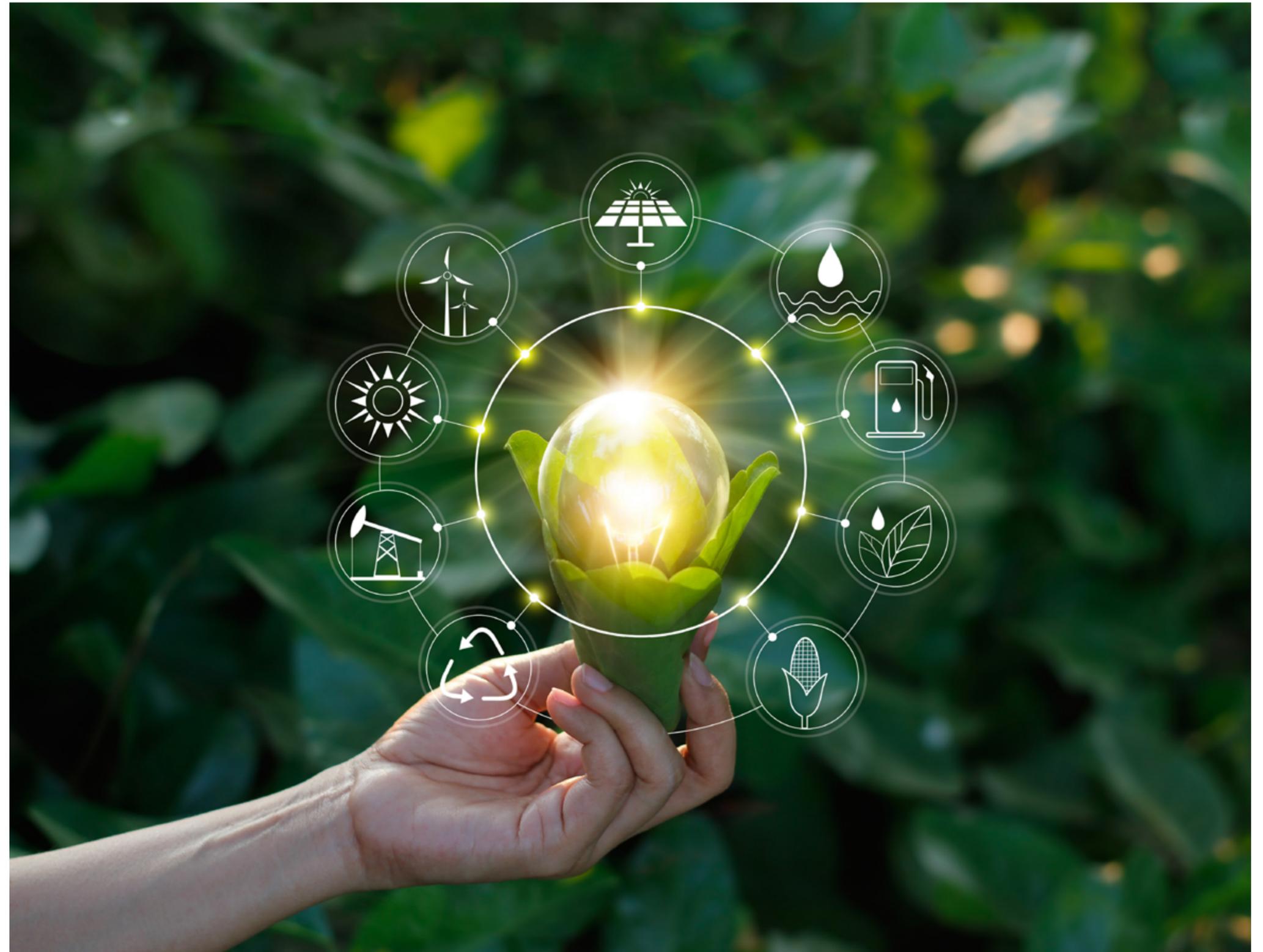
**Graph:** natural gas volumes compared to the volumes of the rooms to be heated

## 3.5 Energy intensity

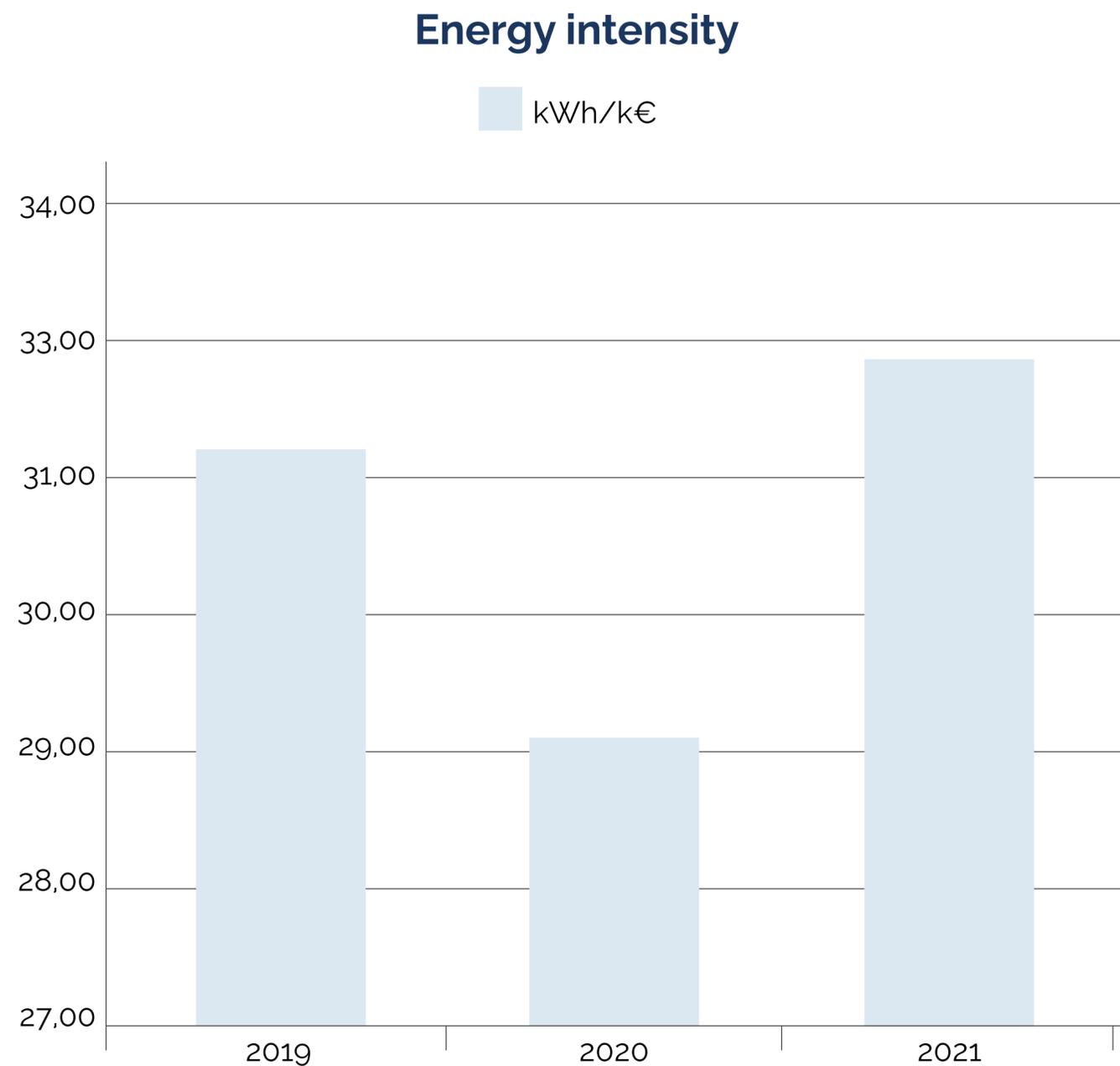
In order to assess a company's energy performance, technical literature calls for companies to measure their consumption in relation to the specific product units that are manufactured.

However, performance indicators calculated in this way are useful and representative in situations where the consumption of production equipment is much higher than consumption that can be defined as auxiliary to the process, and where therefore product volumes directly affect consumption. The type of manufacturing process that characterises Technoprobe and the significant impact of auxiliary consumption dedicated to maintaining suitable thermo-hygrometric conditions inside the work environments, which in fact are not dependent on production volumes, make the performance indicators as defined above unrepresentative.

However, in order to characterise the incidence of energy consumption in the creation of the finished product, the Energy Intensity Indicator is calculated as the ratio over the years between consumption and company turnover.



As shown in the graph, the energy consumption data compared to turnover shows a substantially constant trend of around 31 kWh every € 1,000 invoiced. The reduction in 2020 is caused by an increase in “smart working” methods in response to the Covid-19 pandemic.



**Graph:** energy intensity expressed in kilowatt-hours for every € 1,000 invoiced

## Energy efficiency, a drive for continuous improvement

In addition to the measures implemented and concluded in recent years, Technoprobe is constantly looking for technical or management solutions and measures that can guarantee even better results in terms of energy efficiency. The analysis paths undertaken have identified which future energy improvement actions could be classified according to the level of complexity of implementation, economic cost and payback time.

- Greater efficiency of air conditioning and ventilation systems with the installation of low-pressure drop filters on existing AHUs, resulting in lower electricity consumption of the machine fans with the same filtering conditions;
- Better management of compressors through analysis of the data from the monitoring system present, and definition of more efficient operating rules and settings;
- Better management of the compressed air network through investigations to search for and repair distribution leaks;
- Better control of energy consumption of the main utilities through the extension of the electrical monitoring system, which is also useful for periodically updating the Energy Diagnosis as required by Legislative Decree no. 102/14;
- Installation of a photovoltaic system on the roofs of the buildings.

The conclusions of the analysis carried out on the complexity of the proposed actions, costs and payback time are illustrated in the table below and will “guide” Technoprobe in defining its plan of action:

ACTION UNDER ASSESSMENT	COMPLEXITY	COST OF ACTION	PAYBACK TIME
Low-pressure drop filters	Low	Low	Short
Compressor management	Low	Low	Short
Repair of compressed air distribution circuit leaks	Low	Low	Short
Expansion of monitoring system	Low	Medium	Medium
Installation of a photovoltaic system	High	High	Medium

## 3.6 Atmospheric emissions

All points of atmospheric emissions present in the buildings are reported in the environmental authorisations of each production site and are subject to constant checks to ensure continuous compliance with the emission limits.

The self-assessment surveys carried out periodically by the Organisation have shown that the parameters investigated are always well below the limits set by current regulations.

In order to determine the "**carbon footprint**" of Technoprobe's activities, an analysis of Scope 1, 2 and 3 GHG emissions generated by the Organisation was conducted.

The analysis was implemented starting in 2019 by reporting Scope 1 and 2 emissions, i.e. CO<sub>2</sub> equivalent emissions from fuel combustion, company vehicles, purchased electricity, air conditioning and cooling.

From 2020 onwards, the calculation was supplemented by also taking into account Scope 3 emissions, i.e. indirect emissions caused by the company's activities.

This category includes emission sources that are not under the direct control of the company, but whose emissions are indirectly generated by the company's own value chain.

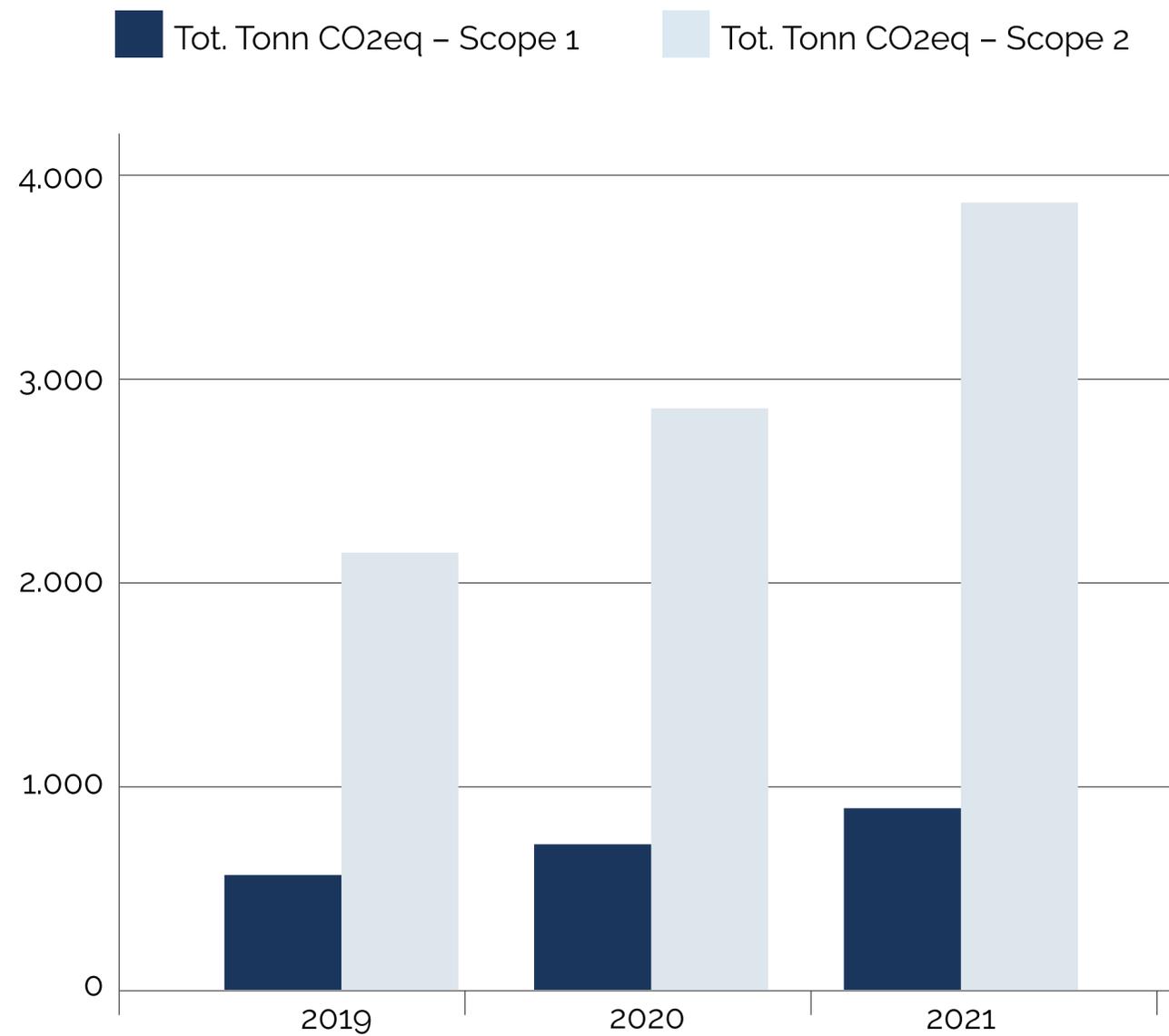
The calculation carried out in 2020 made it possible to obtain a true carbon footprint of the Organisation on which to define an action plan for continuous improvement.

During 2022, the analysis will be updated with data relating to 2021.

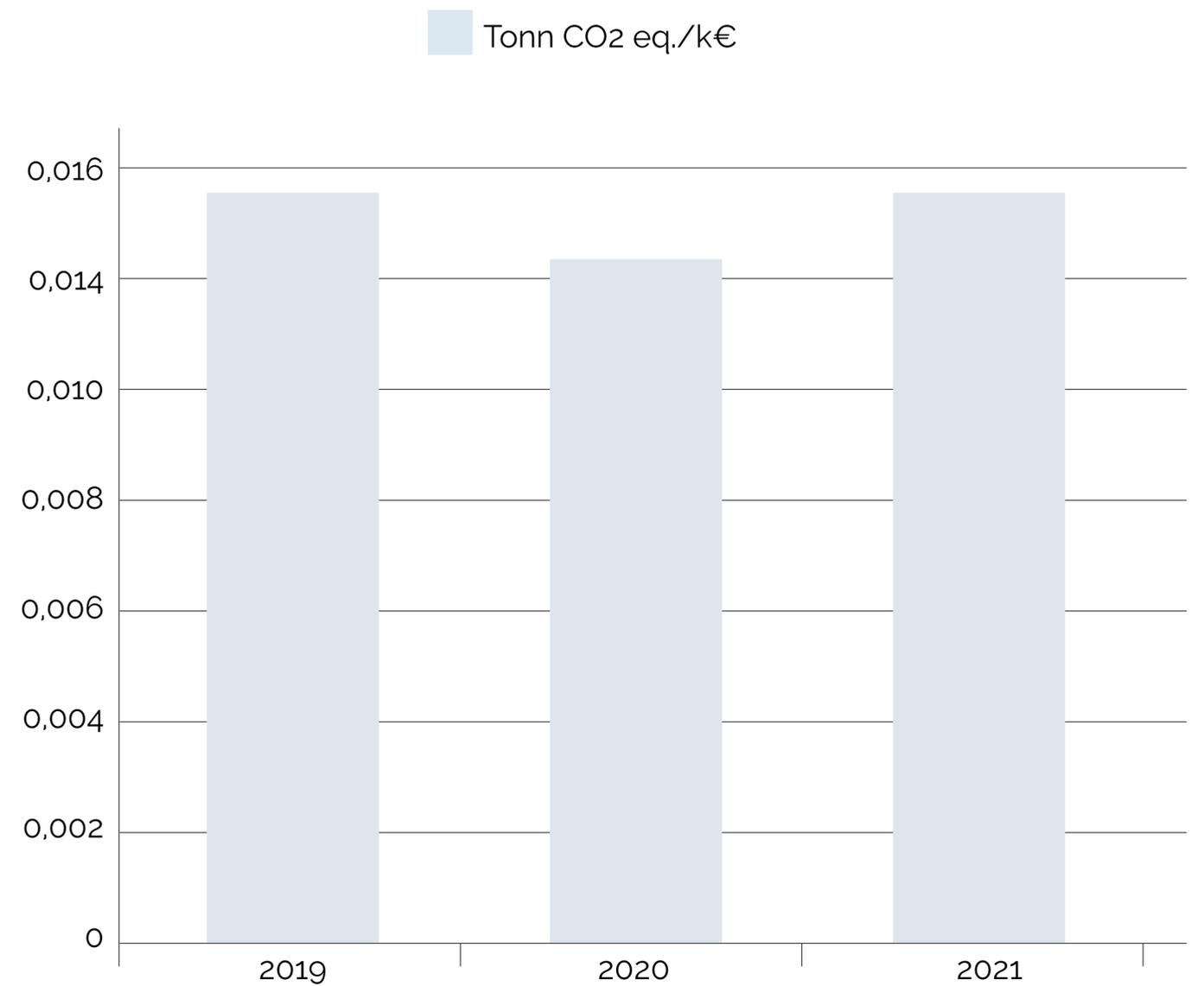
	2019	2020	2021
Tot. Tonn CO <sub>2</sub> eq - Scope 1	572,36	873,97	970,15
Tot. Tonn CO <sub>2</sub> eq - Scope 2	2.103,31	2.873,87	3.820,85
<b>TOTALE SCOPE 1+2 (tonn CO<sub>2</sub>eq.)</b>	<b>2.675,67</b>	<b>3.747,84</b>	<b>4.791,00</b>

The figure for total Scope 1 and Scope 2 CO<sub>2</sub> equivalent emissions compared to the company turnover has remained constant over the three years.

### Scope 1 and 2 CO<sub>2</sub> ep. emissions



**Graph:** Scope 1 and 2 GHG emissions in tonnes of CO<sub>2</sub> equivalent



**Graph:** CO<sub>2</sub> equivalent emissions compared to turnover



Indirect greenhouse gas emissions (Scope 3), i.e. those that are not under the direct control of the company, were quantified as 5,711.74 tonnes of CO<sub>2</sub> eq. for 2020. The comparison with the data for 2021 will allow making an initial assessment of the company's "climate footprint" trend.

In order to reduce carbon emissions, numerous projects have been developed, including:

- Incentives for employees to use public transport to travel to work, by reimbursing the total cost of annual tickets, and activating a shuttle service from the railway station to the Cernusco site;
- Planting of native tree species in the company's green areas, with the aim of contributing to creating a real woodland area of more than 65,000 sqm;
- Creation of a community vegetable garden where zero-km vegetables and small fruits are grown and sold directly on site.

## Sustainable mobility

Environmental commitment comes first and foremost from the daily actions of each of us.

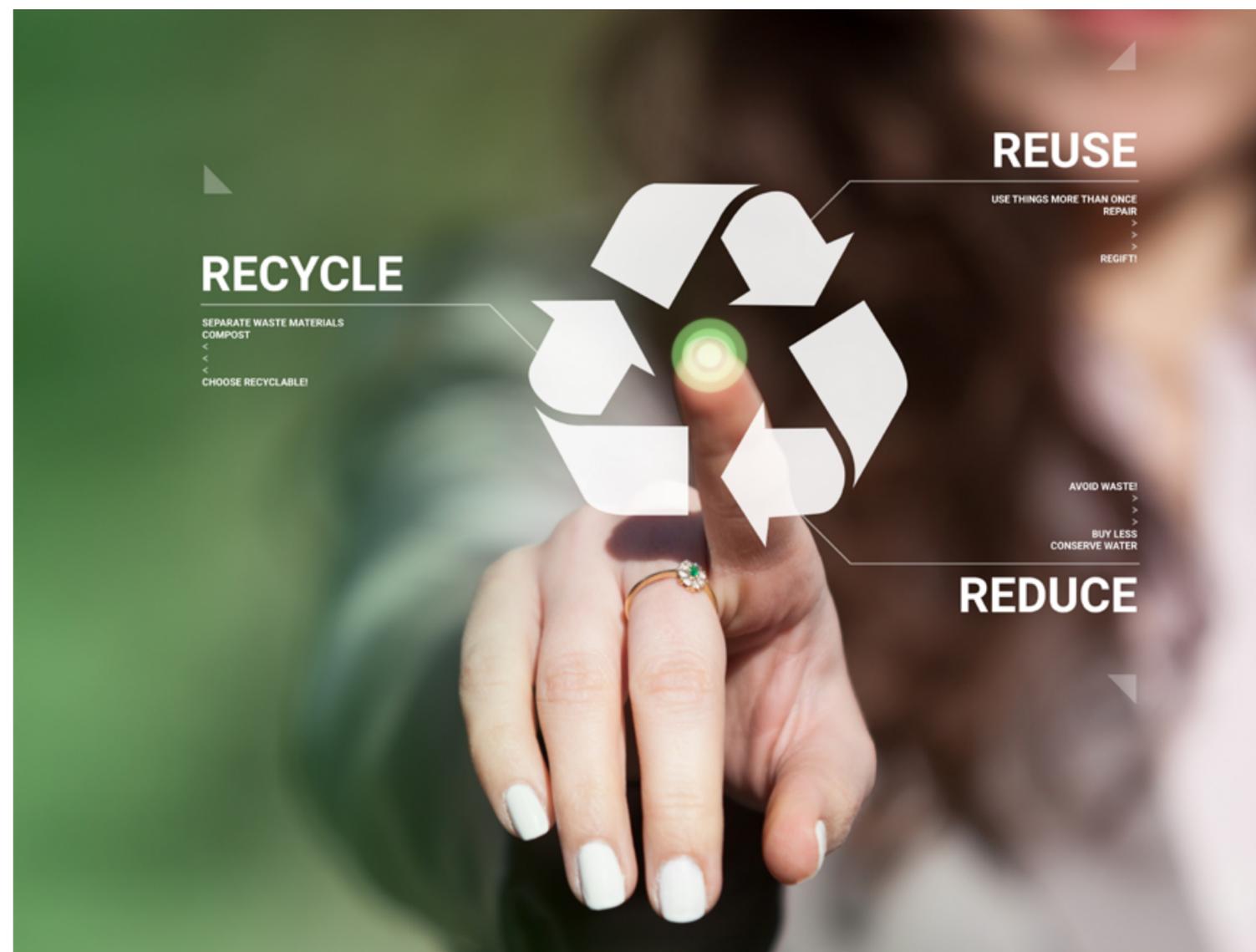
Transport has a significant impact on the environment and with this in mind, the company has implemented various solutions to reduce the environmental, social and economic impacts generated by the way employees travel.

To incentivise employees to use **public transport**, Technoprobe assumes **100% of the cost of the annual train ticket** for each employee who uses it.

As far back as 2018, the company provided employees with a **free shuttle service** to transport them from the train station to their place of work.

The shuttle service was suspended during the most severe stage of the Covid-19 pandemic but was reactivated as soon as the health situation allowed it.

## 3.7 Waste Management



Technoprobe is constantly striving to **reduce the volumes of waste** deriving from its production and office activities.

With regard to "household" waste produced in all work areas, careful separate waste collection is carried out in the company departments. Employees are constantly made aware of the importance of good waste management to protect the environment.

Special waste deriving from production processes is managed by adopting the best solutions available and favouring material or energy recovery operations over disposal as much as possible.

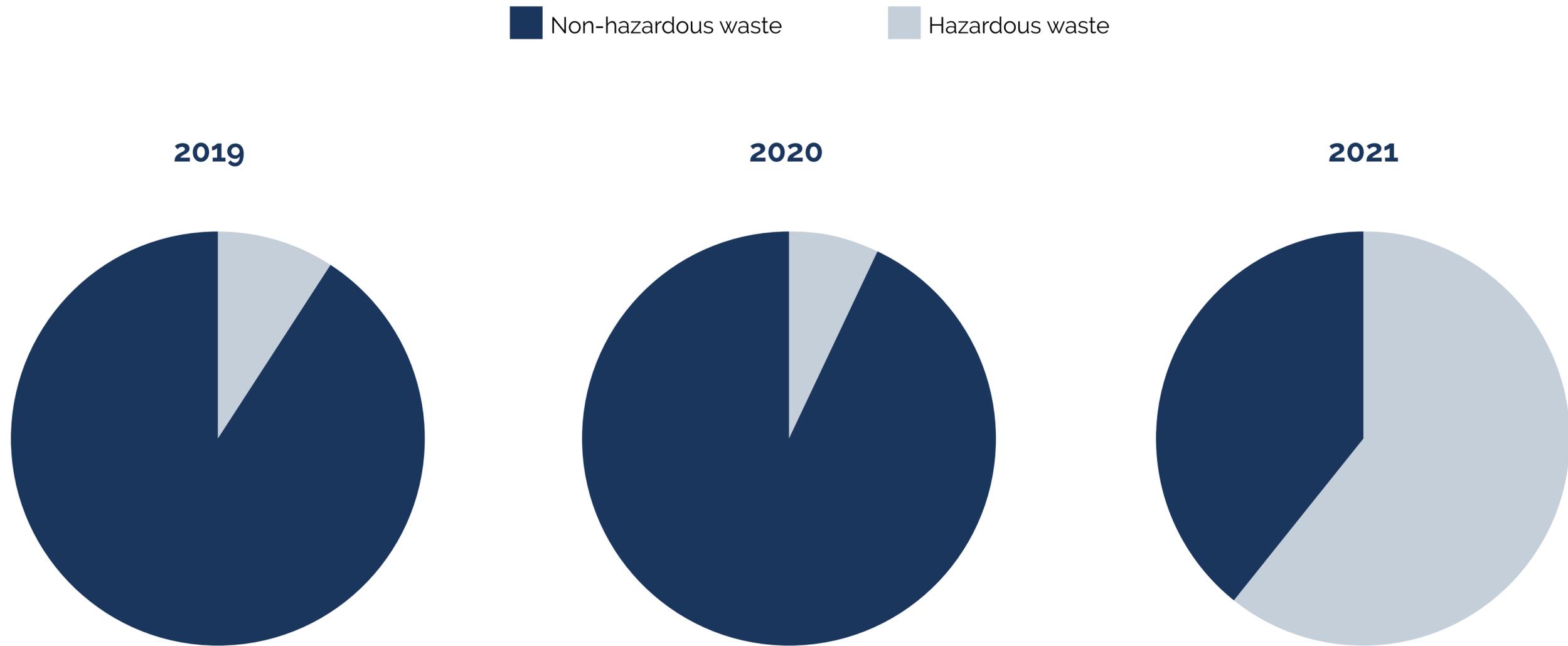
Dedicated areas have been set up inside the production sites for the temporary storage of special waste. These areas have been set up in such a way as to **prevent any form of soil or groundwater pollution**; in fact, the waste is placed in areas that are protected against the weather, and that are paved and equipped with safeguards to prevent any spills.

Most of the waste produced by Technoprobe's factories and offices is non-hazardous. In fact, hazardous waste accounts for an average of 10% of the total waste produced.

2021 was, however, an anomalous year in which there was a significant increase in the volumes of hazardous waste produced.

This was due to a temporary situation relating to the management as hazardous waste of process water in the start-up phase of the Agrate site, cautiously classified as such prior to the activation of the industrial waste treatment plant.

The graphs below detail the percentage of hazardous waste produced in each reporting year:



**GraPH:** breakdown of hazardous and non-hazardous waste in percentage terms for the Technoprobe sites

With regard to waste operations at destination, about **37% was sent for material or energy recovery** in 2021. This percentage is increasing compared to previous years. In fact, the figure for **waste sent for recovery increased by 11%** compared to 2020, as shown in the graph below:

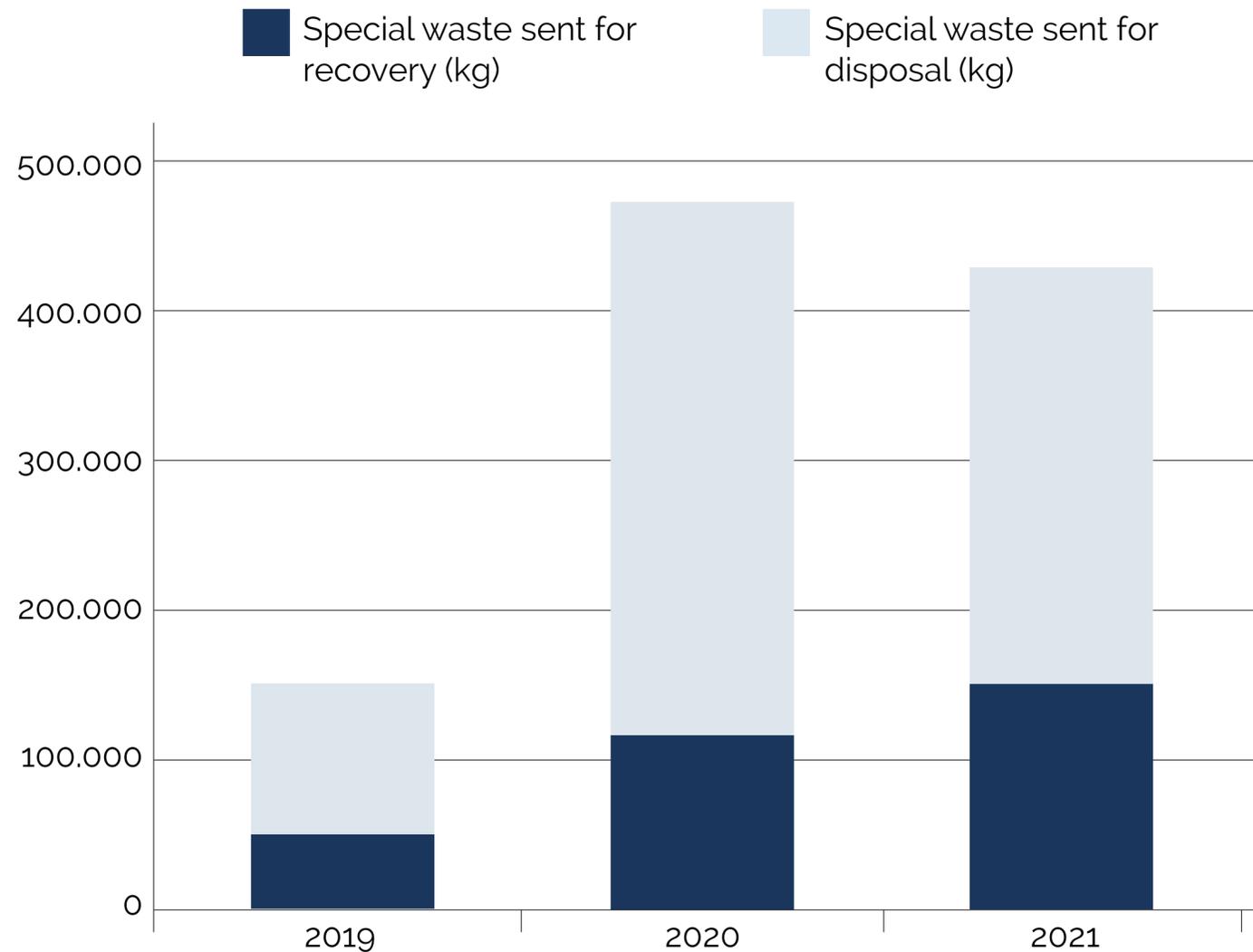
To contribute to the **circular economy**, the company gives preference to material or energy recovery operations and only sends its waste for disposal if there is no other alternative.

Waste sent for disposal consists of aqueous liquid residues from washing operations or galvanic processes for metal surface treatments.

Despite the significant growth in production volumes in 2021, Technoprobe **reduced its waste by more than 41,000 kg** compared to the previous year.

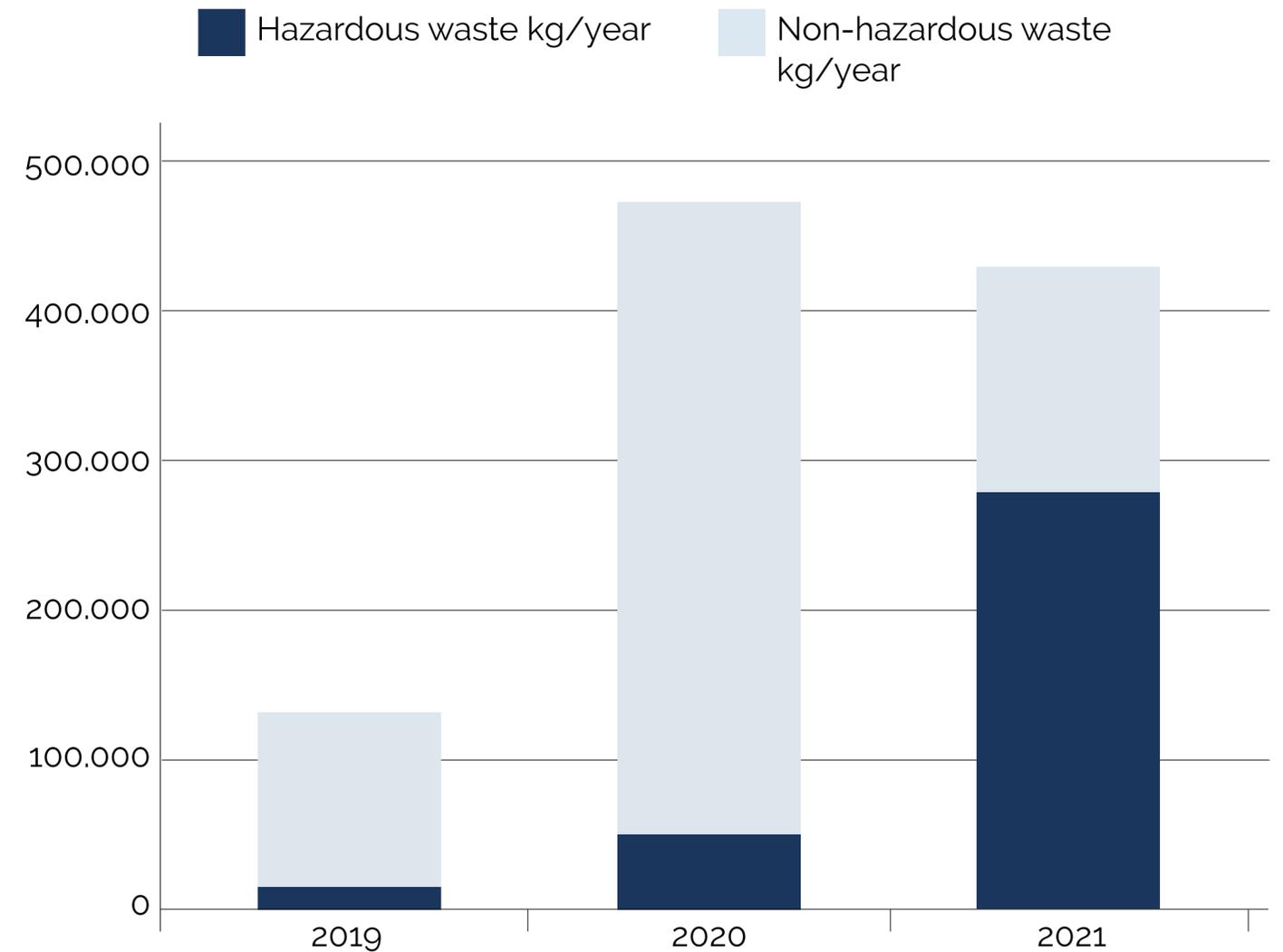
The following graph shows the trend in the volume of waste produced in the reporting period:

### Operations at destination



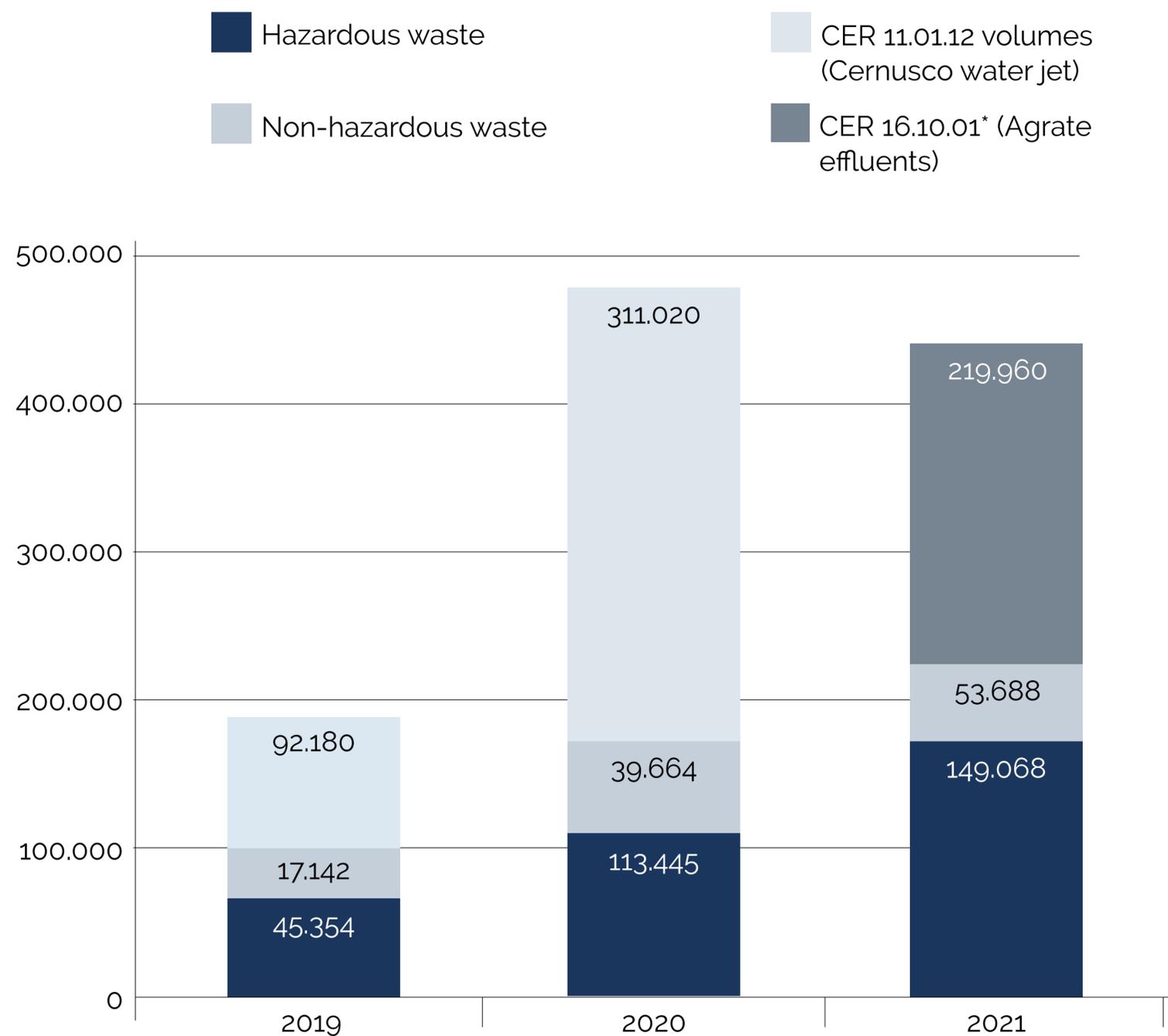
**GraPH:** operations carried out at destination on special waste delivered

### Waste produced



**Graph:** volume of special waste produced in kilograms

### Waste management contribution of effluents (kg)



**Graph:** detail of contribution of effluents managed as waste on total waste produced

The significant increase in waste produced in 2020 is due to the management as waste of the effluents coming from the automatic washing machines, pending their conveyance to the industrial discharge plant at the Cernusco Lombardone site, which took place in December 2020 (the waste was managed with CER 11.01.12).

Also for the Agrate Brianza site, operational since July 2021, it was initially opted to manage industrial waste as special waste until the activation and testing of the wastewater treatment plant. For this reason, a reduction in the total volumes of waste produced is expected in 2022.

The graph shows the contribution to the significant increase in the total volumes of waste produced by Technoprobe due to the temporary management as waste of effluents deriving from the Cernusco Lombardone and Agrate Brianza sites.

The volume of special waste produced by Technoprobe sites was compared to turnover, the results are shown in the graph below:

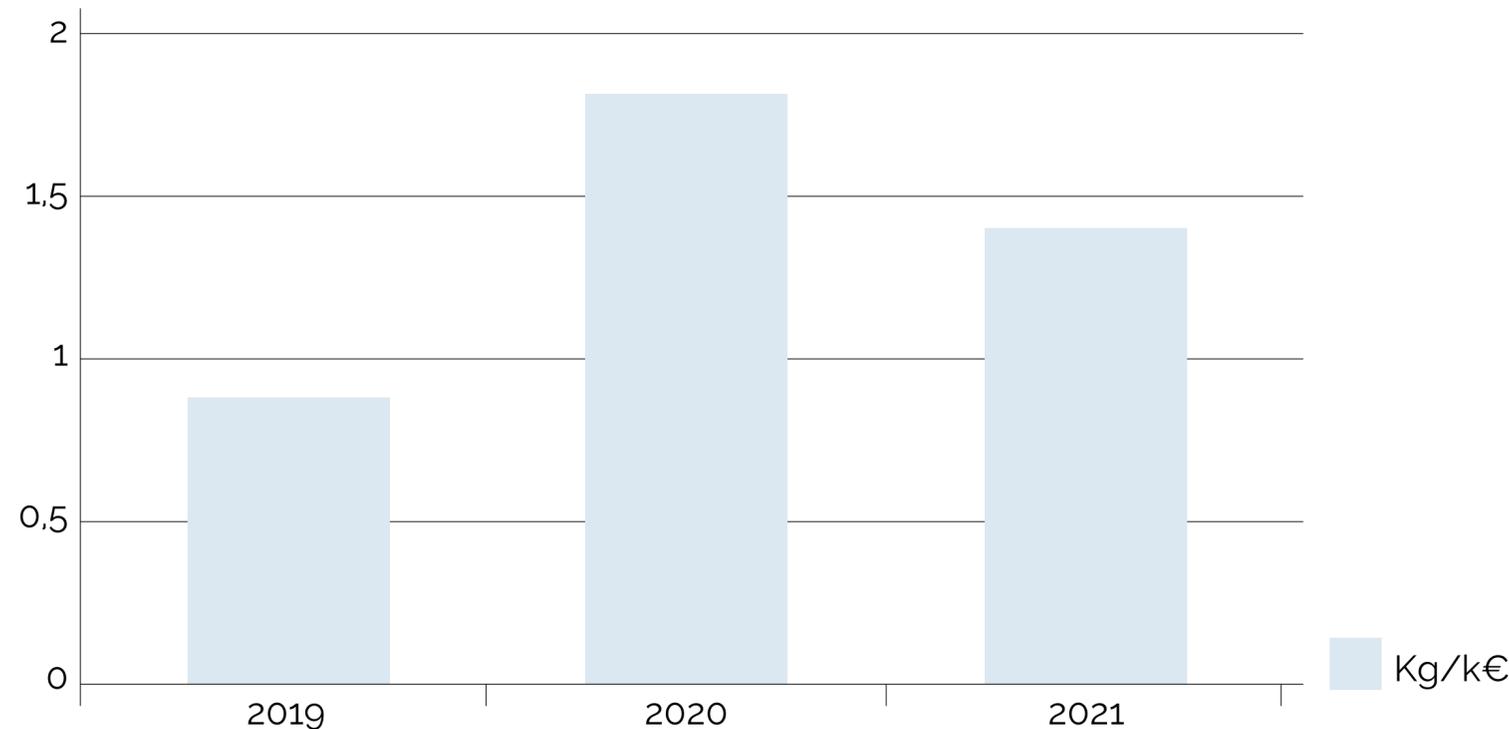
The volume of waste compared to company turnover shows an increase in 2020 due to the exceptional production of waste from the automatic washing processes, introduced in that year, which is now managed as industrial waste in the public sewerage system after treatment.

The data is to be interpreted in the same way also for 2021, as the wastewater from the Agrate site was managed as waste.

The improvement obtained as a result of the activation of the industrial discharge for all industrial effluents, previously managed as waste, has made it possible to **optimise the management of company surfaces**, the reduction of impacts deriving from the transport of considerable volumes of waste and the reduction of transport and labour costs.

It should be noted that in 2021 the indicator was reduced by about 0.42 kg of waste for every € 1,000 invoiced. This means that approximately **127,000 kg of waste was prevented** in the year compared to 2020.

### Waste produced compared to company turnover



Graph: volume of waste produced compared to company turnover

## Roadmap towards a plastic-free company

In order to reduce the volume of plastic waste, all vending machines have been equipped with a system that detects the presence or absence of a personal cup when dispensing the drink, thus avoiding the use of disposable cups.

Employees are given incentives to use reusable cups through a discount applied directly on the price of the drink (coffee € 0.10 instead of € 0.30)

Thanks to this initiative, it can be estimated that 2 million plastic cups were prevented from becoming waste in 2021.

Plastic spoons have also been replaced by disposable wooden spoons.

In line with the company's plastic-free policy, and to discourage the purchase of water in disposable plastic bottles, dispensers of still and sparkling water have been installed, available free of charge to all those present in the company.

A further incentive to limit plastic consumption is the increase in the price of plastic water bottles in vending machines to € 1, i.e. 200% more than the original price.

## 3.8 Sharing of Environmental Sustainability commitments



### CDP – Carbon Disclosure Project

The Organisation has joined the Climate Change Programme of the Carbon Disclosure Project (CDP), the leading global disclosure system for the management of environmental impacts.

The CDP offers a system to measure, track, manage and share climate change information globally, involving both the manufacturing world and public administrations in a virtuous community. Starting from 2019, Technoprobe has completed the questionnaire defined by the CDP in which it enters all available information aimed at reporting the GHG emissions and energy consumption, as well as describing the company's approach to climate risk. All the information entered goes into a common database useful for benchmarking the environmental performance of organisations and reporting to investors and the market.

Completion of the CDP questionnaire has helped the Organisation to effectively communicate its strategies for measuring emissions and managing risks/opportunities associated with the effects of climate change,

as well as setting targets for **continuous improvement of performance**.

### RBA – Responsible Business Alliance

Technoprobe also carries out an annual self-assessment according to the checklists defined by the RBA (Responsible Business Alliance), a non-profit organisation made up of companies in the electronics and automotive industries committed to upholding a common Code of Conduct regarding the social, environmental and ethical responsibility of their supply chains. The company is required to complete a self-assessment questionnaire with the aim of conducting a Due Diligence of the effectiveness of its risk management systems on health and safety, environment, ethics and working conditions. It is also required to disclose its business practices on issues such as Business Ethics and Human Rights Protection.

# Environmental Highlights

**43,4%**

of electricity procured  
in 2021 from renewable  
sources

**200**

trees planted  
in 2021

**70.000**

square metres of  
green areas

**1**

kg less CO<sub>2</sub> per €  
1,000 invoiced in 2020  
compared to the  
previous year

**-2,9**

mc of methane for  
every cubic metre of  
building heated

**+11%**

waste sent for recovery  
in 2021 compared to the  
previous year

**127.000**

kg of waste avoided in  
2021 compared to 2020

**449**

training hours for personnel  
with environmental  
management tasks in 2021

# 4.

## OUR RELATIONSHIP WITH THE COMMUNITY

Technoprobe was born in the territory where the Crippa family has its roots.

Behind the great growth of these decades - not only in Italy but worldwide - there is the story of an all-Italian family, a family that strongly believed in the goal it had set for itself, taking it upon itself to establish a strong relationship between the company and the surrounding territory, inspired by the principle of "acting with a community of people," rather than with a simple organisation.

It is the story of two generations of courageous and insightful entrepreneurs who have shaped and succeeded in creating a company of true excellence in terms of innovation, quality and reliability. They have done so by also bringing value to the local area and its communities, demonstrating how when a family and a territory enter into a social agreement where they each fully assume their responsibilities, the positive effects end up benefiting every stakeholder, without any kind of distinction.



## 4.1 Vaccination Centre

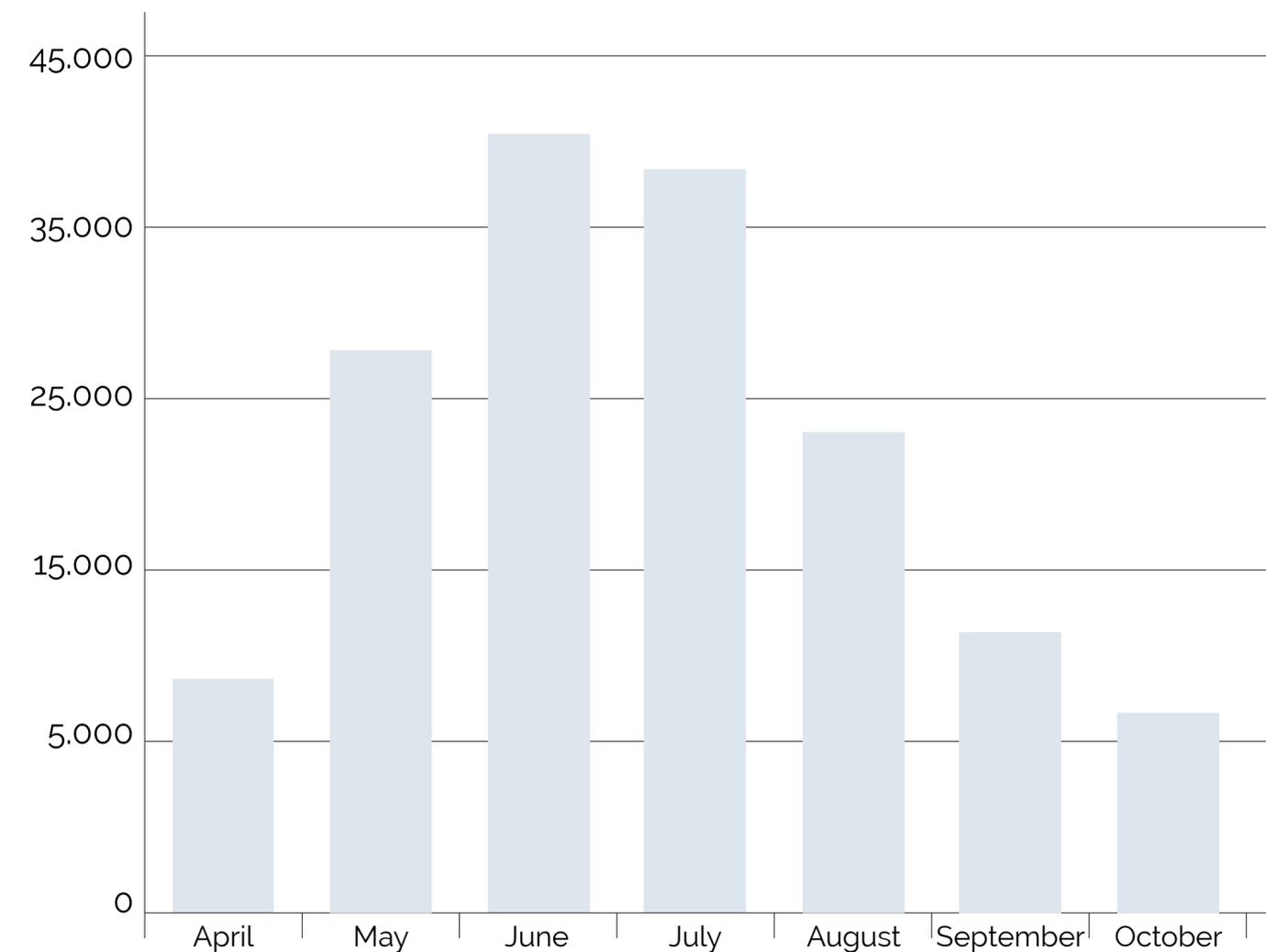
A determining factor in Technoprobe's corporate policy is its commitment to social responsibility, especially in the territory in which it operates. Symbolising a point of reference and support for the local economy and well-being means strengthening the link between the company and the territory, to be understood as a community of people and not only in purely environmental terms.

The commitment in this sense came to life in the impressive vaccination campaign promoted by Technoprobe: what initially began as the company's desire to encourage and support the vaccination of its employees and the local community, in fact, became a reality on 19 April 2021, when the **Vaccination Hub** was officially opened inside the TP5 building in Cernusco Lombardone.

A 1700-square metre space offered by Technoprobe, on free loan to the Region of Lombardy, to initially house five operational vaccination lines, which grew to 10 in the month of June.

**During the 6 months of operation (from 19 April to 25 October 2021), a total of 159,669 doses were administered, with an average of 840 doses per day, every day, including August 15th, Saturdays and Sundays.**

**Number of vaccinations administered in 2021**





80,921 people received their first dose, 74,760 received their second and 3,988 also received their third.

All the paperwork and procedures related to the setting up, management and organisation of the space were done in a month and a half.

In addition to the space, Technoprobe also provided a whole range of support services: for 7 days a week, from 8 am to 8 pm, the company made available qualified personnel to manage and supervise the operations, as well as a team of people from different functions to support the vaccination centre.

Technoprobe also provided meals from the company canteen free of charge to all healthcare staff and volunteers, according to a precise schedule. It also took care of the general cleaning costs, as well as costs for electricity (light and heating) and water supply.

It made 150 parking spaces available and supplied the necessary hardware (computers and printers) free of charge.

When the vaccination centre closed, as a token of appreciation for the commitment and dedication shown by all the healthcare personnel involved, Technoprobe organised an event to thank doctors, nurses and volunteers.

## 4.2 Community garden of Cernusco

Another virtuous example of caring for the community and environment was born in 2017 with an important work inclusion project in collaboration with the Cooperativa Paso Lavoro.

This social agricultural project was strongly desired by the founder Giuseppe Crippa and aims at employing disadvantaged people who can find opportunities, satisfaction and fulfilment in this context.

Technoprobe's "**Community garden**" is a 70,000 sqm sustainable ecosystem consisting of a **4100 sqm** vegetable garden, a **wood** and a **shop** managed by the Cooperativa Paso Lavoro which sells products from the Cernusco garden and other affiliated farming communities, promoting the economy of local sustainable farming and breeding practices at zero-km.





The entire project is maintained with five job placements for people with disabilities or in frail condition, who are involved in growing the fruit and vegetables and running the shop.

Sustainability also means creating a virtuous model to inspire and bring good practices to the area. The example of Technoprobe has, in fact, attracted the interest of numerous industrial companies in the neighbouring area who, interested in community agricultural projects, have turned to the Cooperativa Paso Lavoro to pursue this virtuous path on their premises.

In just a few years, other projects have developed in the neighbouring areas between Merate and Olgiate Molgora, employing as many as 12 trainees, 3 full-time and 5 part-time workers.

Through the planting and cultivation activities, the young people working in the various gardens were able to produce almost 12,000 kg of fruit and vegetables in 2021 alone (an increase compared to 2020 and 2019).

In the woods adjacent to the Cernusco vegetable garden, Technoprobe is also engaged in an ambitious agroforestry project in which the agricultural system is integrated with the planting of native plants.

In addition to supporting the virtuous interaction between different species and sustainable use of resources and land, Technoprobe has also brought considerable environmental benefit to the territory through the natural absorption of CO<sub>2</sub> by the plants.

### Specifically, the following were planted::

- 60 5-year-old beech trees
- 60 4-year-old beech trees
- 30 3-year-old oak trees
- 25 5-year-old chestnut trees
- 25 4-year-old beech trees

The **Cernusco Community Garden** was inaugurated in 2019, with a party organised by the company for all employees and their families.

Once again, Technoprobe has demonstrated its ability to break out of the traditional schemes of a company in which times and spaces for work performance are defined in order to grasp the prospects of a new model of "company-community." A model in which moments and places of aggregation play a fundamental role to give workers the chance to better experience company life

## 4.3 Technoprobe for schools



**“For a company like ours, which has grown a great deal and will continue to grow in the coming years, collaboration with the world of education and training in general is not just an opportunity but rather an obligation.”**

**Roberto Crippa**

The continuous search for highly qualified and specialised personnel has led the company to organise a number of school-work alternation programmes with various institutes located in the area.

In 2021, Technoprobe gave **72 students** the opportunity to try out the PCTO (Pathway for Transversal Skills and Orientation) teaching method, aimed at consolidating knowledge and enriching the education of each student through practical experience in the company, both as a school-work alternation and as a curricular traineeship (i.e. traineeships included in a training course).

In collaboration with the Aldo Moro Secondary School in Valmadrera and the Floriani High School in Vimercate, Technoprobe hosts students both as **ordinary and enhanced school-work alternation**, and as an **apprenticeship** to complete their studies.

Students from various Higher Technical Institutes are also hosted for **post-diploma courses** as well as undergraduates from various universities, including the Milan Polytechnic Institute, the University of Bergamo and the Università Cattolica del Sacro Cuore for **traineeships** aimed at completing their theses or passing their exams.

A targeted project was carried out with the **Badoni** Technical Institute in Lecco, with whom practical workshops were set up, and Technoprobe has made itself available to provide teaching staff and to equip the school with the necessary tools and supplies.

In addition to school-work alternation paths, Technoprobe also made itself available as a company representative for a school orientation activity dedicated to lower secondary school students, which was held in Barzio from 16 to 26 of October 2021.

More than 2,300 students in their third year of secondary school had the opportunity to come into contact with high schools and various companies in the area in order to choose their future educational path.

## A new five-year electronics course in collaboration with the Francesco Viganò State Technical Institute

On Saturday, 27 November 2021, Technoprobe held an orientation day for the new electronics course to be offered by the Viganò State Technical School in Merate.

The open day was attended by about 130 people interested in the new educational proposal created at the request of Technoprobe, in collaboration with Confindustria Lecco and Sondrio.

The new course, strongly supported by the company, will be a five-year course in electronics aimed at obtaining the qualification of electronics expert, and meets the increasingly pressing needs of companies to find specialised professionals. Technoprobe's commitment to the success of the course was essential. In fact, the company made itself available to set up the training course and all the laboratory activities. The first class of 23 students will start in September 2022. The technical studies and skills that this course will offer students will become more strategic than ever due to the evolution of the contemporary and future world, in which electronics will be a major player.

## Technoprobe Summer job

"Attracting new talent": this is the mission of Technoprobe, which in the summer of 2021 offered a fixed-term employment contract to students and non-students over the age of 18 to work in the production departments.

Thus, the company activated around 50 contracts, succeeding in attracting young people willing to take on the challenges of the working world.

# 4.4 Sustainability scenarios...

## Interview with Giovanna DeCapitani, Mayor of Cernusco Lombardone from 2011 to 2021

### 1. How do you judge the presence of Technoprobe SpA in the municipality? What is the relationship between local institutions and the company?

As a municipal representative, I can say that I have followed the entire evolution and growth of Technoprobe, and the legacy it has left on the territory.

The relationship with the company has always been extremely proactive: what started out as a purely institutional approach has been transformed over the years into a relationship of total collaboration on multiple levels, built on mutual needs.

With this in mind, and according to a total sharing of intentions, we have always succeeded in effectively managing the potential to produce jobs for citizens, environmental sustainability and land consumption.

In particular, I can say that I have always been pleasantly impressed by the attitude of the Crippa family: the ethics, passion and total respect for their employees.

On more than one occasion, the company has created moments of aggregation and situations of involvement dedicated to families and employees, through the organisation of parties, family days, open days... I believe these are important messages, dictated by a family that wants to bring the concept of "community" into its company.

### 2. What do you think are the sustainability scenarios that Technoprobe SpA will have to face in the near future in relation to the local community?

The aspect that makes me reflect most is that Technoprobe today is facing a very rapid expansion, especially in terms of new employees.

On the one hand, this certainly translates into an increased capacity to produce jobs for citizens, but it is good to be aware on the other hand that this inevitably leads to difficulty in managing and transmitting the company values to employees. The main challenge I see is that of training and educating people.

Therefore, a lot of work is needed in terms of training and education in order to build a relationship with employees and transmit to them the values that underpin the company.

In fact, I believe that one of the greatest difficulties companies face today is to maintain high employee engagement, especially for large companies.

If employees feel like they are part of a group that appreciates and engages them, they will always be more inclined to devote themselves to their job, not only out of duty but also for the pleasure of doing something that gratifies them, without considering proper engagement also reduces the dispersion of talent.

To make matters worse, there was also the pandemic, which put the brakes on social contexts: companies thus find themselves having to regain relationships with their employees without losing the sense of belonging to the company itself.

# Highlights

**159.669**

vaccination doses in 6 months

**840**

doses per day, 7 days a week

**70.000**

sqm of green area surrounding  
the company

**4100**

sqm of community garden

**200**

plants planted

**72**

young people in the company  
under PCTO projects

# 5.

## OUR NUMBERS

## 5.1 Our financial performance

Technoprobe is the world's second largest manufacturer of probe cards. Since the year of its foundation, the company has seen **constant and rapid growth**, ending 2021 with **its highest turnover ever**.

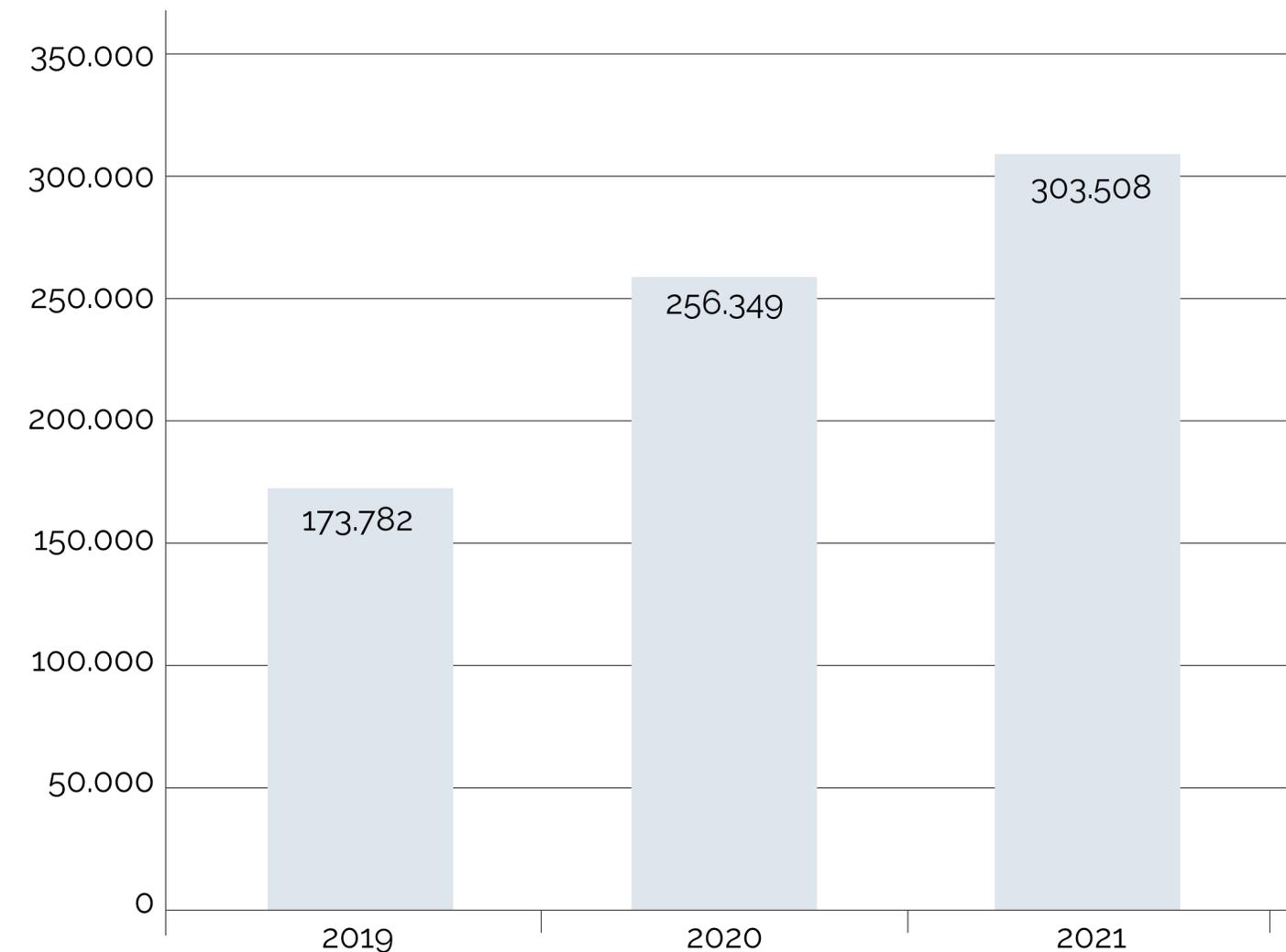
The exceptional development is corroborated both by the turnover figures and by the increase in the number of employees, which went from 711 employees in Italy alone in 2020 to 1,316 in 2021 and 2,100 worldwide.

The economic value generated directly was calculated by reclassifying the income statement.

The main component of value is revenue.

Technoprobe generated a turnover of EUR 303 million in 2021, an increase of 18% over the previous year and 74% over 2019.

Turnover in thousands of Euro



Graph: turnover in k€

	2019	2020	2021
turnover - sales	173.782	256.349	303.508
economic value directly generated	178.090	276.693	342.133
economic value distributed	104.167	136.465	206.360
operating costs	84.067	10.565	164.375
employee salaries and benefits	24.181	40.439	61.494
payments to capital suppliers	9.500	11.000	3.700

**Table** summarising economic value generated and distributed in thousands of euros

An increase in operating costs can be seen in proportion to the growth in directly generated economic value (given by the value of production plus other financial income).

The cost of wages and benefits for employees has also increased over the three-year period, hand in hand with the increase in the number of employees required to run a growing business.

On the other hand, there is an evident decrease in payments to capital suppliers (i.e. dividends distributed). This is due to a strategic choice to leave the capital in the company in order to support expansion plans.

## Growth during a pandemic: a matter of resilience

The extraordinary growth of Technoprobe's activities in 2020 and 2021 was particularly significant considering the difficult global economic and social situation caused by the COVID-19 pandemic and its consequences.

While it is true that the pandemic has in itself sped up digitalisation by stimulating a great increase in the use of technology everywhere, one cannot overlook the strategic vision and ability to translate the strategy into concrete actions by the Owners and Management. The group's growth strategy is based on two lines of development:

On the one hand, there is growth along internal lines, focusing on product innovation, process optimisation of existing solutions and the joint development of technologies to expand the Group's product portfolio in order to offer innovative solutions in the final-test area.

On the other hand, there is growth along external lines, where Technoprobe intends to pursue the growth path also by investing in Italy aimed at the inclusion of process phases currently managed by third-party suppliers. It should also be noted that thanks to careful monitoring of the spread of Covid-19 variants and, despite the epidemiological curve in the first part of 2021, the company has not experienced any production slowdowns.

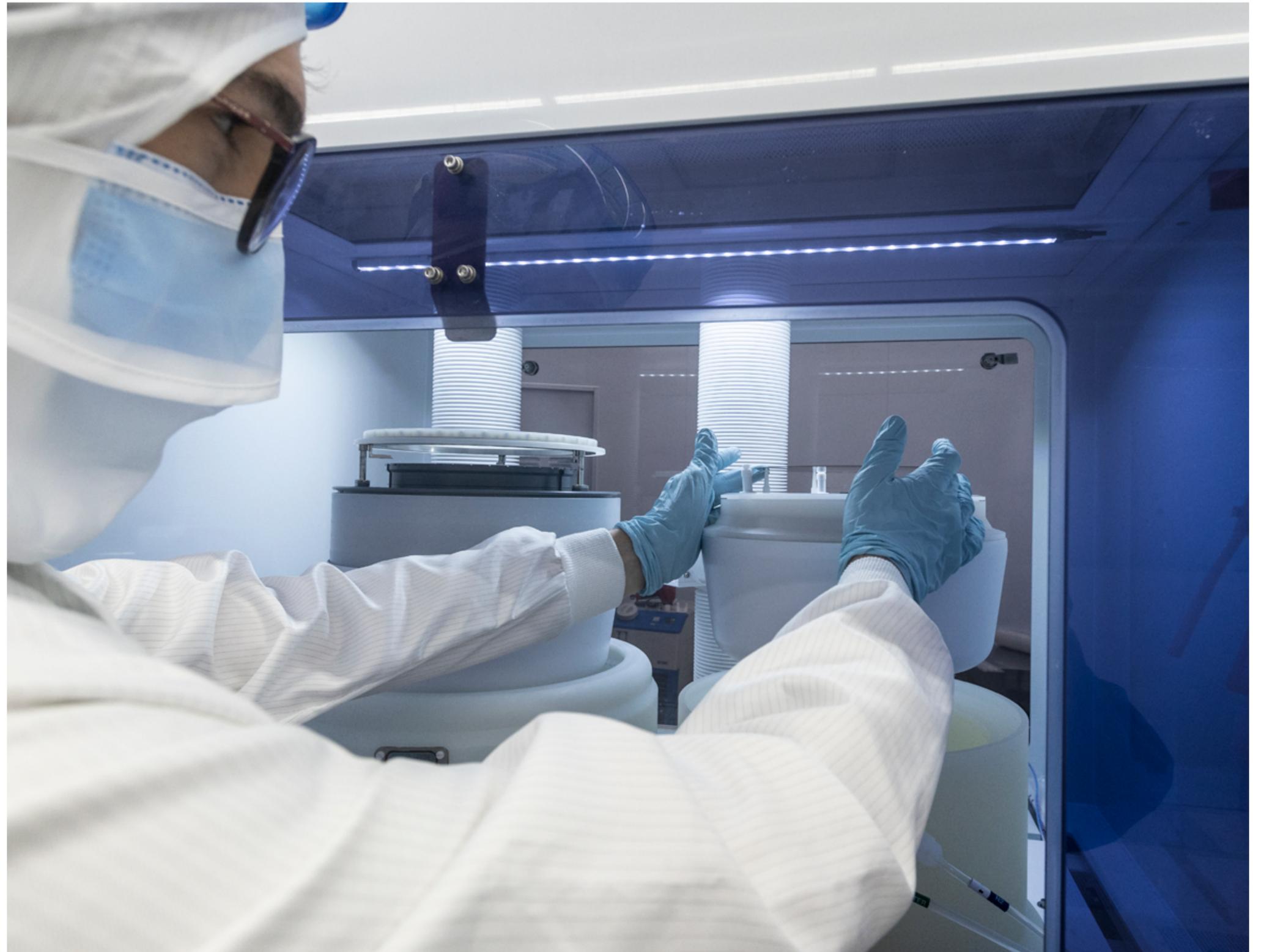
# METHODOLOGICAL NOTE

## SCOPE, PURPOSE AND CONTENTS OF THE REPORT

In carrying out its business activities, each Organisation interacts with its own organisational, economic, environmental, and socio-economic context both inside and outside its premises.

The interaction with internal (i.e. employees) or external (i.e. the environment, institutions, community) stakeholders is therefore continuous and constant.

The purpose of this Report is to examine, quantitatively through data, and qualitatively through information, the company's impact on the environment and society, as well as to act as an initial stage in formalising the profitable relationship with stakeholders.



# Scope of the Report



The reporting parameter is represented by Technoprobe S.p.A.'s offices in Via Cavalieri di Vittorio Veneto, 2 Cernusco Lombardone (LC) and Via Guglielmo Marconi, 8 Agrate Brianza (MB), comprising respectively five buildings in Cernusco Lombardone and one in Agrate.

It should be considered that:

- The Agrate building located in Via Guglielmo Marconi 8, Agrate, has no impact on the figures relating to 2019 and 2020 as it became operational in July 2021.
- Building TPI3, located in Via Cavalieri di Vittorio Veneto 2, Cernusco Lombardone, became operational in 2020.
- Building TPI4, located in Via Cavalieri di Vittorio Veneto 2, Cernusco Lombardone, became operational in the Q4 of 2019.
- An additional building located in Via Milano 10, Osnago, was also acquired in 2021, which has no impact on the reporting because it was not yet operational in the period under review.

The data and information contained in all chapters of the Report, as well as the reporting tables and topics relating to the materiality matrix, refer to the reporting perimeter expressed in this Methodological Note.

In the event that the data reported does not include all the company's locations or all the information necessary for an optimal calculation, this has been appropriately indicated in the text.

If the reporting of data is extended to other locations belonging to the Group, but outside Technoprobe S.p.A., this has been appropriately indicated in the text.

In the Report and this Note, the words "Organisation" and "Company" are understood to refer to "Technoprobe S.p.A." and its production sites in Cernusco Lombardone and Agrate Brianza.

# Definition of material aspects

The definition of so-called "material" or relevant issues (according to the Materiality principle of a sustainability report) for Technoprobe S.p.A. and its stakeholders is the initial step in establishing which areas of sustainability are priorities in the Report.

The combination of internal and external materiality assigned to each aspect yields a value of importance that makes it possible to put these topics in order of priority, selecting a limited number on which to focus action and reporting commitments.

Its graphic representation is therefore the result of consultation, analysis and evaluation of the relevance of the sustainability aspects or topics defined on the basis of a list prepared by the company containing topics appropriate to its activities and intended to guarantee that all the sustainability aspects are covered.





The issues found to be relevant and of interest to the Organisation and stakeholders are those designated as worthy of being reported. In order to be exhaustive in the reporting, some qualitative and quantitative information relating to less relevant topics may have nevertheless been included in this Report.

The stakeholder engagement process involved both internal and external stakeholders relevant to company activities and sustainability issues.

The following activities were carried out:

- Interviews with managers of the main company departments in order to investigate the main elements of their business, establish interest in sustainability issues and identify relevant projects/initiatives that could be the subject of specific reporting.
- Interview with the Mayor of Cernusco Lombardone

All the interviews were conducted based on a format of "standard questions", which represented a baseline from which to initiate reflections, points of interest and considerations on the topic. The results of the interviews were shared with the Company Management.

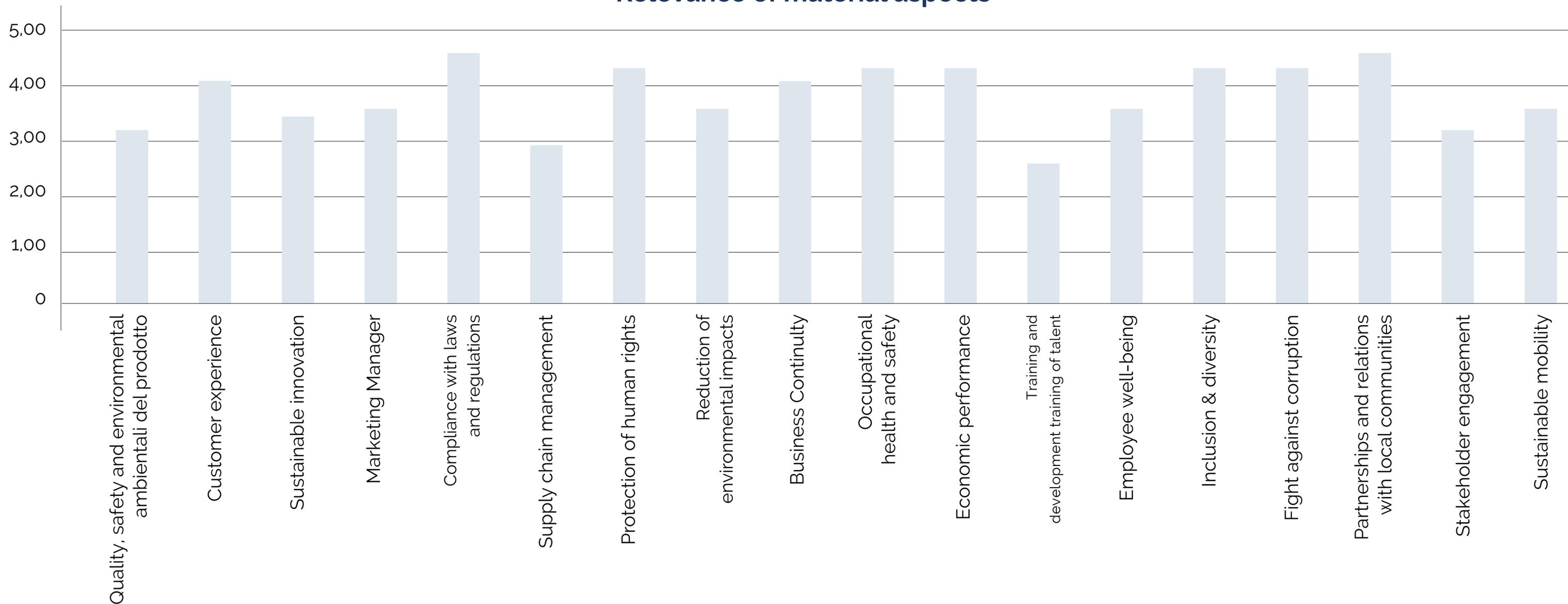
Below is the list of topics that emerged as relevant from the interviews carried out with stakeholders and from the discussion with the Company Management, and their significance to the material aspects of the GRI Standards and the perimeter of these aspects within the Report.

Relevant topics for Technoprobe	Aspects of GRI Standard	Perimeter
Quality, safety and environmental performance of the product	GRI 416-417	Internal-External
Customer experience	416	Internal-External
Sustainable innovation	Not reported by a specific indicator	Internal-External
Marketing Manager	GRI 417	Internal-External
Compliance with laws and regulations	GRI 205-206	Internal
Supply chain management	GRI 204 - 414	Internal-External
Protection of human rights	GRI 411-412	Internal
Reduction of environmental impacts	GRI 301 – 302 – 303 – 305 – 306	Internal-External
Business continuity	Not reported by a specific indicator	Internal
Occupational health and safety	GRI 403	Internal-External
Economic performance	GRI 201-204	Internal
Training and development training of talent	GRI 401-404	Internal
Employee well-being	GRI 102 -401 - 405	Internal
Inclusion and diversity	GRI 405-406	Internal
Fight against corruption	GRI 205	Internal
Partnerships and relations with local communities	GRI 413	Internal-External
Stakeholder engagement	Not reported by a specific indicator	Internal-External
Sustainable mobility	Not reported by a specific indicator	Internal

Below is a graph of the relevance of the aspects for internal stakeholders.

For this first edition of the report, we chose not to represent the relevance of external Stakeholders as the sample number is too small to be sufficiently representative.

### Relevance of material aspects



This sustainability report follows an approach that can be defined as **"GRI Standards inspired"** which refers to the requirements of the GRI standards for sustainability reporting (GRI standards v.1) but it is not exhaustive with respect to the mandatory indicators to be reported in order to be "in accordance."

In some cases, moreover, additional data was also included with respect to the details required by the GRI standard due to certain particular aspects of the company. This report has not been audited by third parties but, as it is the first edition strongly desired by the Company Management, it represents the first step on an improvement path that will allow the company to achieve certification of the contents.

# Data and reporting period

With this report, Technoprobe S.p.A. aims at providing stakeholders with a balanced and fair view of the corporate responsibility strategy and performance during the three-year period 2019 - 2021.

The data is updated on 31 December of each year. Should there be any exclusions stemming from the lack of data or from the reporting period of such data, this will be duly indicated in the text.

