#### Tecnostrutture® 40 La r s Davide evolution

# SUSTAINABILITY REPORT 2023



Tecnostrutture s.r.l.



#### SUSTAINABILITY REPORT 2023

This report, which will be updated every year, has been approved by the Board of Directors of Tecnostrutture and has been verified by the independent body Intertek Italia S.p.A., as stated in the asseveration letter on page 93.

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## Letter to stakeholder

In 1983 we founded Tecnostrutture. Forty years later, we can say that what we initially believed in, i.e. self-supporting mixed structures, has proven to be an efficient, safe, time and costeffective way of building. This way of building has guided us in the development of our company and allowed us to actively promote the culture of industrialisation of the construction site: we have invested in numerous large-scale training events, presenting ourselves as 'Builders of Culture'. For this anniversary, we wanted to reflect and identify a phrase that sums up how we see this journey of ours, and we feel we have reached '40 years of evolution in building'. In this Sustainability Report 2023 we aim to take a snapshot of who we are today and the path we are taking towards sustainable development.

On the environmental front, we have focused our efforts on the most impactful phases of our production cycle: raw material production and product end-of-life. We have introduced rewarding criteria for the selection of suppliers, favouring those who use raw materials with a low environmental impact. We have also developed and patented NPS® FLEX, the demountable and reusable version of NPS® , based on the 'design for disassembly' concept, which

represents a significant step towards environmental sustainability in the construction sector. In 2023 we paid special attention to the safety of our employees. We have invested in training and information on specific risks, constantly emphasising the importance of the adoption

and the correct use of protective equipment. We also promoted

proper maintenance of our plants and equipment and actively worked on the creation of a widespread safety culture.

The key objectives were to contain the risks to the health and safety of workers and to minimise the severity and number of accidents in the workplace.

To further reinforce our commitment to safety and business ethics, we have introduced our code of ethics, a document that serves as a 'moral contract' signed by all key company personnel, employees and collaborators. This code reflects the fundamental values of our company and sets high ethical standards for all our operations.

We believe that sustainability goes beyond mere compliance with environmental standards and regulations; it implies a tangible commitment to the well-being of our corporate community. For this reason, we have implemented a corporate welfare plan, ensuring that our employees can enjoy working conditions that that favour them. We thank you all for your continued support and cooperation as we pursue our mission to become an increasingly sustainable and responsible company.

Enjoy your reading,

Franco Daniele CEO & Founder Tecnostrutture srl

Giulia Daniele Board Member Tecnostrutture srl Managing Director Tecnostrutture GmbH

Gile Lile



### Intervention of the Sustainability Steering Committee

Tecnostrutture is now in its third year of sustainability reporting, a topic that is growing in importance, representing a vanguard in its sector. Thanks to a great deal of awareness and involvement of the various corporate functions, the company is in fact acquiring more and more awareness of these issues, contributing concretely to the sustainability of the construction sector, a sector in which the contribution to the ecological transition remains marginal.

Tecnostrutture's path and the consequent positive image return rests on solid foundations, namely on great design work aimed at challenging traditional construction systems.

The company, however, is aware that sustainability requires a broad vision that does not exclude any of its three spheres: environmental, social and governance. On the environmental sphere, Tecnostrutture has been moving forward for years thanks to the development of the EPDs of its products, and with the Sustainability Report, the company has chosen to define its commitments regarding social and governance aspects as well. In order to make sustainability an increasingly integrated aspect of its choices, it will be necessary for Tecnostrutture to act through systemic actions, continuing to involve all areas of the company to promote and disseminate the culture and approach to sustainability, also read in terms of innovation, a characteristic that has always distinguished Tecnostrutture. To this end, specific training courses could be implemented in the company, also targeting key figures, that are organic and transversal on all topics of interest to Tecnostrutture, including ESG issues. On this, Tecnostrutture can once again prove to be at the forefront, continuing to promote the satisfaction and wellbeing of its workers and reinforcing the culture of sustainability within the company.

#### Andrea Di Lenna

CEO & Founder of Performando Professor at the University of Padua Member of Tecnostrutture's sustainability steering committee





# Chapter 1



For 40 years we have been active in the production of semi-prefabricated elements consisting of a combination of steel and concrete, and we offer extensive experience and highly specialised skills. Our commitment, already wellestablished in Italy, has also extended abroad, thanks to our constant research and development towards innovative solutions, supported by important university bodies. Our significant investment in innovation and industrialisation aims to promote a real change in the way business is done in the construction industry.

# About us

#### 1.1 Our history and our values

Our journey began in 1983, when Franco Daniele and Maria Angela Cerchier founded Tecnostrutture in Eraclea, the town that hosted our headquarters for 12 years before moving to Noventa di Piave in 1995. The following year two new partners embraced the project: Ernesto Damiani and Paolo Biondo. Since then, a journey studded with successes and challenges has begun, making us a benchmark in our sector.

#### Our numbers in 2023

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Employees				R		R	
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### **CORPORATE HISTORY**

#### From 1983 to the present day

#### 1983

Founding of Tecnostrutture

**1990** st patents on

Filing of the first patents on methods of industrialisation of constructions

#### 2000

Start of production and distribution under licence of REP technology

#### 2006

Introduction of the PTC abutment made of high-performance centrifuged concrete

#### 2013 Launch of own technology New Performance System (NPS), consisting of column, beam, slab

2017

Completion of the internalisation of all major value-added phases from production

#### 2020

International turnover of about 50% (Denmark, Monte Carlo) **1984** Start of production of metal lattice beams

#### 1995

Relocation of offices to the current premises in Noventa di Piave (VE)

#### 2004

Debut of the pioneering ECOTRAVE compliant with LEED environmental sustainability requirements. Introduction of the PDTI column with a steel surface and filled with concrete

#### 2012

The first company in Italy to obtain CE certification according to EN 1090-1 standard

2014 Airfloor patent filed, revolutionary slab oriented to seismic safety

2018 Start of Expansion in international markets

2022 Founding of Tecnostrutture Deutschland GmbH Sustainability, especially environmental sustainability, has guided our path for about 20 years and step by step we achieved several results:

- in 2004 we launched ECOTRAVE® on the market, a solution with a brick base and complying with LEED environmental sustainability requirements
- in 2011 we joined the Green Building Council Italy (GBC Italia)
- in 2013 we complete the development of our New Performance System (NPS®), which combines outstanding performance with reduced environmental impact
- in 2019 Tecnostrutture Academy is born, an online portal to share knowledge and experience related to the world of mixed structures.
- from 2022 we are the only Italian manufacturer of mixed structures to publish a sustainability report, a
- voluntary document with which we want to communicate our approach to sustainability to the outside world.



Over the years, we have joined numerous organisations and associations. Below is the list of associations of which we are currently members:



Association representing industrial companies in the Treviso area.



Body that drafts and publishes voluntary normative documents (UNI standards, technical specifications, technical reports and reference practices).



European Centre for Training and Research in Earthquake Engineering (EUCENTRE) supports and takes care of training and research in the field of earthquake risk reduction.



Association that pursues the diffusion of green building through LEED, a protocol developed in the United States.



It fosters the spread of a qualified sustainability culture and a growing awareness of the social and economic value of sustainable infrastructure.



A study by the Illinois Institute of Technology in Chicago, which investigates how increasing urban density and vertical growth can promote more sustainable and healthier cities, especially in front of mass urbanization and the growing effects of climate change.



The Federal Association of Prestressed Concrete Slabs (BVSF) wants to foster the knowledge of this efficient and environmentally friendly structural solution, which is ideal in combination with Slim-Floor beams such as our NPS construction model.



The Italian National Association of Earthquake Engineering (ANDIS) aims to spread the culture of seismic problems in Italy among professionals who work in areas of relevance.



Cresme provides the private sector and public institutions with information and knowhow to describe and forecast economic and construction market trends at a territorial, national and international level



The Confederation of Danish Industry is the largest business organisation **D**• Danish Industry and employers' organisation in Denmark.



It is the association of Small and Medium Enterprises in the territories of Venice, Rovigo and Belluno. It defends the interests of entrepreneurs by representing them before bodies, institutions and other economic categories with the aim of facilitating and supporting the development of their businesses.

In our journey, our company mission has constantly been our guide: to guarantee certain timings and costs through a construction system that is safer, more efficient and sustainable than traditional ones. Our goal is the industrialisation of construction, with a focus on innovation.

In 2020, we developed and published our value system, a document regularly provided to stakeholders before starting new collaborations. We believe that sharing the same values is an essential prerequisite for the creation of a satisfactory working relationship for all. Specifically, our activities are based on the following pillars:

#### • Knowledge

We want to spread a new building culture and we are aware that to do so we need curiosity, courage and ambition. These three elements form the basis of our research and development initiatives which, conducted with leading technical-scientific partners, allow us to go beyond the limits of current knowledge in the sector.

#### Robustness

Creating resilient solutions, capable of challenging time and space, in the name of safety and reliability: this is the approach we offer our customers.

#### • Timing

Our attitude towards time is active: we work quickly on objectives without neglecting the precision needed to achieve optimal results. We work by integrating soft skills to make the final execution simple, fast and efficient.

#### Essentiality

'Less is more' is the slogan that exemplifies the essential, minimalist style of building, working and living to which we aspire. Through conscious and sustainable use of resources we take away instead of adding, creating simplicity where there is complexity, valuing only what is necessary and pursuing our ultimate goal: to improve people's quality of life.

In addition to being shared and promoted within Tecnostrutture, these values are published in several languages on our website so that they can be understood by all stakeholders.







#### 1.2 Our structure and organisational set-up

Through the holding company Dafin S.r.I., Tecnostrutture S.r.I. is wholly owned by the Daniele family.



The Board of Directors (BoD), whose composition was updated in 2020 and is appointed and evaluated periodically by the Shareholder's Meeting, consists of six directors - three of whom are independent - who bring specialised expertise that is functional to our development project. The Board of Directors is responsible for the management of the company through the elaboration of corporate strategies, but also for decision-making and evaluation of economic, environmental and social performance. The Board of Directors independently determines the compensation to be paid to its members, based on performance indicators linked to EBITDA and specific areas of expertise.

The company also has a single-member board of auditors, which is entrusted with the control of legality.

Name	ame Location		Main areas of expertise		
Franco Daniele	President and CEO	Foundation	Sales and technical supervision		
Giulia Daniele	Administrator	May 2017	Business development and sustainability		
Giovanni Montagner	Administrator	June 2013	Management support		
Enrico Gomiero	Non-executive administrator	May 2017	Management and internationalisation processes		
Giulia Milan	Non-executive administrator	May 2020	Financial planning		
Matteo Mottin	Non-executive administrator	May 2020	Product and process engineering		

Aware that sustainability is a value that must permeate our entire company, we have appointed a contact person in each department to help us promote good practices in Environmental, Social and Governance (ESG) areas. These contact people constitute the Sustainability Committee of Tecnostrutture, a cross-functional internal body that meets quarterly and through which we define and monitor corporate sustainability goals, making them concrete through effective and innovative solutions.

In addition, Tecnostrutture can count on a Steering Committee that offers technical and scientific expertise to support strategic business decisions on sustainability issues. It consists of experts in green building, civil engineering and human resources:

• Chiara Calderini. Professor at the Department of Civil, Chemical and Environmental Engineering and member of the curriculum committee in Structural, Geotechnical Engineering and of the PhD materials in Civil, Chemical and Environmental Engineering at the University of Genoa, she supervised the LCA assessment of Tecnostrutture. She coordinates the master's degree course in Engineering for Building Retrofitting and is a member of the steering committee in Science and Technology of Sustainability at the University of Genoa School of Engineering. She is the author of numerous publications in the field of building technology.

• Andrea Di Lenna. A graduate in Business Administration, he is involved in management education, organisational consultancy and training for national and multinational production and service companies, as well as for Public Administration realities. At the Department of Philosophy, Sociology, Pedagogy and Applied Psychology of the University of Padua, he teaches the courses "Organisation and Management of Human Resources" and "Economics and Organisational Planning". He is director of Performando, a management training and consulting company for personal and organisational development.

• Andrea Fornasiero. He is chairman of the Standards Committee of Green Building Council Italia, a non-profit association that promotes the dissemination of a sustainable building culture, part of the international GBC network. He deals with aspects of sustainability, building physics and energy-environmental certification in the civil construction sector at Manens-Tifs. He was the first Italian to join the technical committee of the U.S. Green Building Council (USGBC), with the aim of evaluating and recommending technical solutions for the development of the LEED system.



#### 1.3 Products

Our product offer consists mainly of beams, columns and a modular slab system. In 2023, we obtained a patent for NPS® FLEX, the NPS solution designed to be disassembled, making building elements reusable.



- NPS self-supporting columns are available as:
  - composite columns with a steel surface and filled with concrete
  - centrifuged or high-performance concrete columns.



NPS beams are mixed steel-concrete lattice girders, self-supporting, and can be combined with any type of slab.



Patented by Tecnostrutture, the Airfloor® slab is the lightest composite slab on the market.



Easy to assemble, NPS<sup>®</sup> FLEX can be moved quickly and offers a wide range of design possibilities. Customisable to the specific requirements of a particular project, it is suitable for a variety of application areas: from residential to office and tertiary.



Our products are mainly used in construction in these sectors:



We also offer numerous services to support professionals and companies in the design and implementation of works, including:

- · organisation of activities aimed at disseminating culture and scientific knowledge on mixed structures
- provision of technical tools developed to facilitate design with NPS elements
- supply of technical and commercial material to support the preliminary assessment phases of mixed structures
- support capable of embracing the entire process: from identifying the ideal solution for the customer to dimensioning the elements, to delivery on site and assistance with installation
- assistance with on-site installation of NPS structures and assembly of NPS structures with our own workers.

In addition to the head office in via Meucci 26 and the production plant in via Volta 36, located in Noventa di Piave, we have a logistics base provided by one of our suppliers in the province of Cosenza: a functional detail to serve Southern Italy and North African countries.

To meet the market's needs and to follow active and upcoming projects especially in Northern Europe, we are present in Denmark with a representative office.

In 2022 we founded Tecnostrutture Deutschland GmbH with headquarters in Essen. Establishing a German organisation with a regular legal form for this country was a natural transition. In fact, we have been present in Germany since 2020 with a representative office where our customers can interact in German with native-speaking designers and salespeople. The choice of Essen as the headquarters of this organisation is also no coincidence: the city is strategically located in the heart of North Rhine-Westphalia, facilitating relations with customers in Central and Northern Europe.



#### 1.4 The markets in which we operate







Our journey towards greater sustainability began in 2004, when we designed the first beam with a pure terracotta base with the aspiration of contributing to the ecological transition of the construction sector. Since then, we have taken many steps forward, including assessing the impacts of our products and communicating them through appropriate certifications. A milestone on this journey was the drafting of our first sustainability report related to 2021, thus extending our focus on sustainability to social and governance aspects.

We strongly believe in this tool, which allows us to increase the transparency of our operations and dialogue with our stakeholders. The drafting of the third edition of the report confirms our commitment to increasingly integrate sustainability into our business strategy and to continuously improve Tecnostrutture's performance in ESG areas.

# **Methodological Approach**

#### 2.1 Criteria for drafting the report

The data and information in this report refer to 2023 and cover production activities, as well as all other activities carried out in the reporting year and related to the three spheres of sustainability, conducted

in the head office at Via Meucci 26 and in the factory in via Volta 36.

This report has been prepared in accordance with the 2021 version of the Sustainability Reporting Standards published by the Global Reporting Initiative (GRI). The GRI standards define some guiding principles to ensure the quality and accuracy of the information reported, so that stakeholders, and in general anyone reading the report, can fully assess the organisation's impacts and its contribution to increasingly sustainable development.

The reporting principles in the standards are: accuracy, balance, clarity, comparability, completeness, timeliness, verifiability and sustainability context.

The drafting of the document saw the active collaboration of various corporate functions that contributed to the collection of the necessary data and their correct contextualisation. This process was facilitated by the Sustainability Committee, a cross-functional working group, established to promote change within our organisation. This report, which will be updated annually, is has been approved by the Board of Directors of Tecnostrutture and has been verified by the independent body Intertek Italia S.p.A., as reported in the asseveration letter on page 93.

#### 2.2 Stakeholder involvement

To gather the instances, expectations and points of view of stakeholders, we conducted a specific activity called stakeholder engagement. This is an articulated process of listening and dialogue that involves stakeholders in the formulation of company policies and strategies.

The first step, implemented in the first reporting cycle and re-evaluated annually, saw the identification of the categories of relevant stakeholders for our Company: these coincide with those who are or may be affected, directly or indirectly, by the Company's activities. In order to identify the stakeholders of greatest relevance to Tecnostrutture, the principles of responsibility, influence, proximity, dependency and representativeness were considered, as required by the AA1000 Standard on Stakeholder Engagement (AA1000 SES) developed by Accountability; this standard is the basis on which we assigned a priority class to each category identified.

The table below lists and describes the stakeholder categories identified during the drafting of the first report and confirmed in the current one.



#### Internal workers

Those working in the employ or on behalf of Tecnostrutture, including their representatives (e.g. trade unions)



#### **Service Providers**

Those who provide Tecnostrutture with services such as fitters and carpenters, but also personnel recruitment companies and IT services.



Investors

Possible buyers of company shares in the medium to long term.



The set of institutions that can directly or indirectly influence Tecnostrutture's activities (Region, Province, Municipalities and similar foreign institutions where our factory and offices are located and where our products are installed, Universities).



Private, non-profit associations and organisations that can act in areas that directly or indirectly influence the activities of Tecnostrutture (e.g. environmental associations).



#### Suppliers of raw materials

Those who supply Tecnostrutture with materials (steel and concrete) for product manufacture.



#### Sales chain

Tecnostrutture's sales chain consists of the client, i.e. the person who invests in the work, the designer and the construction company that takes on the work.



#### Society and local communities

The social context of the territories in which Tecnostrutture's sites are located and which may directly or indirectly influence its activities.



**Financial institutions** 

Banks and credit institutions that can contribute to the financing of Tecnostrutture's activities.



International, national and local media that may directly or indirectly influence Tecnostrutture's activities. In order to identify the ESG issues of greatest interest to our stakeholders and establish their relevance, in this report we have chosen the indirect engagement method, which consists of selecting and analysing documentation to reconstruct the opinions and demands inherent in our priority topics. The analysis of the results of the stakeholder engagement was assigned a direction and orientation value.



#### 2.3 Materiality matrix

The materiality analysis is the methodological heart of any sustainability report and the starting point for selecting issues related to an organisation's most significant impacts on the economy, environment and people.

In order to come to the identification of the material themes, it is essential to first study its own reality, the context in which it operates and the competition it faces, identifying priority sustainability issues, including aspects related to respect for human rights. This activity was carried out for the 2021 report and adjusted for the 2022 report in line with the implementation of the updated reporting standards. For each of the potentially material issues, we identified the main current and potential impacts that our Company generates in the three dimensions of sustainability: economic, social and environmental. To each theme and its related impacts, we have associated specific GRI Standards by selecting, within them, GRI disclosures relevant to our organisation.

We assessed their **significance**, based on **importance** and **likelihood** of occurrence, by submitting a questionnaire to the company management. For 2023, the previously defined impacts have been re-evaluated and confirmed. The following diagram shows the list of Tecnostrutture's material issues and the related Sustainability Development Goals (SDGs) of the United Nations 2030 Agenda; the correlation was made taking as reference the indications contained in the document Linking the SDGs and the GRI Standards issued by the GRI in 2021.

	Material Themes	Definition	SDGs
1	Loyalty and transparency	Acting with respect for all means and techniques in accordance with the principles of professional correctness, condemning and rejecting corruption and unfair competition	16 YANG, JUSTICA Had STRING INSTITUTION INSTITUTION
2	Compliance and Legal Compliance	Management of the company in compliance with national and inter-national laws, rules and regulations governing its operations and the use of products.	16 FRAGE INSTITUTE MOLETIMESE INSTITUTESE
3	Resilient and sustainable products	The production of robust, durable and safe products that respect the principles of environmental and social sustainability	12 ASTROSPIL UNIXIMPTIN JAP REDUCTION
4	ProductionThe production of high quality products through appropriate management of energy, water,sustainabilitygreenhouse gas (GHG) emissions and respect for biodiversity.		12 ASSTOCHEL CONSUMPTING AD INTOCICION AD INTOCICION
5	Security and well-being psycho-physical condi- tions of collaborators	La protezione della salute e della sicurezza dei collaboratori e la promozione del loro benessere anche mediante lo sviluppo personale e professionale.	8 ассон нее даб гоммис зарати
6	Economic soundness	The ability of the company to generate economic value and redistribute it to stakeholders.	
7	Circularity of raw materials	Encourage the use of raw materials with a high recycled content in production and that meet the principles of the circular economy.	12 ASSTOCHE CONSUMPTIN JAD RECORCIDE A
8	Partnership and associations	The creation of partnerships and active participation in associations to share knowledge and skills in order to foster innovation and development in the sector.	9 INTEGEN INFORMATION
9	Customer satisfaction	Ensuring customer satisfaction with the quality of the products and the efficiency of the services provided to strengthen customer loyalty to the brand.	9 Meterie Herbathe
10	Education and training	The promotion of knowledge and culture of innovation in the construction sector, with particular reference to the offsite system, on the national and international scene, also in cooperation with schools and universities.	9 MEERIN MONITOR
11	Research and innovation Research and technological innovation as strategic elements to increase the company's knowledge and competitiveness and to pursue continuous improvement and the develop- ment of ever more efficient construction methods.		12 RESPONSE CONSUMPTION HIG PRODUCTION

We awarded the highest scores to Loyalty and Transparency, Compliance and Compliance with Laws, in line with our business model and the values underpinning our way of doing business, which we have included in our code of ethics, that we promoted and disseminated to our internal and external stakeholders during the reporting year.

The theme of Resilient and Sustainable Products, linked to our commitment to provide those who choose us with reliable and durable solutions, has remained a priority, as well as customer satisfaction, which we are committed to assessing with a special questionnaire that we have updated and improved in the reporting year. The topic of production sustainability has also gained importance within our company; this is no surprise to us. While environmental impacts are receiving increasing attention in the construction sector, we have also initiated several collaborations with authoritative industry associations in this area, and are also committed to promoting our innovative systems, which promote the spread of more efficient construction methods in line with the principles of the circular economy and sustainability.

Issues such as safety and psycho-physical wellbeing of workers, the most important resource for our success, and economic solidity remain relevant for us, knowing that it is on this that the ability of its redistribution to all categories of stakeholders depends.

Construction site of the Sibaritide Hospital

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# **Chapter 3**



During 2023, we worked a lot on human capital and the last months of the year saw the first results: we are improving our production efficiency and have given a major boost to the research and development area.

We were also able to take advantage the favourable raw materials price trend, improving our budget numbers.

We have shown remarkable resilience, absorbing major postponements in the execution of some projects and thus managing to keep production volumes in line with those of 2022, thus consolidating, our growth.

Finally, in 2023, we achieved a very important goal: to build the entire Olympic Village in Milan for the 25th Winter Olympic Games in just over seven months, proving that we are a highly innovative, high-performance and sustainability-conscious company.

# Economic and ethical soundness

#### 3.1 Value creation and risk management

The generation of economic value ensures the sustainability and continuity of our business over time, while its distribution allows us to understand the impact of our activities on stakeholders, the territory and the socio-economic system as a whole. Both aspects - generation and distribution of economic value - are detailed in the table below.

Economic value generated and distributed	2023		2022		2021	
Economic value generated	€	29.715.755	€	31.321.856	€	19.741.473
Distributed economic value	€	29.801.987	€	31.123.016	€	19.502.214
Operating Costs	€	21.448.675	€	21.623.823	€	14.561.367
Insurance costs	€	94.447	€	84.769	€	66.713
Costs for advertising, promotion and publicity material	€	134.091	€	111.226	€	133.423
Costs for exhibitions, fairs, events, seminars and conferences	€	81.249	€	25.871	€	31.926
Costs for travel, transfers, lunches and overnight stays	€	156.413	€	101.161	€	68.523
Quality costs	€	14.612	€	28.565	€	41.627
Construction site safety costs	€	83.613	€	57.404	€	40.089
Costs for studies and research, laboratory tests and quality control	€	253.828	€	136.866	€	231.721
Salaries and employee benefits	€	4.324.103	€	3.930.942	€	3.301.688
Costs for training and education / Employee medical examinations / Canteen/ Mileage reimbursements	€	46.290	€	45.353	€	56.321
Depreciation and Amortisation	€	1.634.114	€	1.069.540	€	598.673
Financial income and expenses	€	302.752	€	165.440	€	104.685
Payments to Public Administration	€	578.527	€	274.968	€	129.449
Investments in the community	€	17.380	€	20.000	€	10.000
Other miscellaneous operating expenses	€	631.894	€	483.579	€	136.011
Economic value retained	€	1.171.024	€	198.840	€	239.259



Eight per cent of the procurement budget is spent on suppliers in the province of Venice.

Added to the retained economic value are government subsidies and tax breaks received for the purchase of new machinery and capital goods, as well as for research and development activities. Details are given below.

Financial assistance received from the government		2023		2022		2021	
Tax reliefs and deductions	€	206.280	€	160.617	€	69.901	
Grants for investment, research, development and other relevant subsidies and other relevant subsidies	€	67.203	€	41.614	€	178.233	

In 2023, the after-tax profit for the year amounted to EUR 1,444,507, which was entirely reinvested in activities for the growth of the company. The table shows the types of orders obtained during the reporting year.



New Olympic Village in Milan Our NPS New Performance System structures were used in the construction of the new Olympic Village in Milan, which will host the athletes of the XXV Olympic Winter Games in 2026. The Olympic Village is part of a project of 190,000 square metres, which will be completed once the sports event is over with new residences, a large park, public spaces and the suspended forest on the existing railway track.

The role of Tecnostrutture and its offsite construction method was central in ensuring that work proceeded quickly and safely, due to the need for less manpower on site. With off-site, there is also no need for formwork.

This avoided 160 round trips from the production plant to the construction site to transport the temporary material.

Worksite numbers:

### 6 buildings

of 8 floors (for an average of 900 m<sup>2</sup> area per floor)

### 12 months

lead time

### 46.000 m<sup>2</sup>

surface

Solution used: 760 NPS® PDTI® Columns, 2,638 NPS BASIC beams, 46,500 m<sup>2</sup> of hollow core slab and 240 prefabricated stairs and landings


Render of the Milan - Cortina 2026 Olympic Village, Milan



With regard to the assessment and management of risks and opportunities related to our activities, we are aware of the importance of the impacts that the construction sector can generate in ESG areas. Due to their intrinsic characteristics, infrastructure works have a direct and prolonged influence over their entire life cycle on natural capital elements such as biodiversity, soil, water and atmosphere; at the same time, these works are exposed to multiple environmental risks, including damage caused by extreme weather conditions. Furthermore, the sector in which we operate contributes to the provision of essential services such as sanitation and transport, which is why we also have a significant impact on individuals, families and society at large. Governance aspects also require careful strategic planning in order to avert the risks associated with our supply chain relationships.

For all these reasons, we identify and monitor risks and opportunities related to



Milano - Cortina 2026 Olympic Village, Milan

our activities and products, and we keep potential impacts under control. With specific regard to environmental aspects, we have defined a corporate strategy to respond promptly to emergencies and we have an environmental and quality management system in place, obtaining the relevant ISO 14001 and 9001 certifications. In accordance with the requirements of the European privacy regulation 2016/679 called General Data Protection Regulation (GDPR), we also perform an analysis of the risks related to personal data processing.

Finally, risks related to corruption are of particular relevance to our reality, as the size of projects and the multiplicity of phases and parties involved make our activities exposed to corrupt behaviour<sup>1</sup>. We are personally committed to identifying risks in this area and to maintaining corporate policies to combat corruption and anti-competitive behaviour.

In 2023:

- no corruption and discrimination incidents have been established or contested
- no lawsuits were filed for anti-competitive behaviour<sup>1</sup>, antitrust and monopolistic practices
- we have not been sanctioned for violations of environmental laws and/or regulations or in social and economic contexts.

As a demonstration of our commitment to conducting our business in an ethical and transparent manner, we have obtained the Legality Rating certification. The Competition and Market Authority has given Tecnostrutture a rating of "AA +", a score that indicates a high degree of attention to ethical and correct management of its business.

<sup>1</sup>. "OECD Guidance on Duty of Care for Responsible Business Conduct" - OECD (2018).



As a company, we strive daily to have a limited impact on the planet and on people. Regarding the former, we transparently communicate the environmental impact of our products, support the introduction of a building registry, use recycled materials in production wherever possible, and provide solutions that enable the reuse of raw materials.

We also want our employees to feel involved in decision-making processes, so each department, through a contact person, sets its own goals and promotes good sustainability practices. Thanks to this system, we have identified the Sustainable Development Goals (SDGs) of Agenda 2030 that are most relevant to our reality and on which we can act most effectively.

7 - Clean and affordable energy; 8 - Decent work and economic growth; 9 - Industry, innovation and infrastructure; 10 - Reducing inequalities; 12 - Responsible consumption and production; 16 - Peace, justice and strong institutions



In detail, during 2023:

- Concerning the SDG Clean and Affordable Energy, we point out that all electricity used in our factories as of 1 January 2022 is generated from renewable sources, a part of which is self-generated by a photovoltaic system; installing new photovoltaic panels on the roofs of our production facility is one of the targets for 2024
- For the SDG Industry, Innovation and Infrastructure we aim to invest in research on the fire resistance
- With regard to the SDG Responsible Consumption and Production, we plan steel processing with 4.0 machinery in order to minimise waste; the remaining product is sent for recycling.



Our commitment to innovation in the construction sector is recognised nationally and internationally. In 2022, Giulia Daniele was awarded the "Mirna Terenziani" prize by GBC Italia, dedicated to one of the personalities who contributed the most to the development of the association. What made this achievement possible was the dedication of all Tecnostrutture people in pursuing the path towards sustainability, by revolutionising the company culture and implementing activities in favour of local communities.







When it comes to innovation, we make no compromises. For us, this noun has a precise meaning: it is a tension to break the traditional patterns of the sector in which we operate, thanks to research and development activities conducted together with high-level technical and scientific realities.

This is how we are able to create new knowledge in construction, knowledge that we take care to share through various tools. This continuous search for knowledge is not only a company practice, but is one of our core values. To do so, it takes not only a lot of curiosity, but also a good dose of courage.

These assumptions are translated into practice in the continuous study of advanced technologies and in the efficiency of production processes, with the ultimate goal of offering our customers state-of-the-art construction solutions in terms of performance, safety and aesthetics.

## Product and process innovation

#### 4.1 Innovation for the development of the sector

Stimulating the development of the construction sector and the industrialisation of construction sites connotes us as promoters of change. We firmly believe that sharing knowledge is the best way to contribute to the evolution of the field in which we are active, and that is why, since the early 2000s, we have intensified our research and development activities, organising, among other things more than one hundred training events at universities, professional associations and construction sites.

Our investment in research and development includes:

Approximately 125.000

Our growth path boasts the support of numerous universities but also sees a fundamental contribution in the stimuli we receive from every designer interested in presenting us with novel structural challenges and suggesting innovative solutions. Some of the universities with which we have collaborated in recent years for specific projects and the publication of scientific articles include:

University of Pisa

University College of London

University of Camerino

University of Genoa

University of Padua

ETH Zurich

University of Washington

Ruhr-Universität Bochum

University Federico II of Naples

Among the projects to which we have contributed is a technical handbook introducing the

fundamental concepts of mixed steel-concrete construction technology, now in its fourth edition. The latest version includes indications for structural modelling according to the correct regulatory prescriptions for safety, thanks to which it will be possible to avoid errors attributable to improper procedures that can compromise the strength and durability of structures; at the same time it will allow

to avoid any inappropriate interpretation of the behaviour of self-supporting mixed steel-concrete constructions.



















The dissemination action of the 2011 edition of the handbook takes on particular importance considering the performance orientation of the more recent technical regulations, which set the final requirements of the work, leaving greater room for manoeuvre and responsibility to the professionals in charge of design and construction.

Tecnostrutture ACADEMY is another project that allows us to spread the culture of innovation, as well as an online platform that from 2019 is the reference point for sharing knowledge in the field of mixed steel-concrete structures. Designed for all those who work in the world of design and construction, Tecnostrutture ACADEMY provides numerous resources such as scientific articles, videos, events and online seminars. As mixed structures are a cross-cutting theme, the content covers a wide range of topics, including design in BIM, seismic safety and the earthquake bonus, sustainability and much more. Since January 2020, we have also developed an English language version, thus reaching an international audience.

#### 4.2 Innovation for product quality and service efficiency

Our long experience with composite structures has allowed us to increase our know-how in the industrialisation of the product, which is useful in guaranteeing consistently high quality standards, and in perfecting its technical performance especially in relation to seismic resistance.

Since 2000, we have undertaken intensive research activities, dedicating human and financial resources to improving the NPS® system products, creating new solutions and refining production and technical support processes. Recent projects include:

- the seismic resistance analysis of the nodes, entrusted to the University of Padua.
- PTC® NPS column tests performed at Shanghai Tongji University.
- the FEM input test on the stiffness of structures conducted by the Eucentre Foundation in Pavia.
- the life cycle analysis of structures (LCA), conducted with the contribution of the University of Genoa.
- characterisation of the new Airfloor<sup>™</sup> floor with fire resistance tests conducted at the CSI laboratory.
- acoustic performance testing at the EcamRicert laboratory.
- Comparative analysis of assembly speed, material savings and environmental sustainability of structures, measured in terms of a building's carbon footprint, conducted in collaboration with Studio Fieschi & associates
- Dissertation on the development of new solutions according to the logic of Design for Disassembly in cooperation with the University of Genoa.
- In detail, we carried out the following activities in the reporting year:
- A first fire characterisation test of a new highstrength concrete mix that prevents spalling in case of fire
- A test to evaluate an alternative coating to the Airfloor FIRE slab
- Completion of the anti-seismic node testing campaign for the NPS system® ;
- First stages of the 'F.R.E.S.C.O.' research project, focusing on the fire resistance parameterisation of NPS BASIC beams®
- A shear and bending test at the ETH in Zurich.

As far as the technical certificates for the use of our products in foreign countries are concerned, we received the Appréciation Technique d'Expérimentation (ATEx), i.e. the favourable judgement for the use of the NPS® off-site construction system on French territory by the highest scientific-technical body for construction: the Centre Scientifique et Technique du Bâtiment (CSTB).

In 2022, we obtained a certification allowing us to distribute our PTC colmns and a particular type of PTC<sup>®</sup> Plus and Basic in Switzerland by the Vereinigung Kantonaler Feuerversicherungen (VKF-AEAI), the association of cantonal fire insurers.

By 2023, we managed a total of 25 patents, two of which, previously registered only in Italy, were also filed for other European countries:



2023 was the year of the market launch of NPS FLEX<sup>®</sup>, completing a long research journey on Design for Disassembly started in 2016 with the delivery of the first demountable NPS structures<sup>®</sup>. In NPS FLEX<sup>®</sup>, the beam-to-column connection system can be disassembled by simply acting on the bolts used in the construction phase to secure and stabilise structures both during assembly and throughout the life of the structure.

NPS FLEX<sup>®</sup> offers even more efficient end-of-life management of our structures. Here are some reasons:

• Design for Disassembly integrates the design process of the building into its life cycle and allows this first phase to be carried out in an ecodesign perspective, also taking into account the end of life.

• NPS FLEX<sup>®</sup> enables the reuse of structures and not just their downcycling. This reduces the burden and potential future costs of waste disposal for the community in which the building is located and contributes to a lower use of resources.

• When a building designed with NPS FLEX<sup>®</sup> comes to the end of its life, it is potentially more economical to remove and reuse the structures because the process is simpler and less labourintensive than demolition. In addition, it simplifies component maintenance and enables leasing and take-back systems.

• Many countries and organisations have set targets to reduce greenhouse gas emissions and waste. The NPS FLEX<sup>®</sup>, designed for disassembly, helps achieve these goals.

• NPS FLEX<sup>®</sup> allows greater flexibility when changing the use of a building. When occupants' needs change, the original building can be easily reconfigured, adapted or dismantled to create new spaces or buildings. This is especially true for speculative buildings whose changes of use are frequent.



Our products and production processes comply with the following standards:

#### UNI EN 1090-1

Execution of steel and aluminium structures. Part 1: Requirements for conformity assessment of structural components



UNI ENI 3834 Quality requirements for fusion welding of metallic materials.



UNI ENI 13225 Precast concrete products – Linear structural elements



Thanks to the great work done over the past years, today all major NPS® products have an Environmental Product Declaration (EPD), a certification recognised on international level that communicates data on the environmental performance of products and services in an objective and comparable manner.

The study leading to the EPD is based on on Life Cycle Assessment (LCA): an analysis conducted in conformità alla ISO 14040 e capace in accordance with ISO 14040, which is able to examine the flows of matter, energy and resources required for the production, use and end-of-life of a product, identifying which are the main environmental impacts.

This approach over the years has revealed a number of advantages on different sides. The first is the one that allowed us to deal with public administrations. Mandatory in Italy since 2016, the Minimum Environmental Criteria (CAM) guide public administrations in the stages of the procurement process, favouring the choice of products that have less environmental impact, for the assessment of the eco-compatibility of a building component, CAM refer to environmental labels and, among these, the most comprehensive is precisely the EPD.

Over the years, LCA studies have enabled us to identify the processes and materials with the greatest environmental impact and to which we have devoted our efforts with a view to reduction.

Not only that: the periodic updating of the EPD tells us whether the improvement measures are effective or not. The LCA methodology has thus proved to be both a lever for innovation, eco-efficiency and circular economy, and a pool from which to draw information for communication and marketing activities based on reliable and verifiable data.

The path taken with the development of the EPD allowed us not only to demonstrate the compliance of NPS® products with CAM, but also with LEED sustainability certification. LEED® is a voluntary certification programme that covers the entire life cycle of any type of building. It promotes a sustainability-oriented approach to design, construction and demolition by evaluating building performance in key areas, such as energy and water savings, reduction of CO2 emissions, improved indoor ecological quality, materials and resources used, design and site selection. Developed by the U.S. Green Building Council (USGBC), the system is based on awarding 'credits' for each requirement. The sum of the credits outlines the four levels of certification: basic, silver, gold, platinum.

The Deutsche Gesellschaft für Nachhaltiges Bauen (DGNB), developed in Germany, is a building assessment scheme committed to promoting sustainability that takes into account the environment, people's well-being and costeffectiveness. Our beams and columns are included in the DGNB Navigator, a free online database for architects and designers that can be used as a planning and evaluation tool in the certification and selection of building materials to be used in sustainable buildings.



We sought advice from an external body to map the characteristics of our CAM-compliant products listed in the Ministerial Decree of November 10th 2017, and the LEED and DGNB certifications. For the sake of transparency, these documents are freely downloadable from our company website.

Our attention also extends to the supply chain of which we are an integral part. A In this regard, to ensure complete traceability of the products and the raw materials from which they are made, we use a barcode system that allows us to trace back the raw material supplier for each component.







Megastore Benetton, Verona

#### **Our commitment to seismicity**

Italy presents a significant seismic risk linked both to the intrinsic danger of many areas of the country and to the high seismic vulnerability of the existing buildings. Most of the buildings in our territory have been constructed in the absence of anti-seismic design rules or according to outdated standards, without guaranteeing the safety standards required by the current Technical Regulations for Construction

Over the years of activity in Italy, we have developed an extensive experience in post-earthquake reconstruction and seismic retrofitting of schools and other types of buildings. We have also conducted numerous research activities on seismic issues, in collaboration with Italian and international universities, such as the Eucentre in Pavia, the University of Pisa, and the University of Washington.

NPS<sup>®</sup> products provide seismic resistance and native fire resistance, that is to say, without the use of bracing in the structure or additional surface treatments. In particular, one of our proposals stands out, that is one of the latest filed patents: the NPS<sup>®</sup> Sismi PDTI<sup>®</sup> column, which are particularly suitable for construction in seismic zones. Having higher ductility reserves than reinforced concrete systems, this product absorbs the action of earthquakes more effectively, reducing stress on the overlying structure. An example of the application of our expertise in this area concerns the renovation and seismic retrofitting of the Benetton megastore, located in Via Mazzini in Verona, in a building dating back to the 1500s that is bound to the Fine Arts. Thanks to the flexibility of our system, we built the entire structural frame with NPS<sup>®</sup> technology while maintaining the existing building envelope, granting reduced times and costs compared to traditional prefabricated and semi-prefabricated systems.

#### 4.3 Customer satisfaction

Our long-standing experience enables us to provide our customers with a wide and diverse range of products and solutions, which distinguishes itself from the competitors by five factors.

#### 1. Single supplier for all structural elements:

• Greater efficiency in project management.

• Perfect match of beams and columns, with interference-free connections.

• Responsibility for the static design relevant to the NPS product lies with us NPS product® at our charge.

### 2. Reduced costs and timescales and less subject to change:

Reducing the manufactured by an average of 40% compared to traditional systems, ideal for new buildings or commercial renovations
Irrelevance of weather conditions for the

execution of the work

#### 3. Optimal utilisation of built volumes:

• Maximisation usable space in width and height thanks to beams with large spans and slender columns and slabs

• Adaptability of NPS beams® to different requirements

• Flexibility in the distribution of interior spaces, with ease of changing the layout over time

• Recognition of credits for building environmental certifications such as LEED and DGNB.

#### 4. Speed of assembly and safety on site:

• Installation speed: 5 minutes per column, 8 per beam;

• Indicative reduction of 80% of of labour requirements

• Elimination of formwork, with positive effects on costs and waste

• Delivery of beams and columns at the time of installation, without the need for storage space.

#### 5. Native fire and earthquake resistance:

• Native fire resistance for up to 180 minutes, so no additional treatment for beams and columns is required

• High seismic resistance standards make our solutions ideal for buildings in seismic areas and/ or high buildings

• Lightness, resulting in reduced load on foundations.

To find out whether customer satisfaction is in line with our expectations, each year we send a questionnaire of ten multiple-choice questions to a selected sample. In 2023, 75%

of the customers involved in the survey stated that they were satisfied with our products and services: the speed of assembly and the technological features of our products, in particular, were the most appreciated features. We also use the results of the questionnaire to set targets of improvement and achieve increasing efficiency in the delivery of products and services. One of our objectives is to promote the questionnaire to increase the number of respondents.



## **Chapter 5**



Construction is among the sectors with the highest environmental impact both in terms of resource consumption - soil, water, raw materials, energy - and in terms of climate-changing gas emissions into the atmosphere and waste production.

The Association for Sustainable Infrastructure (AIS) conducted a survey to assess the positioning of the sector with regard to ESG issues and to encourage the transition of all players in the supply chain towards products and processes with a lighter impact. The most relevant sustainability aspects for companies and their stakeholders were identified through a materiality analysis based also on interviews with a representative sample of the entire construction supply chain. It emerged that the aspects on which action is needed with most urgence are the prevention of pollution, the reduction of natural resource consumption and the mitigation of climate change.

The transition to a circular and zero-emission production model is complex. However, if interpreted as an opportunity, environmental challenges can provide a strong push for innovation and the socio-economic development of communities. Accepting this stimulus, we have decided to involve all our resources at Tecnostrutture in the construction of more sustainable buildings, for a better future for the people living in them.

# Efficient, responsible and circular production

### 5.1 Our approach

Maintaining ISO 14001 certification for the Environmental Management System (EMS) in the company ensures a structured approach capable of responding to environmental emergencies. EMS implementation in the company is useful on many fronts, including:

• Reducing the negative impacts of our production activities on the environment

• The identification of potential risks that can affect our activities

• The fulfilment of legislative obligations in the environmental field

• The strengthening of our position on the market.

Furthermore, ISO 14001 helps extend our reach along the value chain, benefiting all stages of our products' life cycle.

#### 5.2 Resource Management

We are committed to using the resources necessary to carry out our activities as efficiently as possible, to reduce waste, and to constantly monitor our consumption.

Among those we keep under control there is water, even though it is a secondary item in our consumption. Water consumption in 2023:

**1.940** m<sup>3</sup>

In 2022, water consumption was 961 m<sup>3</sup>; we therefore increased our consumption by approximately 102% compared to the previous year. This increase is due to the opening of an office area at the Via Volta plant.

Comparative life cycle analyses (LCAs) between NPS structures and conventional steel and reinforced concrete structures show significant water savings of around 22% when using NPS structures compared to reinforced concrete structures<sup>2</sup>.

Turning to energy consumption, in 2020 we installed the first photovoltaic panels with a theoretical maximum power of around 20 kWp at one of our production plant departments, which generated 1% of our total energy consumption in 2023.

Furthermore, as in 2022, in 2023 we purchased electricity from renewable sources with a Guarantee of Origin (GO).

The table below details the energy consumption of our production plant in 2023. As with water, the increase in natural gas is attributable to the opening of the new office area.

<sup>2</sup> Comparative LCA analysis between NPS system and conventional steel and reinforced concrete structures - Multi-storey building by Prof. Chiara Calderini, Chiara Piccardo with the collaboration of Ing. Simone Caffè, DICCA - Department of Civil, Chemical and Environmental Engineering of the University of Genoa and with the support of Eng. Alessio Argentoni

Energy consumption by energy source GJ	2023	2022	2021
Natural gas Electricity purchased from the grid	276 2.297	189 2.318	225 1.904
of which from renewable sources Coal Natural gas Petroleum products Nuclear Other sources	100% 0% 0% 0% 0% 0%	100% 0% 0% 0% 0% 0%	13% 13% 64% 1% 5% 5%
Self-generated electricity by photovoltaic plant and consumed	25	26	82
Self-generated electricity by photovoltaic plant and sold	-	-	-
Total energy consumption	2.598	2.533	2.211

Through a comparative study conducted in cooperation with the University of Genoa, we carried out a quantification of the energy consumption of NPS® structures. Taking into account all phases of the life cycle (production, transport, construction, maintenance and end-of-life), the results indicate a 33% saving in energy consumption compared to steel structures and 21% saving compared to reinforced concrete structures. The life cycle analysis and the comparison of the performance of the individual products are based on an existing case study: a multi-storey building for tertiary use located in the Swiss municipality of Aigle, built with the NPS system®.

In 2022, we set for ourselves the goal of gradually reducing the amount of paper purchased: even in 2023, paper purchases decreased by about one third compared to 2022. Aware that sustainability requires a path of continuous improvement, we have set the following targets with regard to the consumption of material and energy resources:

• Implementing good practices for the progressive dematerialisation of archives and offices among our workers

• Installing new photovoltaic panels on the roof of the production plant.

#### 5.3 Emissions and waste

Our production processes inevitably generate GHG emissions into the atmosphere: although on some of them we have no direct control, we consider it important to report on them in a transparent manner.

The table below shows the emissions from the use of natural gas as fuel and the production of purchased electricity in the reporting year.

Direct GHG emissions (Scope 1)	2023	2022	2021
CO <sub>2</sub> eq. (ton)	15,6	10,7	12,7
Indirect emissions from energy consumption (Scope2, location based)	2023	2022	2021
Location based, $CO_2$ eq. (ton)	175,9	177,5	145,8
Market based, CO <sub>2</sub> eq. (ton)	0	0	238,1
Other significant emissions into the atmosphere (kg)	2023	2022	2021
NOx	6,73	5,28	6,27
SO <sub>2</sub>	0,16	0,13	0,15
CO	4,09	3,21	3,81
PM < 2,5	0,03	0,02	0,03

The figures for 2022 and 2021 differ from those published in previous sustainability reports as they were recalculated using an update of the emission factors consistent with what was done for 2023.

As far as waste production is concerned, we programme steel processing with 4.0 machinery and limit scrap, which is then reused for other products or sold and recycled. Below is a breakdown of the waste produced at the production plant in Via Volta 36 and at the offices in Via Meucci 26 in 2023.



Waste produced (ton)				
First level CER code	Description of waste	2023	2022	2021
12 - Waste from physical and mechani- cal surface treatment and processing of metals and plastics	Ferrous metal filings and shavings	86	-	24
15 - Packaging waste, absorbents, rags, filter materials and protective clothing (not otherwise specified)	Mixed Material Packaging	12	4	11
16 - Wastes Not Otherwise Specified in the list	Discarded equipment, other than those falling under headings 160209 and 160212	0,6	-	10
	Cement waste	67	17	42
17 - Waste from construction operations and demolition	Iron and steel waste	967	966	751
	Construction and Demolition Waste	-	15	43
20 - Urban Waste	Septic tank sludge	-	-	2
Total		1.113	1.002	883

All waste produced is destined for recovery, as shown in the table below.

Hazardousness of waste produced (ton)	2023	2022	2021
Hazardous waste for disposal	-	-	-
Hazardous waste not destined for disposal	-	-	-
Non-hazardous waste for disposal	-	-	-
Non-hazardous waste not destined for disposal	1.113	1.002	880

An important contribution in terms of waste reduction comes from the NPS system, which consists of tailor-made products that do not require packaging for transport and eliminate the problem of handling enclosures. In addition, because the structures are self-supporting and do not require provisional works, we have seen a significant reduction in formwork, timber and props and avoided the transport of these materials. These features allow us to obtain more credits for environmental building certifications.



### 5.4 Materials and supply chain sustainability

As a company, we have always supported the traceability of raw materials through product certification and the use of a building register including a material inventory.

The EPDs of NPS<sup>®</sup> products provide information about the materials used and the recycled content. In the beams and columns of this system, a share of recycled material is always guaranteed, which can be up to 93% in the case of steel. In addition, by exploiting the structural efficiency of the combination of steel and concrete, compact sections are obtained that reduce the use of raw materials.

At the end-of-life stage, 100% of the structural steel in the NPS elements<sup>®</sup> can be recovered through a remelting process and reconverted into other structural steel without loss of properties. Once the end-of-waste stage is reached, the concrete can be used as an aggregate in new concrete through a further grinding process that can effectively replace virgin material.

Below are the quantities of materials used in production.

Materials used for production (ton)	2023	2022	2021
Total	12.041	13.622	9.386
Steel	6.802	8.522	6.386
Concrete	5.239	5.100	3.000

Since steel is the main raw material we source, we have created

a rating of suppliers based on the percentage of post-consumer recyclate used in production, by directly requesting the information and analysing the documentation and certifications that can attest to this data. To continuously improve the sustainability of our supply chain, we have set the goal of communicating to our raw material suppliers that we will use the percentage of recycled content in the materials as a rewarding criterion in the selection.

We currently declare in the EPDs of our products the percentages of recycled steel shown in the following chart. The choice of these percentages was made conservatively because at the time of writing the declarations, the described supplier mapping had not yet been implemented.





## **Chapter 6**



The construction sector can be considered rather traditionalist and conservative. In order to promote innovation in terms of sustainability, efficiency and safety in this area, we consider it crucial to invest in the creation of knowledge and awareness at all levels.

The first level has a direct impact on us and concerns our workers. We try to establish relationships of mutual satisfaction with them, recognising that their well-being contributes to the overall improvement of our organisation.

The second level involves all actors outside our organisation. For years, we have been working to spread knowledge on the topics that interest us, also through collaborations with important research bodies and active participation in sector associations.

# Relationship creation and management

### 6.1 Our workers

At the end of the reporting year, our workforce comprised 79 direct employees and 3 workers employed under outsourcing contracts. Even in contractual forms there can be aspects that say something about the sustainability of a company. As a production company, we try to give preference to stable, long-term employment contracts: 95 per cent of our employees have permanent contracts, while 96 per cent work with us full-time.

We resort to temporary work to cope with large orders and where it is necessary to increase the workforce for a limited period. Our goal remains to create mutually satisfying relationships: it is no coincidence that many of the workers who start working in this way are later hired as direct employees.



Given the geographical location of Tecnostrutture's premises, all counted workers refer to the Italian geographical area.

Since 2019, we have established the Tecnostrutture Sustainability Committee, which aims to make sustainability a widespread and shared aspect in the company.

#### Some of us have the floor..

Now in its third year of reporting, we feel we can say that the theme of sustainability is effectively permeating the corporate culture. Having abandoned the initial resistance, people within Tecnostrutture are beginning to consider this path an opportunity rather than an added complexity. The first Sustainability Report, due to the novelty of the issues we had to deal with, had required a great deal of effort in terms of learning and setting up the required work. This initial investment of energy now allows us to carry out our tasks contributing to the Report in an easier way. Moreover, thanks also to the organisation of meetings aimed at sharing the progress we are making on the subject, involvement in sustainability-related activities is increasingly widespread in all areas of the company. For the future, what we hope for is an ever-increasing interest of our colleagues in sustainability, which must be cultivated in moments of aggregation, such as plenary meetings and company volunteer days. With regard to the goals to be set, Tecnostrutture can continue to do a lot to reduce the environmental impact of the construction sector and has a great deal of work to do on the issue of safety of workers, for which many changes are already planned. Finally, we hope that our work will increasingly set an example outside our company borders.

#### **Tecnostrutture Sustainability Committee**



In our relations with our employees, we are committed to avoiding any form of discrimination based on factors such as age, gender, sexual orientation, health status, ethnicity, nationality, political opinions and religious beliefs. We are aware that a full valorisation of human resources can be realised above all by respecting diversity and striving for equal opportunities.

To demonstrate their importance, we decided to formalise these principles within our first Code of Ethics.







Between 30 and 50 years 20 Over 50 years 5 Protected categories and the disabled 3



Under 30 years 8 Between 30 and 50 years 16 Over 50 years 5 Protected categories and the disabled 3



Between 30 and 50 years 14 Over 50 years 5 Protected categories and the disabled 2



Between 30 and 50 years 23 Over 50 years16 Protected categories and the disabled 1



Under 30 years 9 Between 30 and 50 years 26 Over 50 years 13 Protected categories and the disabled 1



Between 30 and 50 years 7 Over 50 years 10 Protected categories and the disabled 0 In 2023, we hired 16 direct employees and 12 contracted workers. As it has been the case in the past in our production plant, the newly hired direct employees have different nationalities, which is an asset for us and a continuous source of challenges and stimuli that pushes us further towards diversity. The 16 terminations during the year include direct employees who left the company voluntarily and through retirement. Of the 17 terminations relating to temporary staff, 3 were due to recruitment as direct employees.

Incoming turnover* by gender, age group and geographical area - Direct employees	2023	2022	2021
Number of recruitments in the year Men Women	16 14 2	36 33 3	23 21 2
Under 30 years Btw. 30 and 50 years Over 50 years Nationality	4 10 2 Italy	11 18 7 Italy, Afghanistan, Bangladaab, China	2 10 - 5 Bengali
	Senegai Bangladesh Afghanistan	Bangladesn, China, Ivory Coast, Guinea Morocco, Moldova, Nigeria, Senegal, Serbia, Sri Lanka	Egyptian Russian Indian Italian Kuwaiti Luxembourgish Moldovan Romanian
Hiring rate	20%	46%	37%

Incoming turnover* by gender, age group Contracted		2023	2022	2021
Number of recruitments in the year		12	17	26
	Men	12	17	25
	Women	-	-	1
	Under 30 years	1	7	11
	Btw. 30 and 50 years	6	5	11
	Over 50 years	5	5	4
	Hiring rate	400%	340%	325%



Outgoing turnover* by gender, age group and geographical area - Direct employees	2023	2022	2021
Number of terminations in the year	16	19	12
Men	15	16	10
Women	1	3	2
Under 30 years	4	9	3
Btw. 30 and 50 years	7	6	6
Over 50 years	5	4	3
Nationality	Italy, Kuwait, Nigeria, Ivory Coast, Egypt, Afghanistan	Italy, Moldova, China, Russia, Senegal, Sri Lanka	Italian Bosnian
Negative turnover rate	20%	24%	19%

Outgoing turnover* by gender, age group Contracted	2023	2022	2021
Number of terminations in the year	17	25	20
Men	17	25	19
Women	-	-	1
Under 30 years	3	9	6
Btw. 30 and 50 years	8	12	6
Over 50 years	6	4	6
Negative turnover rate	567%	500%	250%

\* Incoming and outgoing turnover rates are calculated by dividing the number of hirings and terminations recorded in 2023 by the number of employees and temporary staff respectively

In 2023 we again organised a corporate volunteering day, involving employees and their families in a waste collection activity in Noventa di Piave, organised in collaboration with the local Legambiente club and under the patronage of the Noventa di Piave Municipality. The idea was born three years ago thanks to the Sustainability Committee and this year, for the first time, the event was also open to the public. To celebrate Tecnostrutture's 40th anniversary, we hosted a summer party for employees and their families. It was an opportunity to toast to this collective milestone and to share our sustainability journey. In addition, we gave some small groups of our employees the opportunity to enjoy a half-day sailing experience off the coast of nearby Caorle. The activity was planned in such a way that people from different departments in the same group could get to know their colleagues from other departments more closely. For Christmas 2023, we arranged a toast with a raffle for which all gifts received by Tencostrutture for the holidays were put up as prizes.

#### 6.2 The well-being and professional growth of workers

First and foremost, we protect the welfare of our employees by guaranteeing them their rights according to the law and the relevant National Collective Labour Agreement (CCNL), that of the metalworking industry. The company management is responsible for defining the remuneration policies, respecting the principles of fairness of tasks, responsibilities and previous experience. In the reporting year, the annual remuneration rate<sup>3</sup> was about 346% (-3.8% compared to 2022). In 2023, there was no increase in the salary of the highest paid figure.

Next, we value and give importance to health and safety aspects. We pay attention to these in all the contexts in which we operate: in our factory, in our offices, but also on the construction sites where our products are installed. At our plant in Noventa di Piave, we do not have a health and safety management system for our employees, but we comply with the national regulations in this area (Legislative Decree 81/08). To do this, we use the support of an external consultant who prepared our Risk Assessment Document (DVR) following specific inspections that facilitated an in-depth process analysis. This tool has enabled us to identify the main risks to which our employees are exposed, such as crushing, cuts and liquid splashes from the cement used in our products. The figure of the Prevention and Protection Service Manager (RSPP) is also outsourced. On the other hand, there is a Workers' Safety Representative (RLS) in the company who collects reports from colleagues on possible inaccuracies in the application of procedures. An emergency coordinator is also constantly present in the production phases.

In 2023 we had eleven cases of accidents with a prognosis of more than two days among direct workers and one accident with a prognosis of more than forty days. However, our goal remains to reduce the accident rate every year.

<sup>3</sup> The wage rate is calculated as the ratio of the highest annual salary to the median of the salaries of all employees (excluding the highest).



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Accidents at work	2023	2022	2021
Man hours worked (employees) n of recordable accidents n of serious accidents fatal accidents Recordable Accident Rate* Serious Accident Rate* Death Rate*	140.917 11 - 78 7 -	134.354 7 - - 52 - -	106.886 4 - - 37 -
Man-hours worked (contracted) n of recordable accidents n of serious accidents fatal accidents Recordable Accident Rate* Serious Accident Rate* Death Rate*	16.747 - - - - -	19.112 2 - - 105 -	31.583 - - - - - -

\* Values calculated on 1,000,000 hours worked.

As far as occupational health services are concerned, we strictly observe health surveillance as part of the mandatory practices in the management of the worker. Depending on the periodicity and type of examinations required for everyone's job, workers undergo the necessary check-ups and examinations at our occupational physician's office.

Their confidentiality is protected: the examinations are individual and the report drawn up afterwards is shared only with the employee and the Human Resources Department. The results of any tests are delivered to the company in a sealed envelope and as such returned to the employee, unless there are anomalies relevant to suitability for the job. If limitations or prescriptions emerge, the company shall ensure that they are respected, protecting the worker.

In addition, we facilitate our workers' access to health and medical services outside of work, for example by regularly reminding them of their right to access Metasalute, the supplementary health care fund for workers in the metalworking industry, which allows them to obtain affordable services in affiliated facilities. In addition, since 2023 we have adopted a corporate welfare plan through an online platform that allows the possible credit to be spent also on reimbursements of incurred healthcare expenses.

We endeavour to handle business relationships and requests from suppliers and customers in the best possible way while respecting the protection of our workers. The working environment and work rhythms must always be respectful of employees' rest periods and possible restrictions as well as the protection of their health.

All employees receive mandatory training in terms of health and safety at work. We believe in the professional development of our employees, which is why we organise specific training courses on technical business aspects, product development and commercial management.

In 2023 we generated a total of 690 hours of training, of which 674 to direct employees and 16 to temporary employees. This results in a per capita value of about 9 hours for direct employees and 5.3 hours for temporary employees. With a view to constant improvement, we set ourselves the goal of carrying out a preliminary study of feasibility to implement a training course to improve collaboration and communication between different departments.



Table 6: Average annual training hours per employee per capita

In addition to formalised training as such, we organise side activities that can contribute to the personal growth of our workers.

In 2023, around 30 employees from our offices had the opportunity to meet Paolo Vanoli, coach of Venezia Calcio, who, based on his experience in the revival of the Venetian football team, gave motivational insights on how to better approach life in the company.

As part of the Confindustria Veneto Est Sustainability Group, some of our workers were able to listen to the testimony of a company in our area on the impact that the implementation of Model 231 has had on their reality, which was particularly interesting in view of the goal of equipping ourselves with the same governance model.

#### 6.3 Associationism and external relations

We have applied the same level of innovation to the development of marketing and communication strategies as we do to our products. We are aware that it is useful to propose ourselves as promoters of the dissemination of the culture of our products: this is a fundamental effort to increase awareness of the benefits of their use and to contribute to the development of the sector in the market. To this end, we have created a real virtual community of reference that brings together industry experts such as designers, architects and engineers, customers and colleagues who consider us a point of reference. We dialogue with this audience through multiple communication tools:

#### Social Media

10,400 followers with publications in Italian, French, German and English



12.200 followers with content in Italian



600 follower



Newsletter



Website



YouTube channel, 1,550 subscribers



Tecnostrutture Academy 12,503 users and 3,364 page views Tecnostrutture ACADEMY is a project we are very proud of: a container available in Italian and English designed for all those who work in the world of design, both experts and students who begin to approach new construction technologies. Conceived by our founder in 2019, the platform is the fruit of the work of the communication, R&D and technical teams. Its goal is to share knowledge, information and resources on mixed steel and concrete structures with industry professionals.

Tecnostrutture ACADEMY is a place to find videos, articles, software and publications on the most important aspects of our company, our products and our industry. To offer different and above all authoritative points of view on the topics we deal with we often rely on external experts. In 2023 ACADEMY counted 3,364 views, but our goal is the constant growth of this figure because we want to increase the circulation of the content.

Our desire to network for the dissemination of the culture of our products is also manifested through active participation at the technical seminars and conferences of the seven industry associations to which we belong.




· Participated as speakers at the annual conference organised by the Association of Chartered Certified Accountants entitled 'The Impact of ESG on Company Valuations: Myth or Reality'

· Participated as speakers in the conference organised by Collegio Tecnici dell'Edilizia

 Participated as spectators in ReBuild Italia and the Sustainability Week organised by Confindustria Veneto Est

 Held a seminar in Hamburg for technicians, dedicated to the topic of mixed structures and their reduced environmental impact, with presentation of a comparative LCA between different structural solutions

• Participated as a speaker at a conference organised by Harpaceas on design efficiency

Attended the conference PROJECTS OF ITALY

+ CAMELOT organised by Quotidiano Immobiliare, with a speech by Franco Daniele as coordinator of the 'Industrialisation' working group

 Organised a seminar for architects and engineers in Munich presenting NPS System combined with wood solutions

· Participated in the BAU international trade fair in Munich and launched our NPS FLEX®

 Attended the Building Green event in Hamburg, with a presentation of the NPS FLEX®

· Supported the Tall Buildings conference in Milan, promoted by the CTBUH

· Organised and participated in a seminar for technicians in Loano in Liguria, Italy

· Organised and participated as speakers in

a Seminar at the Ruhr University in Bochum

· Organised several in-house training seminars in Italy, Germany and France.



Shanghai

Tongii University





University of Padova

#### University of Napoli Federico II



UNIVERSITÀ DI PISA University of Pisa



University of Udine



University

College of

London



ETH di Zurigo



IUAV di Venezia



University of

Camerino

University of

Genova





EUCENTRE

University of Whasington



University of

Bochum





of Firenze



UNIVERSITÀ



University of Salerno



CSI



Università di Roma

From 2021 Giulia Daniele is an Ambassador of the international project #BuildingLife, promoted by GBC. The task of the Ambassadors is to act as spokespersons for the members of the building supply chain by supporting and promoting this project, which aims to call for the commitment of the European Commission and of national governments in concrete policies to address the total impact of the carbon dioxide in our industry.

We believe in the dialogue between universities and companies: over the years, we have developed partnerships with important academic institutions - especially engineering and architecture faculties - with whom we organise research and development activities, training meetings and company tours, to get to know and be known by the designers of tomorrow.

In 2023 we have:

- · Lectured at European universities including the Münster University of Applied Sciences
- Organised a guided tour for university students at the Sibari Hospital construction site
- Sponsored the European Assembly of Architecture Students, during which we spoke with a presentation of the NPS FLEX system<sup>®</sup>
- Participated in a student webinar on career guidance
- Proposed as speaker for a seminar at the Berlin Association of Engineers Prof. Andreas Taras from ETH Zurich, who presented tests performed on NPS beams<sup>®</sup>

Our goal for the coming years is to continue to spread the culture of innovation at universities and research centres.

As far as relations with the territory are concerned, in 2023 we have:

- Participated in Confindustria's PMI DAY, hosting students from the Jacopo Sansovino Technical Institute in Oderzo and the Scarpa - Mattei Higher Education Institute in San Donà di Piave over two days
- · Financially supported the festival of the Municipality of Eraclea
- Sponsored and participated with Tecnostrutture employees in the 3x3000 relay race in Eraclea
- Donated 2000 euros to the association The Garden of Hana.

## Methodological note

305-1305-1 Direct emissions of GHG (Scope 1) and 305-7 Nitrogen Oxides (NOx), Sulphur Oxides (SOx) and other significant emissions

## Data source

Fuel				Emission factors				
		Heating	LHV (Lower Heating Value)		SOx [g/GJ]	CO [g/GJ]	PM <sub>2,5</sub> [g/ GJ]	CO <sub>2</sub> [kg/GJ]
Gas naturale	m³	35,3	MJ/m³	16,7	0,611	22,2	0,111	56,3

Natural gas

- Lower Calorific Value (PCI): ISPRA, National Standard Parameter Table, 2023
- Emission factors:

- CO2: DEFRA, UK Government GHG Conversion Factors for Company Reporting, 2024 (IPCC 2021 GWP 100a)

- Other emissions: Ecoinvent 3.8 (Heat, central or small-scale, natural gas {Europe without Switzerland}| heat production, natural gas, at boiler fan burner low-NOx non-modulating <100kW | Cut-off, U)

## 305-2 Indirect GHG emissions (Scope 2)

## Data source

Electricity

- Emission factors Scope 2 (location based):
  - 0.077 tCO2e/GJ

Source: Ecoinvent 3.9 (IPCC 2021 GWP 100a)

- Emission factors Scope 2 (market based):
  - 2021: 0.125 tCO2e/GJ
  - 2022: 0 tCO2e/GJ
  - 2023: 0 tCO2e/GJ

Source: Ecoinvent 3.9 (IPCC 2021 GWP 100a)

The company's objectives and commitment

SDGs Agenda 2030	Target	Objective	Target to 2023	Attainment Status	Target to 2024	Material theme
7 AFFORDABLE AND CLEAN ENERGY	7.2	Reducing im- pacts related to energy consu- mption	Installation of new photovoltaic panels to increase the share of sel- f-generated energy from renewable sources.	The objective was par- tially achieved. Financing for the realisation of the work was obtained in 2023.	Installation of photo- voltaic panels on the roof of the production plant	Production sustainability
8 DECENT WORK AND ECONOMIC GROWTH	8.5 8.8	Pursuing the he- alth and safety and welfare of workers	Reducing the rate of accidents Increasing investments in employee welfare Implement a training course to improve colla- boration and communica- tion between the different departments.	The objective was partial- ly achieved. The accident rate has increased. A wel- fare plan was implemen- ted and meal vouchers were provided and the company undertook a multi-departmental organisational consulting project.	Reducing the rate of accidents Increasing investments in employee welfare	Safety and well-being of co-workers
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.1	Pursuing custo- mer satisfaction in the quality of the products provided and in all phases of the services provided	Increasing the sati- sfaction of our custo- mers Updating the evalua- tion questionnaire and defining new KPIs on the basis of the previous year's results	The satisfaction rate of customers responding to the questionnaire is stable.	Increase the number of customers responding to the questionnaire. Update the evaluation questionnaire and define new KPIs based on the results of the previous year.	Customer satisfaction
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.1	Pursuing custo- mer satisfaction in the quality of the products provided and in all phases of the services provided	Reducing reports of non-compliant products	The target was not achieved. The incre- ase in non-compliant products can be traced back to a higher number of non-standard orders and a number of new suppliers not yet aligned to our requirements.	-	Customer satisfaction
9 INDUSTRY, INNOVATION AND INFRSTRUCTURE	9.2	Creating networ- ks and collabo- rations to foster innovation and development in the sector	Participating in industry working tables through direct engagement of the company.	The goal was achieved. Giulia Daniele was invol- ved in a working group for AIS. Franco Daniele joined the AIS board.	-	Partnerships and associations
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.2	Promoting the culture of innovation (offsite) in the construction sector	Collaborating with Universities and Research Centres Increasing the dissemina- tion and promotion of the A- cademy	Objective partially achieved. As far as the Academy is concerned, in fact, there was a decrea- se in views compared to 2022, but an increase in total users.	Promoting the culture of innovation in uni- versities and research centres	Education and training
10 REDUCED INEQUALITIES	10.2	Increasing the redistribution of value with regard to the social and economic development of the area in which Tecnostruture operates.	Increasing the share of investment in the local community	The objective was achieved as reported on page 75.	Keeping the share of investment in the local community stable	Economic soundness

SDGs Agenda 2030	Target	Objective	Target to 2023	Attainment Status	Target to 2024	Material theme
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.2	Pursuing de- materialisation in corporate operational management	Progressively reduce the amount of paper purchased	The objective has been achieved. The amount of paper purchased has gradually decreased over the years; in 2023, 23% less paper was purchased than in 2022.	Implementation of good practices for the progressive demateria- lisation of archives and offices	Production sustainability
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.2	Promoting the robustness, durability and safety of products sup- plied	Application of the 'Design for Disas- sembly' prin- ciple in the development of the NPS® building system.	The goal was achieved. A patent was filed for the NPS FLEX® product, which was then launched on the market.	Conduct of the Preliminary stages of a project on the fire resistance of Tecno- strutture products	Resilient and sustainable products
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.5	Pursue the re- duction of waste produced both in production and in offices	Progressively reducing the amount of waste produced	The objective was not achieved. Overall, the waste pro- duced increased by 10% compared to the previous year.	Improvement of separate collection in the company and quantification of waste assimilable to munici- pal waste	Production sustainability
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.6	Pursue research and innovation activities to contribute to the development of the sector and the improve- ment of product quality.	Increase man-hours de- dicated to research and development activities Increase investment in re- search and development by at least 20 per cent	The target was achieved. 20% more hours were devoted to research and investments increased by 200%.	Increase man-hours dedicated to research and development activities Increasing the invest- ments made in rese- arch and development activities	Search and innovation
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.6	Establish a system to as- sess suppliers' approach to environmental sustainability	Mapping suppliers by share of recyclates they use in products addres- sed to Tecnostrutture Making the percentage of recycled material a reward criterion in the selection of suppliers and communicate this to them	The objective was partial- ly achieved. Suppliers have been map- ped and the percentage of recyclate used as a reward criterion. This will be communicated to suppliers.	Keep up-to-date the mapping of suppliers according to the share of recyclate they use in products addressed to Tecnostrutture. Use the percentage of recycled material as a reward criterion in the selection of suppliers and communicate this to them	Circulation of raw materials
16 PEACE JUSTICE AND STRONG INSTITUTIONS	16.6 16.7	Apply the prin- ciples of ethics and transparen- cy in operations to counteract corruption and anti-competitive behaviour.	Communicate the princi- ples of the code of ethics in the company through a special meeting and by posting it on the available physical and online noti- ce boards.	The objective has been achieved. The code of ethics was published on company notice boards and pre- sented to employees.	Adopting the governan- ce model Model 231	Loyalty and Transparency
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	16.6 16.7	Comply with the laws and regula- tions of reference that regulate the operation of the company and the production of goods.	Not receiving sanctions from control bodies and authorities	The objective was achie- ved. No nonconformities were recorded.	Not receiving san- ctions from control bodies and authorities	Compliance and enforcement

## MANAGEMENT MODE

To simplify the development of management mode reporting, the priority themes for Tecnostrutture have been aggregated into three macro-themes that share the management approach.

Macrotheme	Priority themes for Tecnostrutture
1. GENERATED VALUE	Economic solidity Loyalty and transparency Compliance and legal compliance Research and innovation Customer satisfaction
2. ENVIRONMENTAL RESPONSIBILITY	Sustainability of production Circulation of raw materials Resilient and sustainableproducts
3. SOCIAL RESPONSIBILITY	Health and psycho-physical well-being of workers Education and training Partnerships and associations

## PROCESSES COMMON TO ALL MACRO-THEMES

## **MOTIVATIONS AND BOUNDARIES**

The material topics were identified by applying the principles for defining the contents of the report and through the stakeholder engagement and materiality analysis processes described in detail in the methodological note. Subsequently, through a discussion with company management, the disclosures to be reported were selected for each material theme identified.

For each material theme of Tecnostrutture, the perimeter within which the potential impact may fall was identified:

- Within company boundaries: in this case, the impact primarily affects internal stakeholders
- Outside the company boundaries: it is mainly external stakeholders who are affected by the impact
- Inside and outside the company boundaries: the impact affects all stakeholders.

In managing material issues, Tecnostrutture considers both the possible impact it may cause directly and that which may indirectly result from its actions.

## MANAGEMENT TOOLS

## POLICIES and COMMITMENTS

We aim to ensure products and services that meet customer requirements, while complying with current regulations. This is made possible through a high level of professionalism throughout the production process. With the publication of this second report, we also want to demonstrate our willingness and commitment to continue on the path towards sustainability. This will and this commitment arise from the company management, as described in the letter at the beginning of the report, and are transmitted to all levels of the company.

The commitment to ESG issues is also confirmed by membership in associations and networks that contribute to to the ecological transition of the construction sector.

## **OBJECTIVES AND TARGETS**

The goals and targets that Tecnostrutture sets itself on its path to sustainability are found in this report. They are of an improving nature with respect to national regulations and will be monitored annually. Other more specific improvement objectives regarding quality and the environment are identified and monitored in the management systems implemented by the company in accordance with international reference standards (ISO 9001 and 14001).

## RESOURCES

The responsibility for allocating human and financial resources lies with the Board of Directors.

## **GRIEVANCE MECHANISMS**

In Tecnostrutture there are complaint collection systems provided for by the quality and environmental management systems. Furthermore, with the publication of this Report, all stakeholders will be able to forward requests and complaints to the appropriate mailbox esg@tecnostrutture.eu.

## SPECIFIC ACTIONS

Tecnostrutture has two support committees involved in the path towards sustainability: the Sustainability Committee, which helps the Board of Directors define the path, and the Supporters Committee, formed by company employees whose task is to spread sustainability principles within the organisation. Tecnostrutture publishes the Sustainability Report in compliance with the main international reference standard for sustainability reporting, the GRI-Standards. The following sections detail the specific actions that Tecnostrutture implements in the field of sustainability, in relation to the material themes identified through the materiality analysis process.

## MANAGEMENT EVALUATION

The results of the audits performed on management systems and their annual reviews will be used to monitor the actual adequacy of the management of material issues. The disclosures of GRI standards reported in this and subsequent reports will also be used as management assessments.

## LIABILITY

The commitment to embrace an increasingly sustainable approach is shared by all members of the board of directors, who also assume responsibility for implementation in the development of strategies, implementation of policies, realisation of commitments and achievement of objectives. The achievement of the specific objectives identified in the company's management system improvement plans, on the other hand, are delegated to those responsible for implementing the relevant systems. On the other hand, there are no procedures in the company aimed at preventing and mitigating conflicts of interest. Transactions between related parties are regulated by contracts concluded at normal market conditions.

## GENERATED VALUE MOTIVATIONS AND BOUNDARIES

#### Material theme

Material theme	Related impacts	Motivations and boundaries	Material topics from GRI Standard	Informative
Economic soundness	<ul> <li>Increased competitive- ness of the company</li> <li>Contribution to the economic stability of the company's collaborators</li> <li>Economic growth of the region through the recruit- ment of local employees</li> </ul>	The generation of value for the company determines its soundness and its ability to redistribute value both within and outside the company boundaries. Any related impacts could have an effect both inside and outside the company boundaries.	GRI 201: Performance economic 2016	201-1 Direct economic value generated and distri- buted 201-4 Financial assistance received from the gover- nment
Loyalty and transparency	<ul> <li>Risk of incurring san- ctions for non-compliance with applicable legislation on corruption, competitive- ness and taxation</li> <li>Improvement of repu- tation of the company</li> <li>Contribution to the deve- lopment of a more ethical society</li> </ul>	Acting with respect for all means and techniques in accordance with the principles of professional correctness, condemning and rejecting cor- ruption and unfair competition. Any related impacts could pre- valently have an effect outside the company boundaries.	GRI 205: Anti-corruption 2016	205-1 Transactions asses- sed for corruption risks 205-3 Established inci- dents of corruption and
Compliance and enforcement	<ul> <li>Improvement of repu- tation of the company</li> <li>Risk of incurring penalties</li> </ul>	The management of the company in compliance with national and international laws, rules and regulations governing its operations and the use of its products. Any related impacts could pre- valently have an effect outside the company boundaries.	anti-competitive 2016	actions taken 206-1 Actions for anti-cor- rupt behaviour, antitrust and monopolistic practices
Research and innovation	<ul> <li>Increased competitive- ness vity of the company</li> <li>Improvement of repu- tation of the company</li> <li>Contribution to the transition to a low-carbon economy through the de- velopment of sustainable and innovative services/ products</li> </ul>	Research and technological in- novation as strategic elements to increase the knowledge and competitiveness of the company to pursue continuous improvement and the deve- lopment of ever more efficient construction methods. Any related impacts could have an effect both inside and outside the company boundaries.	-	No. of hours dedicated to research and development activities Amount of investments made in research and development
Customer satisfaction	<ul> <li>Improving pre-stations and supply efficiency</li> <li>Consolidation of the relationship of trust with the company</li> </ul>	Ensure customer satisfaction with the quality of the products and the efficiency of the services provided in order to strengthen customer loyalty to the brand. Any related impacts could have an effect both in- side and outside the company boundaries.	-	% of satisfied customers

## MANAGEMENT TOOLS POLICIES and COMMITMENTS

The main motivation of any economic activity is the creation of value, a goal linked to the company's need for growth and development that reflects the effects of corporate strategies. This priority objective is the determining element for the survival of the company and the policies and commitments in favour of the main stakeholders also derive from it. For Tecnostrutture, the redistribution of the value generated to the main stakeholders is an aspect of identity.

Tecnostrutture is committed to scrupulously complying with all applicable standards and laws in the areas of quality, safety, the environment, and anti-monopolistic and anti-trust behaviour, striving for continuous improvement, including a constant drive for development and innovation, to cultivate customer satisfaction.

## **OBJECTIVES AND TARGETS**

The objectives and targets assumed for the material topics of this macro-theme are developed by following what is described in the section 'Processes common to all macro-themes'.

## RESOURCES

The personnel and financial resources for the management of this macro-theme are identified by the Board of Directors.

## **GRIEVANCE MECHANISMS**

The mechanisms by which complaints relating to this macro-theme can be made are developed as described in the section Processes common to all macro-themes

## SPECIFIC ACTIONS

Economic soundness:

- The Board of Directors periodically evaluates the profit and loss accounts, company performance and the risks and opportunities related to value generation and its redistribution.
- For the redistribution of the value, money donations to specific local and national associations are confirmed annually. When, during the realisation of company activities, further possibilities for donations emerge, they are communicated to the Board of Directors, which decides whether to subscribe to them. Loyalty, transparency and compliance with laws:
- The management systems implemented ensure the periodic monitoring of relevant legislation in order to identify new laws or regulations applicable to Tecnostrutture and their compliance.
- Research and innovation:
- Each year, multiple research and development projects are carried out to improve various areas such as increasing technical performance and product sustainability, worker health and safety, and efficiency in production and in the management of products in their use phase and end-of-life.

Customer satisfaction:

- An annual questionnaire is sent to customers to assess their level of satisfaction with the quality of the products and services provided by Tecnostrutture.
- In order to guarantee high levels of product quality and service efficiency, we take care of the relationship with our customers to support them in the management of ordinary and extraordinary activities.

## MANAGEMENT EVALUATION

The evaluation mechanisms on the management of material issues under the macro-theme "Generation of value' are developed as described in the section 'Processes common to all macro-themes'.

#### LIABILITY

The responsibilities for the management of the material issues related to the macro-theme "Generated Value" are assigned to following what is described in the section 'Processes common to all macro-themes'

## ENVIRONMENTAL RESPONSIBILITY MOTIVATIONS AND BOUNDARIES

Material theme	Related impacts	Motivations and boundaries	Material topics from GRI Standard	Informative
Production sustainability	<ul> <li>Impact on climate change</li> <li>Risk of incurring penalties for non-compliance with applicable environmental legislation</li> <li>Improvement of repu- tation of the company</li> </ul>	The adoption of practices that ensure responsible management of energy and water resources and GHG emissions. Any rela- ted impacts could have an effect inside and outside the company boundaries	GRI 302: Energy 2016 GRI 303: Water and waste water 2018 GRI 305: Emissions 2016 GRI 306: Waste 2020	302-1 Energy consumed within the organisation 303-5 Water consumption 305-1 Direct GHG emissions (Scope 1) 305-2 Indirect GHG emissions from energy consumption (Scope 2) 305-7 Nitrogen oxides (NOx), Sulphur oxides (SOx) and other significant emissions 306-1 Waste generation and si- gnificant waste-related impacts 306-2 Management of signi- ficant waste-related impacts 306-3 Waste generated 306-4 Waste not intended for disposal 306-5 Waste for disposal
Circulation of raw materials	<ul> <li>Difficulties in approving raw materials</li> <li>Improvement of repu- tation of the company</li> </ul>	Favour in production the use of raw materials with a high recycled content and that meet the principles of the circular economy. Any related im- pacts could have an effect especially outside the company boundaries.	GRI 301: Materials 2016 GRI 308: Supplier Environ- mental Assessment 2016 GRI 414: Supplier Social Assessment 2016	301-1 Materials used by weight or volume 308-1 New suppliers assessed using environmental criteria
Resilient and sustainable products	<ul> <li>Reduction of time and impacts related to con- struction operations</li> <li>Contribution to the well- being of society through the development of high social impact projects</li> </ul>	The production of robust, durable and safe products that respect the principles of environmental and social sustainability. Any related impacts may have an effect mainly outside the company boundaries.	GRI 417: Marketing and labelling 2016 GRI 416: Customer health and safety 2016	417-1 Information and labelling requirements for products and services 416 -1 Assessment of health and safety impacts by product and service categories.

## MANAGEMENT TOOLS POLICIES and COMMITMENTS

The construction sector is responsible for the emission of about 36% CO2 and 30% waste. The transition to a circular and zero-emission economy is challenging, but achievable. Accepting this challenge, Tecnostrutture has decided to involve everyone in its organisation in helping to build more sustainable buildings. The company has also identified sustainable development goals that are linked to its business and to which it can make an active contribution; among these priorities are 11 "Cities and sustainable communities', 12 'Responsible consumption and production' and 13 'Fighting climate change'.

## **OBJECTIVES AND TARGETS**

The objectives and targets assumed for the material topics of this macro-theme are developed by following what is described in the section 'Processes common to all macro-themes'.

## RESOURCES

Personnel and financial resources for the management of topics are allocated by the Board of Directors

## **GRIEVANCE MECHANISMS**

The mechanisms by which complaints relating to this macro-theme can be made are developed as described in the section 'Processes common to all macro-themes'.

## SPECIFIC ACTIONS

Production sustainability

- Maintaining an environmental management system compliant with the ISO 14001:2015 standard
- Installation of new photovoltaic panels for electricity generation
- Signing a contract for the supply of electricity from renewable sources with a guarantee of Origin. Circulation of raw materials
- Use of recycled steel in NPS products.

Resilient and sustainable products

- Obtaining Environmental Product Declarations (EPDs) in accordance with UNI EN 15804 and ISO 14025 on NPS products to transparently communicate environmental performance by providing detailed information on their environmental impact
- Definition, with the support of a third party, of the mapping of the characteristics of Tecnostrutture products that can contribute to obtaining certain CAM and LEED and DGNB certifications.

## MANAGEMENT EVALUATION

The evaluation mechanisms on the management of material themes under the macro-theme 'Products' are developed as described in the section 'Processes common to all macro-themes'.

## LIABILITY

Responsibility for the management of material topics related to the macro-theme 'Products' is assigned to following what is described in the section 'Processes common to all macro-themes'.

## SOCIAL RESPONSIBILITY MOTIVATIONS AND BOUNDARIES

Material theme	Related impacts	Motivations and boundaries	Material topics from GRI Standard	Informative
Security and psycho-phy- sical well-being of workers	<ul> <li>Risk of sanctions for non-compliance with ap- plicable health and safety regulations</li> <li>Increased employee satisfaction</li> <li>Human and professional growth of employees</li> <li>Damage to corporate reputation in the event of accidents at work</li> </ul>	The protection of the health and safety of our employees and the pro- motion of their well-being also through personal and professional development. Any related impacts may have an effect within the company boundaries.	GRI 2: General Disclosures 2021 GRI 401: Employment 2016 GRI 403: Occupational Health and Safety 2018	<ul> <li>2-7 Employees</li> <li>2-8 Other workers who are not employees</li> <li>2-19 Remuneration policies</li> <li>2-21 Rate of pay annual</li> <li>2-20 Processes for Determining Remuneration</li> <li>2-30 Collective Bargaining</li> <li>Agreements</li> <li>401-1 New recruitments and turnover</li> <li>403-1 Occupational health and safety management system</li> <li>403-2 Hazard identification, risk assessment and accident investigation</li> <li>403-3 Health Services</li> <li>professional</li> <li>403-4 Worker Participation and Consultation and Communica- tion on Occupational Health and Safety</li> <li>403-5 Worker training in occu- pational health and safety</li> <li>403-6 Promoting the health of workers</li> <li>403-7 Prevention and mitigation of occupational health and sa- fety impacts related to business relations</li> <li>403-8 Workers covered by a health and safety management system at work</li> <li>403-9 Accidents at work</li> </ul>
Education and training	<ul> <li>Increased competitive- ness vity of the company</li> <li>Improvement of repu- tation of the company</li> </ul>	The promotion of knowle- dge and innovation culture in the construction sector, with particular reference to the offsite system in the national and international panorama. Any related impacts could have an ef- fect outside the company boundaries.	GRI 404: Training and education 2016	404-1 Average hours of training per employee per year
Partnerships and associations	<ul> <li>Increased competitive- ness of the company</li> </ul>	The creation of collabora- tions and active partici- pation in associations to share knowledge and skills in order to foster innova- tion and development in the sector.	GRI 2: General Disclosures 2021 GRI 204: Procurement Practices 2016 GRI 413: Local Communities 2016	2-28 Membership of associa- tions 204-1 Proportion of expenditure towards local suppliers 413-1 Activities involving local community involvement, impact assessments and development programmes

## MANAGEMENT TOOLS

## POLICIES and COMMITMENTS

The care of human resources for Tecnostrutture is an important aspect towards which the company wants to devote more and more resources.

Tecnostrutture's desire is to contribute to the ecological transition of the construction sector by positioning itself as an innovative company in its market. To do this, it has decided to engage in the promotion and diffusion of knowledge, also through the creation of collaborations and active participation in specific associations.

## **OBJECTIVES AND TARGETS**

The objectives and targets assumed for the material topics of this macro-theme are developed as described in the section "Processes common to all macro-themes".

## RESOURCES

The responsibility for allocating human and financial resources lies with the Board of Directors.

#### **GRIEVANCE MECHANISMS**

The mechanisms by which complaints relating to this macro-issue can be made are developed following what is described in the section 'Processes common to all macro-themes'.

## SPECIFIC ACTIONS

• Organisation of company open days and volunteer days with the involvement of all our employees and their families.

• Use of multiple communication tools (e.g. social media, websites, etc.) to communicate to experts in the field, such as planners, architects and engineers, to promote the dissemination of off-site culture

• Continuous updating of the Tecnostrutture ACADEMY, a container that gathers information on products and the industry, which can be consulted by all those working in the design world.

· Active participation in conferences, webinars, events of major industry associations

· Development of collaborations with important academic partners.

• Support for the most deserving local initiatives in the area.

## MANAGEMENT EVALUATION

The evaluation mechanisms on the management of material issues related to the macro-theme are developed following what is described in the section 'Processes common to all macro-themes'.

## LIABILITY

Responsibility for the management of issues related to the area lies with the Board of Directors.



# GRI CONTENT INDEX

#### **Declaration of Use:** Tecnostrutture Srl has prepared a report in accordance with GRI Standards for the period 01/01/2023 to 31/12/2023. **Used GRI 1:** GRI 1 - Fundamental Principles - Version 2021 **Relevant GRI industry standards:** Not available

CBI Standard	Information	Page	Omissions			
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	2-3 Reporting Period, Frequency and Reference Contact	26, 81				
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	2-5 External Assurance	26				
	2-6 Activities, Value Chain and Others business relations	15, 20-23				
	2-7 Employees	62				
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	2-10 Appointment and Selection of Governing Bodies	17-18				
	2-11 President of the highest body of government	17-18				
	2-12 Role of the highest organ of governance in impact management	80-87				
	2-13 Delegation of Responsibilities in managing impacts	80-87				
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GRI 2: General Disclosures	2-15 Conflicts of Interest	80-87				
2021	2-16 Communication of Critical Issues	80-87				
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	2-24 Integration of Commitments in terms of policy	80-87				
	2-25 Processes to Remedy Negative Impacts	80-87				
	2-26 Mechanisms for requesting clarification and raising concerns	80-87				
	2-27 Compliance with Laws and Regulations	39				
	2-28 Membership of associations	15-72-74				
	2-29 Approach to stakeholder enga- gement	26-27				
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GRI 3: Material Themes 2021	3-2 List of material topics	29			
	3-3 Managing Material Themes	80-87			
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GRI 200. ECONOMIC 2016	201-4 Financial assistance received by government	35			
Loyalty and transparency					
	205-1 Risk Assessed Transactions linked to corruption	39			
GRI 200: Economic 2016	205-3 Established incidents of cor- ruption and actions taken	39			
	206-1 Legal actions for anti-com- petitive behaviour, antitrust and monopolistic practices	39			
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	- No. of resources/hours employed in Research & Develop- ment activities	47			
	- Amount of investments facts in research and development activities	47			
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	% of satisfied customers	50			
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Safety and psycho-physical w	ell-being of workers				
GRI 400: Social 2016	401-1 New recruitments and turnover	66-67			
	403-1 Occupational health and safety management system	68-70			
	403-2 Hazard identification, risk as- sessment and accident investigation	68-70			
	403-3 Occupational health services	68-70			
	403-4 Worker participation and consultation and communication on health and safety at work	68-70			
	403-5 Occupational health and safety training for workers	71			
	403-6 Workers' Health Promotion	70			
	403-7 Prevention and mitigation of occupational health and safety impacts directly related to business relations	71			
	403-8 Workers covered by an occupa- tional health and safety management system	68-70			
	403-9 Accidents at work	69			
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CPI Standard	Information	Page	Omissions		
	mormation		Requirement omitted	Motivation	Explanation
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	305-1 Direct GHG emissions (Scope 1)	56			
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	306-3 Waste generated	56			
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Torino, May 9<sup>th</sup>, 2024

Intertek Italia SpA Via Miglioli, 2/A 20063 Cernusco sul Naviglio (MI) Italia

To the Board of Directors of **Tecnostrutture S.r.l.** and to all interested parties

#### **ASSURANCE STATEMENT**

Intertek Italia S.p.A. (Intertek) was mandated by Tecnostrutture S.r.I. (Tecnostrutture) to carry out an independent assessment of the Sustainability Report for the year 2023, in order to verify the correct application of GRI Standards 2021, including the relevance and reliability of its contents with respect to stakeholders' expectations.

Intertek has not played any direct or indirect role in the preparation of the document, whose contents are the sole responsibility of Tecnostrutture.

Intertek declares its independence and absence of conflicts of interest with regard to Tecnostrutture and its stakeholders.

The assessment was accomplished considering in particular the international standard ISAE 3000 (Revised), in "limited assurance" mode.

Our task involved:

- a completeness and consistency analysis of the Sustainability Report under assessment with respect to the standards adopted by Tecnostrutture;
- the investigation of qualitative and quantitative aspects deemed to be significant for stakeholders;
- the interview on a sample basis of Tecnostrutture staff and interested parties' representatives.

#### CONCLUSION

Based on the above activities and selected sample, no contrary evidence arose to let us conclude that:

- the Sustainability Report of Tecnostrutture S.r.l. for the year 2023 has been prepared in accordance with GRI Standards 2021:
- the data and information included in the Report are consistent with the assessed documents.

We therefore believe that the Sustainability Report of Tecnostrutture S.r.l. for the year 2023 contains an adequate representation of impacts, strategies and sustainability performances of the company, with respect to GRI reporting principles and stakeholders' expectations.

Best regards.

**Alessandro Ferracino Regional Director ECA Business Assurance** (excl. UK and Iberia)

Marco Zomer Proiect Leader



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Tecnostrutture s.r.l.





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