

# **Ferrovie dello Stato Italiane Group**

**SUSTAINABILITY REPORT  
2022**

## FERROVIE DELLO STATO ITALIANE S.p.A. COMPANY OFFICERS

<b>Board of directors</b>	<b>Appointed on 26 May 2021<sup>1</sup></b>	
Chair	Nicoletta Giadrossi	
CEO	Luigi Ferraris <sup>2</sup>	
Directors	Pietro Bracco	
	Stefano Cuzzilla	
	Alessandra Bucci	
	Riccardo Barbieri Hermitte	
	Paola Gina Maria Schwizer <sup>3</sup>	
<b>Board of statutory auditors</b>	<b>Appointed on 3 July 2019<sup>4</sup></b>	<b>Appointed on 3 May 2022<sup>5</sup></b>
Chair	Alessandra dal Verme	Rosalba Cotroneo
Standing statutory auditors	Susanna Masi	Sergio Duca
	Gianpaolo Davide Rossetti	Marino Marrazza
Alternate auditors	Letteria Dinaro	Letteria Dinaro
	Salvatore Lentini	Francesco Tulumieri

### **COURT OF AUDITORS' MAGISTRATE APPOINTED TO AUDIT FERROVIE DELLO STATO ITALIANE S.p.A.<sup>6</sup>**

Giovanni Coppola

### **MANAGER IN CHARGE OF FINANCIAL REPORTING**

Roberto Mannozi

### **INDEPENDENT AUDITORS**

KPMG S.p.A. (2014-2022)

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<sup>1</sup> Following the shareholder's resolution on the same date.

<sup>2</sup> Appointed CEO on 3 June 2021.

<sup>3</sup> Appointed by the Shareholders' Meeting on 6 August 2021.

<sup>4</sup> Following the shareholder's resolution on the same date.

<sup>5</sup> Following the shareholder's resolution on the same date.

<sup>6</sup> During the meeting of 17-18 December 2019, the Court of Auditors appointed Section President Giovanni Coppola to oversee the financial management of the Company effective from 1 January 2020, pursuant to article 12 of Law no. 259/1958.

## CONTENTS

<b>Letter to the stakeholders (2-22)</b> .....	<b>5</b>
<b>Introduction to the report (2-1, 2-2, 2-5, 2-48, 3-1, 3-2, 3-3)</b> .....	<b>9</b>
<b>2022 highlights (2-6, 2-7)</b> .....	<b>17</b>
<b>The FS Group: Strategy and Governance</b> .....	<b>19</b>
<b>The group’s profile and business model</b> .....	<b>19</b>
Units and geographical areas (2-1, 2-6) .....	21
Group activities through the lens of European Taxonomy .....	25
<b>The group’s role in the mobility of the future (2-25, 3-3)</b> .....	<b>31</b>
The strategic and business plan (2-22).....	32
The NRRP and developing transport for Italy (203-1; 203-2).....	35
Investments to develop transport for Italy (203-1, 203-2) .....	39
Innovation and sustainable finance as accelerators of change.....	41
<b>Transparency and business responsibility (2-25, 3-3)</b> .....	<b>48</b>
Corporate governance (2-1, 2-9, 2-10, 2-12, 2-13, 2-15, 2-17, 2-18, 2-21, 2-22, 2-23, 2-24, 405-1) .....	49
Sustainability governance (2-24) .....	55
Business integrity (2-12, 2-23, 2-24, 2-26, 205-1, 205-2, 205-3, 207-1, 207-2, 207-3, 403-1) .....	56
ESG rating and other awards.....	81
<b>Integrated management of risks and opportunities (201-2)</b> .....	<b>83</b>
<b>Stakeholder management and value creation and distribution (2-12, 2-28, 2-29, 201-1)</b> .....	<b>94</b>
Stakeholder engagement.....	94
Creation and distribution of value over time.....	99
<b>FS Group for the people</b> .....	<b>100</b>
<b>Putting the needs of people and customers first (2-24, 2-25, 3-3)</b> .....	<b>103</b>
Travel (2-1, 2-6, 2-29).....	103
Focus on people (2-27, 2-29) .....	110
Integrated logistics (2-1, 2-6, 2-29).....	129
Promoting safety (416-1, 416-2) .....	131
Security, information security and privacy.....	145
<b>Our people and their value (2-7; 2-24, 2-25, 3-3, 401-1, 405-1)</b> .....	<b>151</b>
Recruitment and HR management (2-7, 2-19, 2-20, 2-30, 201-3, 401-1, 401-2, 404-2, 405-1, 405-2)	155
.....	155
Encouraging, training and upgrading skills (404-1, 404-2, 404-3).....	163

Health and safety (403-3, 403-5, 403-6, 403-9, 403-10) .....	167
Welfare and Diversity and Inclusion (405-1) .....	171
Relationships with trade unions (401-3, 402-1) .....	175
<b>Relationships with communities (2-24, 2-25, 3-3) .....</b>	<b>177</b>
Promoting social cohesion .....	177
Promoting culture and other social initiatives .....	183
Fondazione FS Italiane .....	185
<b>FS Group for the planet .....</b>	<b>190</b>
<b>Energy and emissions (2-25, 3-3) .....</b>	<b>193</b>
<b>Strategies for decarbonising the transport sector .....</b>	<b>193</b>
Energy consumptions (302-1, 302-3, 302-4) .....	195
Emissions (305-1, 305-2, 305-4, 305-5, 305-7) .....	197
The Units and the initiatives to fight climate change (302-5) .....	201
<b>Responsible purchases (2-24, 2-25, 3-3) .....</b>	<b>204</b>
Our suppliers (2-6, 2-23, 204-1) .....	204
Sustainable procurement (2-28, 308-1, 308-2, 414-1, 414-2) .....	206
<b>Sustainable infrastructure (2-23, 2-24, 2-25, 3-3, 203-1, 203-2, 304-1, 304-2, 304-3, 304-4, 413-1, 413-2) .....</b>	<b>210</b>
Work site management and oversight (301-1, 301-2, 403-9) .....	217
Noise emission management .....	221
<b>Other environmental aspects (2-25, 3-3) .....</b>	<b>223</b>
Waste cycle management (306-1, 306-2, 306-3, 306-4, 306-5) .....	223
Management of water resources (303-1, 303-2, 303-3, 303-4) .....	225
<b>Independent auditors' report .....</b>	<b>229</b>

## Letter to the stakeholders (2-22<sup>7</sup>)

The year 2022 was marked by change at a global level. The war in Ukraine has had severe impacts at a geopolitical level as well as on the economic and social fabric. In particular, it has urgently raised the issue of energy: how should it be procured, and how should it be managed? This question has bounced from international roundtable discussions through corporate boards, and right into people's homes.

Against this backdrop, just a few months after the war broke out, Ferrovie dello Stato Italiane launched its business plan, which will plot the company's course over the next 10 years. It could not but be marked by a significant drive towards transformation: the goal towards carbon neutrality is set for 2040 – ten years earlier than previously established – to be achieved also thanks to an ambitious energy self-production plan. Furthermore, the structure takes on a new organisational form with the establishment of four business units: Passengers, Infrastructure, Logistics and Urban.

The Group, which absorbs about 2% of the country's power demand, feels the responsibility to boost its energy transition. That is why the business plan allocates €1.6 billion, to be used to install photovoltaic systems at facilities, stations and other spaces owned by the Group. The aim is to produce, when fully operational, 2.6 TWh a year and cover 40% of the electricity requirement by self-production. The FS Group will increase the current overall production of solar energy systems installed in Italy by 10%, thus turning into one of the largest renewable energy producers in the country. The self-production plan is in line with the European REPower EU strategy, built into the National Recovery and Resilience Plan, that includes the replacement of fossil fuels with renewable sources among its pillars. In the meantime, the green transition of FS has set off: the first European call for tenders worth €130 million was launched in January 2023, to design and build the first twenty photovoltaic plants in Italy.

Ideally, and metaphors aside, the directives and investments of the business plan provide new energy to the FS mission: to become the company that enables a system of sustainable mobility and logistics, bolstered by a network of synergistic and resilient infrastructure. A system capable of improving the quality of life and respecting nature's balance. Indeed, nature's delicate balance is under threat by climate change, which FS has undertaken to counteract with measures to reduce greenhouse gas emissions. In 2022 there was an improvement in the Group's rating by the Carbon Disclosure Project, the international organisation that helps enterprises measure and manage their environmental impact. The score went from B in 2021 to A- in 2022. Furthermore, the Group intends to validate its roadmap towards decarbonization through the Science Based Targets initiative (SBTi), the initiative by Carbon Disclosure Project, Global Compact Onu, World Resources Institute and World Wide Fund for Nature that encourages the private sector to cut climate-changing emissions to contain global warming within 1.5 °C. In the summer of

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<sup>7</sup> The numbers in brackets after the title of each section refer to the KPI codes set out in the reporting standards adopted (GRI - Global Reporting Initiative).

2022, FS Italiane signed the letter of commitment to certify its objectives: taking 2019 as the base of reference, to halve direct and indirect emissions (scope 1 and scope 2) within 2030 and reduce by 30% those linked to the value chain (scope 3), to achieve carbon neutrality by 2040 with zero net emissions. In addition to progressively lowering emissions, the Group promotes the modal shift so that more and more people opt for trains and public transport in place of private cars, and companies choose to move goods by rail freight. As a matter of fact, logistics is another priority area: the Group seeks to increase the share of goods transported by rail freight to 30% by 2030, as Europe demands.

The pathway towards carbon neutrality has earned FS the addition to the shortlist of the most climate-friendly companies, drawn up by Statista and published by Corriere della Sera in January 2023. The list is based on the ratio in 2022 between CO<sub>2</sub> emissions and turnover – the FS Group ranks second in the Transport and logistics sector. More in general, in 2022, all the main sustainability ratings and indexes acknowledge the leadership position of FS in the sector. Therefore, sustainability translates into tangible, measurable results and goes all the way to the railway tracks: in August 2022, the first Green Intercity train was launched, with a special livery featuring messages to raise awareness on environmental issues. The train has a designated carriage with a six-bike rack, charging stations and seats upholstered with fabric made from recycled plastic. The following month, the new Blues hybrid train with triple power supply (electric, battery and diesel) was presented at the Innotrans international fair in Germany. It makes it possible to consume less fuel and reduce emissions, compared to current diesel trains. After Berlin, the Blues mock-up travelled across Italy with a roadshow in town squares, pending the upcoming deliveries to the Regional Authorities. In October, to inaugurate the Sustainable Development Festival, a special Frecciarossa with livery dedicated to the SDGs of the UN Agenda 2030 entered into service. Indeed, the 17 Sustainable Development Goals are an essential framework for the strategy of FS, which seeks to give the highest contribution to the targets, also by adhering to the Global Compact network and its principles aimed at establishing a responsible and inclusive global economy. The Sustainable Development Festival organised by Asvis, was also the backdrop to the first Sustainability Day of FS, where some of the company's top managers exchanged views with experts and stakeholders to share ideas and good practices for sustainable business. That is the case, for example, of urban regeneration schemes, within which the Group has planned over 2 million square metres of spaces for greening and reforestation projects in disused railway areas.

Innovation and digitalisation are two more pivots of the business plan – they support sustainability projects and broaden their potential. As was the case of the Atlas of Soft Mobility in Italy, which was published last October by RFI in collaboration with the Amodo network of associations. This is a useful interactive map, that citizens and tourists alike can use to find their bearings through the sites of historical-cultural interest close to railway stations. It is the first tool of its kind to include in an integrated whole –

thanks to data processing and spatial analysis techniques – trails, cycle paths, tourist railways, parks, villages, heritage assets and outstanding landscapes throughout Italy. Digitalisation can also support a dialogue between infrastructure and local areas, as was the case with the Talking Work Sites, an exhibition of the end of 2022 covering 30 strategic projects funded by the NRRP. Descriptive panels are installed at the work sites, plus the history, objectives and advantages of the projects are explained by a specific web page on [fsitaliane.it](https://fsitaliane.it), where you can watch progress of the works in real time with a webcam.

For FS, attending to its stakeholders means that the relationship is based on openness, sharing and exchanging views. In early 2022, the joint settlement procedure, already active in HS, was extended to regional transport: Trenitalia customers have the option of settling minor disputes without having to resort to ordinary justice. What is more, a new station support and information service was launched at the end of 2022, to help people find their way and access available services. This service started as a pilot project at the Rome Termini station, and is scheduled to be extended to several other stations in 2023.

While FS is aware that it must uphold a culture of listening, and focus on people's needs, it also knows that sustainable development cannot disregard the value of its human capital, consisting of over 85,000 employees. That is why it has set up a new model for human resource management, aimed at assuring their well-being and development through communication, training, development and caring activities at all levels of the organisation. Inclusion cuts across the new model: the first policy on diversity, equality & inclusion issues was published in October 2022, defining the values, roles and responsibilities of all the people working for the Group. The aim is to ensure the workplace is psychologically safe, free from stereotypes and bias, capable of recognising and appreciating every person's uniqueness. The Diversity Brand Index has ranked the Group among the 20 most inclusive Italian companies, able to promote the values of diversity through tangible initiatives. The soundness of the Group's D&I policies is also evidenced by the fact that FS is considered by female STEM students, as well as by women in general, as the best company to work for. As witnessed by the 2022 editions of the Universum Awards Italy and by the Italy's Best Employers for Women report. In the last four years, women's presence in the FS Group has been increasing steadily: in 2022 it reached 20%, with managerial and middle management positions covered by women exceeding 30%. While the number of women colleagues is rising, we are working for mobility to become more inclusive. For example, in the design of new stations and in the redevelopment of old ones, by opting for design that is attentive to diversity and by raising safety levels.

Solidarity is a founding value for FS Italiane, whose activities in favour of vulnerable people continue. Specifically, it tackles the phenomena of marginalisation and extreme poverty that cluster within railway area, in partnership with local authorities and the third sectors. In 2022, two Help Centres were opened at the Grosseto and Cagliari stations which, within the network of 19 centres spread all over Italy, provide support and shelter for homeless and disadvantaged people. In partnership with the Rome Termini

Binario 95 shelter and the National Observatory of solidarity in Italian stations (Onds), FS Italiane has launched the call for ideas *All roads start from Rome*, targeting startups and SMEs, to identify and develop innovative projects aimed at improving the delivery of support services with a view to social integration. Furthermore, thanks to a memorandum of understanding signed with the Community of Sant'Egidio in the autumn of 2022, some derelict railway sites can be used for food distribution and for setting up shelters.

The 2022 Sustainability Report tells the story of a breakthrough year, and provides the snapshot of a company with renewed energy. The energy required to promote the values it has always upheld and to reach challenging goals, that set its course well into the future. The Group would like to thank the stakeholders for their contributions and suggestions, which it will treasure in the coming years as well, because energy exchange is the key to achieving the right transition.



## Introduction to the report (2-1, 2-2, 2-5, 2-48, 3-1, 3-2, 3-3)

The information in the 2022 Sustainability Report is compared with the previous two years<sup>8</sup>. Any differences in the reporting methodology with respect to the previous Sustainability Reports are due to the improvement of the reporting methods.

Sustainability reporting holds an increasingly central role in conveying a company's medium/long-term performance and ability to create value, especially in this current climate of social and environmental upheaval, where stakeholders are increasingly more focused on understanding how a company reacts to and manages such changes.

This push for transparent reporting of a company's sustainability performance is also driven by recent amendments to the EU and non-EU regulatory framework, e.g., Directive 2014/95/EU on disclosure of non-financial information and Regulation (EU) 2020/852 on European taxonomy.

To guarantee accurate, complete, consistent and timely sustainability information for stakeholders, the Group has defined an internal control model involving the players and companies participating in the reporting process.

This report has been prepared in accordance with the "GRI Sustainability Reporting Standards" guidelines issued by the Global Reporting Initiative (GRI). The data and information published in this report were provided directly by the department heads using a dedicated IT platform or were taken from other official sources<sup>9</sup>.

The Group reports its sustainability performance in three main documents:

- the Consolidated Non-financial Statement (NFS), included in the directors' report prepared annually pursuant to It. Legislative decree no. 254/16, which implemented Directive 2014/95/EU. Included in the annual report, the NFS discloses the information required by the Directive in accordance with GRI standards. The NFS also includes the information as per Regulation (EU) 2020/852 (European Taxonomy) which requires entities falling under the scope of application of Directive 2014/95/EU to report consolidated turnover, OpEx and CapEx that are eligible and aligned pursuant to the criteria set out in the regulation and the relevant delegated acts;
- the Sustainability Report which, as described above, reports the sustainability performance, integrating and elaborating on the information provided in the NFS. The report also includes a

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<sup>8</sup> The Sustainability Report is published annually. The previous edition of the Sustainability report, which referred to 2021, was published in April 2022.

<sup>9</sup> For additional details, in certain cases, reference should be made to the Group's Annual Report as at 31 December 2022.

summary of the information required by the above-mentioned Regulation (EU) 2020/852 (see the “Group activities through the lens of European Taxonomy” section);

- the GHG report<sup>10</sup>, which analyses how the group manages energy issues and greenhouse gas emissions, setting out the approach, strategies, actions and performance of the Group’s operations.

The 2022 Sustainability Report was approved along with the Annual Report and the NFS by the board of directors of Ferrovie dello Stato Italiane S.p.A. on 6 April 2023.

KPMG S.p.A. carried out a limited assurance engagement in accordance with the criteria indicated by ISAE 3000 (revised) on the Sustainability Report.

This report covers the economic, social and environmental activities deemed to be the most significant for the Group and its stakeholders, as described in the following section. Further details are provided in the annexes:

- “Performance indicators”, detailing the Group’s main sustainability indicators;
- “GRI Content index”, bridging table of the contents of the Sustainability Report with the GRI Standards. The document also sets out the links to the “Measuring Stakeholder Capitalism Towards Common Metrics and Consistent Reporting of Sustainable Value Creation” reporting standard defined by the 2020 World Economic Forum and the “Rail Transportation Sustainability Accounting Standard” defined by the Sustainability Accounting Standards Board in 2018;
- “Company highlights”, focusing on the environmental performance and on the main projects and initiatives in the field of sustainability for each company included in the reporting scope.

All of the annexes are also available online in the “Sustainability” section of the website [www.fsitaliane.it](http://www.fsitaliane.it).

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<sup>10</sup> This report will be published in July 2023.

## Materiality analysis

The Group updates the materiality analysis every year. It is an essential analysis tool for planning and managing sustainability performance and to adequately represent the results achieved and the objectives set in the Group's reports. The aim is to identify the social, environmental and economic issues that are a priority for the significant external and internal stakeholders of the Group (known as 'materiality matrix'). The matrix therefore identifies the issues on which a company must focus its efforts, in order to acknowledge the challenges and opportunities for creating long-term value.

The methodological update of the 2022 materiality analysis was also necessary due to the introduction of new regulatory obligations and reporting standards. Indeed, the GRI Universal Standards 2021 came into force as of 1 January 2023. Specifically, GRI 3 Material Topic requires organisations to implement an "impact materiality" approach, that is, to identify, assess and prioritise the impacts generated or that may be generated by the Group in the context it operates in.

Furthermore, in perspective, approval of the Corporate Sustainability Reporting Directive (CSRD), will formalise the obligation to adopt a "double materiality" approach as of the 2024 financial year. "Double materiality" consists of two impact dimensions: "impact materiality", which takes into account the impacts generated by the organisation on the external context; "financial materiality", which focuses on the ability of the issues to affect the company's economic-financial value.

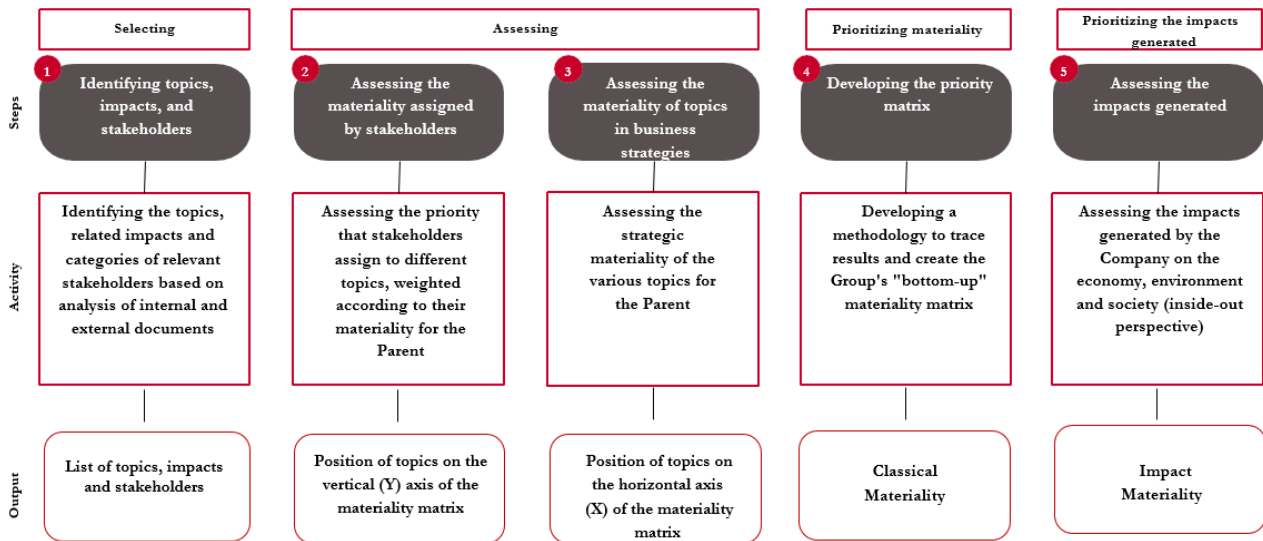
To meet the requirements of the new GRI Standards, mandatory as of 2023, the Group has updated its materiality analysis and complemented it with a process, the aim of which is to identify, assess and prioritise the impacts it generates (impact materiality).

The 2022 materiality analysis began by revising the 2021 materiality matrix, and is based on a preliminary identification of the impacts generated, linked to the Group's activities and value chain, which took into account the Group's strategic goals and external trends, according to a view of dynamic materiality, aimed at preempting emerging topics that will need to be handled in order to remain competitive.

The process of updating material topics, has been conducted on two fronts:

- **"Classical materiality"**, to identify and assess material issues for the Group (X axis) and its main stakeholders (Y axis), in short, the Group's materiality matrix;
- **"Impact materiality"**, which highlights the potential and current impacts generated by the Group. In this case, material topics means the significant impacts generated by the Company on society and on the environment, either actual or potential, in the short, medium and long term.

In compliance with the guidelines of the most recently published international standards such as GRI and EFRAG<sup>11</sup>, the process included the following steps:

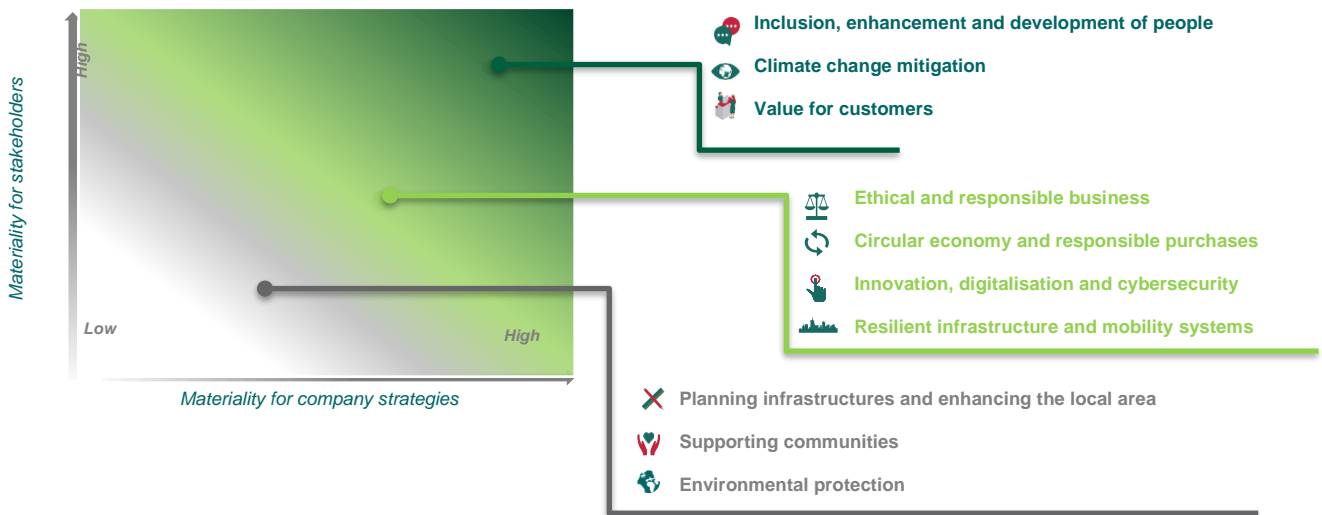


In connection to “Classical materiality”, set out below, it was built with a bottom-up approach, starting from the analysis of the information collected from subsidiaries in the previous two years<sup>12</sup> and from the Datamaran platform, which analyses the main laws and directives in all the countries where FS operates, and the Reports published by other European and international peers and comparable entities.

The methodology used to group the data gathered by the companies considered: the company’s materiality and size, the number of external stakeholders involved and the organisational weight of consulted management.

<sup>11</sup> European Financial Reporting Advisory Group, the entity charged in June 2020 by the European Commission with preparing the new European Sustainability Reporting Standards (ESRS).

<sup>12</sup> The following companies contributed to drawing up the matrix: Trenitalia SpA, RFI SpA, Anas SpA, Polo Mercitalia, Busitalia Sita Nord SpA, Sistemi Urbani Srl, Italferr SpA, Ferrovie del Sud Est and Servizi automobilistici Srl, Ferservizi SpA as well as FS SpA.













The topic *People’s safety: values, technology and culture* was material for all companies that contributed to drawing up the matrix. However, it was not included in the combined matrix because, as reiterated many times by the CEO, “there are no limits to maintenance and safety, nor should there be any”. Accordingly, the topic was not included in the materiality matrix as it applies across all companies and has absolute priority over all other topics in management’s view.











**With regard to “Impact materiality”**, the sustainability departments of the Units<sup>13</sup> and of the Parent have assessed the impacts that the Group generates or may generate on the external context, according to severity or magnitude and probability, in the case of potential impacts. After identifying the significant impacts for each topic, a level of materiality was assigned to the impact, based on an assessment scale consisting of four gradients, from ‘high’ to ‘low’. Furthermore, each positive impact was analysed according to the Group’s direct and indirect contribution towards reaching the Sustainable Development Goals (SDGs) of the UN’s 2030 Agenda with its activities.



The outcomes of the analysis are set out in the following table, showing, for each topic:

- the main **impacts generated** directly and indirectly by the Group on the external context;
- the relevant **materiality of the impact**;
- the **SDGs** of reference for impacts that create added value for the community and/or the environment.

<sup>13</sup> Reference should be made to the “Units and geographic areas” section for more details on the governance of the FS Group.

TOPIC	AREA OF IMPACT	IMPACT MATERIALITY	SDG
<p><b>Ethical and responsible business</b></p>	<ul style="list-style-type: none"> <li>• <b>Reduction and prevention of crimes and episodes of corruption</b>, by implementing the highest ethical standards and conducting business based on the essential principles of transparency and fairness, in compliance with the Group’s vision and values</li> <li>• <b>Strengthening the culture of compliance and lawfulness</b>, by establishing policies and carrying out training and information activities</li> <li>• <b>Integration of ESG aspects into the Group’s vision and strategy</b>, through induction activities of the board and management</li> <li>• <b>Contribution to sustainable development and a low carbon future</b>, by promoting and using sustainable financial instruments (sustainable finance)</li> </ul>		
<p><b>Circular economy and responsible purchases</b></p>	<ul style="list-style-type: none"> <li>• <b>Making the best use of materials to prevent, reuse and recycle waste</b> from Group operations, by implementing circular business models, from purchasing – by integrating criteria that prioritise environmental and social issues into purchase procedures and into supplier selection and vetting processes – to efficient use</li> </ul>		
<p><b>Inclusion, enhancement and development of people</b></p>	<ul style="list-style-type: none"> <li>• <b>Spreading and fostering a culture of inclusion, non-discrimination and respect</b>, promoting diversity (age, gender, skills and experience, religion, political views, ethnicity, nationality, sexual orientation, physical ability, geographical origin, etc.) and equal opportunities in the workplace where everyone can feel at ease and are motivated to build positive relationships</li> <li>• <b>Appreciation of the professional skills and experience of colleagues and boosting their professional development and career</b>, through meritocratic policies and transparent and fair mechanisms that allow all employees to reach their full potential</li> <li>• <b>Guaranteeing employee well-being and work-life balance</b>, through welfare policies, modern and flexible work tools and models and responsible management of organisational changes</li> </ul>		
<p><b>Innovation, digitalisation and cybersecurity</b></p>	<ul style="list-style-type: none"> <li>• <b>Fostering social and economic progress</b> with a focus on infrastructure and services, through digitalisation as a driver to streamline processes, operations and services, and by promoting innovation</li> <li>• <b>Reducing potential losses of data and corporate information</b>, by setting up an environment in which the integrity and confidentiality of corporate data and information and of all stakeholders are constantly monitored</li> </ul>		
<p><b>Climate change mitigation</b></p>	<ul style="list-style-type: none"> <li>• <b>Climate change mitigation</b> thanks to the reduction of energy consumption and greenhouse gas emissions (CO<sub>2</sub>, ozone, methane, etc.)</li> <li>• <b>Climate change mitigation</b> by increasing energy efficiency through the implementation of specific technologies that lead to environmental benefits</li> <li>• <b>Support to the energy transition</b> by promoting renewable sources (for example alternative fuels,</li> </ul>		

TOPIC	AREA OF IMPACT	IMPACT MATERIALITY	SDG
	<p>biofuels, power from ‘green’ hydrogen’, hybrid engines, photovoltaic, wind, etc.)</p>		
<p><b>Planning infrastructures and enhancing the local area</b></p>	<ul style="list-style-type: none"> <li>• <b>Development and enhancement of infrastructure</b>, both rail and road, with a view to environmental and social protection, by implementing national and international sustainability standards and protocols, and continuous interaction with and listening to the stakeholders, safeguarding the landscape, natural and historical-archaeological heritage</li> </ul>		
<p><b>Resilient infrastructure and mobility systems</b></p>	<ul style="list-style-type: none"> <li>• <b>Reduction of any infrastructure-related disruptions</b> to customers by improving the ability of railway and road infrastructure, along with current and future mobility systems, to withstand and adapt to the growing effects of climate change and the fragility of the land (e.g., hydro-geological events, earthquakes, floods, etc.), also using a risk-based prevention and protection system</li> </ul>		
<p><b>People’s safety: values, technology and culture</b></p>	<ul style="list-style-type: none"> <li>• <b>Creation and dissemination of a culture of safety</b> as a core value, inherent to any organisational and productive process</li> <li>• <b>Promotion of occupational health and safety</b> by preventing accidents and injuries and protecting people’s mental and physical integrity</li> <li>• <b>Guarantee to customers of the highest travel safety standards</b>, by assuring the maintenance of the rail and road infrastructure, protection in stations and on board trains and buses, and the safe operation of trains, buses and cars</li> </ul>		
<p><b>Supporting communities</b></p>	<ul style="list-style-type: none"> <li>• <b>Improvement of social cohesion and well-being</b> in the communities where it operates, by understanding their needs and promoting projects (for example Help Centres, reception centres, recovery and redevelopment of assets no longer functional to railway operations, etc.) through the support of socially influential players and volunteers from the Group</li> </ul>		
<p><b>Environmental protection</b></p>	<ul style="list-style-type: none"> <li>• <b>Curbing soil consumption</b>, by implementing preventive actions already at the design stage of the infrastructure</li> <li>• <b>Reduction of soil pollution</b>, by implementing initiatives to mitigate environmental damage during infrastructure construction</li> <li>• <b>Improving the efficiency of water consumption and assuring the quality of groundwater and surface water</b>, by implementing policies and good practices (e.g. streamlining user points, network upgrades and water recovery projects, etc.)</li> <li>• <b>Improving air quality</b>, by promoting actions for the reduction of atmospheric pollution (particulate matter, nitrogen oxides, etc.);</li> </ul>		

TOPIC	AREA OF IMPACT	IMPACT MATERIALITY	SDG
	<ul style="list-style-type: none"> <li>• <b>Prevention and reduction of noise impact and vibrations</b> in the design stage of new rail and road infrastructures, as well as in carrying out the maintenance and improvement of the existing network and rolling stock</li> </ul>		
<p><b>Value for customers</b></p>	<ul style="list-style-type: none"> <li>• <b>Improvement of the travel experience</b>, by understanding current and future needs of customers, and offering multi-modal passenger and freight mobility services of ever higher quality</li> <li>• <b>Improving the integration of all public and soft mobility systems</b> (train, urban and interurban transport, bicycles), by promoting collective and shared modes of moving</li> <li>• <b>Accessibility and full usability of transport</b>, through obstacle-free routes and support services for people with disabilities and reduced mobility (Blue Rooms, tactile paving, visual and acoustic aids, etc.</li> </ul>		





## 2022 highlights (2-6, 2-7)



## Results of operations

## Financial

Profit for the year	€'million	202
Directly generated economic value	€'million	13,835
Economic value distributed	€'million	11,698
Investments	€'million	11,269

## Passenger and freight traffic

Rail traffic - passengers		
passenger-km	billion	34.6
train-km <sup>14</sup>	million	284,9
Rail traffic - freight		
tonne-km	billion	22
train-km	million	43
Road traffic - passengers		
passengers-km	billion	1.5
bus-km	million	158



## The FS Group for the Planet

## Energy and emissions

Energy - total group energy consumption	GJ million	27.2
Emissions - Total greenhouse gas emissions	tCO <sub>2</sub> million	2

## Responsible purchases

Tenders awarded	€ billion	16.8
in which sustainability criteria were included	%	90

<sup>14</sup> Medium and long haul and regional transport.



## The FS Group for the People

### Service quality - Punctuality

Railway passenger transport		
Market services (Freccie)	0-10 minutes	77%
Universal services (Intercity day and night)	0-15 minutes	86.2%
Regional services	0-5 minutes	92.2%
Road passenger transport		
Urban transport	0-5 minutes	93.8%
Suburban transport	0-15 minutes	93.3%

### Customer satisfaction (Italy)

Railway passenger transport (overall journey)		
Medium and long haul transport	Satisfaction %	97.7%
Regional transport	Satisfaction %	91.8%
Infrastructure		
Overall quality of the station	Satisfaction %	98.7%

### Promoting safety

Investments in safety		
Infrastructure	€'million	3,777.8
Transport	€'million	403.9

### Our people and their value

Total personnel	no.	85,361
women	%	20
men	%	80
Training	man-days (thousands)	815

### Relationships with the community

Re-use of assets		
Total surface area under free loan for use	sq.m.	172,497
for social activities (help centres and shelters)	sq.m.	15,793
other real estate	sq.m.	156,704
Fondazione FS Italiana		
Value of assets	€'million	10.6
Value for local communities (2014-2022)	€'million	50.9

# The FS Group: Strategy and Governance

## The group's profile and business model

The purpose of our business model is to make the most of the different types of capital (financial, physical, human and relational, intellectual and organisational, natural)<sup>15</sup> by organising activities and processes to create value in the medium and long-term for all stakeholders.

As in other public utilities sectors, the Group's activities are subject to specific regulation by independent national and international authorities, to ensure the market operates properly and to protect customers' rights.

### Strategy and Governance

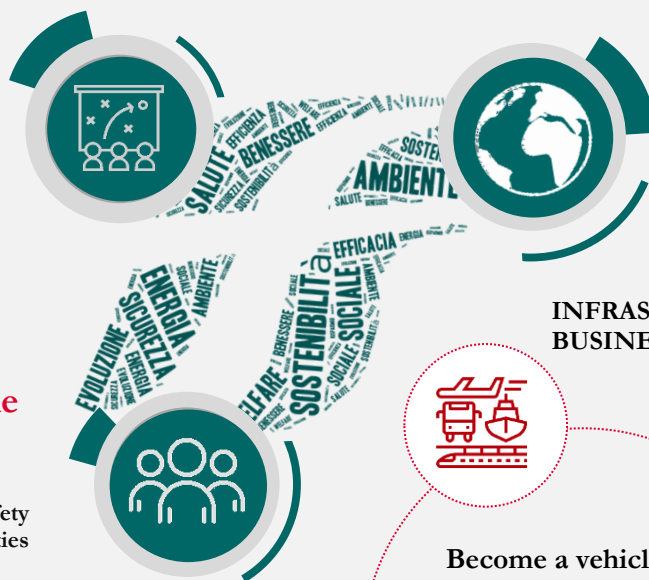
Make the most of the different types of capital by organising activities and processes to **create value** in the medium and long-term, **for all stakeholders**

### ...for the Planet

Safeguard **natural balances** by implementing a sustainable development model

### ...for the People

Meet the **needs** of people, promoting **safety** and fostering **relations** with communities



### INFRASTRUCTURE BUSINESS UNIT

### PASSENGERS BUSINESS UNIT

### LOGISTICS BUSINESS UNIT

### URBAN BUSINESS UNIT

Become a vehicle for building a system of resilient infrastructure, sustainable mobility and integrated logistics

# The Group's Vision

<sup>15</sup> According to the IIRC (International Integrated Reporting Council) framework.

INPUTS

**Financial capital**

- resources necessary to finance activities:
- share capital
  - debt capital (bonds, green bonds, bank loans, sustainability linked facilities)
  - government grants (Government Programme Contract, EU funds, etc.)

**Physical capital**

- material assets necessary to provide high quality services:
- resilient infrastructure (rail/road) and other assets (stations/facilities)
  - fleets (trains/buses/ships)

**Human and relational capital**

- the set of skills, abilities and experience of our people and relationships with stakeholders

**Intellectual and organisational capital**

- the set of intangible assets which contribute to creating value:
- patents, rights, etc.
  - trademarks
  - organisational procedures
  - IT systems

**Natural capital**

- natural resources managed (renewable and finite):
- energy
  - soil
  - water
  - materials

SUSTAINABILITY

PUTTING PEOPLE FIRST

INNOVATION

SERVICE QUALITY

- planning, assessing and managing investments
- debt capital market
- project finance
- soft financing
- sustainable finance



- innovation
- organisation and administration
- planning and control
- risk management
- internationalisation

- planning new infrastructures
- management, monitoring and maintenance of infrastructure (rail/road) and other assets (stations/facilities) and fleets (trains/buses/ships)
- defining intermodal transport services
- providing passenger and freight transport services (market services<sup>1</sup> and universal services<sup>2</sup>)
- monitoring and investments in travel safety



- energy management
- environmental management systems



- recruiting and managing personnel
- training and development
- people care
- health and safety
- relationships with passengers, customers and suppliers
- relationships with institutions

RESULTS



- ✓ regional services
- ✓ high speed services
- ✓ intermodal services
- ✓ integrated logistics services
- ✓ international services
- ✓ engineering services
- ✓ road and rail infrastructure

IMPACTS

- ✓ putting people's needs first
- ✓ people's safety
- ✓ financial performance and investments
- ✓ creating value and competitiveness for the country
- ✓ service punctuality and regularity
- ✓ technological skills and progress
- ✓ attractiveness and satisfaction of the Group's people
- ✓ environmental sustainability



1) services offered without commercial restrictions and without any government grants  
 2) public transport services offered at the request of the government or regions under service contracts, whereby the transport companies receive considerations in exchange for meeting agreed requirements in terms of the frequency of service, fares, service levels and stops

## Units and geographical areas (2-1, 2-6)

The Ferrovie dello Stato Italiane Group, active in Italy and abroad, **builds and operates passenger and freight railway, road and motorway transport works and services**. As required by the organisational model, which reflects the articles of association, activities are mainly carried out through investees<sup>16</sup>.



The context and the significant international trends require a break with the past and the definition of a 10-year strategy, which makes it possible to look at the entire cycle of new projects, from planning to construction.

In order to make a decisive contribution to the country's sustainable development and make full use of the potential of all the Group companies, the 2022/2031 Business Plan highlighted the need to **redefine governance and reorganise the structure into four business units**, each with clear strategic objectives: Infrastructure, Passengers, Logistics and Urban.

The new organisation aims at **strengthening the synergies of the companies within the Group and increase their efficiency**, also with a view to scheduling and planning.

<sup>16</sup> The map of Ferrovie dello Stato Italiane's operating segments and equity investments was updated in March 2023. The chart shows the parent's direct subsidiaries consolidated on a line-by-line basis and FS S.p.A. itself.

The four new business units share mission and objectives, and play a crucial role in developing an ever more integrated and sustainable infrastructure and mobility system, to benefit the country as a whole.

The purpose of the Holding Company is to provide guidance, coordination, strategic and financial control over each sector's parent companies, whose function is to provide guidance, coordination and operational control over the companies forming the Unit.



### INFRASTRUCTURE BUSINESS UNIT

Its mission is **guaranteeing the design, construction, management and maintenance of infrastructure networks for rail, road and motorway transport nationally and internationally.**

**The sector's parent is Rete Ferroviaria Italiana (RFI)**, whose mission is to perform the main role of National railway infrastructure manager.

The Infrastructure Unit also includes the following companies:

- **Anas**, which manages the national roadway and motorway network;
- **Ferrovie del Sud-Est** (for the Infrastructure area only), for managing the most extensive and consistent Italian railway network after RFI, across the four southern provinces of Apulia and linking the county seats of Bari, Taranto and Lecce, as well as 85 municipalities in their areas;
- **Italferr**, which contributes to this segment through its engineering activities, stemming from over 30 years of solid experience in infrastructural projects for traditional and high-speed railways, metropolitan and road transport and the design of ports and stations in Italy and abroad.



### PASSENGERS BUSINESS UNIT

Its mission is **coverage of the passenger transport business**, nationally and internationally, including the promotion, implementation and management of initiatives and services in the field of passenger transport, **providing an integrated offer of products/services and managing a well-structured mix of distribution channels.**

**The segment's parent is Trenitalia**, which provides passenger mobility services in Italy and abroad, managing both regional services and medium and long haul transport, including the noteworthy high speed Freccie trains.

Other companies of the Passengers Unit are:

- **Busitalia – Sita Nord**, which manages with its investees<sup>17</sup> urban and interurban road passenger mobility services;
- **Ferrovie del Sud-Est** (for the Passengers area only), concession holder of railway and road services in the Apulia region.

The Unit's results also include the Netinera group, which operates in rail and road transport on the German local and metropolitan public service market with roughly 40 investees; Hellenic Train, which operates in passenger and freight rail transport in Greece, offering a high-speed service between Athens and Thessaloniki; Trenitalia UK, which provides passenger transport in the UK through its subsidiary Trenitalia c2c; Trenitalia France, which provides long-distance passenger rail services between France and Italy; the ILSA joint venture between Trenitalia and Air Nostrum, one of the first private players to access the Spanish high-speed market under the Iryo brand.



### LOGISTICS BUSINESS UNIT

Its mission is to **guarantee coverage of the logistics and freight transport sector**, nationally and internationally, including the **promotion, implementation, management and sale of initiatives and services in the field of logistics, mobility and freight transport**.

**The segment's parent is Mercitalia Logistics**, specialised in the regeneration of real estate assets for logistics use and in integrated logistics activities.

The Unit consists of seven companies operating nationally and internationally, including Mercitalia Rail, which is Italy's largest rail freight company and one of Europe's largest; TX Logistik, which is Germany's third-largest railway freight carrier, operating in several other European countries as well; Mercitalia Intermodal, Italy's largest combined road/rail transport operator, and the third largest in Europe; Mercitalia Shunting & Terminal, an Italian leader in first and last mile railway services and one of the largest inland terminal operators in Italy; Mercitalia Maintenance, which specialises in maintaining railway cars; TerAlp (Terminal AlpTransit), specialised in the construction of cutting-edge terminal infrastructures.

<sup>17</sup> Busitalia - Sita Nord is also active in the Utrecht and Groningen – Drenthe area through QBuzz, the Netherlands' third largest local public transport operator.



## URBAN BUSINESS UNIT

Its mission is **guaranteeing activities in the real estate sector** and cover the **urban regeneration** sector and provide **intermodality and logistics solutions in urban areas for the first and last step of the supply chain.**

**The sector's parent is FS Sistemi Urbani**, whose aim is to redevelop areas that are no longer used for railway operations to return them to communities, so that they can benefit from new services and meeting places without consuming any more land.

The company's activity is founded on the pillars of environmental, social and economic sustainability, urban mobility, stakeholder involvement and the creation of public and private spaces to improve the well-being of citizens.

The Unit also includes Metropark, which manages 75 parking areas in the main railway stations, and GS Immobiliare.

## FS Italiane S.p.A. is committed to consolidating its leadership in European railway transport and in the international market

Thanks to its world-class assets, the FS Group has become **an international landmark** in its field owing to its high professional standards in the use of innovative technologies.

**The Group exports Made in Italy technological, operational and engineering know-how**, pursuing projects to do with mobility as a whole, mainly focusing on railways.

The Group's international presence is **ensured by the direct commitment of separate entities**, whose offer is complementary and whose activity is constantly coordinated and supported by the work of the Holding company, FS Italiane.



**The other main companies that belong to the Group** are: Ferservizi, which outsources for the main Group companies those activities that are not directly related to railway operations; Fercredit, which mainly aims to develop credit factoring and leasing on the captive market, in addition to expanding consumer credit transactions for Group employees; Italcertifer, which deals with certification, evaluation and testing of transport and infrastructure systems; FSTechnology, specialised in technology and innovation, and FS International, set up to export the extensive know-how of FS Group around the world.



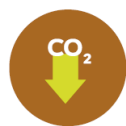
## Group activities through the lens of European Taxonomy

The following section sets out the activities of the FS Group, with reference to the classification of economic activities introduced by Regulation (EU) no. 852/2020 “*on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088*” (known as “EU Taxonomy”).

The EU Taxonomy is part of the broader Sustainable Finance Action Plan<sup>18</sup> dating back to March 2018, put in place by the European Commission with the aim of financing sustainable and inclusive growth, mainly by reorienting capital flows towards a more sustainable economy. With the approval of the Green Deal<sup>19</sup> in 2019, the European Union essentially set the course for more sustainable investments. The goal is to reach a climate neutral economy in the EU by 2050, cutting greenhouse gas emissions by 55% compared to 1990 levels already by 2030. The European Commission has adopted the European Green Deal to support the transition towards a more sustainable European economic and financial system. In the coming years, detailed climate change reporting requirements will become applicable to all enterprises, within the European sustainability standards, being aware that the general expectation, from users as well as from regulators, is that of greater transparency on climate-related issues. An especially important area of information concerns transition plans, which will help users understand how and whether an enterprise intends to shift its business model towards a course that is more compatible with the most recent recommendations on the issue of climate and environmental sustainability.

The EU Taxonomy was introduced into the European system with the Regulation (EU) 2020/852 (Taxonomy), which establishes the conditions to be met by an economic activity in order to be considered environmentally sustainable and is applicable, among others, to companies that currently fall within the scope of the Non-Financial Reporting Directive (Directive 2014/95/EU), implemented by the Italian legislative system by Legislative Decree 254/2016, to be superseded by the new Corporate Sustainability Reporting Directive (CSRD) as of the financial years ended on 31 December 2024.

Specifically, Regulation (EU) no. 2020/852 defines an environmentally sustainable economic activity as one that substantially contributes to at least one of these six environmental objectives:



Climate change mitigation



Climate change adaptation



Sustainable use and protection of water and marine resources



Transition to a circular economy



Pollution prevention and control



Protection and restoration of biodiversity and ecosystems

<sup>18</sup> “Action Plan: Financing Sustainable Growth”, Commission Notice of 8 March 2018.

<sup>19</sup> “The European Green Deal”, Commission Notice of 11 December 2019.

and which, at the same time:

- avoid significant harm to any of the environmental objectives (DNSH);
- are carried out in compliance with the minimum safeguards.

As established by the Regulation itself, the parameters to be used as reference to assess the environmental sustainability of each individual activity under the Taxonomy are set out in appropriate delegated acts issued by the European Commission.

## Adopting EU Taxonomy

The Taxonomy Regulation was published in the Official Journal of the European Union on 22 June 2020 and entered into force on 12 July 2020. Under the regulation, undertakings which are subject to the obligation to publish a consolidated non-financial statement (NFS) shall include therein information on how and to what extent their activities are associated with environmentally sustainable economic activities. Specifically, they shall disclose the proportion of their turnover derived from products or services associated with environmentally sustainable economic activities (turnover KPI), the proportion of their operating expenditure (OpEx KPI) and the proportion of their capital expenditure (CapEx KPI) related to assets or processes associated with environmentally sustainable economic activities.

With regard to the identification of the activities, in 2021 the European Commission established, by means of a specific delegated act (Delegated Regulation (EU) no. 2139/2021 known as Climate Law<sup>20</sup>), the activities and relevant technical screening criteria only with reference to the first two objectives of the Taxonomy (**climate change mitigation** and **climate change adaptation**), while works concerning the other four objectives are still underway. Therefore, the analysis carried out by the companies of the FS Group focused on these two objectives.

Similarly, with reference to the content, methods and presentation of information, the Regulation granted to the Commission the power to adopt one or more delegated acts aimed at instructing companies on how to reclassify and set out disclosures on activities. Specifically, said act was adopted on 6 July 2021 (Delegated Regulation (EU) no. 2178/2021 known as Delegated act art. 8), and the FS Group produced the qualitative and quantitative information in the following sections based on its requirements.

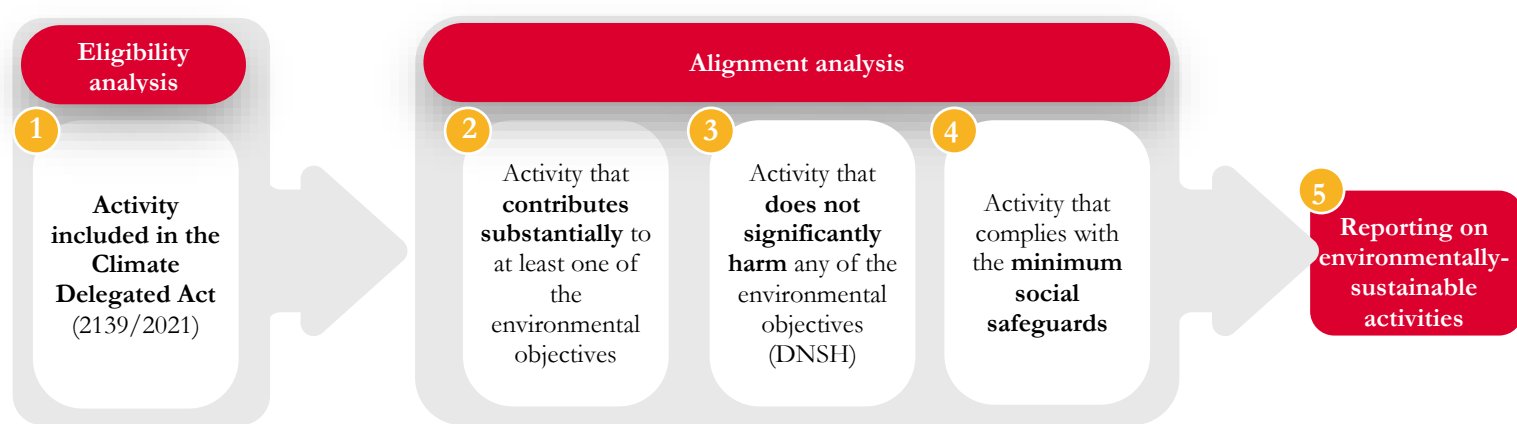
For the financial year ended on 31 December 2021, as required, FS Group reported on the proportion of Turnover, OpEx and CapEx only related to “eligible” activities, i.e. falling within the scope of the Regulation in a broad sense, since they are specifically listed in the Climate Law, without ascertaining their actual alignment with the screening criteria, and therefore without ascertaining their actual environmental sustainability. Indeed, eligibility is again presented as a necessary but not sufficient

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<sup>20</sup> Subsequently, on 2 February 2022, the European Commission submitted a complementary delegated act on climate which, in compliance with strict conditions, also includes in the list of economic activities under the Taxonomy specific activities in the sector of nuclear energy and gas.

condition to prove the real environmental sustainability of an activity – as a matter of fact, it merely indicates that the activity in question has the potential to be aligned with the Taxonomy. However, in compliance with the time frames established by the Regulation, in 2022 the companies of the Group carried out a complete review of the eligible activities identified in the previous financial year, in the light of the new and improved knowledge, as well as an assessment of the technical screening criteria of the “Do No Significant Harm” – DNSH analysis and of compliance with the minimum safeguards, in order to establish the alignment of its activities with the sustainability requirements (aligned activities).

The picture below shows the screening process for ascertaining the environmental sustainability of the activities.



Below is a short description of each stage of the process that led to EU Taxonomy reporting:

**1. Identification of activities**

The analysis of the eligible activities was conducted by each FS Group company in order to verify that they corresponded to one or more of the activities listed in the Climate Act.

The following table shows the eligible activities identified by the Group companies:

ELIGIBLE ACTIVITIES IDENTIFIED BY THE GROUP	
<b>3. Manufacturing</b>	
3.3. Manufacture of low-carbon emission technologies for transport	
<b>6. Transport</b>	
6.1. Passenger interurban rail transport	
6.2. Freight rail transport	
6.3. Urban and suburban transport, road passenger transport	
6.6. Freight transport services by road	
6.7. Inland passenger water transport	

## ELIGIBLE ACTIVITIES IDENTIFIED BY THE GROUP

6.10. Sea and coastal freight water transport, vessels for port operations and auxiliary activities
6.11. Sea and coastal passenger water transport
6.14. Infrastructure for rail transport
6.15. Infrastructure enabling low-carbon road transport and public transport
<b>7. Construction and real estate activities</b>
7.2. Renovation of existing buildings
7.3. Installation, maintenance and repair of energy efficiency equipment
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)
7.6. Installation, maintenance and repair of renewable energy technologies
7.7. Acquisition and ownership of buildings

## 2. Alignment assessment

Each Group company, for each eligible activity, has verified the so-called "**alignment**". Alignment, i.e. the verification of the capacity of each activity to **contribute substantially to the achievement of one or more objectives**, mitigation or adaptation, also distinguishing between **transition activities** (activities for which there are no technologically and economically feasible lower-carbon alternatives, but which, nevertheless, present a performance that corresponds to the best performance in the sector and provided that they do not hinder the development and diffusion of lower-carbon alternatives, nor entail a dependence on carbon-intensive assets) and **enabling activities** (activities that directly enable other activities to make a substantial contribution to an environmental objective).

## 3. DNSH assessment

To ascertain compliance with the “Do No Significant Harm” principle (DNSH), **the Group has identified for each economic activity**, and on the basis of the substantial contribution to the “mitigation” and “adaptation” objectives, **the documentary evidence and sufficient elements to prove that there are no negative impacts on the remaining environmental objectives**, such as:

- management systems and certifications (ISO14001, ISO50001, etc.);
- climate risk analysis and assessment of asset vulnerability;
- environmental impact assessment (EIA);
- environmental product declarations (EPD);
- minimum environmental criteria (MEC) or other sustainability criteria included in negotiation procedures and in contracts;
- waste management procedures;
- carbon footprint measurement.

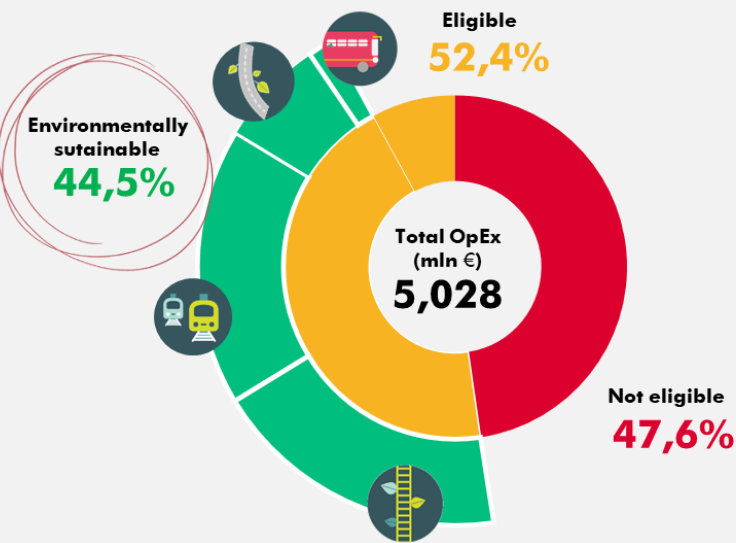
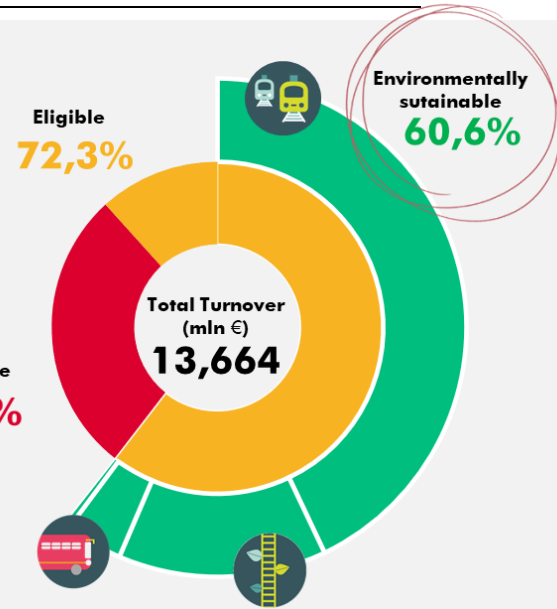
#### **4. Assessment of minimum safeguards**

With regard to compliance with the minimum safeguards, **the FS Group guarantees and promotes the protection of human rights**, operating in accordance with the United Nations' Universal Declaration of Human Rights and the fundamental conventions of the International Labour Organization. For more details on the policies, tools and activities put in place by the Group, please refer to the section Protection of human rights.

#### **5. Reporting on environmentally-sustainable activities**

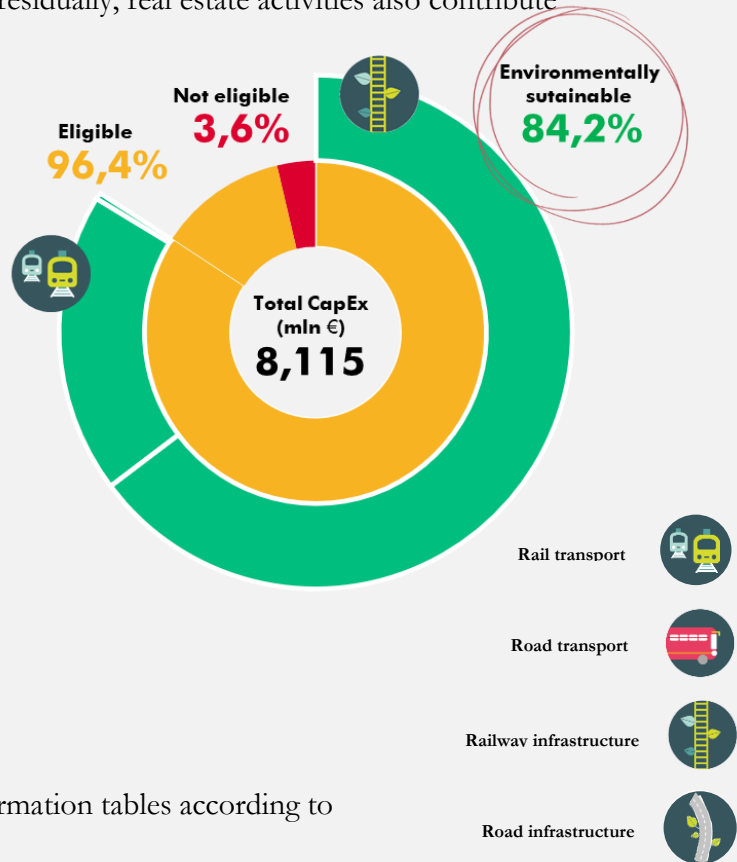
For financial year 2022, the level of alignment with the EU Taxonomy of the economic activities of FS Group, owing to their substantial contribution to the Mitigation and Adaptation objectives, in compliance with the DNSH principle and with the minimum safeguards, is shown in the graphs below.

More than 60% of the Group's revenues are attributable to environmentally sustainable activities, with passenger and freight rail transport (42.9%) and rail infrastructure management activities (13.5%) contributing the most. Road transport accounts for about 3.7%, and road infrastructure and real estate activities make a residual contribution of about 0.4%. Revenues from products and services associated with climate change-adapted economic activities are not included in the numerator of the Turnover KPI.



With regard to the **operating costs** defined in Annex I of the so-called Delegated Act Art. 8, **about 44.5% is attributable to environmentally sustainable activities**. The activities relating to railway infrastructure and rail transport contribute 18.7% and 17.4% respectively to the eco-sustainable share, road infrastructure accounts for about 6.7%, road transport for 1.7% and, residually, real estate activities also contribute

More than 84% of the Group's capital expenditures are for investments in environmentally sustainable activities, demonstrating the Group's commitment to help develop a sustainable mobility system. Of the CapEx aligned, 64.9% are related to railway infrastructure management, about 19% are related to rail transport, while the remaining portion (about 0.5%) is related to road transport and real estate activities.



If we also consider Anas's technical investments that contribute to the climate change adaptation objective (falling within the scope of IFRIC 12), the share of eco-sustainable capital expenditure would increase by about EUR 282 million.

The annexed Performance Indicators contain the information tables according to Article 8 of the EU Taxonomy Regulation.

## The group's role in the mobility of the future (2-25, 3-3)

Almost three years after the beginning of the crisis caused by Covid-19, the route “**back to normality**” for the mobility of passengers and goods may be considered concluded and demand is up again, according to the estimate of the Audimob report<sup>21</sup>, significantly **picking up**, back to volumes that are very close to pre-Covid levels (**-6% travel and -15% passenger\*km compared to 2019**).

In 2022, and particularly, in the first 9 months compared to the same period of 2019, the levels were essentially close to those of the end of 2019, in particular for extra-urban **road traffic** (the volume of light vehicles was just -5% in the ANAS network and -3% in the motorway network), while the recovery of **public transport** was slower (the gap between January and September 2022 compared to 2019 was -20% for High Speed, -23% for regional rail transport and -13% for the total passengers of Local Public Transport - LPT), worsened, on the supply side, by the exponential increase in energy costs and, more generally, by the inflation resulting from the crisis triggered by the **Russian-Ukrainian conflict**.

With regard to the **choice of means of transport**, the modal split in 2020 was deeply affected by the impact of the health crisis, with a marked preference for **active mobility**, the rediscovery of the **value of proximity** and **public space**. The data from 2019 to the first six months of 2022 paint a picture of a return to the “**old normal**”, the **car share** rises just below 65%, one and a half points higher than the pre-Covid level (dropped to 59% in the first year of the pandemic), thus restating its dominant position in the Italians' modal preferences. The decline in active mobility, full rebound of the private car and slow comeback of public transport, as we leave the health emergency behind, jointly result in a less than virtuous mobility demand, in terms of sustainability, compared to previous years.

In this context, despite the critical issues described above, the strong impetus in fighting climate change, confirmed by the European Green Deal and the ‘Fit for 55’ package (the EU's climate and energy plan), stepped up by the NRRP funds, and the need to foster Mobility-as-a-Service (MaaS) provide us with the **opportunity to promote an ever more shared, sustainable, resilient, and inclusive mobility**, to create long-term value for all stakeholders.

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<sup>21</sup> Report on mobility in Italy by ISFORT (Higher Institute of Transport Training and Research) in partnership with CNEL (National Council for Economics and Labour) and the scientific contribution of AGENS (Confederal Transport and Services Agency) and ASSTRA (Transport Association).

## The strategic and business plan (2-22)

The new **2022-2031 Business Plan “Un tempo Nuovo”**, approved by the Board of directors in March 2022, sets **€190 billion** in total investments, boosting the FS Group’s commitment to serve Italy by implementing an **ecosystem of sustainable mobility and integrated logistics** that leverages several factors:

- making **national rail and road infrastructural investments**;
- recovering and subsequently growing pre-Covid (passenger and freight) traffic volumes, also via suitable **repositioning and incentive actions**;
- a renewed focus on the core business, **firmly overseeing service quality**;
- promoting **increasingly more sustainable mobility and logistics services**;
- **developing systems aimed at large-scale self-production of energy from renewable sources**;
- creating **synergies between the various transport systems** to foster **intermodality**.

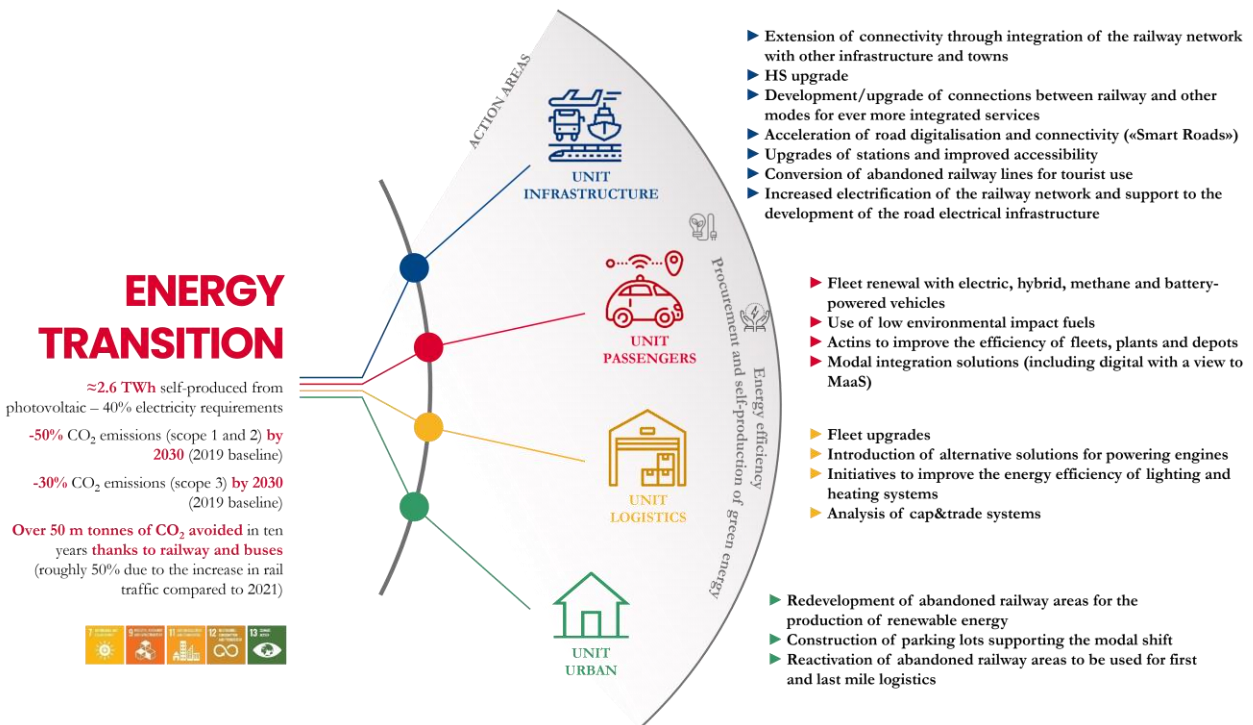
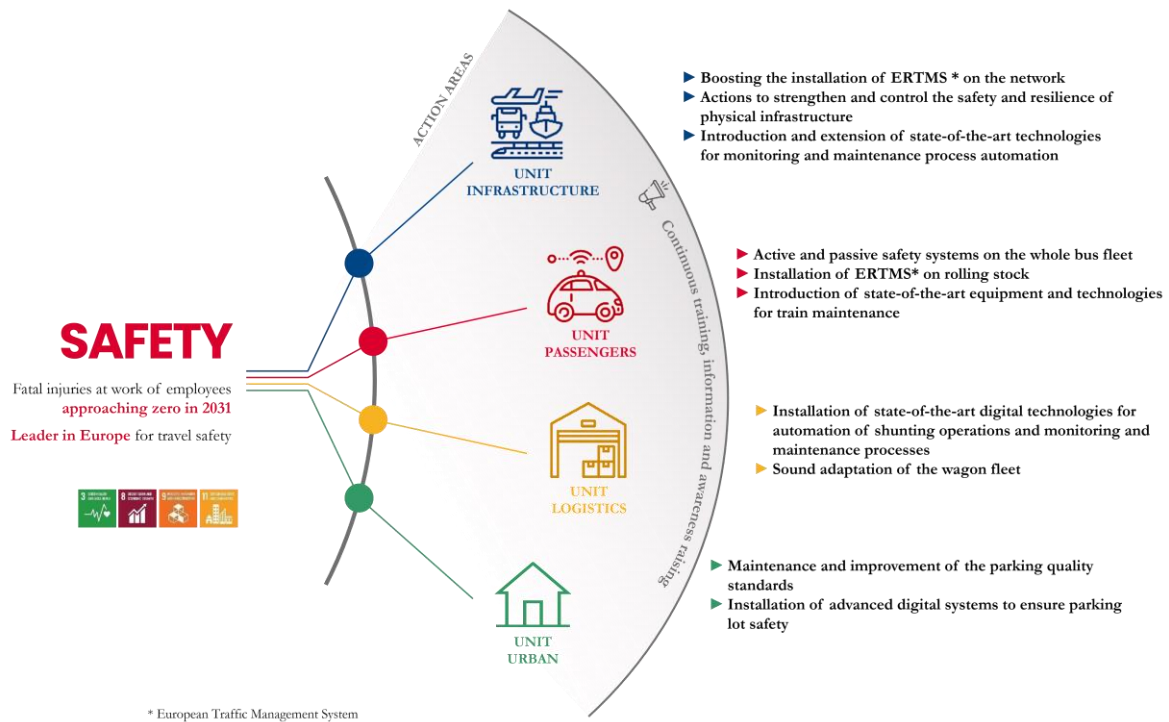
Rising to the challenge posed by the **UN 2030 Agenda for Sustainable Development** and addressing the urgent issues posed by the current critical situation, marked by the ongoing geopolitical and economic crisis, and by the need to redefine the governance of the new organisational structure consisting of **four Business Units**, the Group seeks to focus its strategic commitment guided by the principles of sustainability.

The new **Strategic Plan** defines **5 main challenges**, linked to specific objectives:



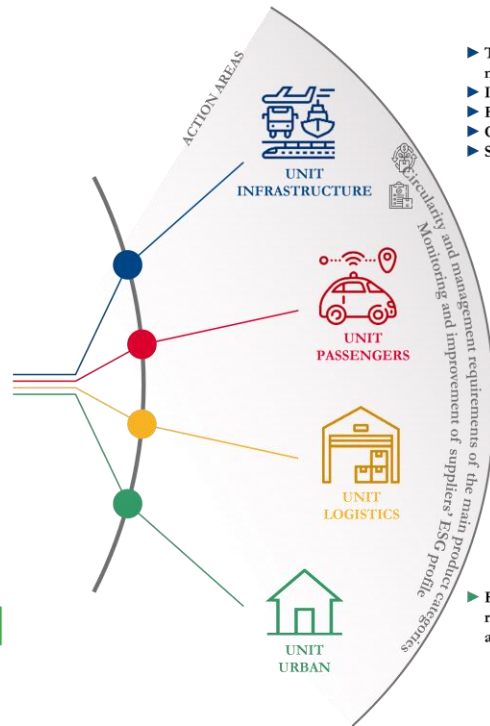


These challenges are linked to different areas, on which the Group will act to contribute to 13 out of the 17 UN Sustainable development Goals, which also uphold many of the mission statements of the National Recovery and Resilience Plan (NRRP):



### CIRCULARITY AND RESPONSIBILITY IN VALUE CHAINS

100% assessed with a view to ESG from 2026  
 ≈ 100% waste sent for recovery by 2031  
 100% projects with sustainability study, stakeholder engagement and climate footprint measurement  
 2.3 million sq.m. planted areas in urban redevelopment projects  
 12,000 trees and shrubs planted within station redevelopment projects



- ▶ Trials to reduce material procurement and waste generation in maintenance and construction processes
- ▶ Improvement of the waste collection and disposal in stations
- ▶ Reuse of materials and water resources in building site activities
- ▶ Optimised use and sustainable management of water assets
- ▶ Sustainability assessment of network maintenance and development

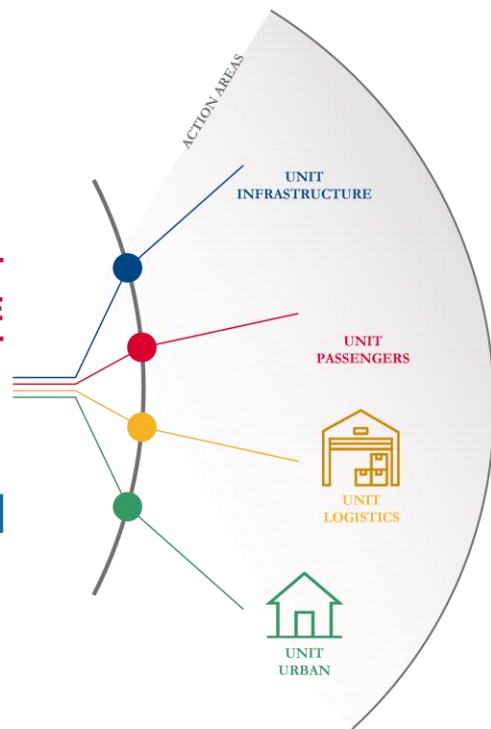
- ▶ Streamlined waste collection in industrial processes
- ▶ Raising the awareness of personnel and contractors on responsible waste management
- ▶ Streamlining/upgrading water networks for optimised water use
- ▶ Reuse of materials and trialling solutions for water circular economy

- ▶ Trials for reuse of materials with a view to the circular economy
- ▶ Streamlining/upgrading of water networks for optimised water use
- ▶ Organisational measures and rules of conduct for efficient use of resources

- ▶ Redevelopment and urban regeneration of areas not used for railway operation with a focus on the environmental, social and tourist value for local areas

### ENHANCEMENT AND INCLUSIVE DEVELOPMENT

32.4% women in managerial roles by 2026 and 36.4% by 2031  
 Continuous development of the Group's human capital



- ▶ Improved gender balance in managerial roles
- ▶ Acceleration and evolution of skills and expertise
- ▶ Digitalisation, flexibility in the way of working throughout the Group
- ▶ Construction of key skills and key people of the future
- ▶ Projects for building networks of significant relationships between people
- ▶ Dissemination of a culture that appreciates and highlights people's individual talent and characters
- ▶ Dissemination of inclusive skills

The **focus on customers** will always underlie the Group's strategy to support sustainable progress, by providing ever higher quality in multimodal mobility services and promoting collective and shared modes of transport. Therefore, FS will continue measuring its commitment and improving the Group's sustainability performance, considering the exchange of views with stakeholders as an important opportunity for growth.

This transformation will be **boosted** by **digital infrastructure**, by building a centre of excellence to ensure that digital investments meet business needs and help develop platforms to connect passengers and freight, and **people**, with ad hoc programmes created to enhance and develop their expertise.

## The NRRP and developing transport for Italy (203-1; 203-2)

Italy has the chance to turn over a new leaf and overcome the economic and social impacts of the pandemic to build a new fairer, greener, more inclusive country thanks to 'Italia Domani', the National Recovery and Resilience Plan (NRRP) set up to seize the opportunity given by Next Generation EU<sup>22</sup> that mobilises €191.5 billion. Italy has topped up the NRRP with additional national resources equalling €30.6 billion, by setting up the Complementary National Plan (CNP).

The FS Group has been called upon to play a crucial role in defining and implementing the NRRP and the CNP. To date, €25.89 billion of the funds have been allocated to FS Group companies in their role as implementing and managing entity, 24.82 billion of which (96%<sup>23</sup>) allocated to RFI, in detail:

- €24.29 billion under Mission 3 *Infrastructure for sustainable mobility* Component 1 intended for actions to develop and upgrade the national and regional railway network;
- €0.23 billion in Mission 1 *Digitalisation, innovation, competitiveness, culture and tourism* Component 3;
- €0.08 billion in Mission 2 *Revolution, plants and ecological transition* Component 2;
- €0.23 billion in Mission 5 *Inclusion and Cohesion* Component 2 and Component 3.

### MISSION 3: INFRASTRUCTURE FOR SUSTAINABLE MOBILITY

**Upgrade and expand the national high speed railway network and enhance the regional railway network, especially in the south. Upgrade freight transport services using an intermodal approach regarding the airport network. Foster the optimisation and digitalisation of air traffic.**

This is in line with the role assigned to railway transport within the framework of the Sustainable and Smart Mobility Strategy (SSMS) goals set by the EU in 2020 to help cut CO<sub>2</sub> emissions by 90% by 2050 and to complete the Single European Transport Area set out in the 2011 White Paper. This approach

<sup>22</sup> Also known as the Recovery Fund.

<sup>23</sup> The remaining 4% (1.07 billion) has been assigned to other Group companies (ANAS, FSE and Fondazione FS, etc.).

also seeks to promote cohesion, reduce regional disparity, improve connectivity and access to the domestic market for all regions.

By adding resources to existing projects and expediting them, as well as by adding new ones connected to Italy's infrastructural growth strategy (#Italia Veloce), the railway investments included in Mission 3 of the NRRP – supplemented by those under the Complementary Fund pursuant to art. 4 of It. Decree Law 59/2021 – aim to implement and complete works that are part of European infrastructure projects or that fill the gaps that stunt Italy's economic growth and, in particular, of the South and Islands.

Focused on developing the main railway lines, linking them up and integrating them into the HS/HC network, speeding up and updating the entire network including the regional lines, strengthening the railways for transporting freight over long distances and improving last mile connections, the Mission 3 NRRP investments which RFI is responsible for are broken down into eight areas:

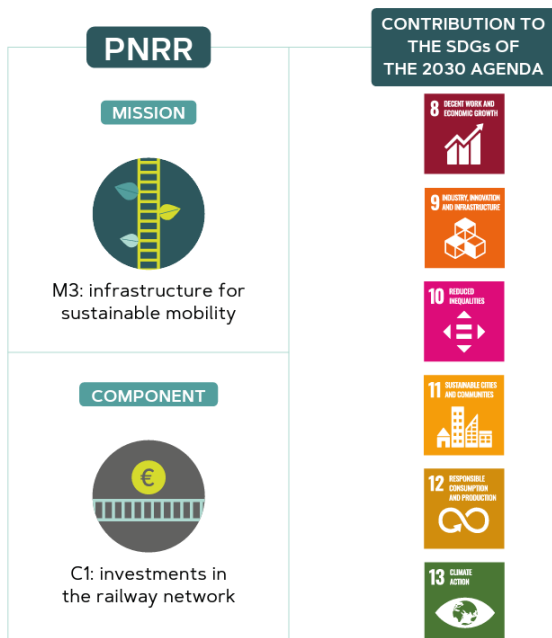
1. high speed railway connections to the south for passengers and freight;
2. high speed lines in the north connecting to Europe;
3. east-west connections;
4. developing the European Rail Transport Management System (ERTMS);
5. upgrading metropolitan railway hubs and key national connections;
6. upgrading regional lines;
7. upgrading, electrifying and boosting the resilience of southern railways;
8. improving southern railway stations.

9. The expected benefits include:

- greater integration between the national railway infrastructure and regional railways;
- expansion and integration of rail/road services;
- uniform safety standards;
- new passenger and freight connections to airports, ports and terminals;
- optimising services offered by integrating High Speed services and local public transport.



By 2026 the investments aim to have reached a significant milestone in the process to build a modern, digitalised, sustainable infrastructure system that can meet the decarbonisation challenge set by the European Union in the European Green Deal strategies and help reach the SDGs set out in the United Nations 2030 Agenda, especially some of them.



The sustainability factor of RFI’s investments refers to both the purpose of the works once they are up and running and the planning and building choices and methods. As provided for by the Recovery and Resilience Facility (RFF) for all measures included in the National Recovery and Resilience Plans, their compliance with the DSNH principle has been ascertained, as defined by Regulation (EU) 2020/852 (known as Taxonomy Regulation), based on which an economic activity is sustainable if it contributes to at least one of the six environmental objectives set forth by said Regulation, without harming the other environmental objectives.

See the [RFI Business Plan](#) for more details on the projects and commercial benefits of the main investments that RFI will roll out over the next five years (2022-2026) thanks to the resources allocated by the NRRP.



## Infrastructure Unit of the FS Group ready to open construction sites worth nearly €30 billion

2022 ends for the Infrastructure Unit of Gruppo FS with new calls for tenders worth over €25.5 billion and contracts worth €15 billion.

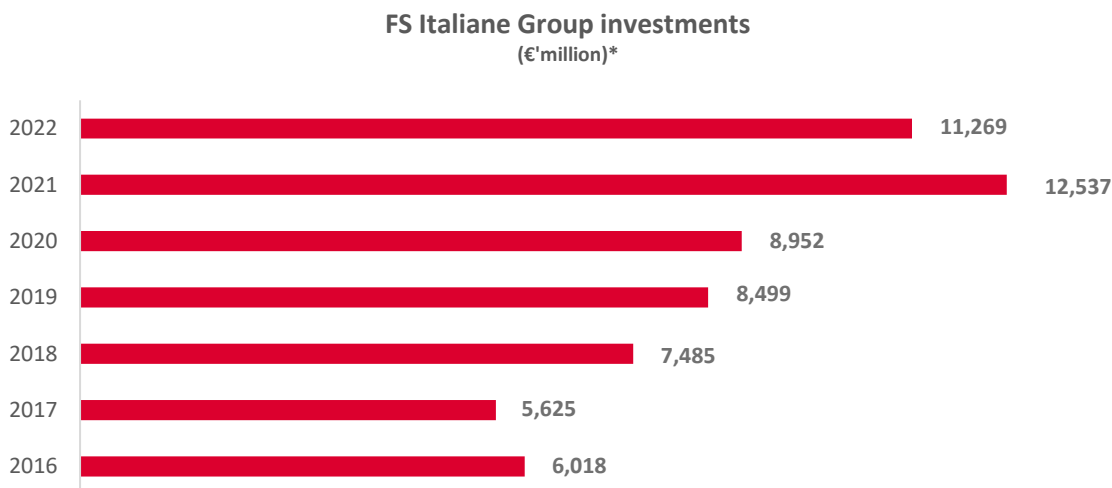
Not only did RFI and Anas manage to achieve their goals, but 2021 tenders were exceeded by a good €10 billion (+64%). After the final push in December, when tenders worth €10 billion were called, in 2023 the two companies of Gruppo FS are ready to open work sites worth €30 billion.

In December alone, RFI published 46 calls for tenders worth €8 billion, and was able to end 2022 with 283 new calls for tenders on the market, exceeding €21 billion of procedures underway, over €10 billion of which concern projects under the NRRP.

The calls for tenders include many projects for the South: 6 tenders for a total of €6 billion in Sicily, which will allow all the Palermo-Catania-Messina construction sites to be opened in 2023; the Battipaglia-Romagnano section, part of the new Salerno-Reggio Calabria high speed line, worth over €2.16 billion financed with NRRP resources; the new Ferrandina - Matera La Martella line.

## Investments to develop transport for Italy (203-1, 203-2)

Despite the economic environment heavily affected by the geopolitical situation and the rise in commodity prices, the FS Group has managed to continuously increase investments.



\*Since 2019 they include the contractual advances paid to suppliers by RFI and Anas.

The FS Italiane group's capital expenditure<sup>24</sup> totalled €11,269 million in 2022, (-10% compared to 2021); excluding the dynamics of contractual advances, amounting to €2,608 million for 2021 and €418 million for 2022, the Group recorded an increase in investment spending of more than 9%, establishing itself among the leading investors in Italy and supporting the development of the transport, infrastructure and logistics sector.

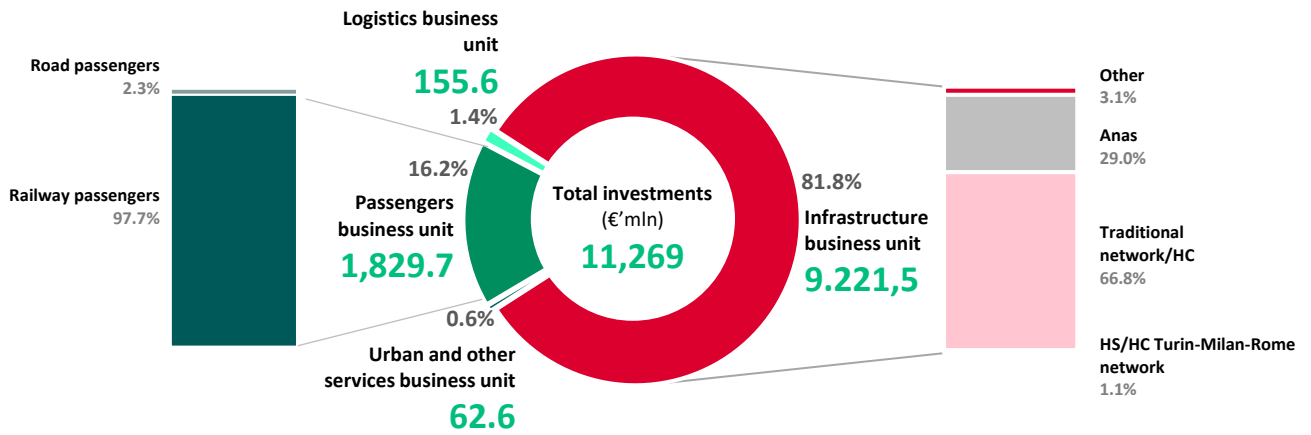
Specifically, RFI recorded investments of about €6,260 million (of which €6,064 million for the traditional/HC network, €98 million for the HS/HC Turin-Milan-Naples network and €98 million for contractual advances to suppliers), the Anas Group about €2,678 million (of which €320 million for contractual advances to suppliers), Trenitalia about €1,633 million, Busitalia Group companies more than €38 million, Mercitalia Group companies about €156 million, and, finally, the remaining companies operating abroad for more than €170 million (Netinera, c2c, Trenitalia UK, Trenitalia France and Hellenic Train).

The FS Group's investments prioritised Italy (98%), with only the residual 2% allocated to companies operating abroad.

Investments are analysed below by business units.

<sup>24</sup> These include investment programmes and projects (including those through leases or special purpose entities) managed by the Group to support business development, in property, plant and equipment, assets under concession or other intangible assets, excluding financial investments (in connection with equity transactions).

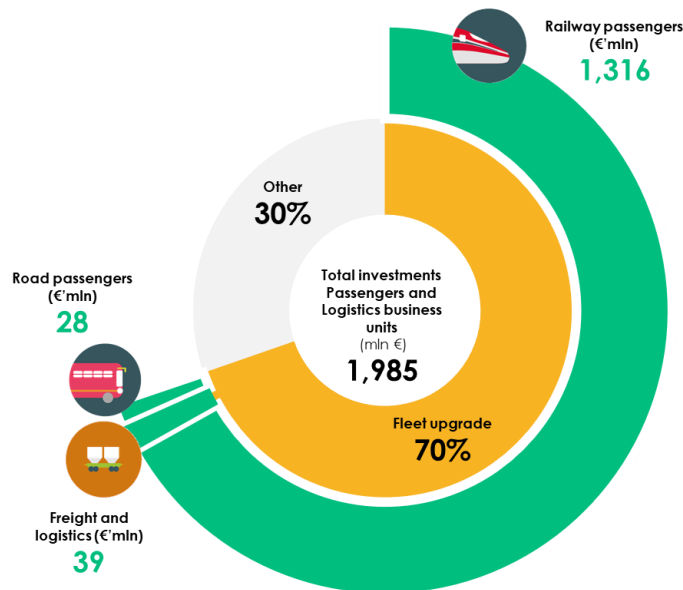
Investments by business units (€'mln)



In the Infrastructure business unit, about 41% of investments were allocated to safety, technology and maintenance (of which €281 million are for latest-generation technologies to the railway network) and about 58% were dedicated to new works (roads and rails).

In the Passengers business unit, the upgrade of the railway passenger fleet and the road transport fleet absorbed around 73% of investments (€1,345 million). In the Logistics business unit, 25% of investment was devoted to fleet renewal (about €39 million)<sup>25</sup>.

Focus on upgrading the fleet (mln €)



<sup>25</sup> For passenger and freight rail transport, renewal includes both purchase and revamping of rolling stock.



In 2022, the FS Group, as part of the broader R&D sector, invested €12.0 million<sup>26</sup>, of which about 79% in technologies for traffic safety, 18% for studies and experiments on new components and systems, 3% to the defense of environment and territory.

## **Innovation and sustainable finance as accelerators of change**

### **Innovation**

Continuous and systemic innovation is a strategic driver for the Group's strengthening of its leadership positions in the sectors in which it operates. Through innovation, the Group aims to offer increasingly higher quality services tailored to the specific needs of passengers, customers and other stakeholders. Innovation covers every link in the value chain, from design, to construction and maintenance and, finally, to the delivery of safe, integrated, made-to-measure transport services.

Faced with a highly uncertain scenario, dominated by high inflation and an increase in energy market prices, where it is increasingly urgent to improve sustainability performance, the FS Group is even more compelled to rethink and reorganise its services and how it uses the infrastructure, turning innovation into one of the accelerators of change.

The National Recovery and Resilience Plan (NRRP) provided a huge stimulus by allocating considerable resources to the Group to build and design new railway infrastructure and upgrade existing infrastructure with a view to sustainability, accessibility, digitalisation, resilience and interconnection.

In 2022, the Group presented the 2022 – 2031 business plan, which identified innovation, digitalisation and connectivity as enabling factors. To achieve the goal of ever more integrated and smart connected infrastructures and technological facilities, the Group has developed a set of strategic initiatives to be pursued through six digital platforms: Resilience platform, for monitoring road and railway infrastructures; Smart Mobility platform, designed with passengers in mind, a single access point for seamless timetables, travel planning, ticketing and parking management; Integrated Logistics platform, combining the systems of Group companies that deal with freight transport; Smart Timetable platform that coordinates maintenance needs and available service levels; Group Payment platform, which integrates transaction management on a single purchasing system; Gigabitrail platform that connects the railway infrastructure.

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<sup>26</sup> These investments are part of the infrastructure sector investments.

With regard to international research and innovation activities, the Group collaborates with trade organisations and European institutions to foster a transition to a more sustainable, integrated and multimodal future. The Group plays an active role in research and development projects financed by European programmes such as Horizon Europe, the EU's key funding programme for research and innovation which helps to achieve the UN's SDGs and boosts the EU's competitiveness and growth. Within the public-private partnership Europe's Rail, of which the Group is a founding member, the first call for tenders for railway research and innovation activities was awarded to FS Group (co-financing by Europe's Rail totals €232.8 million). The operational, technological and innovative solutions covered by the call for tenders deal with management of the European railway network, automation and digitalisation of railway operations, sustainable and resilient systems, freight rail transport and regional and diffuse lines.

In addition to activities carried out with trade associations and European institutions, the Group was very active in interacting with innovative start-ups and SMEs: over 200 start-ups answered the Group's calls to action in 2022. During the year, in addition to expanding its network of collaborations with start-ups and small enterprises, the Group formed partnerships with business incubators and also supported co-innovation projects with start-ups in the fields of sustainability, digital document management on construction sites, predictive maintenance and customer relations management. As in the previous year, various open innovation solutions were rolled out in 2022: three Call4Ideas, the first FS Hackathon, and various vertical scouting operations to meet the specific business needs of the operating companies.

Along with the search for ideas and partners for innovative solutions, the Group develops in-house programmes to promote corporate entrepreneurship. The third edition of Innovate was launched during the year. The Group's in-house programme promotes corporate entrepreneurship focusing on issues of connectivity, automation and internet of things; energy and new materials; and customer experience. The programme received as many as 216 proposals, of which 5 innovative projects were shortlisted for acceleration, and eventual selection of the winner project.

Finally, the Group has 3 Innovation Hubs in Rome, Naples and Catania where talents, startups and companies can meet and share expertise and skills supporting innovation processes.

## Sustainable finance

Sustainable finance tools are key for the group in ensuring its sustainability and competitive edge over the medium to long term, with a direct impact on its reputation and its ability to collect funds on the capital market.

Recent legislative developments and the growing pressure of public opinion are encouraging collaboration between institutions, the financial sector and businesses to join forces in keeping global warming within the limits of the Paris Climate Agreement and to ensure future generations have the chance to live in a more sustainable world.

The recovery plan, the New Green Deal, EU taxonomy and sustainable finance drive the shift towards a greener continent, to improve personal well-being and achieve carbon neutrality by 2050.

Aware of its role in Europe, throughout the country and, especially, in the transport sector, the Group has decided to promote increasingly integrated, inclusive, collective and environmentally-friendly mobility (infrastructure and services).

In this context, it has chosen sustainable finance tools to fund all the projects that help boost the Group's performance.

In addition to requiring the allocation of the proceeds to sustainable projects, sustainable finance tools increase transparency with stakeholders through reporting on the ways in which the financing is used and its environmental and social impacts.

To finance projects with positive impacts in terms of environmental and social sustainability, Ferrovie dello Stato Italiane has developed a Green Bond Framework (updated in 2022) in line with the Green Bond Principles of the International Capital Market Association (ICMA) and aligned with European Taxonomy.

The Green Bond Working Committee was set up on 27 March 2018 to implement and update the Green Bond Framework, with specific regard to the identification and assessment of eligible green projects, which includes holding discussions with the counterparties involved in the analysis of the projects' greenness and the implementation of reporting procedures and management of the proceeds from the bond placements.

Six Green Bonds<sup>27</sup> were placed between 2017 and 2022, for a total of €3.95 billion.

With the first issue in 2017, the Group launched a programme aimed at integrating financing decisions with ESG criteria in line with its business model.

To date, the Green Bonds have financed the purchase of latest-generation rolling stock for public transport and freight transport, maintenance of rolling stock and construction of high speed railway infrastructure, helping to cut emissions from the service.

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<sup>27</sup> The documentation is available at the following address: <https://www.fsitaliane.it/content/fsitaliane/it/investor-relations/debito-e-credit-rating/green-bond-framework.html>.

Specifically with regard to financing the new rolling stock, proceeds from the Green Bond placements made the following purchases possible:

- the **new regional Pop trains** (medium capacity) and **Rock trains** (high capacity) are equipped with high-energy efficiency technologies (e.g., natural ventilation engines, light alloys, LED lights, sensors for optimal air conditioning, smart parking mode, etc.), cutting CO<sub>2</sub> emissions by approximately 20% compared to the other trains in the same market segment. Furthermore, these trains are 92%-96% recyclable, offer more space and charging stations for e-bikes and are eligible for white certificates (incentives for high-energy efficiency technologies);
- the **ETR 1000 trains** (Frecciarossa 1000), the world's first high speed (HS) trains with an Environmental Product Declaration (EPD) as they contain CO<sub>2</sub> emissions at just 28 grammes per passenger-km (approximately 20% less emissions than the previous generation ETR 500 train). To date, Frecciarossa 1000 is the most noiseless train with the least vibrations produced in Europe thanks to its reduced aerodynamic resistance. In addition, when its life cycle comes to an end, the materials used to construct it are over 94% recyclable.
- the **new engines** (E494, the most recent model in the TRAXX single-system locomotive family) were designed to reduce energy consumption, vibrations and noise pollution, using new technologies like parking mode and eco-mode (which reduce consumption when, inter alia, loads are light), a dynamic braking system (which recovers the energy generated by braking) and a latest-generation air conditioning system. The **new wagons** also boast technological features that improve safety (electronic sensors to prevent accidents) and reduce energy consumption (they are approximately 1,400 kg lighter).

FS Italiane became the first company in Italy to be certified by the Climate Bonds Initiative - a non-profit organisation that promotes sustainable finance around the world as a way of combating climate change. Demonstrating the group's interest in using sustainable financial instruments to support investments that reduce the environmental impact of its sector, it has reached a green bond ratio<sup>28</sup> of 58% and a green debt ratio<sup>29</sup> of 46%.

The Group placed two Green Bond issues in 2022:

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<sup>28</sup> The total amount of outstanding green bonds (at year end) divided by the total amount of outstanding bonds (five-year moving average) as per the "Commission guidelines on non-financial reporting: guidelines on reporting climate-related information" issued by the European Commission on 20 June 2019.

<sup>29</sup> The total amount of outstanding green debt instruments (at year end) divided by the total amount of outstanding debt (five-year moving average) as per the "Commission guidelines on non-financial reporting: guidelines on reporting climate-related information" issued by the European Commission on 20 June 2019.

- the Group placed its fifth Green Bond issue in July for a nominal amount of €200 million and seventeen year maturity. The subscription is the second tranche of the amount of €550 million, approved by the EIB in 2021 and intended for new purchases by Trenitalia of high speed trains, under its Green Bond Purchase Programme, and follows the €350 million issue, subscribed in December 2021, which was the first corporate Green Bond ever purchased by the Bank. The proceeds from the issue will allow Trenitalia to purchase brand new ETR1000 high-speed trains to be deployed on the Italian and Spanish railway lines, aiding the modernisation of the existing fleet while increasing competitiveness in business outside Italy;
- the sixth Green Bond was issued in September for a nominal amount of €1.1 billion and maturity at April 2027, which is the largest bond issue ever placed by FS. The proceeds make/made it possible to finance the new Eligibile Green Projects under the Green Bond Framework updated to June 2022. Specifically, the issue made it possible to purchase new trains, to cover the maintenance expenses of Trenitalia rolling stock as well as – for the first time ever – to make investments for the completion of the Turin-Milan-Naples high-speed network, managed by RFI, including financing the underpass crossing the Florence area. All the financed investments meet the criteria of the EU Taxonomy, as confirmed by the second party opinion of Sustainalytics.

In addition to the Green Bonds, the Group also used other sustainable finance tools in recent years; specifically:

- a green loan from Unicredit to purchase new Frecciargento electric trains for passenger transport in line with the European Taxonomy criteria;
- private bond placement to purchase new trains for public transport, in line with European Taxonomy criteria, funded via the Eurofima Green Bond programme;
- a climate action loan from the European Investment Bank to purchase new hybrid trains for regional transport;
- a Sustainability Linked Revolving Credit Facility (RCF).

FS Italiane agreed on the three-year RCF in June 2021 for an amount of **€2.5 billion**, extended to **€3 billion** in 2022, the Group's first sustainability-linked product. Under the terms of the RCF, the margin and commitment fees are revised when the Group reaches targets related to the four key performance indicators that take a snapshot of its commitment to various ESG (Environmental Social Governance) issues.


The targets are as follows:

## ESG TARGETS


### Gender gap among management

Closing the gender gap by increasing the number of **women in managerial positions**






**ESG rating**  
Improving the group’s **sustainability profile** according to the **ratings agency Moody’s ESG Solutions methodology**



**Easy stations**  
Increasing the number of **actions to eliminate architectural barriers at stations** to give all passengers full autonomy while travelling (raising platforms, installing lifts and tactile walkways)



**Integrated mobility**  
Increasing the number of **spaces for bicycles** available on the **regional train** fleet in Italy, to boost the **modal shift** towards collective and shared mobility

The table below provides an update on the ESG targets of the sustainability-linked RCF<sup>30</sup>:

KPI	Measurement unit	Baseline	Target 2021	Target 2022	Actual 2021	Actual 2022	Status
<b>ESG rating – Moody’s ESG Solutions</b> (formerly Vigeo Eiris)	score	52	54	56	64	65	✓
<b>Gender gap<sup>31</sup></b>	%	27.5	n.a.	28.4	29.7	30.95	✓
<b>Easy station</b>							
Actions	no.	605	≥730	≥870	759	889	✓
Tactile walkways	km	53	≥60	≥70	72	84.56	✓
<b>Integrated mobility</b>							
Bicycle spaces	no.	5,050	≥5,500	≥6,000	5,711	6,198	✓

Key: Target reached ✓

<sup>30</sup> See the “ESG rating and other awards” section for more details on the target related to improving the group’s sustainability profile according to the ratings agency Moody’s ESG Solutions methodology.

<sup>31</sup> The target has been spread over the next two years, starting from 2022. The scope of the analysis includes the following companies FS S.p.A., RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani (net of personnel seconded to Metropark), Mercitalia Logistics, Mercitalia Rail, Mercitalia Intermodal, Busitalia Veneto, Busitalia Rail Service, Busitalia Campania, Grandi Stazioni Rail, Grandi Stazioni Immobiliare, Terminali Italia, Italcertifer, Nugo, FSTechnology and Cremonesi Workshop.

As shown in the table, the Group pursues its commitments, which were all achieved in 2022 as well (ensuring that FS will enjoy the financial benefits gained from the more favourable financial conditions of the RCF), proving the key role it seeks to play in developing safe, integrated and sustainable mobility. These priority objectives for FS and Italy will be monitored and measured until the RCF expires in 2024.

## Transparency and business responsibility (2-25, 3-3)

In order to contribute more and more to the development and well-being of the countries where we operate, we must understand the trends and forces that will shape our Group in the future and act quickly to get ready for what is to come.

On this journey towards the future, **sustainability, responsibility, transparency, ethics and integrity** are the principles that guide the Group in the creation of corporate governance processes.

The values and rules of conduct in the Code of Ethics reflect **our commitment to ensuring that all people in or outside the Group always act lawfully and ethically.**

<p><b>Integrity and honesty</b></p> <p>Integrity and honesty can be seen in both big decisions and daily choices. They mean more than just following the rules, which alone does not suffice; they entail sincere, upstanding and transparent conduct that makes you feel good about what you're doing, even when no one is watching. They are the foundation of proper conduct and clear, coherent communication.</p>	<p><b>Responsibility and awareness</b></p> <p>Responsibility is in the DNA of our people. It is the awareness of the important role that each of us holds for passengers, colleagues and the places where we operate. We are aware of the safety and value of our passengers, our people, vehicles and infrastructure, the environment and local communities.</p>	<p><b>Passion</b></p> <p>We are passionate about our work, even if it can be tiring and demanding. We aim for excellence, doing our best and improving over time. This makes us the Group's best ambassadors at all times.</p>
<p><b>Courage and self-criticism</b></p> <p>All great innovations originate from the courage to change and the ability to integrate diversities. Our actions are always aimed at innovation, we accept ideas different from our own and we transform mistakes into opportunities to grow and improve.</p>	<p><b>Open-mindedness and respect</b></p> <p>To be openminded and respectful means to consider diversities as a resource, to welcome them as a stimulus for sparking creativity and an opportunity to understand those around us, be they colleagues, customers or any other person. They are values at the basis of fairness and merit recognition.</p>	<p><b>Teamwork</b></p> <p>We belong to a team capable of facing great challenges by working together in a close-knit and integrated manner. To be a team also means to collaborate in a climate of open-mindedness based on constructive participation and feedback for our mutual well-being.</p>

Source: Code of Ethics of the FS Group.



## Corporate governance (2-1, 2-9, 2-10, 2-12, 2-13, 2-15, 2-17, 2-18, 2-21, 2-22, 2-23, 2-24, 405-1)

The corporate governance structure of FS Italiane S.p.A. and its main subsidiaries is organised according to the traditional system: the Shareholders appoint a Board of Directors (the parent's BoD is responsible for management and is currently comprised of seven directors) and a board of statutory auditors (the parent's board of statutory auditors is responsible for controls and is currently comprised of three standing auditors and two alternate auditors). The Shareholders also appoint the independent auditors<sup>32</sup>, responsible for performing the statutory audit. Pursuant to article 12 of Law no. 259/1958, the Court of Auditors' Magistrate appointed to audit FS Italiane S.p.A. attends the meetings of the Board of Directors and the board of statutory auditors.

In accordance with the by-laws, the board of directors: (i) appoints a CEO; (ii) may assign proxies to the Chairperson, with the shareholder's approval, with respect to issues that may be delegated by law; (iii) sets up committees, where necessary, to provide consultation and make proposals (two committees were set up in FS S.p.A.: the Governance, Appointment and Remuneration Committee and the Control, Risk and Sustainability Committee); and (iv) appoints the Manager in charge of financial reporting.

The following chart represents FS S.p.A.'s corporate governance structure.

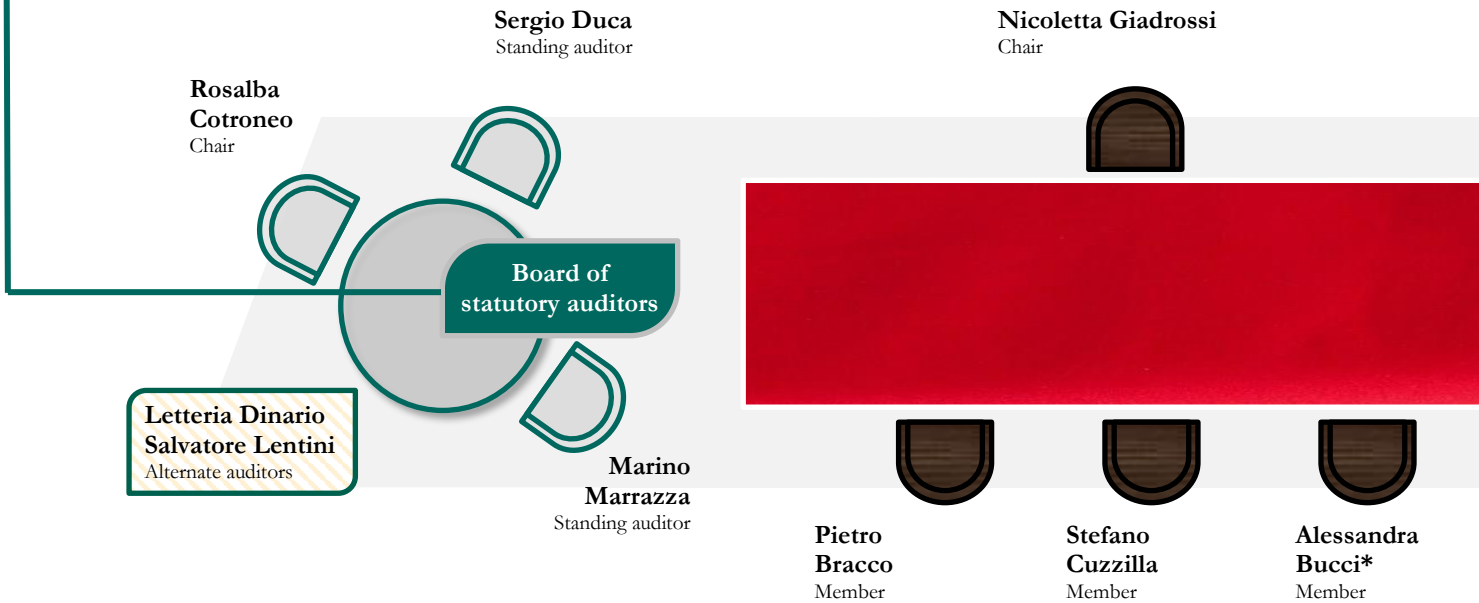
Additional information is provided in the Group's 2022 Annual Report (Directors' report, Report on corporate governance and the ownership structure).

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<sup>32</sup> KPMG S.p.A. was engaged to perform the statutory audit for both the Holding Company and the subsidiaries beginning from 2014. Based on the applicable special provisions set forth by (It.) Legislative decree no. 39/10 (article 16 et seq.), after FS S.p.A. became an "entity of public interest" by issuing the listed bonds in 2013, the engagement lasts for nine years (2014-2022). By a resolution of the FS SpA Assembly on March 21, 2023, it was resolved to appoint the new auditor as statutory auditor of Ferrovie dello Stato Italiane SpA for the period 2023-2031.

## Board of Statutory Auditors

The board of statutory auditors monitors compliance with the law, the by-laws and the principles of correct administration, particularly with respect to the adequacy of the parent’s organisational, administrative and accounting system and that it functions properly. When the parent became an entity of public interest, its board of statutory auditors also became the “Internal Control and Audit Committee” pursuant to article 19 of (It.) Legislative decree no. 39/2010, responsible for supervising financial reporting, the efficiency of internal control systems, internal audit and risk management, as well as the statutory audit and, finally, the independence of the independent auditors, especially with regard to the type of any non-audit services provided to the audited company.



## Control, Risk and Sustainability

Pietro Bracco (Chairperson), Riccardo Barbieri Hermitte and Stefano Cuzzilla are the members of this committee, which is responsible for providing proposals and advice to the board of directors in the latter’s assessments and decision on the internal control and risk management system, its approval of periodic financial and non-financial reports as well as the sustainability profile of FS’ operations and its interaction with all stakeholders.

## Green Bond Working Committee

Monitors the identified projects to ensure they meet the financing criteria\* through green bonds, as per the current Green Bond Framework (GBF) of FS SpA, assesses any eligible new projects within the current GBF.

## Ethics Committee

This committee carries out advisory activities and sets guidelines within the framework of the principles and rules of the FS Group’s Code of Ethics. Its main responsibility is to clarify the meaning and application of the Code of Ethics, examine any reports received, promote the appropriate investigations, guarantee the utmost confidentiality of the whistle-blower, provide support in the definition of ethics communication/training initiatives, examine any needs for amendments/additions, coordinates and maintains information flows with the Supervisory Board and periodically informs the company’s BoD.

## Sustainability Committee

The Sustainability Committee guarantees the integration of social and environmental aspects in the group’s economic-financial strategies and promotes the values and principles of sustainable development, in line with stakeholders’ needs and expectations.

## Sponsorships and Partnerships

This committee assesses and approves communication and/ marketing sponsorships and partnerships proposed by company units or group companies to make sure they are in line with group strategies and communication goals and suitably improve the group’s image and help promote the products/services of the parent and/or relevant Group company.

## Foreign Crisis Management

It is deployed by FS Italiane S.p.A.’s operating Travel security team. It works in collaboration with a specialised provider and the competent institutions.

\*Issued by the International Capital Market Association.

## Board of directors

It is responsible for managing the Company and carrying out all operations necessary to implement the corporate purpose. Pursuant to the Articles of Association (as most recently amended\*\*), the BoD pursues the sustainable success of business activities, with the aim of creating long-term value for the benefit of shareholders, taking into account the interests of other stakeholders relevant to the Company. It has reserved powers on matters of economic and strategic importance to the Group and on the vote to be cast at shareholders' meetings of subsidiaries identified as strategic (including appointments of the relevant corporate bodies).

**Luigi Ferraris**  
CEO



### Age diversity

Six members over 50

One member aged between 30-50

### Gender diversity

Three female members

Four male members

## Board of directors

## Shareholders' meeting



## Supervisory Body 231\*\*\*

**Rocco Blaiotta**  
Chair

**Maurizio Bortolotto**  
**Umberto La Commara**

## Manager in charge of financial reporting

**Roberto Mannozi**

**Riccardo Barbieri Hermitte**  
Member

**Paola Gina Maria Schwizer**  
Member

## Governance, Appointment and Remuneration Committee

Stefano Cuzzilla (Chairman), Pietro Bracco and Alessandra Bucci are members of this Committee. This Committee provides proposals and recommendations to the Board of Directors with respect to, inter alia, how key managers and members of the management and control bodies of group companies are selected and chosen; remuneration and incentive system guidelines and criteria; and criteria for measuring and assessing performance targets.



## Management

Group Transformation  
Corporate Affairs  
Administration, Finance & Control  
Technology, Innovation & Digital  
Strategy & Sustainability  
Communication  
Legal Affairs  
FS Security Project  
International  
Security & Risk  
Audits

## Credit Committee

The Credit Committee monitors the performance of group loans and receivables, highlighting any critical areas and promoting the necessary corrective action, while also assessing consolidated exposure to each counterparty and any possibility of offsetting amounts.

## Equal Opportunities Committee

This committee promotes initiatives and pro-active measures to offer women workers more favourable working conditions and work distribution, to help them achieve a better work/family balance.

## Italy's joint committee on training for the FS Group/Steering committee

It is responsible for steering and supporting group-funded training activities and subsequently assessing them, in addition to liaising with the trade unions at multi-industry and sector level. The Committee also serves as a "Steering committee" whose main responsibilities include: approving intercompany and/or individual company training plans to submit to Fondimpresa on behalf of the parties; monitoring their performance and assessing the success of completed initiatives; drafting and signing memoranda of understanding to obtain loans.

## Capital Allocation

In connection to the Group's M&A transactions, to significant investment/divestment initiatives and to participation in tenders called by the corporate structures and Group companies, it provides its approval, ensures consistency with the strategies and goals of the Business Plan of the FS Group, ensures the financial-equity sustainability and monitors progress.

## Crisis Management

Assures coordinated management of serious crisis situations arising from man-made or natural events nationally and/or internationally and relating to the safety of Group workers abroad, mobilises the required resources and information flows to ensure business continuity and oversees 'significant critical issues and incidents' in railway operations if they may potentially cause adverse impacts on several Group companies.

## Committees

## Other committees

\*On February 28, 2023, the BoD resolved to identify Alessandra Bucci as the Sustainability liaison director, with the task of: i) acting as a liaison between the Control, Risk and Sustainability Committee and the BoD; ii) collaborating in the organization of special inductions for the BoD; iii) participating permanently as an auditor in Control, Risk and Sustainability Committee meetings dealing with the subject matter.

\*\*Modification of Article 12 of the Articles of Association resolved by the Assembly of FS SpA on May 3, 2022, effective June 1, 2022.

\*\*\*On 17 December 2020, FS SpA's board of directors amended the parent's 231 Model and by-laws in relation to the composition of the Supervisory Body. In its new form, the Supervisory Body consists of three members, of which: (i) at least two members from outside the group, one of whom - with specific expertise in Legislative decree no. 231/2001 - is also appointed chairperson, and (ii) another member from outside the Group or, alternatively, the Internal audit manager in office. An external member other than the chairperson may be a member of the board of statutory auditors.

Group Measure no. 304/AD of 18 May 2022 was defined as the **Governance Model of the FS Group** consistent with the Group's Regulation, approved by the Board of Directors of FS SpA in March 2022. The Regulation governs the scope and methods of management and coordination activities, in order to outline a Group-wide organisational and information structure that is conducive to generating value for stakeholders, pursuing sustainable development in its environmental, social and economic dimension, inspired by the values of legality, ethics, integrity and transparency.

The structure of the Governance Model is functional to implementing the unitary strategic project of a Group that operates in several complementary sectors while ensuring autonomy in the management of the four sectors (Infrastructure, Passengers, Logistics and Urban Unit) and the operations of subsidiaries. In compliance with current legislation and without prejudice to the full operational, organisational independence and risk management of the direct and indirect subsidiaries, the new organisational model is set up as follows:

- the **Holding Company**, whose role is to provide general strategic guidelines and financial coordination in implementing the Group's common business strategy, exercise management and coordination activity in relation to the Sector Holding companies and other direct subsidiaries;
- the **Sector Holding companies**, i.e. companies controlled directly by the Holding company and identified to carry out management and coordination activities for steering, technical-operational orientation, coordination and control, including risk management models, systems and protocols, of the companies in the respective sector (Unit);
- the other companies that are not identified as Sector Holding companies and are subject to management and coordination by the Holding Company;
- the companies that belong to each Unit.

Within the new Governance Model, **FS SpA** plays the **role of management and coordination** towards the Sector Holding companies and other subsidiaries, with the aim of carrying out the **functions of general strategic steering** and **financial coordination in implementing** the Group's common business plan.

Within its steering and coordination activities, the Holding Company acts in the following areas: definition of general business and investment strategies; finance; establishing a presence in and developing foreign markets; changes to business scope; technological and digital innovation and development; corporate governance and structures; methodological guidelines for internal control and risk management models; macro organisational plans; institutional relations; regulatory compliance models (non-technical-operational or environmental); models for budget, control, planning and administrative and reporting processes; management/development policies for Group human resources and communication and image.

For the governance of cross-company (or staff) processes, the Holding Company also plays its role through management by **Professional Categories**, which means it has direct responsibility at Group level for effective and efficient operation of the relevant function, in order to foster the development and advancement of synergies and to oversee the development of skills and knowledge in a unified and consistent manner, also by sharing work models and experiences and systematic participation in the know-how available throughout the Group.

With regard to the professional categories under their responsibility and with the specialised and methodological support of the competent unit of the parent's Corporate Affairs Department, the Group process owners: define governance models, update group policies, guidelines, procedures and methodologies; perform a preliminary analysis of the companies' organisational documents to check their compliance with Group policies/guidelines and to provide methodological support, if necessary; monitor the implementation of such guidelines; identify and define professional standards for the relevant area/professional category and set parameters for updating the skills of the relevant professional category; ensure that company organisational models for general Group processes comply with the guidelines.

The FS Group ensures its stakeholders that the group is managed in line with the strategic goals. To this end, the Holding Company spurs group companies to adopt suitable internal control and risk management models. With regard to preventing risks as per (It.) Legislative decree no. 231/2001, FS Group companies adopt their own organisational, management and control models, make sure they are actually implemented and updated and set up supervisory bodies, with independent powers to act and control, responsible for monitoring that the models work properly and are complied with and for updating them. The Holding Company dictates the requirements and criteria for the appointment and operation of the supervisory body members.

FS Italiane S.p.A.'s organisational structure (in terms of organisational units/positions, missions and responsibilities, title and workplace location) and its variations are formalised and reported via organisational measures. Specifically:

- the CEO of FS Italiane S.p.A. signs and authorises the organisational measures regarding the units/positions that report directly to him;
- the Chairperson of FS Italiane S.p.A. signs and authorises the organisational measures regarding the Audit Department;
- the department heads who directly report to the CEO and/or the chairperson together with the Corporate affairs manager sign and authorise the organisational measures regarding variations to their respective departments.

This process ensures that the CEO's ordinary and extraordinary management responsibilities, including economic, environmental and social responsibilities, are deployed along the hierarchical chain.

For more details regarding the Group's corporate governance, please refer to the Report on Corporate Governance and Ownership Structure included in the Annual Financial Report 2022.

## Sustainability governance (2-24)

We believe that economic development, social inclusion and environmental protection can be pursued only through good sustainability governance. This is why we have defined and adopted a sustainability governance model and made the highest internal governance body, FS Italiane S.p.A.’s board of directors, accountable for it. In 2016, we established a Group Sustainability Committee to advise the group’s CEO (as chairperson of the Sustainability Committee), guaranteeing the integration of sustainability principles into business strategies.

### Board of directors

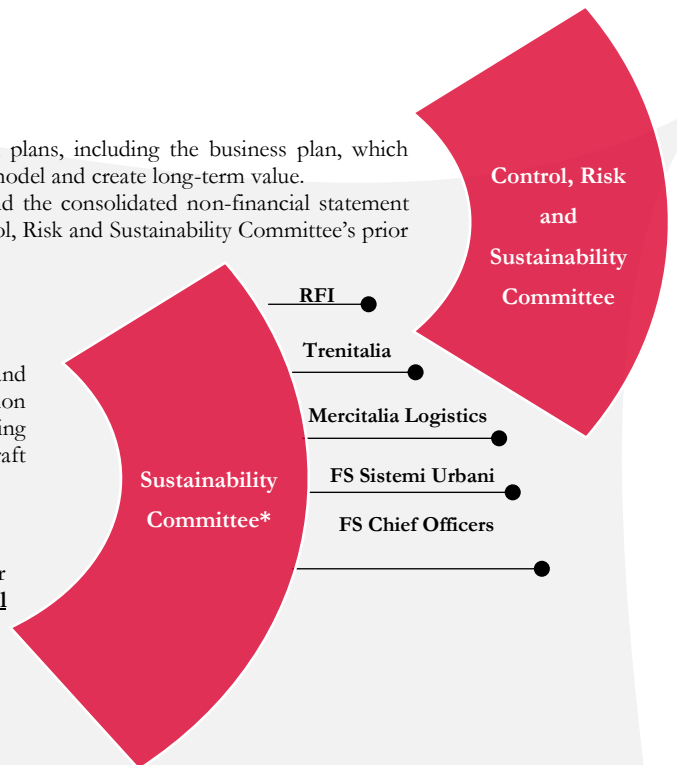
The board examines and approves strategic, business and financial plans, including the business plan, which includes objectives and guidelines to promote a sustainable business model and create long-term value. The board is responsible for approving the Sustainability Report and the consolidated non-financial statement pursuant to (It.) Legislative decree no. 254/16 (NFS), with the Control, Risk and Sustainability Committee’s prior approval.

### CEO

The chairperson of the Sustainability Committee assesses and approves the proposals of the board of directors regarding the integration of social and environmental aspects in the group’s strategies, including through dialogue with stakeholders and examines and validates the draft Sustainability Report.

### Chief Strategy & Sustainability

They define guidelines, methodologies and models for the proper implementation of sustainability policies and also act as technical secretary for the Sustainability Committee.



**In order to oversee sustainability issues at the group’s operating companies, aided by a suitable organisational structure, FS underwent a change management process in 2022 by revising the “Sustainability and Environment” professional category**



\*With Group organisational measure no. 243/AD of 15 December 2022, which replaces group organisational measure no. 76/AD of 15 December 2021, the members of the Sustainability Committee were renewed.

An induction process targeting Boards and management of the main Group companies was implemented, to strengthen knowledge and commitment on the topic of sustainability and its strategic value for FS Group, promoting a growth of corporate culture.

The training programme involving Boards, aimed at fostering a business model that ensures the balance of ESG components, consists of 2 sessions:

- **Entry-Level Session**, which provides basic knowledge on the main ESG topics;
- **Deep Dive Session**, extensively looking at specific topics to promote the integration of ESG principles into the corporate strategy.

The first Entry Level Session involved over 20 Boards<sup>33</sup>, and will continue into the second half of 2023, also involving management. The training content for managers aims to disseminate the essential principles of sustainability and provide a systematic view of the Group and the broader external context. Both induction programmes respectively include the participation of top Italian and/or global expert speakers with proven seniority and expertise, and sector specialists from within the Group.

## **Business integrity (2-12, 2-23, 2-24, 2-26, 205-1, 205-2, 205-3, 207-1, 207-2, 207-3, 403-1)**

We promote a company culture based on integrity, ethics, loyalty, probity, transparency and respect for the law, which are determinant principles in governing complexity, encouraging knowledgeable decisions. We prevent and abstain from any situation presenting a conflict of interest and reject and discourage any form of corruption at all levels in Italy as well as abroad. To ensure transparency with stakeholders in the management and control of the business, we have defined best practices through a solid system, consisting of rules, tools, activities, procedures and organisational structures, to protect the Group's reputation and integrity and the stakeholders.

### **Internal control system**

The internal control and risk management system (ICRMS) is a series of rules, procedures and organisational structures aimed at effectively and efficiently identifying, measuring, managing and monitoring main risks, to contribute to the company's sustainable success.

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<sup>33</sup> Starting in December 2022, the Boards of Anas, Blufferries, Blujet, Busitalia Campania, Busitalia - Sita Nord, Busitalia Veneto, Fercredit, Ferrovie del Sud-Est, Ferservizi, Fondazione FS, FS SpA, FS Sistemi Urbani, Metropark, FSTechnology, Grandi Stazioni Rail, Italcertifer, Italferr, Infrarail, Mercitalia Intermodal, Mercitalia Logistics, Mercitalia Rail, Mercitalia Shunting&Terminal, RFI, Terminali Italia and Trenitalia took part in the Entry Level Session.



FS Italiane S.p.A. uses the internationally renowned Internal Control Integrated framework (the “CoSO Report”<sup>34</sup>) as its reference framework for the implementation, analysis and measurement of the internal control and risk management system.

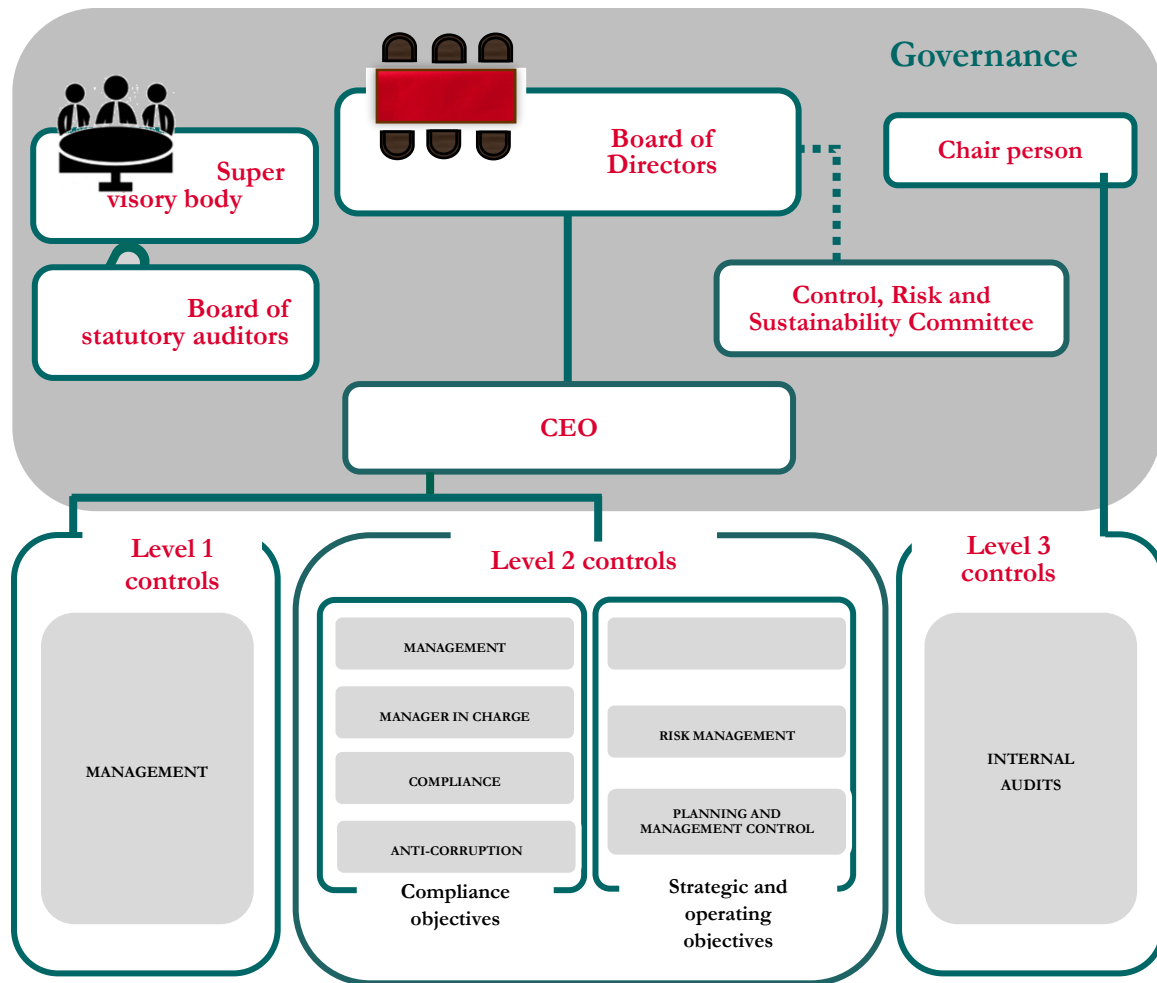
The internal control and risk management system consists of the following three control levels:

- **Level 1 controls:** to ensure the correct performance of operations and an adequate response to the related risks. These activities include periodically checking the effectiveness and efficiency of the design and functioning of controls to: i) ensure that they are tailored to their objectives, ii) check that they are updated to any changes in operations, iii) identify and promote any improvement actions. Management is responsible for defining and conducting these controls.
- **Level 2 controls:** to monitor the main risks with the aim of ensuring the effectiveness and efficiency of the related risk management and to monitor the adequacy and functioning of controls (for main risks). Level 2 controls also support level 1 in the definition and implementation of adequate management systems for the main risks and related controls. Management and other specific functions, like Risk Management, Compliance, Anti-Corruption and the Manager in charge of financial reporting conduct level 2 controls.
- **Level 3 controls:** to provide independent and objective assurance on the adequacy and effective functioning of the level 1 and 2 controls and, in general on the ICRMS as a whole. Independent, non-operating units, such as the Internal Audit Department, perform level 3 controls.

A brief description of the duties and responsibilities of the main parties involved in the internal control and risk management system is given below.

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<sup>34</sup> “Internal Control – Integrated Framework” published by the “Committee of Sponsoring Organizations of the Treadway Commission”.



**The Manager in charge of FS Italiane S.p.A.’s financial reporting**

In 2007, upon the shareholder Ministry of the Economy and Finance’s express request, FS Italiane S.p.A. created the position of “Manager in charge of financial reporting” on a voluntary basis, and the position became legally mandatory in 2013 pursuant to article 154-bis of the Consolidated finance act when the parent subsequently issued bonds listed on the Irish Stock Exchange (EMTN programme), resulting in FS Italiane S.p.A.’s status as a public interest entity pursuant to article 16 of (It.) Legislative decree no. 39/2010 as an “Issuer of listed financial instruments”.

The Manager in charge of financial reporting is responsible for establishing adequate administrative and accounting procedures for the preparation of the separate and consolidated financial statements and issuing, jointly with the CEO, attestations on the adequacy and effective application of the control systems.

The Manager in charge of FS Italiane S.p.A.’s financial reporting defines and updates the Group’s financial reporting control model (“262 Model”) in accordance with aforementioned article 154-bis of the Consolidated Finance Act and international standards (CoSO Report “Internal Control – Integrated Framework” published by the Committee of Sponsoring Organizations of the Treadway Commission).

The model requires the Holding Company and main subsidiaries to have Managers in charge of their financial reporting. The Manager in charge of FS Italiane S.p.A.'s financial reporting defines the group's annual action plan and monitors its compliance with Law no. 262/2005. This manager also issues guidelines for the preparation of administrative/accounting procedures, audits on their adequacy and whether they are operational and the issue of attestations on the internal financial reporting control system. The Managers in charge of the various companies' financial reporting implement and maintain the internal financial reporting control systems, continuously exchanging information with the Holding Company's Manager in charge of financial reporting. The 262 process consists of the following annual stages: definition of in-scope companies and processes, process mapping, risk and control assessments, issue/review of procedures, self-assessment to check that the controls are designed adequately and that they are effectively operational, independent tests, assessment of weaknesses and definition of action plans and attestations.

### **Compliance**

The Compliance Unit ensures that the Compliance Model of the FS Group is defined and updated, identifying the methodological standards and control systems at Group level, as well as performing periodical assessments on the compliance of the subsidiaries to check that policies and standards have been correctly implemented, and to put in place any communication and information actions on the matter. Consistently with the Governance Model of FS Group Italiane, the Compliance Manager supports the Chief Legal Officer, as Group Process Owner, in steering and coordination activities of the Legal & Compliance professional category. Specifically, the Holding Company's Compliance department ensures the centralised supervision of the professional category, unitary management levers and the identification and implementation of integration methods, promoting the development and advancement of synergies, fostering maximum professional integration and overseeing in a unified and consistent manner the development of skills and knowledge, also by sharing work models and experiences and systematically partaking in the know-how available within the Group.

Furthermore, the Compliance Unit monitors the national and international legislation and best practices which the corporate and Group rules must adhere to, ensuring and providing the necessary support for the definition of actions to take to ensure compliance with new provisions; it checks the alignment of internal organisational rules for any adjustments. It also provides specialised support, coordinating with other relevant company units, for the implementation and management of internal control models and compliance programmes relating to the anti-bribery & corruption management system ("ABC system"), and the antitrust compliance programme of Group companies. Under the coordination of the 231 Team, updates FS Italiane SPA's 231 Model with respect to developments in the applicable regulations and changes in the organisation and processes, monitoring the progress of any corrective actions. It also

supports decision-making processes by analysing business and trade compliance profiles with respect to trade development initiatives abroad (Sales Promoters, Sales Consultants and Business Partners), M&As, sponsorships and other strategic initiatives.

### Compliance Model of the FS Group

This model **protects against the risk of violating** national or international regulations or internal rules which could harm the companies' and group's reputation and lead the national, foreign or supranational legal or administrative authorities to impose sanctions, including restrictive measures and bans, **driving the implementation of specific organisational controls** to identify, assess, mitigate and monitor compliance risks and prevent behaviour that could be in violation of internal and external rules and regulations and ensure strict compliance with them to **promote a company culture based on integrity, ethics, loyalty, probity and substantial compliance**.

In line with the organisational solutions adopted by the other second and third level control departments comprising the general ICRMS, the Group has a decentralised compliance model. The Holding Company's compliance department acts as the chief group structure with separate compliance units/departments also set up at the subsidiaries. This enables suitable specialisation by type of business, gaining advantages from proximity to the business units and enhancing the specific organisational and operating characteristics of the individual companies, while also ensuring that the same compliance governance model is adopted throughout the Group.

This Compliance Model is implemented by Group companies within their own internal regulatory system, adapting its contents to their respective situation. The Compliance structures/controls of the Group's subsidiaries, based on their specific organisational and business features, as well as the operational complexity of the activities, ensure the application of operating methods consistent with those set out in the Group's Compliance Model.

To this end, the Compliance Unit assures specialist and methodological support to the subsidiaries' compliance units/departments on issues related to implementing the Group's compliance model.

### **Antitrust Compliance Programme**

The FS Group revised its internal antitrust compliance tools in order to further implement antitrust prevention tools and spread the culture of fair competition within group companies and among all personnel. This process led to the adoption of an **FS Group Antitrust Compliance Programme** which was fully implemented with the issue of the **FS Group Antitrust Policy**, as per group measure no. 274/AD of 3 October 2019. The document set up, inter alia, the **Body in charge of implementing the Programme**, comprised of the Compliance unit manager (Legal Affairs) and the Regulatory and Antitrust Affairs Manager (Corporate Affairs), who is in charge of updating the Programme and monitoring its implementation in agreement with the Antitrust managers of the individual Group companies.

**Such Body is also obliged to send an annual report to senior management** on antitrust compliance activities carried out – in accordance with principles of decision-making autonomy, segregation and transparency with which the group complies, especially as regards the Italian railway infrastructure operator. **This report** contains comments on:

- any reports received and measures taken as a result;
- awareness and training activities carried out, via online training or classroom courses, and the results obtained from tests on online training;
- any assessments and checks carried out, the results thereof and measures adopted to address any critical issues detected;
- activities planned for the subsequent year for the correct and efficient implementation of the Programme.

To integrate the Group Antitrust Compliance tools and in line with the Programme's general framework, the main Group companies are equipping themselves with specific compliance tools as further prevention measures against antitrust risks linked to the specific characteristics of their business. These compliance tools identify the areas that require most attention for each company, setting out rules of conduct to ensure compliance with and to safeguard fair competition in their specific areas of business.

### **Anti-Corruption**

The Anti-Corruption organisational structure is part of FS SpA's Security & Risk area, as a 'second level' safeguard of the internal control and risk management system, and defines and monitors the implementation of Group strategies, guidelines and policies on the fight against corruption, including by designing, implementing and governing the Anti-corruption Framework, the related integrated monitoring and reporting to Group governance and control bodies. Furthermore, it steers and coordinates the roles making up the relevant professional category.

Based on the guidelines on the Anti-corruption Policy, every company of the FS Group must set up an autonomous anti-corruption department, which must be operationally independent yet synergistic with other corporate control departments. An Internal Quality Review is carried out regularly, in order to ascertain conformity of the Group's anti-corruption safeguards to the stated mission and corporate regulatory framework, as well application of the methods set by the Holding Company.

## **Risk management**

Part of the Internal control and Risk management system, the Risk Management & Climate Resilience organisational unit, under FS SpA' Security & Risk area, ensures coordination of the Group's risk management process, through the design, implementation and governance of the corporate risk management system (Risk Management Framework<sup>35</sup>), and relevant integrated monitoring and reporting to the governance and control bodies. It also coordinates the methods applied by the Risk Management departments and safeguards of Group companies.

The FS Group's Risk Management Framework establishes the existing and potential areas, responsibilities, methodologies and tools for the effective management of the process to identify, assess, measure, manage and monitor the group risks to support risk-based decision-making processes. Adopting a single group-wide framework has enabled the Group to, inter alia:

- establish the scope of application of the risk management process, identifying the areas for action and the decision-making processes embodying such process;
- identify tools and group-wide consistent and coherent risk assessment and management models, establishing responsibilities and their application in the Holding Company and the Group companies, based on the type of activities and the area in which these activities are carried out;
- establish methods to interpret, analyse and present the findings of the shared risk management activities;
- promote the dissemination of a corporate culture more geared towards risk management
- promote the growth of the professional category, through the dissemination of a shared 'language' and the implementation of pathways for the development of the skills and expertise of the resources involved in the risk management process.

Consistently with the governance model of the FS Group, there is a clear distinction when it comes to risk governance between the role of the Holding Company's Risk Management department, which ensures the definition and monitors the implementation of Group strategies, guidelines and policies, and that of the departments/safeguards of Group companies, which ensure the application of the operational model to protect against business and operational risks, by implementing the strategies, guidelines and policies defined by the Holding Company. The Sector parent companies also coordinate and ascertain the implementation of the Framework within their Sector or Unit.

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<sup>35</sup> The Group's Risk Management Framework, inspired by the requirements of the Corporate Governance Code of listed companies and consistent with national and international best practices (including the "COSO Enterprise Risk Management Framework – Integrating with Strategy and Performance" and UNI ISO standard 31000:2018 "Risk management – Guidelines")

The Risk Management & Climate Resilience organisational structure ensures the implementation, methodological governance and monitoring of the Group Framework to manage and measure the corporate risks as a whole within a logic of Enterprise Risk Management. It coordinates the Group's Risk Management process, ensuring, for FS SpA, the definition of the risk profile and the identification, analysis, measurement, assessment and continuous monitoring of risks, while providing methodological support to subsidiaries. It ensures the integration of the risk management Framework with the Group's strategic and operational planning processes. It oversees the Project and Portfolio Risk Management framework to support the assessment, in terms of time and cost, of the risks pertaining to national infrastructure investments and international projects undertaken by the Group, also with reference to the projects under the Recovery and Resilience Plan (NRRP). In agreement with the responsible corporate and Group structures, it ensures the governance and implementation of the Group's climate resilience framework supporting the climate change Transition and Adaptation Plans, by defining guidelines, methodologies, risk scenarios and by pursuing strategic collaborations for the implementation of appropriate synergies and the promotion and participation in national and international projects/networks.

Within the wider Risk Management Framework, the Risk Assessment process, according to the methodology defined at Holding Company level, and consistently with the main international standards and market best practices (e.g.: UNI ISO standard 31000:2018 *Risk management – Guidelines*), aims at identifying and assessing the main risks that Risk Owners perceive as significant in the pursuit of corporate objectives, also with Environmental, Social and Corporate Governance in mind.

The Group has adopted the Risk & Control Self Assessment (RCSA) method for risk assessment, which is characterised by the active participation of the respective Risk Owners in identifying and assessing the risks related to their activities, putting controls in place as part of the Internal Control System and identifying possible improvement actions to contain risks.

### **Planning and management control system**

In line with the strategic guidelines and objectives that the board of directors has defined:

- **Strategy & Sustainability**, which, to generate economic, environmental and social value for all stakeholders, defines the Group's strategies, strategic positioning and the development of the Group's business both in Italy and abroad;
- **Administration, Finance & Control**, ensures oversight of the planning process, in line with the strategic guidelines and objectives defined by Strategy & Sustainability, and budget and control, and defines the financial, budget, tax and Mergers & Acquisitions policies.

### **Internal audit**

The Internal Audit Department is independent and objective for assurance and advisory purposes in order to improve the organisation's efficiency and effectiveness. It is responsible for: i) checking that the internal control and risk management system is operating and adequate, both on an ongoing basis and in relation to specific needs and to provide assessments and recommendations to promote efficiency and effectiveness; ii) providing specialist support concerning the internal control and risk management system to management, in order to improve the effectiveness, efficiency and integration of the controls in the business processes and to promote the constant improvement of governance and risk management.

The organisational and operational structure of the Group's Internal Audit Department provides for:

- the presence of the Internal Audit department in the Holding Company FS SpA and, as a rule, in direct subsidiaries. For the other Group subsidiaries, Italian as well as foreign, the Internal Audit department of FS SpA's direct subsidiary, jointly with the respective department of the Sector Holding company, decides whether to set up the department in its direct or indirect subsidiary, taking into account: i) the specific features and respective risk profiles, ii) the efficiency criteria, without prejudice to the objective of effectively monitoring its own internal control and risk management system;
- FS SpA's Internal Audit Department's provides guidelines, coordinates and controls the implementation methods of all the Group subsidiaries' Internal Audit Departments, including by: i) defining and updating guidelines, models, audit methodologies and monitoring/controlling their correct application; ii) managing the Internal Audit professional category, as Group Process Owner, also by approving candidates to head the subsidiaries' Internal Audit Departments.

The Internal Audit Departments<sup>36</sup> report to the Board of Directors, with the Chairperson of the Board acting as go-between. The Control, Risk and Sustainability Committee (where present), in coordination with the Chairperson of the board of directors, monitors the autonomy, adequacy, effectiveness and efficiency of the Internal Audit Departments.

The Internal Audit Departments provide operational support to the supervisory bodies of their respective companies in the performance of supervisory activities.

Internal audits are conducted on all departments, units, processes and/or sub-processes and IT systems with respect to the following risks and consequent objectives:

- effectiveness and efficiency of business processes;
- reliability of financial reporting;

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<sup>36</sup> In addition to Ferrovie dello Stato Italiane S.p.A., the following companies have Internal Audit Departments: Trenitalia, RFI, Ferservizi, Italferr, Busitalia - Sita Nord, Fercredit, FS Sistemi Urbani, Grandi Stazioni Immobiliare, Italcertifer, Ferrovie del Sud Est, Mercitalia Logistics, FS Technology, ANAS and FS International.



- compliance with laws, regulations, by-laws and applicable standards;
- protection of company assets.

In compliance with international professional standards<sup>37</sup> for performing Internal Audits, the purposes, powers and responsibilities of the Internal Audit have been formally defined in the *Internal Audit Governance Model*, known as *Audit Charter*. This document clearly defines the scope, main operational methods and information flows (specifically with Top Management and Control/Supervisory Bodies).

### **External controls**

- **Independent auditors:** since 2014, KPMG S.p.A. has performed the statutory audit of the Holding Company and its subsidiaries;
- **Court of Auditors' control:** the Court of Auditors verifies FS Italiane S.p.A.'s financial management, via a Magistrate who attends the meetings of the Board of Directors and Board of Statutory Auditors.

### **Organisational, management and control models pursuant to (It.) Legislative decree no. 231/2001 and Supervisory Bodies**

Group measure no. 306/P/AD of 20 June 2022, which replaced the previous measures issued since 2002, requires that FS Group companies to adopt and ensure the effective implementation of Organisational, Management and Control Models that adequately prevent the illegal conduct covered by (It.) Legislative decree no. 231/2001 and set up (i) a Body with independent powers of initiative and control with the task of supervising the operation of and compliance with the Models and of taking care of and/or putting forth their updates and (ii) reporting channels in compliance with the applicable legislation and internal regulations on Whistleblowing Management.

The aforementioned Group Measure, as a rule, requires the Supervisory Bodies to have a collective form<sup>38</sup> and be comprised of: (i) at least two individuals from outside the Group, one of whom possesses specific expertise on (It.) Legislative Decree 231/2001 and is also appointed Chair, and (ii) the Internal Auditing Manager in office or other individual from outside the Group. An external member other than the Chairperson may be a member of the Board of Statutory Auditors. If the Supervisory Body consists solely of external members, in order to encourage the integration and synergy of everyone involved in the internal control system, the same Supervisory Body, by resolution, decides whether (i) the Internal Audit Manager permanently sits in on the body's meetings, offering advice and support, or (ii) the Internal

<sup>37</sup> The purpose of the international Internal Audit Standards is to: 1. Promote adhesion to the binding elements of the International Professional Practices Framework; 2. Provide a reference framework for performing and developing a wide range of added-value internal audit services; 3. define the parameters for assessing the internal audit's performance; 4. Promote the improvement of the organisation's processes and activities.

<sup>38</sup> Group measure no. 306/P/AD of 20 July 2022 provides that Group companies whose organisations are less complex and/or smaller in size may set up a Body with only one member from outside the Group with extensive and specific expertise on the matter.

Audit Manager is called from time to time by the Supervisory Body to sit in on individual meetings or to discuss specific matters, always to provide advice and support.

In order to guarantee these bodies' independence, their members cannot hold similar positions with subsidiaries or parents or, in any case, have significant economic relationships with the company<sup>39</sup>, or with subsidiaries or parents, over the three years prior to being appointed.

Since 2003, FS Italiane S.p.A. has had its own Organisational, Management and Control Model as per (It.) Legislative decree no. 231/2001 (the "231 Model") which it regularly updates to ensure ongoing improvement. It was last updated on 26 October 2022 (see box below).

FS Italiane S.p.A. has set up an inter-departmental team, "Team 231"<sup>40</sup>, coordinated by the Compliance department, tasked with starting, inter alia, either on its own initiative or on a recommendation by the Supervisory Body, the activities to update the company's Model 231, propose updates, following an examination by the Supervisory Body, and ensure the Supervisory Body is regularly apprised.

Model 231 is available on the company intranet and the general part of the model is published on the corporate website, on the "Ethics, Compliance and Integrity" page designed as a single home for the Code of Ethics, the Anti-corruption Policy, Model 231, the ABC system, the Antitrust Compliance Programme, the Compliance Model and whistleblowing management. Regular training is provided on the model.

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<sup>39</sup> Except in fulfilling their duties as part of the Internal Audit Department and/or the Board of Statutory Auditors.

<sup>40</sup> The composition and tasks of Team 231 were last updated with the Group Measure no. 242/LEG-COA of 13 December 2022

### Update to Model 231 of FS Italiane SpA

On 26 October 2022 the Board of Directors of FS Italiane SpA approved the latest update to Model 231, which expands/updates the applicable types of crime taking into account regulatory changes, as well as reflecting the main organisational and governance changes at the Company.

Below are the various steps of the updating activities:

- analysis of corporate activities that are potentially significant under (It.) Legislative Decree no. 231/2001, identification of hypothetical ways in which crimes may be committed and at the same time, identification of the processes which might involve the risk of committing the offences;
- risk assessment and mapping, aimed at identifying in detail the conducts and activities at risk, which might lead to administrative liability pursuant to (It.) Legislative Decree no. 231/2001, with identification, for each risk-crime, of the related sensitive activities/instrumental processes and of the corporate structures responsible for the operating activities overseeing these activities.

Gap analysis of the internal control system through (i) the analysis of the design of the existing control system ('as is') overseeing the identified areas/activities at risk, (ii) the comparison of the existing control system with the requirements identified in the methodology applied and in the Guidelines/Best Practices of reference, also assessing their adequacy, and (iii) the definition of an action plan to be implemented to further strengthen the internal control system with a view to continuous improvement.

### Tax transparency

The Holding Company's Board of Directors is directly involved in tax governance. At its meeting held on 16 April 2019, the Board issued the Ferrovie dello Stato Italiane's Tax Strategy as the cornerstone of the broader Tax Control Framework (TCF). This strategy sets out the parent and Group objectives in managing tax changes, defines the risk management criteria and also outlines the rules of conduct to be adhered to.

Specifically, the board plays a guiding role over tax risk management and performs this role by managing the TCF which assigns roles and responsibilities at all company levels. The TCF identifies the key figures in the tax risk management and control process as the Group Tax director, based in the Administration, Finance & Control Department, the Tax manager of the FS Group companies equipped with a tax risk control system, the Holding Company's Tax compliance manager and the group companies' Tax compliance managers.

Within the broader Tax Control Framework, the FS Group internal control model on the recognition, measurement, management and control of tax risk<sup>41</sup> (the “Tax risk control model”), which was designed to fully and efficiently integrate with the Group’s financial reporting model (“Model 262”), identifies the controls to be adopted to detect, measure, manage and control the tax risks inherent to company processes, thus defining how to manage the control process:

- i. mapping and measuring tax risks linked to company processes;
- ii. identifying procedures related to company processes with tax effects;
- iii. describing controls protecting against tax risks and assigning relevant roles and responsibilities;
- iv. establishing effective monitoring procedures to detect any weaknesses or errors in its functioning and activate any corrective actions necessary;
- v. establishing effective procedures to update the model following any changes in the company or the relevant legislative framework;
- vi. reporting annually to management bodies.

The model procedures and controls pertain to all company processes presenting a tax risk and assign responsibilities for complying with tax regulations to all employees involved in the process activities.

In order for the tax control framework to function effectively, an awareness of tax risk must be spread and promoted at all company levels, along with adequate knowledge of the rules and principles of the tax risk control system. To this end, a specific section has been created on the company intranet dedicated to cooperative compliance which provides descriptions of the relevant regime, legislation and practice, essential TCF documents, training courses on tax issues and the relevant support material.

Through the above controls applied at all company levels, the tax control framework helps reduce the loss of economic value which would arise from incorrect application of tax regulations in the form of higher taxes, penalties and interest - expenses which would cause economic damage as well as harming its reputation.

Aware of the need to promote a corporate culture based on the principles of honesty, integrity and compliance with tax regulations and the importance of adequately managing the tax risk intrinsic to company processes, and to safeguard its position and reputation, FS Italiane S.p.A. together with the subsidiaries Trenitalia S.p.A. and Rete Ferroviaria Italiana S.p.A. signed up to the tax cooperative compliance programme as per (It.) Legislative decree no. 128/2015. The purpose of the programme is to foster a new form of communication and stronger cooperation, focused on guaranteeing rights and facilitating relations, between the tax authorities and taxpayers equipped with an effective system for

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<sup>41</sup> Tax risk control model is implemented, with the necessary specifications, by Rete Ferroviaria Italiana S.p.A. and Trenitalia S.p.A. which, jointly with FS, have adhered to Cooperative Compliance. However, the Holding assesses the advisability of applying the Model, as a privileged tool for controlling and managing tax risk, to other Group companies, regardless of their adherence to the collaborative compliance scheme.

detecting, measuring, managing and controlling tax risk, intended as the “risk of operating in violation of tax regulations or against principles or rules”.

Via the tax cooperative compliance programme, FS has set up constant communication with the tax authorities in order to assess together the elements susceptible to generating risk, before filing tax returns or complying with other tax obligations, thus pre-empting potential tax disputes.

**Certified Management Systems**

Ferrovie dello Stato Italiane S.p.A. and the main Group companies are steadfastly committed to implementing, certifying and maintaining their Management Systems, adopted on a voluntary basis, for the ongoing improvement of the Group’s performance<sup>42</sup>, using these tools to strengthen the environmental and occupational health and safety components of the internal control and risk management system.

	Quality	The environment	Occupational health and safety
		✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
		✓	
	✓		✓
	✓		

<sup>42</sup> For more information about the certifications and the scope of the group’s operating companies’ management systems, see the final table in the *Company highlights* annex attached to this Report.



## Control and prevention of infection on board trains and in meeting places

**Trenitalia's Biosafety Trust Certification** was renewed. It is the world's first railway company to receive this certification, according to the certification scheme developed by RINA, that awards the best practices adopted in preventing and controlling infections in meeting places managed by the Company and on trains and installations to ensure the highest levels of safety for passengers, employees and suppliers.

Although, during the year, the health emergency due to the SARS-CoV-2 virus pandemic ceased, the infection prevention and control management system was kept in place as a valid tool for minimising the risk of direct and indirect infection from a number of viruses and bacteria and to meet the needs of the community.

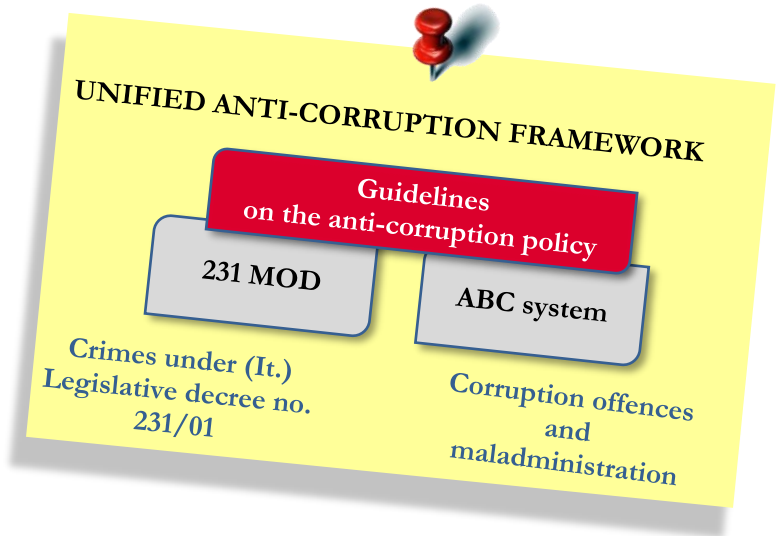
The management system for risk prevention and reduction adopted by the company, integrated with the Environmental, Occupational Health and Safety and Quality Management Systems, periodically involves an interdisciplinary team in order to identify possible infectious agents that may be found in living and working environments, assess their infectious risk and therefore define the actions to eliminate or mitigate them.

### ABC system

**The FS Group conducts its business in compliance with the principles of integrity, ethics and zero tolerance for corruption.** The Group has adopted a Code of Ethics and Model 231, and joined the United Nations' Global Compact, the tenth principle of which is to "work against corruption in all its forms", demonstrating its commitment to operating in accordance with these principles.

To further support this commitment, since 2017, the Parent has voluntarily used a **single self-regulatory tool to prevent corruption**. Called the **Anti-corruption Framework**, this tool is based on two management and control models:

- **Model 231**, for criminal offences involving corruption in the interest or to the benefit of the entity;
- **The anti-bribery & corruption management system (ABC system)**, set up to implement the *Anti-corruption policy guidelines* which also form an integral part of the Framework and contain directions for the creation of an effective anti-corruption system at FS Italiane S.p.A..



**The ABC system** strengthens protection against corruption taking into account the cases of corruption offences and those of maladministration, i.e. all cases of deviation from rules, including internal ones, involving disregard for the aforementioned principles of integrity, ethics and legality.

**FS Italiane S.p.A.'s direct and indirect subsidiaries have adopted their own respective frameworks**, which they adjust to their specific organisation and business, while remaining in compliance with the applicable legislative obligations.

In July 2022 the BoD of FS SpA approved the **Anti-corruption Policy** of the Ferrovie dello Stato Italiane Group, with the aim of ensuring a consistent system of rules and safeguards within the FS Group. The Anti-corruption Policy is applicable and mandatory also for third parties that have professional or business dealings with the companies of the FS Group and is published on the companies' website and intranet.

What is more, during 2022 the 'integrity clauses' of the contractual formats of FS SpA, as well as the standards of employment contracts and the disclaimer of Group organisational documents were updated, in order to ensure the Anti-corruption Policy is fully disclosed within as well as outside the Company, and it is complied with by all recipients.

The Anti-corruption Policy contains control principles that are widely applicable and rules of conduct for 14 sensitive areas, while the anti-corruption models of individual companies implement and manage measures overseeing their specific processes, with regard to the regulatory, legal and operational context of reference.



Consistently with this setup, the **ABC systems identify the prevention, control and organisational tools** to tackle specific risks and the characteristic processes of individual companies. Specifically, the ABC system of FS SpA centres around processes relating to the following areas: *Procurement and Contracting, Advisory Engagements, International Business Development, Membership Fees, Sponsorships, Co-marketing, Gifts and Donations and Human Resources*, considered by the relevant legislation and best practices, as being the most exposed to the risk of corruption.

The analysis of the aforementioned areas is conducted by defining and monitoring Key Performance Indicators (KPI) and Key Risk Indicators (KRI). The standards of conduct of the ABC system are implemented in corporate provisions, so that the rules of conduct to be complied with during activities are immediately apparent and can therefore be easily applied.

This set of tools was defined in 2022 also for the additional sensitive areas **Relations with the Public Administration and with noteworthy Private Entities** and **Relations with Private Subjects** - identified on the basis of the integrated analysis of the inputs available to the Anti-Corruption department, and will be published upon the next update to the ABC system of FS SpA.

Anas SpA in December 2021 obtained certification of compliance of the anti-corruption management system with the international standard UNI ISO 37001:2016, validated in 2022 at the outcome of the first surveillance.

The ABC system ends with a **schedule** that identifies the activities for the implementation of the measures it describes and who will carry them out, as well as the deadlines. **An integral part of the ABC system and updated** each year, the schedule reflects the Company's commitment to **pursuing an anti-corruption policy that is truly effective and goes beyond mere compliance.**




In order to identify room for enhancement in the ABC system (e.g., further risk areas for which specific prevention tools should be put in place), FS S.p.A. completed its first **Anti Bribery&Corruption Risk Assessment** campaign in 2021.

The Anti Bribery&Corruption Risk Assessment was carried out using the **Control Risk Self-Assessment** methodology, involving the managers of all units that report directly to the CEO/Chairperson in analysing the processes under their responsibility in terms of inherent risk and assessing controls in place in order to estimate the level of residual risk. This methodology is based on relevant ISO standards (31001) and was developed with the support of the parent's Risk Management Unit.















The organisational and governance developments that took place at FS from mid 2021 and throughout 2022 call for an update of the Risk Assessment. Pending the integrated analysis of the whole set of inputs available to the Anti-Corruption department, gathered between 2021 and 2022, the additional areas **"Relations with the Public Administration and with noteworthy Private Entities"** and **"Relations with Private Subjects"** were identified, for which specific standards of conduct and indicators of possible deviations have been prepared, which will enrich the upcoming edition of the ABC system of FS SpA.

## Other rules and policies to safeguard processes at risk of corruption

FS Italiane S.p.A. also reinforced protection against corruption in 2022 by issuing specific rules and policies.

**Issue  and revision ** 

**of rules and policies safeguarding certain processes at risk of corruption**

- ✓ Guidelines for the **management of relations with the Public Administration** and with **noteworthy Private Entities** 
- ✓ Policy on the proper and safe use of **Digital Resources** 
- ✓ **Anti-corruption Policy** of the Ferrovie dello Stato Italiane Group 
- ✓ Procedure for **taking part in national and international calls for tenders** of the Group 
- ✓ **Sponsorships and Partnerships Committee** 
- ✓ Procedure for the management of **Sponsorships, Partnerships, Co-Marketing Initiatives** 
- ✓ Group **governance model on engaging and monitoring consultants and similar professionals** 
- ✓ Procedure on **Recruiting Critical Positions** 
- ✓ Group Guidelines and Procedure for **Assignment, Management and Revocation of Powers of Attorney** 
- ✓ **Green Bond Working Committee** 
- ✓ Management of purchases of **goods and digital and technological services associated with and/or with digital impact** 
- ✓ Purchasing procedure via **petty cash, advance orders and company credit cards** 
- ✓ Guidelines and procedure for **remuneration policies and incentive systems** 
- ✓ Guidelines and procedure for **Participation in Associations and appointment of Group personnel** 


## Whistleblowing and whistleblower report management procedure

On 6 October 2021, FS Italiane S.p.A.'s Board of Directors updated the **parent's procedure for handling whistleblower reports**<sup>43</sup>, implementing (It.) Law no. 179/2017 (known as whistleblowing law).

The procedure governs the receipt, analysis and handling of reports sent (also anonymously) by people from inside or outside the Group on events that could involve illegal or irregular conduct or, in any case, conduct in violation of: i) Model 231 and the procedures that implement the model and/or the ABC system; ii) the Code of Ethics; iii) the laws or regulations or internal regulations or measures issued by the authorities and/or, in any case, that could cause damage or jeopardise the FS Group, even just to its image or reputation.

<sup>43</sup> Issued with Group Organisational Notice no. 73/AD of 17 November 2021.

The confidentiality and probity of the whistleblower and the reported parties are guaranteed. FS forbids any type of direct or indirect disciplinary measures, retaliation or discrimination against whistleblowers following the report.

 **Invia una segnalazione**

FS S.p.A. set up an **IT platform** as a preferential channel for **managing whistleblowing reports** as it immediately ensures the confidentiality of whistleblowers and adequate security measures for the information.

The [platform](#) may be **accessed either via the internet or the company intranet** (in the specific section on the “[Ethics, Compliance and Integrity](#)” page) to report violations of:

- ✓ FS e S.p.A.’s Organisational, Management and Control Model pursuant to (It.) Legislative decree no. 231/2001 and implementing procedures;
- ✓ the Anti Bribery&Corruption management system;
- ✓ the FS Group’s Code of Ethics;
- ✓ laws or regulations.

**The Group’s Code of Ethics**, which was updated in February 2018 and is available on the company intranet and website, **states that anyone may refer to their company’s Ethics Committee should they have questions or doubts or need clarifications** about the meaning and application of the Code of Ethics. They may contact the committee by e-mail, post or using the other communication tools that the company provides. The committee treats the requests **seriously, fairly and rapidly**.

**In 2022, FS S.p.A.’s Ethics Committee received and processed 46 reports**, 19 of which were closed/archived (during the same period, the Ethics Committee also closed/archived 31 reports received prior to 2022), **and FS S.p.A.’s Supervisory Body received and processed 18 reports**, which were closed/archived (during the same period, the Supervisory Body closed/archived 4 reports received prior to 2022).

During the year, a data flow was activated, relating to **corporate-level** reports; specifically, **in 2022 subsidiaries received a total of 401 reports**, of which 265 were closed/archived in 2022. Furthermore, in 2022 subsidiaries **closed/archived 124 reports received prior to 2022**.

### Anti-corruption policy awareness, communications and training

By implementing the directive criteria of the Anti-corruption Policy Guidelines, the ABC system requires management accountability, a culture of risk prevention and ongoing training and communication, among other important elements<sup>44</sup>.

The guidelines recognise the importance of spreading awareness about anti-corruption to FS Italiane S.p.A.'s management and personnel, which includes specific training and communications projects, with the conviction that knowledge of the rules governing business conduct and a culture of integrity constitute an essential condition for the knowledgeable application of regulations as a means of preventing corruption.

At FS SpA, **two training clips** were published in 2022 on the topics of traceability and person in charge of drawing up the tender, identified by an internal survey, the 3 clips published in 2021 were updated and restyled, and digital training was provided on *Hospitality and Gifts*.

These vertical sessions follow the e-learning course (rolled out by the parent between late 2019 and early 2020) which continues to be provided to new hires.

**With regard to communications**, alongside the [\*Ethics, compliance and integrity\*](#) page on the **FS S.p.A. website**, which summarises the objectives, tools and principles of FS S.p.A.'s model, in order to share the parent's commitment to ethics, lawfulness and integrity with the public, there is an intranet page on the **ABC system** which contains the models prepared by FS SpA and other Group companies, as well as other ABC system content which is permanently available. What is more, in 2022, the indicators of possible deviations of the ABC system were published in browsable format on the intranet site and the Anti-corruption Policy was published on the intranet and Internet website, in Italian and English.

With regard to training on the ABC system, starting in December 2022, **three training clips** on the *Purchases and Contracts* were provided to companies (Contract Manager, Conflict of Interest, Collaborative Supervisory Agreements), and **classroom training** was carried out, in 4 sessions, on the *Group's governance model on engaging and monitoring consultants and similar professionals*, which was attended by 416 people from Group companies, including FS SpA.

Finally, the Workshop on ***NRPP and FS Group: challenges and tools to safeguard lawfulness*** was carried out in September. About 400 people from the main companies were invited to attend the event, either streamed or live, which was promoted by FS SpA's Security & Risk as part of the initiatives linked



<sup>44</sup> The scope of the analysis includes the following companies: RFI SpA, Trenitalia, FS Spa, Italferr, Ferservizi, Gs Rail, Busitalia Sita Nord, Busitalia Campania, Ferrovie Sud Est E Sa, FStechnology, Mercitalia Shunt&Terminal, Metropark, Fercredit, Fs Sistemi Urbani, and Busitalia Veneto.

to the implementation of the ABC system of FS SpA with presentations by the CEOs of the main NRRP funds recipients and representatives of the authorities and the police.

Also in 2022, on the **International Anti-Corruption Day** promoted by the **United Nations**, the FS Group published specific messages on the websites and intranet to state its commitment to conducting its business in compliance with the principles of integrity, ethics and lawfulness and to disseminating a corporate culture inspired by *zero tolerance for corruption*.

**Ad-hoc initiatives were also planned for communicating, training and raising awareness** about risks and sensitive activities for the company and the related prevention tools identified in Model 231. With regard to training activities, arrangements were made for the e-learning training module targeting the entire company population to be updated, and for classroom training sessions to be provided to the Group Process Owners. With regard to communication, the 231 Model and relevant attachments were published on the company intranet and the general part of the model was published on the dedicated subsection of the *Ethics, compliance and integrity* page of the FS website to emphasise the binding nature of the contractual clauses regarding integrity that require compliance therewith.

## Protection of Human Rights

The FS Group promotes the protection of human rights for its employees, customers, citizens, suppliers and business partners, helping create a responsible value chain and operating in accordance with the United Nations' Universal Declaration of Human Rights and the fundamental conventions of the International Labour Organization.

Among the fundamental principles of the *Sustainability Policy* (issued in 2019) on which the Group's actions are based, respect for human rights and the commitment to creating a responsible chain stand out. This commitment was confirmed in the Code of Ethics (which guides the group in its relationships with stakeholders). To strengthen the commitments already taken at Group level, the main operating companies issued their own sustainability policies, making the respect and promotion of human rights in Italy and abroad a pillar of their business models. Furthermore, the Group promotes open and inclusive workplaces, it is against any discriminating or harmful behaviour, prevents any form of irregular work and encourages policies that are supportive of personnel well-being.

In 2017, the Group joined the UN's Global Compact ("GC") network, undertaking to comply with the ten human rights, labour, environmental and anti-corruption principles and include them in its way of doing business. These principles integrate and reinforce those already established in the Group's Sustainability Policy, Code of Ethics, Model 231, Anti Bribery&Corruption management system and the Anti-corruption Policy. In particular, with respect to human rights, by signing the Global Compact, the Group has formally undertaken to:

- uphold and comply with international human rights provisions;
- ensure that it is not complicit in human rights abuses.

The Group maintains its commitment to prevent any type of human rights violation through:

- the use of specific, standard clauses<sup>45</sup> about respect for human rights in contracts with suppliers, having suppliers sign the Group's Code of Ethics and introducing a sustainability criterion in the supplier qualification process<sup>46</sup>;
- the pursuit of better methods for supply chain management thanks to the participation in the *Railsponsible works*, an initiative that brings together major railway companies and the Group's commitment in the preparation of the *Sustainable procurement management guidelines* to integrate the more recent national and international sustainability standards - including human rights - in the procurement of goods, service and labour;

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<sup>45</sup> With specific regard to the assignment of contracts and concessions for works and services entailing significant manual labour, the FS Group applies social clauses and requirements to comply with certain social and labour protection standards to promote the occupational stability of personnel.

<sup>46</sup> In the second half of 2017, RFI introduced a new criterion for supplier qualification in tenders which considers human rights (the fight against child and forced labour, anti-discrimination and support for the fundamental human rights). Inspired by RFI's initiative, the Group began a *Sustainable Supply Chain Management* project to improve the sustainability of FS Group suppliers. Reference should be made to the section on Sustainable procurement for details.

- rights protection for passengers with disabilities and reduced mobility. The Group offers an assistance service at 332 stations for passengers with physical, sensory or motor disabilities that temporarily or permanently affect their mobility, ensuring their right to move around easily. The service is organised by the Sale Blu centres at 15 of Italy's main stations and the new national Sala Blu created in response to the public health emergency. In 2022, 6 training sessions were provided aimed at improving the technical-relational skills of Sale Blu operators, which involved around 120 resources, and the development of a new dashboard for real-time monitoring of telephone queues, in order to optimise waiting times, was kicked off;
- protecting the rights of disadvantaged people who seek shelter at railway stations. For several years, the group has conducted a solidarity project in collaboration with local bodies and third sector organisations by loaning spaces inside or near railway stations for free use to associations and bodies that relieve marginalisation and social distress<sup>47</sup>.

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<sup>47</sup> Reference should be made to the section on *Relationships with communities* for details.



## ESG rating and other awards

The group’s commitment to **improve its ESG performance** is reflected in its **sustainability ratings**. By applying various methods, the analysts assess the group’s performance in environmental, social and governance terms, its ability to see ahead in the long term, ability to minimise risks and also reach the SDGs.

The **important results achieved** include:

ESG RATING	RANKING	DETAILS
	<p>The Group’s score in the CDP Climate Change questionnaire went from B in 2021 to <b>A-</b> in 2022, above both the European average and the railway sector average.</p> <p>The CDP assessment – which involves more than 18,000 companies worldwide – takes into account the objectives, strategic and financial planning solutions, governance, risk management processes, the ability to report the types of greenhouse gases, the energy saving and efficiency improvement initiatives, etc.</p>	<p>Carbon Disclosure Project is a global not-for-profit organisation that supports organisations in reporting their energy consumption, emissions and actions taken to reduce their environmental impact.</p>
	<p>The group’s ESG profile was rated «<b>Advanced</b>» overall (total score: <b>65/100</b>), <b>ranking fifth</b> among 44 companies at <b>European level</b> in the “Transport and Logistics” segment.</p>	<p>Moody's ESG Solutions is a business unit of Moody's Corporation which addresses the growing global demand for ESG analyses and in-depth climate information.</p>
	<p>The group received a <b>risk rating of 15.2</b>, falling under the <b>low</b> ESG risk bracket.</p>	<p>Sustainalytics is a leader in ESG research and ratings. It supports many of the world’s leading investors that incorporate ESG insights into their investment processes.</p>
	<p>The group was rated <b>BBB</b>, in the «<b>Average</b>» bracket.</p>	<p>MSCI ESG Research provides ESG ratings, on a scale of AAA to CCC, to global public companies and some private companies, based on their exposure to ESG risks specific to the sector and capacity to manage such risks.</p>
	<p>The FS Group took part in the <b>2022 Transport Benchmark</b> conducted by <b>World Benchmarking Alliance (WBA)</b> and its rating earned it <b>seventh</b> place in the WBA's sample of ninety companies among the world's leading transportation companies, assessed according to their progress towards decarbonisation and just transition.</p>	<p>WBA is an organisation gathering 300 different stakeholders, interested in building tools to ensure progress towards a sustainable future. It periodically performs industry assessments, including the WBA Transport Benchmark which ranks the world’s 90 most influential transport companies on their low-carbon transition (ACT) as well as on key social indicators for a just and equitable transition that leaves no one behind.</p>

In 2022, the Group also received many awards and accolades, most notably:



The FS Group won the “ <b>Women in STEM</b> ” award at the “ <b>Universum Award Italy 2022</b> - Students and young professionals edition” of Universum, ranking first as the ideal employer for female STEM students (Science, Technology, Engineering and Mathematics)
In 2022, the FS Group was ranked first again by <b>Potential Park</b> , a Swedish talent communication company, for the management of the online candidate experience and for the commitment to constant engagement with candidates
The FS Group took <b>first place</b> in the <b>Italy’s best employer</b> ranking in the <b>Transport and Logistics</b> category <sup>48</sup>
Among the <b>digital stars</b> of Italy, <b>Busitalia</b> and <b>Ferrovie dello Stato Italiane</b> ranked respectively <b>second</b> and <b>fifth</b> in the mobility and transport segment <sup>49</sup>
The <b>Diversity Brand Index</b> (DBI) <sup>50</sup> includes <b>FS Italiane</b> among the <b>20 most inclusive top brands in Italy</b> , recognising it as one of the most active in fostering greater social inclusion through effective initiatives, within the Company as well as in the national economic system at large
The FS Group, with its “ <b>Smart wagons</b> ” <sup>51</sup> project, was awarded the “ <b>2022 Innovation Award</b> ” by <b>Smau</b> , the must-go event on innovation and startups in Italy
<b>Ferrovie dello Stato Italiane</b> and <b>Busitalia</b> ranked respectively <b>first</b> and <b>second</b> in the <b>Railway</b> and <b>Bus</b> sector in the survey <b>Green Star - The most sustainable companies 2022</b> <sup>52</sup> , in the <b>Transport</b> category
Ferrovie dello Stato Italiane is again the first company in the Transport cluster to be included in the <b>ESG Perception Index</b> <sup>53</sup>
For the fourth year in a row, Italferr was included in the ratings compiled by <b>Engineering News-Record</b> <sup>54</sup> , attesting to the excellence shown in major transport infrastructure projects in Italy and around the world
Mercitalia Rail, a company of the FS Group’s Logistics Unit, received the <b>Logistics Award</b> in the “ <b>Transport and sustainability</b> ” section. The award was assigned by Assologistica for the “Green Alps” service, an environmentally-friendly Italy-France link that carries by train a quantity of bottles of water equivalent to approximately 5,000 trucks a year, with no CO <sub>2</sub> emissions.
The FS Group was awarded as <b>Best in Media Communication</b> , a certification set up by Fortune Italy and Eikon Strategic Consulting, which was delivered in Rome during the BIC Convention. Through an integrated system, a specific commission assessed the results of the FS Group’s communication on national and local, conventional and digital media
Ferrovie dello Stato Italiane was recognised as <b>Ambassador Company for Women’s Rights</b> at the 2022 Awards of <b>Differenza Donna Aps</b> , the not-for-profit organisation that has been active in fighting gender-based violence since 1989 and currently manages the national domestic violence hotline 1522 of the Equal Opportunities Department
The <b>StationLAND</b> project of RFI took first place at the awards of the ESRI User Conference of San Diego, in California. After being awarded at the International Sustainable Railway Awards hosted by UIC (Union Internationale des Chemins de fer) in Berlin, the location intelligence platform developed by the Stations Department of RFI stepped onto the podium again to receive the prestigious award of the Environmental System Research Institute (ESRI) <sup>55</sup>

<sup>48</sup> The survey was carried out by Corriere della Sera in collaboration with Statista.

<sup>49</sup> The study was carried out by the German Institute for Quality and Finance (ITQF) and its media partner La Repubblica Affari&Finanza.

<sup>50</sup> Curated by Diversity and the strategic consulting firm Focus MGMT, the Diversity Brand Index measures and awards the ability of companies to develop a culture geared towards diversity and inclusion.

<sup>51</sup> A system capable of transforming railway wagons into smart and digitalised systems, equipped with on-board computerised systems and sensors for tracking and monitoring the main travel and operating data.

<sup>52</sup> Conducted by the German Institute for Quality and Finance (ITQF) in collaboration with the Institute for Management and Economic Research (IMWF) based in Hamburg, the survey uses social listening to take into account almost one million pieces of online content regarding the green impact of companies in Italy.

<sup>53</sup> Carried out by Reputation Science, a reputation analysis and management company. The Observatory examines leading companies on the Italian market to produce a six-monthly ranking of the top 200 companies perceived as more sustainable on the Internet. The analysis assesses the brand’s proximity to the 17 sustainability pillars set by the UN and produces an indicator for each from (0 to 100) based on qualitative-quantitative and structural parameters.

<sup>54</sup> The top US magazine on engineering and construction, which classifies the leading engineering companies based on their global turnover and international projects.

<sup>55</sup> US multinational, world leader in geospatial solutions, geolocation and geographic information systems.

## Integrated management of risks and opportunities (201-2)



The FS Italiane Group operates in sectors with highly complex and varied activities (designing, building and maintaining infrastructure, operating railway and road networks, providing passenger and freight transport services and managing real estate assets), which make it imperative to manage risks in order to ensure the Group's continuity and sustainability in the medium to long-term.



The Group has defined a model for controlling these risks, described in the Internal Control and Risk Management System. Within this framework, the Risk Management & Climate Resilience organisational unit of Ferrovie dello Stato Italiane ensures coordination of the Group's risk management process, through the design, implementation and governance of the corporate risk management system (Risk Management Framework), and relevant integrated monitoring and reporting to the governance and control bodies. The Business Unit parent companies coordinate and ascertain the implementation of the Framework within their Unit. In 2022, through a single methodological coordination within the broader Risk Management Framework, the main companies of the Group continued their risk assessment campaign, mainly focused on their typical operational and business risks.




The measures to prevent and mitigate risks related to safe train travel and railway operation, occupational health and safety and environmental protection are implemented within the integrated Management Systems of the individual operating companies of the Group.



For additional information, reference should be made to the 2022 Annual Report (*Directors' report, Risk factors*).


The group constantly monitors current and expected risks and opportunities, including social and environmental aspects, particularly those relating to climate change. Below is an extract from the FS Group's 2022 Annual Report that outlines the main strategic and operating risk areas along with the relevant opportunities.

Risk	Description	Safeguards	Opportunities
<p>Business and strategic risks</p> 	<ul style="list-style-type: none"> <li>i. competition due to the opening of markets</li> <li>ii. domestic consumption trends and main economic factors</li> <li>iii. financial management in connection with relationships with public entities, both in terms of credit collection and the funding of investments for short-term concessions</li> <li>iv. potential instability of relevant legislation</li> <li>v. change in travel habits</li> <li>vi. developments in the regulatory and legislative framework</li> <li>vii. increased cost of certain commodities, specifically energy</li> </ul>	<ul style="list-style-type: none"> <li>i. assessment and ongoing monitoring of competitors' bids and market presence</li> <li>ii. improvement and maintenance of the service quality delivered and rapid adjustment to changes in demand</li> <li>iii. monitoring demand, so that the commercial offer more accurately targets customer needs</li> <li>iv. strengthening and updating the fleet, as a part of innovation and way to attract potential customers</li> <li>v. ongoing credit monitoring, with policies to fund invested capital at competitive rates</li> <li>vi. monitoring contracts and their financial balance</li> <li>vii. building customer loyalty, acting on the commercial offer, also through partnerships aimed at enhancing the services offered in terms of geography and service</li> <li>viii. ongoing monitoring of developments in the regulatory and legislative framework by specialist structures and promoting coordination and dialogue with government and regulatory bodies</li> </ul>	<ul style="list-style-type: none"> <li>i. possibility of expanding presence in Europe and continuous improvement of services offered</li> <li>ii. offer of services that increasingly meet people's needs and growth of digital services</li> <li>iii. offer of integrated services to exploit synergies and the possibility of offering related services</li> <li>iv. shifting consumer preferences towards the railway due to high inflation but also thanks to national and international policies aimed at promoting the modal shift</li> </ul>
<p>Operational risks</p> 	<ul style="list-style-type: none"> <li>i. ability to retain certain suppliers operating in the maintenance and construction of rolling stock</li> <li>ii. performance of complex projects that require substantial financial resources and a structured organisational and project management structure</li> <li>iii. interruptions/issues due to system and technology faults, serious natural events and vandalism</li> <li>iv. saturation of high commercial value routes</li> <li>v. managing licences, concessions, advertising, exceptional transport, royalties, trade receivables related to operating the road network</li> </ul>	<ul style="list-style-type: none"> <li>i. structured supplier qualification procedures that include financial assessments as well as technical evaluations. Gradually insourcing critical processes regarding infrastructure maintenance and building, designing and operating technological systems and railway components production</li> <li>ii. improvement of procurement planning by acting on the contract side with multi-year contracts and through more flexible operational management</li> <li>iii. management and control procedures to constantly monitor physical and financial performance of infrastructural projects</li> <li>iv. avant-garde security, control and monitoring systems and the creation of specific network maintenance cycles, adopting</li> </ul>	<ul style="list-style-type: none"> <li>i. increasingly closer partnerships with suppliers to contribute to the group's growth</li> <li>ii. continuous improvement of processes and the construction of high-quality, efficient infrastructure</li> <li>iii. improved safety, punctuality and quality of services</li> <li>iv. continuous improvement of the work environment and safety performance</li> </ul>

Risk	Description	Safeguards	Opportunities
	<ul style="list-style-type: none"> <li>vi. alleged potential violations of occupational safety regulations</li> </ul>	<ul style="list-style-type: none"> <li>procedures for the management of irregularities and emergencies with a constant focus on public information and the provision of accessory services to customers. In order to optimise and boost infrastructure resilience, a wide-reaching project is under way regarding climate change and revising the operational planning, scheduling and rescheduling process for infrastructure maintenance and diagnostics and IT support</li> <li>v. implementation of systems to optimise railway timetabling and traffic management</li> <li>vi. projects to improve traffic flow and improve traffic capacity at large urban hubs and launch of investment programmes for technological upgrades</li> <li>vii. ongoing monitoring of contracts and relevant receivables</li> <li>viii. constant assessment and monitoring of occupational safety by senior management and the competent units</li> <li>ix. specific programmes to enhance surveillance and inspection activities</li> </ul>	
<p>Country risk</p> 	<ul style="list-style-type: none"> <li>i. dynamic international context and significant political and economic instability in certain geographical segments</li> </ul>	<ul style="list-style-type: none"> <li>i. measures to guide and coordinate international business</li> <li>ii. strengthening the enforcement of internal regulations with provisions defining the processes, roles and responsibilities in managing initiatives</li> </ul>	<ul style="list-style-type: none"> <li>i. expansion of international presence</li> </ul>
<p>Compliance, legal and contractual risks</p> 	<ul style="list-style-type: none"> <li>i. non-compliance risks generally arising from potential non-compliance with the rules characterising the legislative and regulatory framework, with potential consequences consisting of legal or administrative sanctions, financial losses and reputational damage</li> </ul>	<ul style="list-style-type: none"> <li>i. definition of the compliance model, establishment of organisational units (internal audit, compliance and DPO) to verify that guidelines and company and group measures and procedures comply with relevant legislation and national and international best practices</li> <li>ii. definition and adoption of an antitrust compliance</li> </ul>	<ul style="list-style-type: none"> <li>i. continuous improvement of processes and activities and alignment with best practices</li> <li>ii. more transparency and improved group reputation</li> </ul>

Risk	Description	Safeguards	Opportunities
<p>IT and cyber risks</p> 	<p>i. adoption of new technologies, like blockchain, AI and IoT could facilitate future cyber attacks designed to steal confidential information or block essential services, including as acts of terrorism</p>	<p>programme to help prevent and manage risks related to violation of anti-trust legislation</p> <p>iii. definition and implementation of the personal data protection framework</p> <p>i. implementation of an integrated security policy and governance model and adoption of general principles and consistent operational logics</p> <p>ii. create and operate a specialised cyber security operation centre where the most expert human resources and advanced technologies converge to prevent, detect and fight cyber attacks</p> <p>iii. set up a company specifically dedicated to overseeing ICT at group level, defining strategies and achieving synergies and economies of scale</p> <p>iv. mitigation of threats from exposure of business services on the Internet, by implementing tools to protect against cyber attacks</p> <p>v. management and control model to classify information in terms of privacy to protect such information from possible violations</p>	<p>i. improved ability to prevent cyber threats</p> <p>ii. the new digital dimension could drive more efficient and personalised services</p>
<p>Environmental and climate risks</p> 	<p>i. non-compliance with environmental laws and regulations</p> <p>ii. risks related to climate change (see the table below for more details)</p>	<p>i. unit dedicated to safeguarding environmental issues and defining environmental management systems (ISO 14001 certified)</p> <p>ii. contractual obligation for companies that build infrastructures to implement an Environmental Management System (compliant with ISO 14001:2015) of site activities for the entire duration of the works</p>	<p>i. ability to compete through the development of new services and processes with reduced greenhouse gas emissions</p> <p>ii. better reputation and positive perception of the group by passengers and industrial customers</p>
<p>Social risks and risks related to the protection of human rights</p> 	<p>i. failure to respect human rights by the group, its people and industrial and commercial partners</p>	<p>i. definition of standard contractual clauses for compliance with the group's code of ethics and worker health and safety standards</p> <p>ii. signing a work quality protocol for railway service contracts</p> <p>iii. joining the UN's Global Compact and the</p>	<p>i. improvement in the group's reputation</p>

Risk	Description	Safeguards	Opportunities
<p>Human resources management risks</p> 	<ul style="list-style-type: none"> <li>i. failure to monitor personnel management risk factors (presence of key resources, difficult-to-find specialist skills, motivation and professional development) could compromise the achievement of the objectives in the business plan</li> <li>ii. employee health and safety</li> </ul>	<p>introduction, for tenders, of supplier assessment criteria, including the respect for human rights as a requirement</p> <ul style="list-style-type: none"> <li>i. relationships with trade unions based on transparency and collaboration</li> <li>ii. personnel training and refresher courses, accompanied by specific recruitment drives for professionals on the market outside the group as well</li> <li>iii. incentive and corporate welfare plans</li> <li>iv. streamlining and digitalisation of recruitment processes</li> <li>v. strategic organisational approach for diversity and inclusion</li> <li>vi. specific actions on setting up remote working and welfare</li> </ul>	<ul style="list-style-type: none"> <li>i. improved work environment and personnel motivation, increased attractiveness and retention capacity</li> </ul>
<p>Corruption risks</p> 	<ul style="list-style-type: none"> <li>i. crimes could be committed, bribery in particular</li> </ul>	<ul style="list-style-type: none"> <li>i. preventing corruption and illegality with FS Italiane S.p.A.'s adoption of Model 231 and the issue of the FS Group Anti-corruption Policy</li> <li>ii. definition of the Anti-corruption Framework (including the Anti Bribery&amp;Corruption management system) as a self-regulatory tool</li> <li>iii. ongoing training and communications, including specific online courses on the ABC system</li> <li>iv. whistleblowing management procedure</li> <li>v. FS Group Anti-corruption Policy containing control principles across the organisation and rules of conduct for sensitive areas</li> </ul>	<ul style="list-style-type: none"> <li>i. promoting the group's reputation, both within and outside of the organisation, through a commitment to compliance with ethics and organisational and procedural safeguards</li> </ul>

<u>Risk</u>	<u>Description</u>	<u>Safeguards</u>	<u>Opportunities</u>
<p>Risks of fluctuating commodity prices</p> 	<ul style="list-style-type: none"> <li>i. the prices of services, raw materials, energy and transport can vary based on market trends and it may not be possible - or only possible to a limited extent - to translate the higher energy procurement costs into higher selling prices to customers with consequent effects on the group's profit margins</li> <li>ii. procurement costs into higher selling prices to customers with consequent effects on the group's profit margins</li> </ul>	<ul style="list-style-type: none"> <li>i. creation of departments and units that monitor trends in the prices of materials and services that are fundamental for business operations and any applicable regulations. A project began to redesign the procurement process based on an analytical model to determine optimal procurement prices, with the additional aim of speeding up and simplifying the process while making it traceable and paperless</li> </ul>	<ul style="list-style-type: none"> <li>i. continuous improvement of procurement processes</li> <li>ii. preparation of a plan for self-production of energy from renewable sources and a business unit dedicated to its implementation, taking advantage of the areas available for plant construction</li> </ul>

In the preparation of this section, in addition to that provided for by Legislative decree no. 254/2016, the group analysed the Commission guidelines on non-financial reporting: guidelines on reporting climate-related information, updated by the European Commission in June 2019, and the recommendations of the Task Force on Climate-related Financial Disclosures – TCFD, which describe the methods for managing and monitoring the risk and opportunities of climate change and the estimate of the related financial implications.

The FS Group strives to ensure increasingly more climate-resilient infrastructure and mobility services by:

- assessing exposure to risks deriving from climate change in the medium to long term;
- preparing an accurate monitoring system for the effects of weather and climate change;
- defining a coherent plan for climate change adaptation projects.

From an initial top-level analysis and in accordance with that defined by the European Commission in June 2019 and the TCFD, the risks and opportunities related to climate change are monitored and classified as:



<u>Risk category</u>	<u>Risk</u>	<u>Description</u>	<u>Impact on the business</u>	<u>Potential financial impact</u>	<u>Mitigation action</u>
<b>Transition risk</b>	Risk of regulatory change	Change in the greenhouse gas emission regulatory framework	Application of energy efficiency requirements, revision of emissions fees, introduction of a carbon tax	<ul style="list-style-type: none"> <li>i. Higher operating costs</li> <li>ii. Higher investment costs and asset impairment</li> </ul>	<ul style="list-style-type: none"> <li>i. Constant tracking of regulations with monitoring of changes in the greenhouse gas emissions allowance system</li> <li>ii. Definition and monitoring of energy consumption and emissions targets</li> </ul>
<b>Transition risk</b>	Legal risk	Exposure to legal disputes in the event of failure to adopt climate impact mitigation measures	Possible reputational and financial impacts in the event of failure to control this risk	Higher operating costs	<ul style="list-style-type: none"> <li>i. Implementation of an environmental management system to control compliance with the applicable regulatory framework</li> </ul>
<b>Transition risk</b>	Risk related to the relevant market	Change in the habits of passengers and customers interested in greener products and services and uncertainty on the procurement market	More competition and reduction in transport demand	<ul style="list-style-type: none"> <li>i. Lower operating revenue</li> <li>ii. Higher operating costs for the procurement of raw materials (e.g. energy)</li> </ul>	<ul style="list-style-type: none"> <li>i. Monitoring the needs of passengers and customers and the development of new customised services</li> <li>ii. Promotion of a modal shift towards collective mobility and railway transport for passengers and freight, respectively</li> </ul>
<b>Transition risk</b>	Risk related to technological evolution	Spread of new low-emission technologies	Failure to adopt cutting-edge (low carbon) technologies and non-development of the related management expertise	<ul style="list-style-type: none"> <li>i. Lower operating revenue</li> <li>ii. Higher operating costs (R&amp;D)</li> </ul>	<ul style="list-style-type: none"> <li>i. Continuous investments in new, low-environmental impact technologies, in employee training and in the recruitment of personnel highly specialised in the management of new technologies</li> </ul>
<b>Transition risk</b>	Reputational risk	Loss of reputation connected to the increase in public	Possible stakeholder dissent with new works (e.g., new	<ul style="list-style-type: none"> <li>i. Lower operating revenue</li> </ul>	<ul style="list-style-type: none"> <li>i. Participation in national and international</li> </ul>

<u>Risk category</u>	<u>Risk</u>	<u>Description</u>	<u>Impact on the business</u>	<u>Potential financial impact</u>	<u>Mitigation action</u>
		concern about climate change	infrastructures) due to potential negative external factors, resulting in possible delays in construction	ii. Higher operating costs	<ul style="list-style-type: none"> <li>targeted initiatives to strengthen the commitment to reducing emissions</li> <li>ii. Stakeholder engagement initiatives to transparently report the possible positive or negative impacts of new works</li> <li>iii. Monitoring and reporting on long-term targets to combat climate change</li> </ul>

The FS Group developed methodologies in order to draw up a uniform and coordinated approach to adapting to climate change for all group businesses. It monitors climate trends and expected transitions (by taking part in sector work groups organised by the UIC and PIARC-World Road Association) as well as via analyses based on Representative Concentration Pathway (RCP) scenarios defined by the Intergovernmental Panel on Climate Change (IPCC).

In 2021, the Group developed a structure programme in response to the physical risk from climate change in order to improve service performance and reliability, reduce emerging costs generated by climate change and boost train travel safety.

The objective of the climate adaptation and resilience programme is to manage the uncertainty of the relevant impacts in order to detect and plan the best physical interventions to be proactively carried out on the infrastructure network.

The approach of the infrastructure climate resilience programme is based on three factors: i) scientific awareness of future climate dangers, ii) the digitalisation of infrastructural assets and technology for monitoring current climate, and iii) structural adaptation works.

<u>Risk category</u>	<u>Risk</u>	<u>Description</u>	<u>Impact on the business</u>	<u>Potential financial impact</u>	<u>Mitigation action</u>
<b>Physical risk</b>	Acute physical risk	Deriving from extreme weather events such as hurricanes, floods and drought, which	Disruptions of operations, failure to provide services and damage to infrastructure and	<ul style="list-style-type: none"> <li>i. Less operating revenue due to a smaller offer</li> <li>ii. Higher operating costs (e.g., costs</li> </ul>	<ul style="list-style-type: none"> <li>i. Developing risk scenarios, models of vulnerabilities and data</li> </ul>

<u>Risk category</u>	<u>Risk</u>	<u>Description</u>	<u>Impact on the business</u>	<u>Potential financial impact</u>	<u>Mitigation action</u>
		are increasing in frequency and intensity because of global warming and will exacerbate hydrogeological instability	assets, with possible repercussions on people's safety	<ul style="list-style-type: none"> <li>for higher insurance premiums and to restore the normal operability of assets)</li> <li>ii. Impairment of existing assets</li> <li>iii. Higher investments to increase the infrastructure's resilience capacity</li> </ul>	<ul style="list-style-type: none"> <li>collection to quantify the potential risk</li> <li>ii. High-tech and environmentally-sustainable tools to monitor and control the conditions of railway infrastructure and plants</li> <li>iii. Design, construction and maintenance of infrastructure to make it more resilient to the effects of climate change, including the use of redundancy mechanisms (life-cycle management)</li> <li>iv. Inclusion of climate change issues in strategic plans</li> </ul>
<b>Physical risk</b>	Chronic physical risk	Deriving from longer-term climate change (higher average temperatures, scarcity of water, rising sea levels, loss of land stability, etc.) which affect hydrogeological instability	Disruptions of operations, failure to provide services and damage to infrastructure and assets	<ul style="list-style-type: none"> <li>i. Less operating revenue due to a smaller offer</li> <li>ii. Higher operating costs (e.g., costs for higher insurance premiums and to restore the normal operability of assets)</li> <li>iii. Impairment of existing assets</li> <li>iv. Higher investments to increase the infrastructure's resilience capacity</li> </ul>	<ul style="list-style-type: none"> <li>i. Developing risk scenarios, models of vulnerabilities and data collection to quantify the potential risk</li> <li>ii. High-tech and environmentally-sustainable tools to monitor and control the conditions of railway infrastructure and plants</li> <li>iii. Design, construction and maintenance of infrastructure to make it more resilient to the effects of climate change (life-cycle management)</li> </ul>

<u>Risk category</u>	<u>Risk</u>	<u>Description</u>	<u>Impact on the business</u>	<u>Potential financial impact</u>	<u>Mitigation action</u>
					<ul style="list-style-type: none"> <li>iii. Inclusion of climate change issues in strategic plans</li> </ul>

Climate change may also create opportunities for the group:

<u>Scope</u>	<u>Type of opportunities</u>	<u>Description</u>	<u>Impact on the business</u>	<u>Potential financial impact</u>	<u>Possible action</u>
<b>Efficiency of resources</b>	More efficient modes of transport	Use of more energy efficient modes of transport for passengers and freight	Lower energy consumption and emissions and offer of distinctive services with respect to the competition	Higher operating revenue Lower operating costs	Constant tracking of new low environmental impact technologies and continuous monitoring of customers' needs
<b>Sources of energy</b>	Use of renewable and/low-impact energies	Use of renewable and/low-impact energies	Reduction of GHG emissions and offer of distinctive services with respect to the competition	Lower operating costs Higher operating revenue	Constantly monitoring new low environmental impact technologies
<b>Products and services</b>	Offer of green services	Development or expansion of low CO <sub>2</sub> emission services	Improvement in the services offered and the group's reputation	Lower capital costs Lower operating costs Higher operating revenue	<ul style="list-style-type: none"> <li>i. Constantly monitoring new low environmental impact technologies, continuous monitoring of customers' needs and offer of distinctive services</li> <li>ii. Monitoring the opportunities of sustainable finance instruments</li> </ul>
<b>Markets</b>	Access to new markets	Offer of distinctive services on foreign markets as well and possibility of gaining competitive edge	Increase in revenue by entering new markets and more competitive edge on domestic markets	Higher operating revenue	Continuous monitoring of customers' needs and offer of distinctive services with a low environmental impact
<b>Resilience</b>	Resilient infrastructure	Design, construction and maintenance of infrastructure to make it more resilient	Lower asset impairment and service disruption risks	Lower operating costs Higher operating revenue Protecting asset value	Design, construction and maintenance of infrastructure to make it more resilient to the effects of climate change, including the use of

<u>Scope</u>	<u>Type of opportunities</u>	<u>Description</u>	<u>Impact on the business</u>	<u>Potential financial impact</u>	<u>Possible action</u>
					redundancy mechanisms

## Stakeholder management and value creation and distribution (2-12, 2-28, 2-29, 201-1)

Consistently managing relations with its stakeholders, through a “programmatically and proactively” approach that uses various tools for engagement and continuous feedback, is a priority for the Group in order to focus strategic choices on creating and distributing value in the medium and long term to people, to the environment and to all stakeholders.

### Stakeholder engagement

The FS Group strives to maintain a transparent and collaborative relationship with its stakeholders<sup>56</sup> via active involvement and ongoing dialogue, as it firmly believes that by understanding their expectations and reconciling interests, it guarantees the effective creation of value.

#### MAIN CHANNELS OF COMMUNICATION WITH STAKEHOLDERS



<sup>56</sup> The criteria used to identify stakeholders are as follows: responsibility, dependence, materiality, influence, degree of interest/impact/knowledge.

### Sustainability day 2022 of the FS Group

On 4 October 2022, at Palazzo delle Esposizioni, the FS Group organised the first edition of the Sustainability Day, on the opening day of the **Sustainable Development Festival 2022** promoted by Asvis (Italian Sustainable Development Alliance). The event was an opportunity for an exchange of views between FS Board and Managers and stakeholders from academia, authorities and civil society, with the aim of gathering useful suggestions, remarks and reflections for dealing with rapidly evolving scenarios.

After an introduction to the Group's Strategic Plan, the event centred around three topics: energy transition of logistics and transport, sustainable development of infrastructure, urban redevelopment and regeneration.







The event was broadcast live on FSNews and the Sustainable Development Festival 2022.

On the same Sustainability Day of Ferrovie, the CEO of Trenitalia presented the Frecciarossa with the livery decorated with the 17 goals of the UN Agenda 2030, symbolising the FS Group's path towards sustainability.

### Sustainability Policy

To make sustainability a guiding principle in the definition of strategic and operating choices and to ensure sustainable growth in the medium and long term, the FS Group has identified the principles at the heart of its operations in the *Sustainability Policy*. This document, which was approved on 16 April 2019 by the Board of Directors and is inspired by the Sustainable Development Goals and the UN Global Compact principles, is based on seven principles.



	<b>Creating shared value</b> <i>Reconciling financial, social and environmental objectives, generating value for the company, for stakeholders and for the regions it works in</i>
	<b>Community and stakeholder engagement</b> <i>Activate systematic processes for stakeholder engagement</i>
	<b>Safety for passengers and workers</b> <i>Assuring an ever higher level of health and safety and consolidating a culture of risk management and prevention</i>
	<b>Quality of Services</b> <i>Improving customers' experience, paying attention to actual quality as well as perceived quality</i>
	<b>Value of employees</b> <i>Actively attend to people's development, avoiding any form of discrimination</i>
	<b>Efficient use of resources and environmental protection</b> <i>Promote an efficient use of energy resources and support the adoption of an LCA logic in all processes</i>
	<b>Respect of human rights</b> <i>Protect human rights in its activities, among suppliers and business partners, contributing to the creation of a responsible supply chain</i>

## Other forms of dialogue

Each year, the group promotes a number of initiatives to inform, advise, discuss and partner with the various stakeholders. In 2022, with regard to associations, the Group joined Fondazione Occorsio, Fondazione Centro Studi Divulga of Coldiretti, Venice World Sustainability Capital Foundation and Fondazione Ottimisti e Razionali, initiating joint projects. The Ferrovie dello Stato Italiane Group also takes part in the activities of the following associations: Confindustria and its local branches, Agens, Federtrasporto, Federturismo, Assonime and Accredia. At European level, it collaborates with CER (Community of European Railway and Infrastructure Companies) which acts as the sector's voice with the main European institutions (Commission, Parliament, Council) and promotes dialogue between companies and decision-making bodies. The group also participates in specific working groups at the UIC and the ERA (European Railway Agency).

Furthermore, the FS Group collaborates with the following organisations: Asvis, United Nation Global Compact, Global Reporting Initiative, the Foundation for Sustainable Development, Legambiente, Green Building Council Italy, Railsponsible, the Kyoto Club, the Italian Association for Sustainable Infrastructure and the Alliance for Circular Economy. A protocol was drawn up with consumers' associations, which was signed in February 2023.





There were no non-conformities in advertising in 2022. No form of financial assistance and no benefits are granted to the aforementioned associations other than the membership fees.

**Media relations, publishing and multi-media material**

In 2022, the group was active with the national, regional, local and international media (press agencies and national, local and international newspapers, the free press, general and trade magazines, radio, television and photographic, radio and television agencies) as well as online publications, websites and blogs. Its media work included external communications, such as:

- the online newspaper *fsnews.it*;
- the Group’s website *fsitaliane.it*;
- *La Freccia* magazine;
- the online radio station *FSNews Radio*;
- social media;
- the *FSNews* Telegram channel.

**Web Strategy**

In 2022, the **#BEGREEN** project was launched, the digital column of the FS Group covering all forms of sustainability, as told by green influencers, journalists, and representatives from the worlds of academia and sports. It focuses on proximity tourism, ecological transition and sustainable and integrated mobility. The activities of FS Italiane’s blog **#RailPost – un viaggio da raccontare** continued, with employees and passengers telling their stories about issues ranging from innovation to sustainability, slow and proximity tourism.

The **Sustainability** section homepage of **FS Italiane’s corporate website** ([www.fsitaliane.it](http://www.fsitaliane.it)) was updated.

The Group can also be found on:



For its internal stakeholders, the Group has:

- widely **cascaded** its Business Plan in order to create an ecosystem of continuous dialogue among all employees;
- broadened internal communication channels by rolling out **mywe**, the first app designed for all the Group's employees, and **Wespeak**, the new Internal Communication channel which broadcasts in real time new initiatives, news and messages from the Group;
- launched the new project **"Tell Welly"**, an internal communication channel to listen to colleagues' needs and collect suggestions and good practices to improve the environment as well as work processes.

In 2022, **PlaNet FS** was launched, a gamification-based awareness raising and training initiative with exciting challenges and interactive features that allowed **over 400 employees** of the FS Group to discover various topics linked to sustainability and to learn more about the Group's commitment to creating value for the community in a lasting and responsible manner. For ten weeks, Group employees took up the challenge and engaged in sustainable actions such as going places without using a car, reducing energy consumption, making dishes by using leftovers, using reusable water bottles and shopping bags and upcycling objects and clothes. But not just environmental topics: the inhabitants of the FS PlaNet also tackled issues such as inclusivity and gender equality. These were the challenges taken on by the employees involved in the **pilot project, stemming from a collaboration by the FS Group with Up2You, as part of the Open Italy Elis programme** that promotes dialogue and collaboration between companies and startups.

By using the PlaNet FS **web app**, our colleagues successfully completed a total of **10,089 missions that resulted in savings of 15,134 kg of CO<sub>2</sub>**: their sustainable actions contributed to supporting offsetting projects and were rewarded with small, eco-friendly objects for everyday use.

The three best players and the three best teams were given the opportunity, in line with the project's objective, to take part in two **learning experiences** at Italian companies that had a great social and environmental impact: the symbolic places of the social and cultural revolution pursued by **Olivetti**, in the heart of the industrial town of Ivrea, now a UNESCO world heritage site; the headquarters of **Gruppo Luccioni**, in Ancona, which has turned a stretch of the Esino river into an open-air laboratory for producing hydroelectric energy that powers the first zero-emission local community in Italy.

Further enriching the project, **Sustainability Recipes** were provided, i.e. meetings with three leading experts on climate change, urban regeneration and on the issue of diversity and social inclusion.



## Creation and distribution of value over time

Creating value for the Group and its stakeholders is a priority for the sustainability of the business in the medium to long-term.

Based on the reclassification of the consolidated income statement, the table below illustrates the impacts of the Group's activities on its stakeholders. Specifically:

- economic value generated is an indicator of measurable wealth generated by the Group in the year. The analysis of value added provides an objective evaluation of the Group's economic/social impact by measuring the wealth it has created for stakeholders.
- economic value distributed is a qualitative/quantitative indicator of the Group's social impact and the distribution of value to the various stakeholder categories.

The value not distributed by the Group (€2.1 billion) consisted substantially of self-financed investments and accruals to reserves, to be reinvested and thereby ensure the continuity of the business over the medium to long term and, therefore, indirectly benefit the FS Group's stakeholders (such as employees and the community through, for example, improvements in service quality).

Generation and distribution of economic value	2022	2021	2020
Directly generated economic value	13.835	12.416	10.941
Revenue from sales and services	13.169	11.835	10.482
Other sundry income	666	581	459
Economic value distributed	11.698	10.532	9.621
Operating costs for materials and services	6.495	5.424	4.661
Personnel expense	4.723	4.764	4.432
Payments to financial backers	221	160	387
Payments to public bodies	259	184	141
Economic value withheld	2.137	1.884	1.320

*In million Euro*

## FS Group for the people

### Highlights

Putting the needs of people and customers first	
What we have accomplished	What we aim to do
<p><b>Easy and smart stations</b>                      continuing <b>work to improve accessibility</b> (raising platforms to height of 55cm, installing new lifts, installing tactile walkways, reflooring platforms and halls and replacing lighting systems with LED lights) by <b>implementing in 2022 about 51 55cm-high platforms, 79 lifts and about 12 km of tactile walkways in about 65 stations</b></p>	<p>Continuing the improvements included in the <b>Easy and Smart station projects</b> in about 50 stations and <b>implementation of remote control and remote management</b> of station civil installations and lighting for the aim of energy saving</p>
<p><b>PRM service</b>                      180 new wheelchairs were delivered as well as the <b>first 25 mobile platform ramps</b>, to assist boarding the train and easily go over the gap between platform and train</p>	<p>Consolidation of the <b>procedures for measuring the quality delivered by the PRM service and renovation of the Sale Blu of Reggio Calabria and Messina</b></p>
<p><b>Smart Road, a digital and intelligent route</b>                      ongoing Group commitment in implementing the Smart Road project on E45/E55, A2, A19, RA15, SS51, A90/A91</p>	<p><b>From the Smart Road to the Digital Road</b>, with the aim of optimising costs while assuring the same services</p>
<p><b>Upgrade of sections to southern Italy and new links in Europe:</b> iryo set off on its maiden voyage from Madrid to Valencia</p>	<p>Enhancement of Freccia services to southern Italy with further <b>increases in the frequency of the Rome-Apulia service</b></p>
<p><b>Fleet upgrade and intermodal offer</b>                      Over 120 new Pop trains, over 100 Rock trains and 2 hybrid traction Blues trains started operating, in order to consolidate the fleet upgrade plan covering regional transport, and <b>upgrade of the bus fleet with more efficient vehicles, also to promote the integrated “train+bus” offer</b></p>	<p><b>New Blues trains</b> introduced with two possible formats: bimodal (Diesel-Electric) or hybrid (Diesel-Electric-Battery) and <b>design of new Link services (train+bus)</b> in Spoleto and Narni</p>
<p><b>New Wifi Fast service</b> on the ETR 500 fleet and <b>increase of available bicycle places</b> by restyling the Intercity fleet, for a total of 490 places, and increase in the number of places on the Regionale fleet (+500 places approx.)</p>	<p>Ongoing installation of the <b>new multi operator Wifi Fast service</b> on the ETR 500 fleet and rollout on ETR 600</p>
<p>Development of the <b>new railway hub model for security purposes</b> which entails the separation of the operations areas from the retail areas by installing turnstiles and access gates</p>	<p>Ongoing development of the new railway hub model for security purposes with <b>work to be carried out in the stations of Roma Termini, Napoli Centrale, Milano Centrale, Torino Porta Nuova, Venezia Santa Lucia, Firenze Santa Maria Novella and Napoli Piazza Garibaldi</b></p>

Our people and their value	
What we have accomplished	What we aim to do
Continued <b>strict implementation of measures to curb and fight the spread of Covid-19</b> in the workplace	<b>Continue reducing injuries and the frequency rate</b>
<b>Memorandum of understanding with INAIL</b> signed in order to promote workers' health and safety and spread the culture of safety through various initiatives	<b>Continue activities</b> aimed at carrying out projects concerning the <b>FS-INAIL Protocol</b>
<b>"Innovation Safety"</b> project: challenge between startups and SMEs specialised in innovative solutions applicable to occupational safety; the winners were involved in co-design programmes offered by FS Group companies	Continue <b>testing the innovation projects</b> identified in the 2022 edition
Recruitment of new graduates: <b>40 recruitment events</b> were organised, <b>1,557 candidates</b> were assessed by <b>105 HR assessors</b> and <b>60 line assessors</b>	<b>Define the strategic ranking by priority of roles within Units</b> ("Strategic Roles Project")
<b>"Women in STEM"</b> award at the <b>"Universum Award Italy 2022 - Students and young professionals edition"</b> of Universum, ranking first as the ideal employer for female STEM students	Start carrying out the Group-level <b>e-learning project</b> , designed for <b>primary and secondary schools</b> in the whole country, with the aim of familiarising pupils and students with the FS Group
<b>First place in the Online Talent Communication ranking prepared by Potential Park</b> of companies with the best experience in online recruitment	Testing <b>innovative recruitment methods</b> and implementing <b>new strategic partnerships</b> with the world of academia
<b>Development Community:</b> a widespread development network started being constructed, a community of people within the Group who put their experience, skills and time at the service of their coworkers' growth	Implement the <b>Future Leaders project</b> , aimed at training managers in advanced and transformative leadership for the next generation of leaders in strategic Group positions
<b>Young Talent Policy:</b> the new policy integrates levers of attraction, compensation, training and development into an attractive and competitive development pathway with respect to the target market of new graduates and young graduates in technical and non-technical areas	<b>Initiate the procedure for implementation and certification of a gender equality management system</b> according to UNI/PdR 125:2022
<b>Policy Diversity, Equality&amp;Inclusion:</b> the first policy clarifying the values, roles and responsibilities of all the Group's people in assuring a psychologically safe workplace that values the uniqueness of each one was published	<b>Free Psychological Counselling Pilot:</b> launch of the first counselling programme by telephone/in person for all the people of the FS Group
<b>FS Italiane 2022 Group Gender Equality Plan:</b> the first Gender Equality plan of the FS Group was published. It sets out the actions taken to pursue	<b>SOSpeso Ticket:</b> free carnet tickets (in collaboration with Trenitalia) for women victims of violence who need to reach homes and centres

Our people and their value	
What we have accomplished	What we aim to do
the objectives of its gender equity strategy, and the principles that inspire it	
<b>Leadership Breakfast and Communication:</b> coaching activity on the Business plan by means of Leadership Breakfast and Public Speaking courses for the Group’s Managers	<b>Leadership of change:</b> promoting a managerial approach to change in order to foster a culture capable of steering effectively through all the new challenges that lie ahead
<b>International Induction:</b> development of international leadership in what is the Group’s first International Induction pathway	<b>International Mindset:</b> continue on the path towards developing international leadership, generate intercultural mindsets, and spread the exchange of best practices and work methods

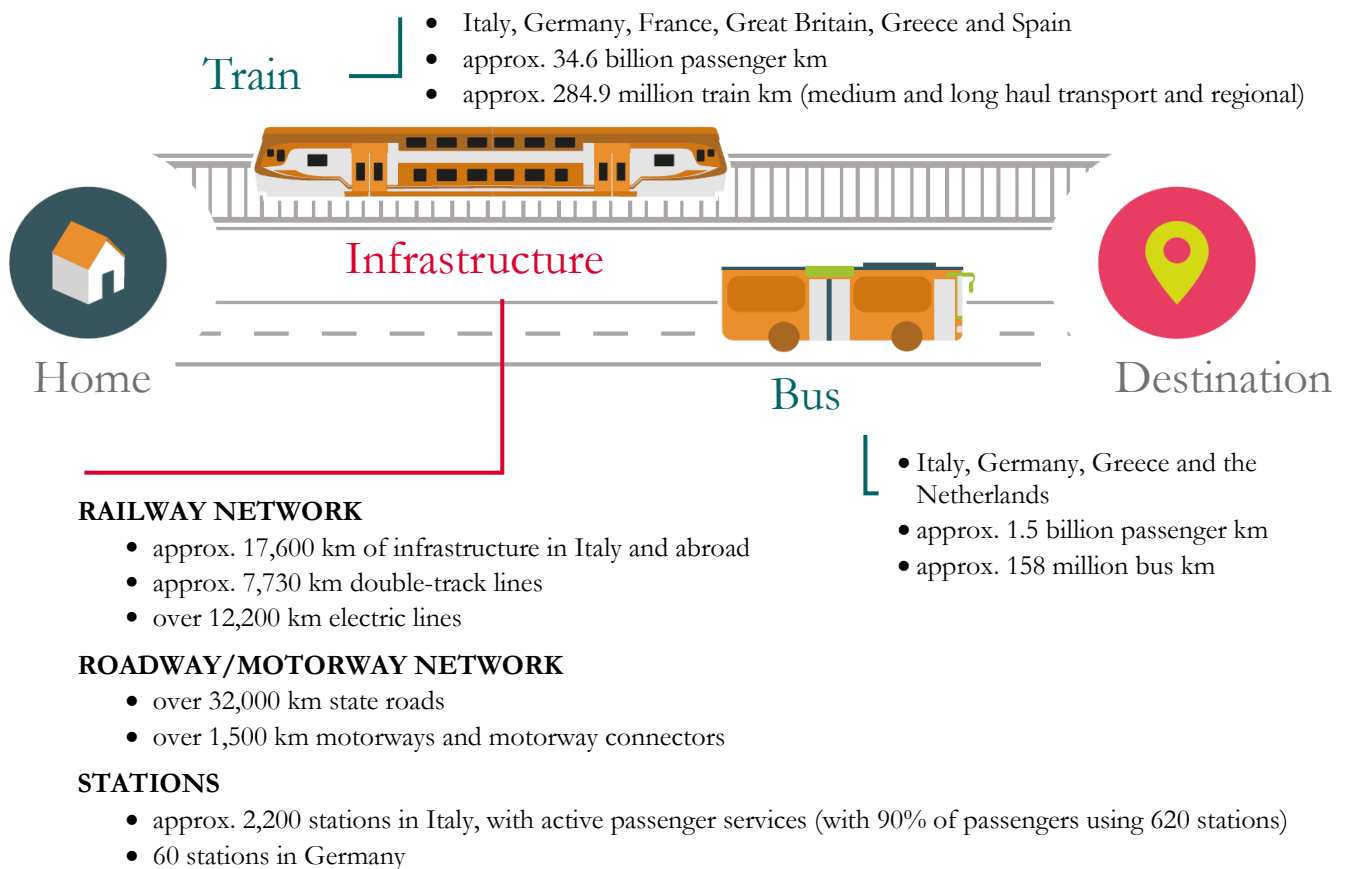
## Putting the needs of people and customers first (2-24, 2-25, 3-3)

Offering high quality and customised services, addressing the needs of passengers and industrial customers alike, is a strategic priority for the FS Group.

Safety, sustainability and integrated mobility are some of the key elements in the travel experience we offer, an experience that encompasses multiple dimensions.

### Travel (2-1, 2-6, 2-29)

The purpose of offering integrated services is to guarantee a travel experience that meets everyone’s specific travel needs, focusing on those who use public transport every day.



### Stations...places of movement

Stations are the places of movement: they express the dynamism of a space designed for travel and modal exchange and they undergo cyclical changes, as they follow or boost the evolution of mobility styles and the urban fabric in which they are set. Stations are the place of transformation, identifiers of

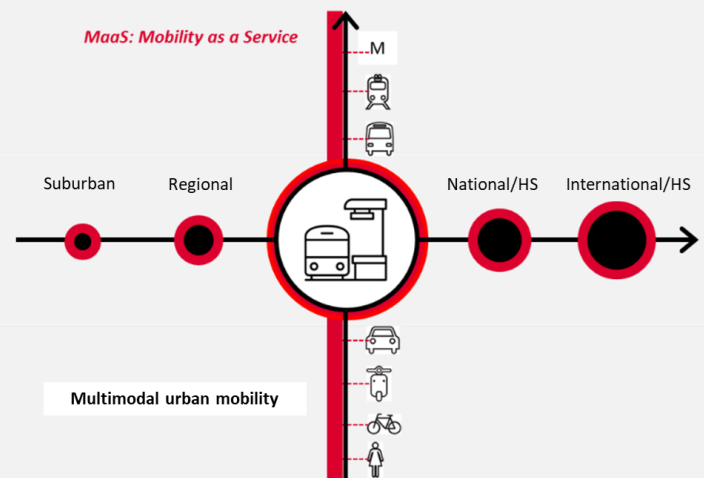
new infrastructures and engineering works that increasingly require diverse and complementary sensitivities and approaches, promoting the quality and attractiveness of the local area, reducing travel costs and times, meeting the increasing demand of new mobility.

Stations are the **point of contact between the railway system and the local area** they serve, and their operation is closely linked to the quality of this relationship. A station that works well is also able to be an integral part of the environment it is set in, whether urban or rural.

The new vision of the station developed by the Group focuses squarely on people's needs and environmental and social sustainability, aiming at making stations and the surrounding areas safer and more pleasant.

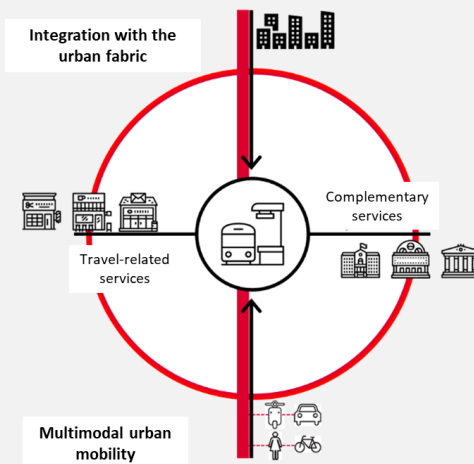
### INTERMODAL EXCHANGE NODE

Easily accessible place where the **exchange and connection of the various modes of transport** takes place.



### SERVICE HUB

It brings passengers and citizens closer to services (commerce, leisure, healthcare, culture etc.) with flexible and versatile spaces.



### THE DIALOGUE WITH STAKEHOLDERS IS A KEY ELEMENT FOR THE DEVELOPMENT OF THE NEW STATION CONCEPT



Accordingly, the new station also plays a leading role within a project of integrated mobility, as the hub of a MaaS system (Mobility as a Service) – with spaces and services capable of supporting faster, easier, more intuitive and seamless transitions between different means of transport – the nerve centre of the smart city, an integral part of the urban fabric, and the driving force behind the redevelopment of brownfield, marginal or unattractive areas.



While the presence of women employed on board means of transport increases, we continue improving safety-related aspects, also in designing new stations and upgrading existing ones. **More inclusive design strategies**, such as the ‘pink’ parking spaces near stations, intended specifically for women who work night shifts, the introduction of new lighting systems, more welcoming routes – especially underpasses – and the redesign of outside spaces, go hand-in-hand with increasing footfall inside stations, also by expanding in-station retail areas as a means for improving safety.

### INTEGRATED STATIONS PLAN

To implement the **new station concept**, an investment plan has been drawn up which primarily concerns stations with the greatest transport significance throughout the national territory, and which serve over 90% of the total passengers in transit on the network.

According to the Plan, stations are to be redesigned with the aim of **fully expressing their potential as transport and service hub**, integrated in their urban context and capable of having a positive effect on redevelopment efforts of the local areas.

Specifically, the Plan has the following main objectives:

- increasing the level of connectivity with local public transport, sharing mobility and active mobility;
- improving internal station accessibility, increasing the attractiveness, functionality, quality and safety of both internal and external spaces;
- enhancing infomobility and wayfinding outside and inside the station.



With a view to that, **the following activities continued in 2022:**

- **the “Easy and Smart Station” projects** concerning the 620 busiest stations in the network;
- **the implementation of international protocols for the assessment of energy and environmental performance** (e.g. ‘Leed’ Protocol, rating the design, construction and management of energetically sustainable buildings, ‘GBC Historic Building’ Protocol certifying the level of sustainability of conservation, redevelopment, restoration and integration of historic buildings, ‘Envision’ Protocol, assessing the environmental sustainability of designed works) and the implementation of ‘Nature-Based Solutions’ (NBS).



## Railway and road network...the route joining us

Improving the country's transport infrastructure by **effectively integrating the railway and road networks** with other infrastructure and urban centres, ensuring the safety and resilience of infrastructure in an increasingly challenging context, accelerating the Group and the country's ecological transition and seizing the opportunities offered by new technologies for maintenance activities and innovative services are among the most important priorities to be pursued by the Group.

**The route that joins**, brings people and passengers together and transports goods, catering for the needs of industrial customers, forming the backbone of the economic and social development of the whole country.

### RFI OPERATED RAILWAY LINES

**16,829 km<sup>57</sup>**

#### CLASSIFICATION

Main lines	6,464 km
Complementary lines	9,415 km
Hub lines	950 km

#### TYPE

Double-track lines	7,731 km
Single-track lines	9,098 km

#### POWER

Electric lines	12,184 km
- double track	7,654 km
- single track	4,530 km
Diesel fuel lines	4,645 km

### FSE OPERATED RAILWAY LINES

**474 km**

### NETINERA OPERATED RAILWAY LINES

**300 km**

### ANAS OPERATED ROAD NETWORK

**32,383,24 km**

#### CLASSIFICATION

Motorways	1,220.80 km
Motorway connectors	354,28 km
State roads	25,358,47 km
Roads being classified or declassified (NSA)	289,31 km
Slip roads and connectors	5,160,38 km

*Data updated as at 31 December 2022.*

<sup>57</sup> Including 70 km outside Italy.



## Train...the most environmentally-friendly means of transport

Mobility is one of the most complex challenges that modern society needs to tackle. Indeed, a growing demand for movement is set against the need to **reduce impacts** on natural resources. The main objective is still to ensure better **quality of life** and **the health of people and land**.

In this context, **the train is the most environmentally-friendly** and energy efficient means of transport, and with the lowest levels of emissions.

In the Group, railway transport can be split into two main segments, in Italy and abroad:

- medium and long haul transport (high speed – HS – services, Intercity – IC) services)
- regional.

### NATIONAL - ITALY

#### MEDIUM AND LONG HAUL TRANSPORT

##### HIGH SPEED SERVICES



FRECCIAROSSA

trains that travel up to 300 km/hr: mainly on the high speed network serving those areas of Italy with the densest traffic and populations



FRECCIARGENTO

trains with flexible structures, enabling them to travel at faster speeds than traditional rolling stock. Accordingly, they are used on both traditional and high speed lines



FRECCIABIANCA

trains that travel on traditional network lines and mainly connect medium and large cities with the main stations on the high speed network, creating a widespread network



INTERCITY

##### INTERCITY SERVICES

these are public transport services offered at the request of the government under service contracts, whereby the transport companies receive consideration (“universal” services). Specifically, they refer to day and night Intercity services



INTERNATIONAL

Eurocity and Euronight international trains connect the main Italian cities with major cities in Austria, Germany and Switzerland



#### REGIONAL

##### WIDESPREAD NETWORK

Metropolitan, regional and inter-regional network of trains all day long



##### SERVICES

Frequent service in cities and fast connections between major regional hubs, ensuring that the two different service levels intersect at the “gateway stations”



##### FLEET

Purchase of new, more modern and comfortable trains (Pop and Rock) for regional and local transport

## INTERNATIONAL



### FRANCE

Day connections between France and Italy and night connections between Paris and Venice. Frecciarossa on the Paris-Lyon-Milan route



### GERMANY

Regional public transport in Bavaria, Saxony, Thuringia, the Czech Republic and Austria, south-west Germany, Lower Saxony and Mecklenburg-Western Pomerania.

In the metropolitan areas of Berlin, Brandenburg, Bremen and Hamburg.

Fleet of approximately 370 trains.

Directly managed network of roughly 260 km mainly in the Lower Saxony area



### GREAT BRITAIN

Passenger transport from London (Fenchurch Street) to Basildon, Southend and Grays, passing through 26 stations in East London and South Essex.

From London to Birmingham, Manchester, Liverpool, Preston, Chester, Edinburgh and Glasgow



### GREECE

Passenger transport in three segments: Intercity (connections between main prefectures – from Patras to Alexandroupolis; Dikaia to Florina; Athens to Thessaloniki), suburban (regions of Athens, including the airport link, Thessaloniki and Patras) and international (Sofia, Belgrade, Bucharest and Skopje)



### SPAIN

Trenitalia, as part of the ILSA consortium, was among the first private operators allowed to enter the Spanish HS market. The commercial service is provided by the High Speed train Frecciarossa 1000, (with Madrid-Barcelona, Madrid-Valencia/Alicante and Madrid-Malaga/Seville) under the brand iryo for a term of 10 years, in competition with Renfe and the French operator Ouigo (owned by SNCF).

On 21 November 2022 there was the maiden voyage of iryo from Madrid to Valencia. The Madrid-Zaragoza-Barcelona service was activated on the 25th.

NEW



## Buses and trams...for sustainable public mobility

**Buses and trams** are the easiest and fastest mobility solutions to reduce urban traffic, protect the environment and provide an intermodal offer, through integration with other means of transport, especially the train, that supports collective transport and **sustainable public mobility**.

Also in this case the Group’s offer targets both the national and international market.

### NATIONAL



#### LOCAL

Local public transport (urban and suburban) in major Italian cities Florence\*, Padua, Perugia and Salerno. In addition to other cities in Campania, Apulia, Umbria and Veneto.

\*direct link with The Mall Firenze outlet.



#### LONG HAUL

Integrated service consisting of dedicated buses that connect medium-sized cities and tourist cities with the HS Frece trains from Bologna, Bolzano, Florence, Lecce, Milan, Naples, Rome, Salerno, Turin, Venice and Verona.

### INTERNATIONAL



#### GERMANY

Public road transport in the North Rhine-Westphalia region, Frankfurt on Maine, Hamburg and Hanover with a fleet of approximately 695 buses.



#### THE NETHERLANDS

Local public transport in the metropolitan area of Utrecht, in the province of Groningen-Drenthe and in the Drechtsteden, Molenlanden and Gorinchem (DMG) area.

## Focus on people (2-27, 2-29)

For some time now, in its effort to offer high-quality services to passengers and industrial customers, the FS Group has implemented a process to **monitor customer care** based on the parameters stated in the service charters<sup>58</sup>, and to monitor **customer satisfaction** through interviews aimed at analysing the expectations and level of satisfaction of passengers and customers.

Furthermore, in order to guarantee appropriate feedback, a **complaints monitoring system**<sup>59</sup> was implemented to help the group actively listen to their needs while also improving the efficiency and effectiveness of services.



The following sections give a summary of the group’s performance indicators.

### Infrastructure

The infrastructure sector includes:







- railway network/stations;
- roadway and motorway network.

With regard to the **railway network and stations**, the Group monitors the objectives stated in the Service Charter (set forth by the regulatory framework for public transport services - Dir. (It.) President of the Council of Ministers 27 January 1994 and Decree (It.) of the President of the Council of Ministers 30 December 1998). In 2022, although the extraordinary situation linked to the Covid-19 emergency continued affecting the first part of the year, **the objectives were all met** – those related to the quality


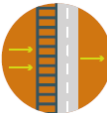

<sup>58</sup> Trenitalia publishes the Service Charter to express its principles and commitments to improve the services it offers.

<sup>59</sup> In this document, “complaints” means reports received, while “inefficiencies” means issues associated with “complaints”. In particular, a complaint may refer to more than one inefficiency.

offered, verified through internal/third-party monitoring, as well as those related to the perceived quality, linked to the customer satisfaction surveys carried out by the Market Observatory.


RAILWAY NETWORK/STATIONS		
Metric	2022 target	2022 result
Focus on the environment 	Double the portion of electricity from renewable sources for internal use by RFI acquired under a specific supply contract (bids for tender)	Achieved 
Safety at the station 	Number of thefts in stations below the 2016-2018 three-year average number*	Achieved 
Accessibility of stations 	Works carried out to improve accessibility (raising platforms to height of 55cm, lifts) – at least 125 operations	Achieved 

\*Data is monitored by Polfer. There has been constant improvement since 2007 thanks to effective actions over time and long-term plans defined by the group for the safety of its customers and assets carried out in collaboration with the railway police under agreements signed from 2007 onwards with the Ministry of the Interior. Accordingly, the target figure is compared to the average 2016-2018 three-year figure from this year on.

ENVIRONMENT IN THE STATION				
Metric		2022 result	2021 result	Change in percentage points (p.p.)
Travel comfort in station premises 	overall perception of the station	98.7%	98.2%	+0.5
Modal integration 	perception of ease and convenience of arrival at the station	98.1%	97.9%	+0.2
Security in the station 	perception of overall security	95.5%	95.4%	+0.1




The percentage of satisfied passengers (votes 6-9) for services offered in stations is monitored by the RFI Market Observatory through over 180 thousand interviews to passengers leaving from the 760 stations of the network used by 94% of total passengers.

For a more detailed analysis of the 2022 results, it is useful to look at the parameter relating to the **percentage of fully satisfied passengers (votes 7-9)**, although it was not used as reference in the Service Charter. In this case, when drawing a comparison with the previous year, **the overall quality of the station further increases** (from 89.3% in 2021 to 90.8% in 2022).



Complaints/reports totalled 6,495 in 2022, compared to 4,984 in 2021. The increase is certainly mainly due to a gradual recovery of mobility after the emergency situation caused by the COVID-19 pandemic in the first half of 2020, in which passengers and the public in general had almost completely stopped using stations station users, subsequently also restricted by the Decree of the President of the Council of Ministers and by the mobility restrictions implemented by the Regional Authorities to stop the virus from circulating. The number of inefficiencies also increased proportionally: 6,987 inefficiencies (+ 29% on 2021). The main channel used to report inefficiencies is “RFI Risponde” which is available on the homepage of the company’s website. The main complaints (approximately 60% of the reported inefficiencies) related to public information, comfort in the station, security at the station, and respect for the environment.

The group monitors the targets established in the service charter for the **roadway and motorway network**:

<b>ROADS AND MOTORWAYS</b>			
<b>Indicator</b>		<b>2022 target</b>	<b>2022 result</b>
Service regularity 	Amount of time road closed for unexceptional snowfall and/or not due to scheduled closing on sample sections	Standard <12h	Achieved <span style="color: green; font-weight: bold;">✓</span>
Travel safety 	When an event affecting roads occurs, the time between the verification of the alert in the control room and its publication on user information systems (VAI, PMV, ANAS website)	Standard max 30 minutes	Achieved <span style="color: green; font-weight: bold;">✓</span>
Customer support 	Definitive response to customers within 30 calendar days regarding requests for information, complaints and suggestions	80%	93% <span style="color: green; font-weight: bold;">✓</span>

The customer satisfaction survey, which surveyed the level of satisfaction and opinion of customers who contacted the customer relations offices, measured a **level of satisfaction of 7.6 out of 10** (on the first nine months of the year).





Complaints are centrally managed by the Customer Service. All complaints received by the Customer Service Department via the many different channels available to customers (telephone, e-mail, live chat, website, appointment, WhatsApp, telegram, social media, land mail), are managed by the User Relations structure.

In 2022, 1,703 complaints were received (+63% on 2021), all managed with an average response time of 12 days. Complaints have increased in the last three years also thanks to the commitment by Anas to ensuring customers are properly informed on the company, therefore, a Complaints Data Bank will be activated in 2023 for instantaneous processing of reported inefficiencies and to improve complaint management.

## Railway passenger transport

Railway passenger transport can be split into two main segments:

- medium and long haul transport;
- regional.

### Italy<sup>60</sup>




#### Trenitalia

Train circulation is monitored in real time and, in the event of critical issues, train personnel are notified so they can inform passengers. The output of the key service elements (punctuality, traffic anomalies, etc.) undergoes a daily analysis and is the subject of regular meetings, where necessary also with the infrastructure manager, to deal with recurring issues (e.g., timetable, personnel shifts and rolling stock schedules) with a view to continuous improvement.

With regard to the punctuality factor, performance in the three types of service worsened (between 0.8 and 5.5 percentage points). In the first few months of the year, overall punctuality was positive, in line with the previous year; starting from March, however, there was a general decline in performance due to the increase in traffic volumes and, in the summer period, to the extreme heat waves that affected the country, causing breakdowns, the management and resolution of which affected railway punctuality.

<sup>60</sup> The scope includes services offered by Trenitalia and Ferrovie del Sud-Est and Servizi Automobilistici.

## PUNCTUALITY



Indicator		2022 result	2021 result	Change in percentage points (p.p.)	
Market services (Freccie)		% of trains arriving within 10 minutes of the scheduled time	77%	82.5%	<b>-5.5</b>
Universal service (IC day and IC night trains)		% of trains arriving within 15 minutes of the scheduled time	86.2%	88.5%	<b>-2.3</b>
Regional Services		% of trains arriving within 5 minutes of the scheduled time	92.2%	93%	<b>-0.8</b>

Data updated to January 2023.

Trains are considered late if they arrive after the indicated limit (considering all trains with no exceptions)

Also with regard to the regularity factor, the values for both segments are slightly down on 2021.

## REGULARITY

Indicator		2022 result	2021 result	Change in percentage points (p.p.)	
Medium and long haul transport		Regular trains, net of trains that were limited, cancelled or arrived over 120 minutes late	97.05%	98.9%	<b>-1.85</b>
Regional		Percentage of trains arriving at their destination out of all scheduled train services (excluding trains cancelled due to strikes)	97.5%	98.9%	<b>-1.4</b>

Data updated to January 2023.

Perceived quality is measured through periodic surveys of passengers aged 14 years and up about their experience on trains managed by the Group (medium/long haul<sup>61</sup> and short haul journeys and local/regional transport<sup>62</sup>). Surveys are conducted using face-to-face and telephone interviews<sup>63</sup>.

In 2022, 97.7% of passengers on medium and long haul trains reported satisfaction with the ‘overall journey’, up 0.6 p.p. on 2021. Overall, improvements were recorded on all of the main aspects on the previous year. Specifically, cleanliness improved by 1.5 p.p.

### MEDIUM AND LONG HAUL TRANSPORT

Indicator	2022 result	2021 result	Change in percentage points (p.p.)
Overall journey* 	97.7%	97.1%	+0.6
Punctuality 	92.5%	91.4%	+1.1
Cleanliness 	96.4%	94.9%	+1.5
Comfort 	97.4%	96.8%	+0.6





\* Satisfaction with the ‘overall journey’ considers all stages of the journey (door to door).

The regional transport survey results also show an upward trend in passenger satisfaction. 91.8% of passengers reported satisfaction with the overall journey, up 1.4 p.p. on 2021. Overall, all of the main aspects recorded improvements on the previous year, specifically, ‘comfort’ and ‘punctuality’.

<sup>61</sup> Surveys are conducted once every two months for a total of six surveys per year and entail 5,800 interviews with a sample of passengers selected using a probability-based procedure in connection with three different aspects: traffic, station and brand.

<sup>62</sup> Surveys are conducted every two months for a total of six surveys per year, and entail 8,870 interviews. Such a high number of interviews also makes it possible to survey passengers travelling on the 35 main regional railway lines throughout Italy.

<sup>63</sup> Face-to-face interviews are conducted at the station before interviewees board their trains/upon arrival. Telephone interviews using CATIs (computer assisted telephone interview), are conducted through call-backs to interviewees two/three days after the journey. The score for each variable considered in the survey is on a scale of one to nine, where one corresponds with the lowest satisfaction and nine with the highest. Passengers who report a satisfaction rate equal to or greater than six are considered satisfied.

REGIONAL			
Indicator	2022 result	2021 result	Change in percentage points (p.p.)
Overall journey* 	91.8%	90.4%	+1.4
Punctuality 	83.5%	82.0%	+1.5
Cleanliness 	82.2%	81.1%	+1.1
Comfort 	92.5%	90.7%	+1.8

\* Satisfaction with the 'overall journey' considers all stages of the journey (door to door).



The careful management of complaints is a vital tool for engagement with customers because it enables the group to monitor and analyse reported inefficiencies, improve performance and provide a service that is increasingly tailored to travellers' needs.

For the systematic and efficient management of complaints, the group has set up an organisation spread throughout Italy consisting of:

- local offices that manage complaints paperwork and replies to customers;
- a network of focal points capable of identifying the issues that customers report and taking the appropriate action for resolution.

Complaints are managed on an integrated IT Customer Relationship Management platform that analyses and handles complaints synergistically with other means of customer contact (such as ticketing offices, customer care centres at stations, online, the call centre, post and e-mail).

Complaints are managed as follows:

- complaints received from customers are entered in the Complaints CRM IT platform, and are assigned to appropriate local offices for management;
- after being analysed, the complaint is sent to the focal points, i.e., technical staff capable of identifying the issues reported by the customer, taking any corrective action to resolve the reason for the inefficiency reported and providing the complaint manager with the information required to send a response;
- the response is sent and, where appropriate, considering the severity of the inefficiency, the customer is offered a voucher.

Currently, the most frequently used channel is the website, through which most complaints arrive.

In 2022, a total of 43,840 complaints were received relating to **medium and long-haul transport services**, approximately 25% up on the previous year, attributable to the rebound of railway traffic after it had decreased due to the restrictions following the Covid-19 health emergency. Similarly, the number of inefficiencies also increased, from 12,623 in 2021 to 24,380 in 2022.

The types of inefficiencies reported most frequently concerned 'regularity and punctuality' (49% of inefficiencies reported in 2022), the 'service level' and 'comfort'. However, inefficiencies concerning 'modal integration' and 'safety' were down on 2021.

CLASSIFICATION OF MEDIUM AND LONG HAUL INEFFICIENCIES (national and international)				
Regularity and punctuality	Service level	Comfort	Modal integration	Safety
2022: 11,937 2021: 4,637	2022: 6,993 2021: 4,956	2022: 3,332 2021: 1,340	2022: 8 2021: 17	2022: 79 2021: 151
<span style="color: green;">● improvement</span> <span style="color: orange;">● worsening</span> <span style="color: grey;">● stable</span>				

Reports also increased in **regional transport services**, as a result of the rebound of rail traffic, from 20,387 in 2021 to 23,366 in 2022 (+14.6%). The analysis of the data points to the fact that, as activities pick up again, passengers would rather report inefficiencies linked to train circulation, mainly stressing critical issues to do with ‘regularity and punctuality’ and the ‘service level’.

CLASSIFICATION OF REGIONAL INEFFICIENCIES				
Regularity and punctuality	Service level	Comfort	Modal integration	Safety
2022: 7,981 2021: 5,569	2022: 9,462 2021: 9,402	2022: 2,444 2021: 2,253	2022: 47 2021: 46	2022: 349 2021: 370
	—		—	
<span style="color: green;">● improvement</span> <span style="color: orange;">● worsening</span> <span style="color: grey;">● stable</span>				

Since 2009, the Group has been providing a fair settlement procedure, whereby customers of medium and long-haul services who are dissatisfied with the response they have received to a complaint or request for a refund/indemnity can request their file to be re-examined by the Settlement Commission.

This procedure is free and non-binding for customers, who may decide whether to accept the proposed solution or not. The European Commission recognises the fair settlement procedure as a best practice.

In 2022, 1,172 files on medium and long haul services were processed, of which:

- 38 received in 2021 and closed in 2022;
- 1,134 received in 2022<sup>64</sup>.

The fair settlement procedure was also introduced for passengers of Trenitalia's regional services as of January 2022, and over 300 applications had been received by the end of the year. Extending the fair settlement procedure to regional transport after the long and well-established experience in medium and long haul transport (Freccie and Intercity) confirms Trenitalia's attention to the people who chose to travel on its regional trains every day.

### INTERCITY GREEN

In the summer, **the new Green Intercity** started running. This train has been refurbished with a special external film and a special carriage with six bike spaces, recharging points, separate waste collection, family area and vending machine. What is more, the walls of carriage 3 display **messages on sustainability, with details on the CO<sub>2</sub> savings of travelling by train.**







On the train, passengers will also find **the first seats upholstered with fabrics woven from recycled plastic**, the production of which achieves savings, per kg of yarn, of 32% in CO<sub>2</sub>, 94% in water and 64% in energy. This sustainable choice will be replicated on the seats of the next Intercity hybrid trains linking towns on the Ionian coast.



### ***Ferrovie del Sud-Est e Servizi Automobilistici (FSE)***


FSE monitors and reports on the quality targets set out in the Service Charter to strive for constant improvement. Specifically, the main targets and results of the railway service are summarised below:

<sup>64</sup> Broken down as follows: 791 for the High Speed segment (602 of which were valid and 189 were not) and 343 for the Intercity service (253 of which were valid and 90 were not).

RAILWAY SERVICE			
Indicator		2022 target	2022 result
 <p>Travel safety</p>	<p>Accident rate (no. of accidents due to the company per 1,000,000 km)</p>	zero accidents	Achieved 
 <p>Travel comfort</p>	<p>Accessibility of vehicles (% of trains fitted with lower floors)</p>	73%	Achieved 
 <p>Passenger information</p>	<p>On board information (% of trains with spoken destination and next stop announcements)</p>	73%	Achieved 

FSE monitors customer satisfaction by administering questionnaires, sampling and surveys. The score for each variable considered in the survey is on a scale of one to nine, where nine corresponds with the highest satisfaction and one with the lowest. Passengers who report a satisfaction rate equal to or greater than six are considered satisfied.

In 2022, 84.6% of interviewees said they were satisfied on the whole with the railway transport service.



Also for FSE careful management of complaints is a vital tool for interaction with customers because it enables the group to monitor and analyse reported inefficiencies, improve performance and meet passenger needs.

Complaints are managed by a special team that receives them via a specific channel on the company website or by e-mail.

In 2022, 493 complaints on the railway service were received (276 were received in 2021).

**United Kingdom**

The FS Group operates in the UK through Trenitalia c2c, which operates the passenger transport service between London and Essex.

A survey was carried out in 2022 using Wavelength, which collected 1,700 responses and showed an improvement in customer satisfaction. In 2021, overall satisfaction was 77/100, while in 2022 the score improved to 78/100.









Complaints are managed by the customer relationship management (CRM) department which aims to reply to 95% of reports received within 10 working days and 100% within 20 working days.

Approximately 5,853 complaints were handled in 2022 (compared to approx. 4,800 in 2021) with an average response time of 6.53 days. The main complaints related to ‘tickets and refunds’ (1,900 complaints), using the ‘smartcard for buying tickets’ (514 complaints), ‘punctuality’ (653 complaints) and ‘problems with purchasing tickets online’ (694 complaints).

**Greece**

Hellenic Train measures passenger satisfaction quarterly (e.g., surveys and mystery customers). The analysis is carried out by a third party. The sample analysed amounted to 2,000 passengers (including all business segments: long haul, interurban, regional). During 2022, despite travel satisfaction increasing on the whole, there was a general decline in customer satisfaction linked, in particular, to punctuality and reliability of the service, which in most cases discounted issues relating to the management of the infrastructure (which is carried out by another party).

Indicator	2022 result*	2021 result	Change in percentage points (p.p.)
Overall journey* 	78%	73.3%	+4.7
Punctuality 	59.7%	67.2%	-7.5
Reliability 	64.4%	66.7%	-2.3
Comfort 	73.7%	75.5%	-1.8

\*2022 data relate to the analyses in the third quarter.



Hellenic Train also handles and monitors complaints received in order to rapidly reply to requests and improve the level of services offered.

In 2022, the number of complaints received almost doubled compared to 2021, for a total of 4,485 compared to 2,084 the previous year (both figures were updated as at 10 December). This increase is mainly due to the recovery of rail traffic, which had been previously reduced due to the restrictions following the Covid-19 health emergency, and to some extraordinary events that affected 2022 (e.g. cancellations that took place on 24 January 2022 due to snow, strikes in the summer months by drivers and staff, renovations that affected the network from November).

Approximately 60% of complaints received a response within the time limit (within 30 or 90 days for first replies) in 2022. The average response time was 20.76 days (compared to 19.38 days in 2021).

**CLASSIFICATION OF COMPLAINTS**

Delays	Refunds	Passenger information	Personnel	Cancellations
2022: 1,666 2021: 342	2022: 1,810 2021: 648	2022: 680 2021: 441	2022: 461 2021: 203	2022: 578 2021: 231

● improvement ● worsening ● stable

**Germany**

The Netinera group uses the methodology defined by the Public Transport Authority to monitor punctuality and passenger satisfaction on a regional basis and according to the type of service offered. That is why summary indicators at group or company level are not currently available.

## Road passenger transport



Road passenger transport completes the group's integrated offer, operating on a national and international level.

### Italy<sup>65</sup>

#### Busitalia – Sita Nord and subsidiaries

Customer satisfaction targets are reported in the various service charters prepared on a regional, provincial and municipal basis and separately for the urban and suburban services.

The punctuality figure (ratio of recorded delays to journeys monitored for punctuality) slightly deteriorated in 2022, owing to the progressive and complete return to normality, after the service reductions linked to the pandemic. This led to an increase in road traffic, which resulted in the increased likelihood of non-compliance with the departure/arrival times of the public service. The punctuality data relating to 2022, however, showed an improvement when related to the pre-pandemic period (2019).





PUNCTUALITY				
Indicator		2022 result	2021 result	Change in percentage points (p.p.)
Urban 	% of arrivals within 5 minutes of the scheduled time	93.8%	95%	-1.2
Suburban 	% of arrivals within 15 minutes of the scheduled time	93.3%	95.3%	-2





Customer satisfaction was also monitored in 2022<sup>66</sup>. Field surveys are the methodology of choice, involving interviews to customers at the time of using the services, to measure the level of satisfaction in real time.

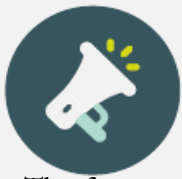
<sup>65</sup> The scope includes LPT services offered by companies in the Busitalia Group and Ferrovie del Sud-Est and Servizi Automobilistici.

<sup>66</sup> Customer satisfaction surveys in 2022 concerned urban and suburban road services of Busitalia and its subsidiaries and the railway service in Umbria. Furthermore, satisfaction surveys were conducted on replacement services offered by Busitalia Rail Service, on navigation services on lake Trasimeno and, to some extent, on the service provided in Tuscany for The Mall Outlet. The results of the surveys carried out in May and November on LPT were consolidated by weighting the customer satisfaction values obtained for each pool against the corresponding number of passengers carried.

The survey method concerned CAPI interviews (face to face), in an urban as well as suburban setting. The sampling plan was stratified by customer pool and line, with random extraction. In addition to socio-behavioural data, the survey gathered data on customers' perception of the quality of the service provided (Customer Satisfaction), using a score of one to ten. Customer satisfaction is gauged on both the service overall and individual aspects of the service.

URBAN			
Indicator	2022 result	2021 result	Change in percentage points (p.p.)
Overall score 	91%	90.6%	+0.4
Service regularity and organisation 	80.5%	79.4%	+1.1
Cleanliness 	81.5%	80.5%	+1.0
Comfort 	82.3%	82.5%	-0.2

SUBURBAN			
Indicator	2022 result	2021 result	Change in percentage points (p.p.)
Overall score 	88.6%	88.7%	<b>-0.1</b>
Service regularity and organisation 	77%	77.4%	<b>-0.4</b>
Cleanliness 	78.6	79.3%	<b>-0.7</b>
Comfort 	83.5%	82.8%	<b>+0.7</b>



The indications, suggestions, observations by customers on the services offered are considered as essential by Busitalia. The company handles reports and complaints through an appropriate procedure and with specific departments, and customers receive responses within the set times.

The focus on the people who travel with Busitalia or are attracted by the company’s ever more diversified and integrated offer, is also exemplified by the specific platform for managing complaints and reports. The integrated platform has made the complaint and report management process more efficient and effective, increasing in-company involvement for the purpose of addressing the reported inefficiency.

The company also took steps to implement the measures under Decision 28/2021 of the Transport Regulation Authority on the matter of complaints. A complaints section was published on its website, with all the appropriate measures to make the process of sending and responding to complaints smoother and more effective for customers. Specifically, the new procedure clearly defines the time frames for sending and responding to the complaint, the channels for sending the reports, requirements and features of the response to customers and what the customer can do if the response is not satisfactory.

Approximately 2,600 reports/complaints were managed in 2022, mainly regarding the local transport services in Veneto, Umbria and Campania and, to some extent, the market service in Tuscany for The Mall Outlet. Compared to 2021, the number of reports decreased by approximately 22%, with regard to local public transport. It should be pointed out that, as well as indicating an improvement also with respect to the critical issues that arose during the pandemic, this decrease should be seen as resulting from the introduction of the new complaints procedure, in compliance with the ART regulations, based on which the customer is asked to describe in detail their report so that the company can handle it effectively.

An analysis of the trends in the categories historically monitored – service regularity, punctuality, on board comfort, customer relations and information provided – yields the following data. Specifically, 1,040 complaints reporting 1,615 inefficiencies were received in 2022 with regard to the urban segment.

**URBAN INEFFICIENCIES REPORTED**

Service regularity	Company/customer relationship	Punctuality	Comfort	Passenger information
2022: 455 2021: 693	2022: 158 2021: 157	2022: 275 2021: 376	2022: 87 2021: 88	2022: 75 2021: 86
	–		–	

● improvement    ● worsening    ● stable

1,504 complaints reporting 2,220 inefficiencies were received in 2022 with regard to the suburban segment.

SUBURBAN INEFFICIENCIES REPORTED				
Service regularity	Company/customer relationship	Punctuality	Comfort	Passenger information
2022: 643 2021: 890	2022: 111 2021: 167	2022: 408 2021: 504	2022: 177 2021: 117	2022: 74 2021: 93

● improvement    
 ● worsening    
 ● stable

**Ferrovie del Sud-Est e Servizi Automobilistici (FSE)**

With regard to the road transport services provided by FSE, the main targets and results are summarised below.

BUS SERVICE			
Indicator		2022 target	2022 result
Travel safety 	Average bus age (total bus age/no. of buses)	12.3	Achieved
Travel comfort 	Air conditioning on vehicles (% of buses with air conditioning)	93%	100%
PRM service 	Buses with bays/platform for wheelchair-bound disabled people (% buses fitted)	21%	52%

With regard to customer satisfaction, measured with the same method described above for the railway service, 88.7% of interviewees said they were satisfied on the whole in 2022.



Also for the road transport segment, careful management of complaints is a vital tool for interaction with customers because it enables the group to monitor and analyse reported inefficiencies, improve performance and meet passenger needs.

Complaints are managed by a special team that receives them via a specific channel on the company website or by e-mail. In 2022, 2,032 complaints on the road service were received (1,576 were received in 2021).

### **The Netherlands**

Qbuzz BV's passenger satisfaction monitoring system includes a national OV barometer<sup>67</sup> survey covering all routes and concession operators.

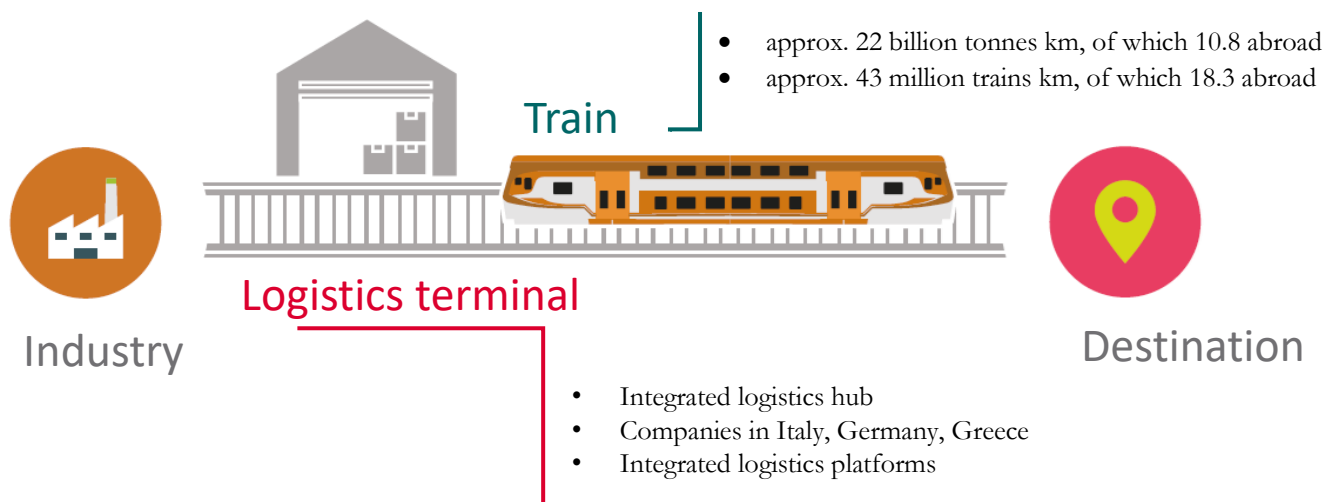
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<sup>67</sup> *OV-Klantbarometer* is the name of the national survey conducted by a third party to gather feedback from public transport passengers (urban and regional). Passengers may score the various aspects of the service. The survey is conducted annually, on a quarterly basis, on buses, trams, metros, regional trains and ships. The areas surveyed largely match the areas covered by the public transport service concession operators. As at the drafting date of this document, the 2022 survey has not been published yet.



### Integrated logistics (2-1, 2-6, 2-29)

The Group’s main objectives are to double the share of long haul railway freight traffic compared to 2019 and to make the railway mode more competitive in the logistics chain. By setting up the Logistics Unit, the Group seeks to establish a presence on the market as a **system operator**, both in Italy and abroad, contributing to **improving the freight transport system and promoting the modal shift**: from road to rail, with fewer social repercussions (accident rate, traffic congestion) and environmental impacts (lower atmospheric emissions and less energy consumption).



The Group’s commercial offer<sup>68</sup> is based on a wide range of Italian and international connections. It meets the needs of the different product sectors, also through a reorganisation by Business Units which guarantees the least time-to-market for customers:

NATIONAL FREIGHT TRANSPORT		
<b>Industry</b>	<b>Intermodal</b>	<b>General</b>
Services for steel, chemicals and automotive industries	Complete selection of railway and logistics solutions dedicated to the transport of containers, mobile homes, semi-trailers and lorries	Transport for manufacturing and work sites, products for large-scale distribution and military transport

<sup>68</sup> The Group’s freight segment is led by Mercitalia Logistics, a subholding company of the Logistics Unit, and is composed of: Mercitalia Rail, which is Italy’s largest rail freight company; TX Logistik group, which is Germany’s third-largest railway freight carrier, operating in many other European countries as well; Mercitalia Intermodal, Italy’s largest combined road/rail transport operator, and the third largest in Europe; Mercitalia Shunting & Terminal, one of the largest intermodal terminal operators in Italy, which designs, creates and maintains freight connections and rolling stock shunting and maintenance services, including intermodal inland terminal operations; and TerAlp (Terminal AlpTransit), which specialises in building cutting-edge terminal infrastructures.



## INTERNATIONAL FREIGHT TRANSPORT

At international level, the group offers logistics and rail solutions in Austria, Denmark, France, Germany, Greece, Norway, the Netherlands, Poland, Romania, Sweden and Switzerland.

The main sectors targeted by the Group's dedicated services are: chemical, wood and paper, raw materials, mining, agriculture and automotive.

The companies of the Logistics Unit conducted the Customer Satisfaction survey also in 2022. A common method was used, with small changes linked to the specific features and different needs of each business. Customer centrality is a fundamental value for all companies in the Logistics Unit.

Specifically, the level of satisfaction with the services was assessed by administering an online questionnaire, set up in such a way that the customer can provide a score, on a 1 to 10 scale, on aspects of the service provided that are deemed essential.

The overall score assigned by customers to the service provided by the Logistics Unit, calculated as the average of the scores given to the individual companies, was in line with last year's score (7 out of 10), showing continued appreciation of the Group's commitment to the services provided.

When analysing the results obtained by Mercitalia Rail with regard to appreciation of freight transport by rail, the total level of satisfaction – which measures the ratio between the sum of the scores obtained and the maximum achievable score – reaches 2/3 of the total, above the figures for 2021 (66.4% in 2022 against 63.3% the previous year).



The group's commitment to carefully handling complaints in order to provide services that are increasingly tailored to its customers' needs extends to the freight segment as well. All complaints received from customers are handled by investigating the causes behind the inefficiency and providing a prompt response to the customer, indicating any corrective measures if possible.

With regard to Mercitalia Rail, 93 complaints were received in 2022, slightly down on 2021 (95 complaints). Approximately 94% of complaints received a response in less than 30 days. The main causes for complaint were management of inefficiencies and traceability of transport when abroad (an IT project is currently being rolled out to set up a new global Track & Trace system to address the latter issue).

## Promoting safety (416-1, 416-2)

Not only is people’s safety a **priority** for the group, but it is a **strategic factor** as well, and one that translates into a daily commitment to providing all services according to the highest standards on its railway and roadway networks.

The Group acts to ensure the full safety of all production activities and that the risks associated with its business are reduced to the minimum for workers, the environment, passengers, citizens and, in general, for the world outside the company (**safety**), as well as ensuring the full protection of passengers from risks associated with causes outside the Group (**security**).



This commitment has led the group to adopt certified maintenance processes, use sophisticated diagnostics tools and invest significantly in non-routine maintenance, safety and technologies, which in 2022 amounted to:




- for the Infrastructure Business Unit at approximately 3.8 billion Euro in infrastructure (+1.7% on 2021);
- for the Passenger and Logistics business units at approximately 404 million Euro in the transport segment (-8% on 2021).

## Railway safety

The Group is **fully committed to the safety of the service offered to customers** (passengers, industrial customers and railway companies).

Safety is indeed a key value pursued by **directly and constantly monitoring the balance between technologies, people and organisation** right from the early stages of infrastructural projects as well as services and industrial processes, with a view to innovation and continuous improvement.

NETWORK SAFETY TECHNOLOGIES		
		km of lines
 <p><b>ERTMS/ETCS</b></p>	<p>The Group was among the first in Europe to implement the level 2 European Rail Traffic Management System/European Train Control System (ERTMS/ETCS) on the High Speed/High Capacity network. The system is based on European standards and ensures that trains from different countries run seamlessly on all the European lines it is fitted on, and guarantees the safe circulation of trains by adopting cutting-edge functions and technologies.</p>	<b>878</b>
 <p><b>SCC, CTC and ACCM</b></p>	<p>The Command and Control System (SCC), being rolled out on the key lines and on the main metropolitan railway nodes, jointly with its evolutions for High Speed lines (SCC-AV and SCC-M), is the most advanced integrated remote traffic management system used in the field of railways. Centralized Traffic Control (CTC) enables remote control and regulation of circulation on lines and stations from central locations (Central Posts - PC). The Multistation Computerised Central Equipment system (ACCM), which is the technological evolution of the Central Systems, simultaneously controls several station systems and the relevant block sections.</p>	<b>13,565</b>

<b>NETWORK SAFETY TECHNOLOGIES</b>		
		<b>km of lines</b>
<b>SCMT</b> 	<p>The Train Operation Control System (SCMT) is a train running safety system assisting the driver which controls the maximum speed allowed, instant by instant, in relation to the constraints posed by signalling, the characteristics of the infrastructure and the performance of the train, under both normal and deteriorated conditions.</p> <p>The system is applicable on electric, single or double track lines of the fundamental, complementary and node network and is certified up to a maximum speed of 250 km/h.</p>	<b>13,324</b> <b>of which 53</b> <b>km with</b> <b>double SSC</b> <b>and SCMT</b> <b>equipment</b>
<b>SSC</b> 	<p>The Driver Support System (SSC) controls the maximum speed allowed, instant by instant, in relation to the constraints posed by signalling, the characteristics of the infrastructure and the performance of the train, under both normal and deteriorated conditions. The system is applicable on non-electric, single or double track lines of the complementary network and whose maximum speed is 150 km/h.</p>	<b>2,539</b> <b>of which 53</b> <b>km with</b> <b>double SSC</b> <b>and SCMT</b> <b>equipment</b>
<b>GSM-R</b> 	<p>GSM-R (where R stands for Railway), is a proprietary system that supports conventional voice and data communications as well as the exchange of information between the most advanced traffic control and signalling technological systems. The GSM-R network also includes over 1,250 kilometres of lines in tunnels, either with proprietary radio coverage or guaranteed through the roaming service.</p>	<b>11,700</b>

The equipment and systems for traffic safety currently used on the Italian network are diversified and integrated with each other according to the features of the lines and the type of traffic (passengers or goods; long, medium or short haul) and ensure:

- traffic management in the station, at junctions and other service locations, making it possible to operate safely on switches, signals, etc., in relation to the tracks assigned to each train<sup>69</sup>;
- headway, making it possible to always maintain the safety distance between trains on the lines<sup>70</sup>;
- train operation protection<sup>71</sup>;
- traffic supervision and remote control<sup>72</sup>;
- traffic protection at intersections with the road network (level crossings);
- the acquisition and transfer of ground and on-board information<sup>73</sup>.

<sup>69</sup> Central equipment: ACE - Central Electric Equipment, ACEI-Central Electric Itinerary Equipment, ACC Central Computerised Equipment, ACC-M Multistation Computerised Central Equipment.

<sup>70</sup> Technological headway systems such as: BA= automatic block; BAB= automatic block system of two-way working lines; BCA= axle counter block; BCAB= axle counter block of two-way working lines; BR= radio block for HS/HC lines.

<sup>71</sup> SSC - Driver Support System, SCMT - Train Operation Control System, ERTMS - European Rail Train Management System.

<sup>72</sup> SCC - Command and Control System, with its evolutions designed for HS along lines, SCC-AV, SCC-M) and CTC - Centralised Traffic Control system.

<sup>73</sup> Dedicated GSM-R telecommunication system, where R stands for Railway.

## EUROPEAN RAIL TRAFFIC MANAGEMENT SYSTEM/EUROPEAN TRAIN CONTROL SYSTEM (ERTMS/ETCS)

The ERTMS/ETCS standard, which is **one of the most significant innovations introduced in the field of railway signalling**, allows trains of different nationalities to circulate, on the basis of information exchanged by the ground and on-board subsystems, defined in a common language and managed with interoperable components. More specifically, the standard defines the procedures for the exchange of signalling information between the ground-based and on-board equipment, identifying the transmission methods to be used and the message format.

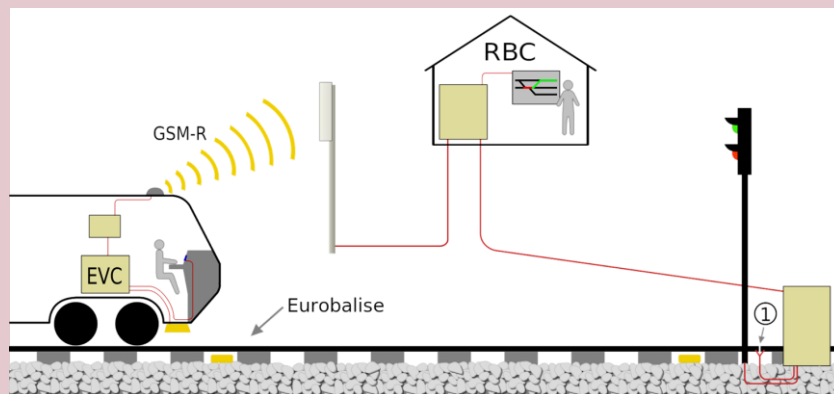
ERTMS/ETCS basically removes the **constraints on international train traffic caused by the differences between the present signalling systems in different countries**.

The ERTMS/ETCS system also provides the driver with all the information needed for optimal driving, constantly controlling the effect of every action taken in terms of train safety, and activating the emergency brakes if the train speed exceeds the maximum safety limits.

The exchange of information between the ground and on-board subsystem takes place thanks to the GSM-R radio channel, while the Eurobalise beacons (fixed) mainly acts as location references. Through the radio channel, the SSB and specifically, its smart core, the EVC, learns the train movement authorisations from the RBC (Radio Block Centre, which centralises information on clear route). The following diagram provides an example of the process.

**The Ferrovie Italiane Group was among the first in Europe to implement the level 2 European Rail Traffic Management System/European Train Control System (ERTMS/ETCS) on the new High Speed/High Capacity network.**

The ERTMS system is currently in the process of being implemented on the conventional lines that belong to the European railway corridors that cross Italy and on the nodes of major cities to shorten train headway (high density).



Consistent with European regulations requiring the implementation of ERTMS on all national lines, the Group has also started the equipping of conventional lines and has recently launched an Accelerated Plan to implement the system on all the approximately 16,800 km of national infrastructure by 2036, anticipating and extending EU obligations that required 6,000 km of Core Network by 2030 and 10,000 km by 2050. The equipping of conventional lines will take place with ERTMS Level 2 where "electronic" signaling facilities (ACC/ACCM) are already available, and with ERTMS Level 1 where electromechanical signaling facilities are still present.

Among the benefits of the new system, anticipated thanks to the Accelerated Plan: increased safety in rail transport, reliability, punctuality and speed, reduced costs of installation and maintenance as well as implementation of the Central Computerized Station Equipment (ACC); in metropolitan nodes, with the implementation of ERTMS HD (High Density) functionality, there will be greater 'capacity' and smoother and more regular movement will be made by eliminating the so-called "bottlenecks." Overall, there will be a significant increase in performance that will also be useful for the purposes of modal shift and to a possible saving of at least 15 percent of electricity for railway companies.

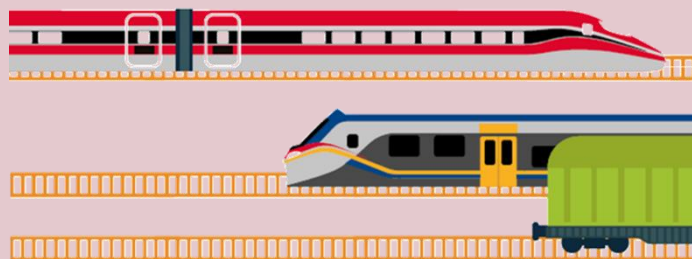
Finally, the renovation of the network's circulation facilities will bring a technological, digital and cultural revolution, preparatory to the future innovation envisaged by the Europe Rail Joint Undertaking research program for ERTMS (use of satellite applications, 5G, automation, synergies with Smart Road) that will place Italy first in the world in terms of potential and performance of the railway system, also acting as a driving force for the Italian railway industrial system abroad.

**Maintenance** is a key process for the management of infrastructure and fleets, in which people, equipment and technologies are constantly engaged in planning and implementing actions aimed at maintaining or restoring the condition of an asset (a plant, equipment, a train, etc. - undergoing maintenance) so that it can perform the required function, with the ultimate goal of ensuring:

- high quality of the service by means of regular and constant usability of the infrastructure and stock;
- reliability and safety standards that comply with the applicable regulations.

### MAINTENANCE OF RAILWAY VEHICLES

The Maintenance of Railway Vehicles is one of the key processes in ensuring that operational safety is maintained and improved and to meet established quality standards.

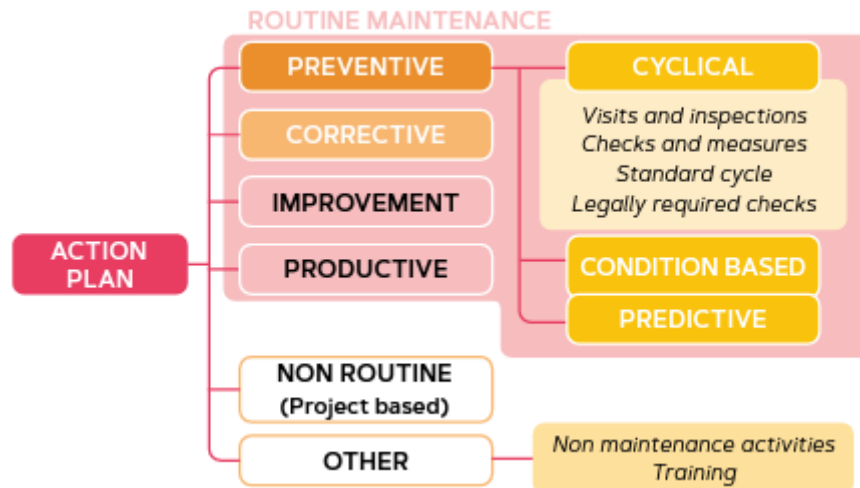


In particular, the Group ensures the planning, performance, control and improvement of maintenance processes through an organisation that provides for several functions:

- a unit that supervises and coordinates all stages of maintenance to ensure safe conditions for railway system vehicles;
- a central unit that establishes the criteria and general provisions for the maintenance of vehicles, including the operating conditions for the functioning of vehicles and to learn from experience;
- operating units that manage taking the vehicles out of service, sending them to repair workshops and subsequently returning them to operations;
- maintenance systems at two organisational levels: the **first level** consists of the divisions' **Current Maintenance Systems**, responsible for light and corrective maintenance work included in vehicle shifts, while the **second level** consists of **Cyclical Maintenance Workshops** responsible for work with a significant impact on the value of the rolling stock, which is carried out when the vehicles are not being used.

The maintenance activities of railway infrastructure is carried out through **standardised processes** and by implementing **different maintenance policies**:

- **corrective maintenance**: performed after a fault is detected, it aims at restoring the condition in which an asset can perform the required function;
- **preventive maintenance** (cyclical, predictive and condition-based): carried out at scheduled intervals or according to established criteria and for
  - the purpose of reducing the probability of faults or functional deterioration of an asset;
- **improvement/productive maintenance**: improvements/small changes that do not increase the value of assets;
- **non-routine maintenance**: specifically undertaken to improve reliability and/or strengthen infrastructure through projects that increase the value of assets.



Maintenance is carried out according to plans that are also developed by extensively **monitoring the network through the diagnostic activity**.





Diagnostics enable operators to automatically determine the conditions of various infrastructure components, assessing their wear and tear through an efficient IT system.

**Diagnostic systems** may be fixed or mobile:

- **fixed diagnostics** systems provide for the permanent application of measurement devices on specific parts of the infrastructure to continuously read the most important functioning parameters for systems comprising the railway station and line infrastructure. Continuously collecting measurements on the characteristics of the infrastructure and processing the data enable operators to base the maintenance strategy on predictive policies, identifying potential malfunctioning before it occurs. Fixed diagnostics are a key back-up tool for operating personnel in the event of a breakdown as they provide the technician with all the information they need to resolve it.
- **mobile diagnostics** entail equipping rolling stock with measurement systems that give important infrastructure readings.

Diagnostic trains used by the Group can accurately diagnose the infrastructure by monitoring the functioning parameters of the track, contact line, signalling systems and telecommunications to order maintenance when the parameters are not within the standard levels.

Railway lines are **classified** in accordance with European standards on the basis of the stresses to which they are subject. On top of **standard safety goals**, maintenance is optimised for each class depending on the level of reliability required by the market, using specific diagnostic trains, with the goal of achieving **sustainable maintenance**.

Superstructure, Telecommunications, Electric Traction and Signalling			Ultrasound <sup>74</sup>
1st class (2 weeks)	2nd class (2 months)	3rd-4th class (4-6 months)	(6-12-24 months)
			

As at 31 December 2022, RFI had a fleet of 30 diagnostic vehicles (4 of which for the HS/HC network), set to be extended up to approx. 40 vehicles in the coming years.

An operating schedule is prepared annually for the diagnostic fleet in order to meet set diagnostic requirements and safeguard traffic.

The following main parameters are checked during diagnostic activities:

- **Superstructure:** track geometry, rail wear and integrity, equivalent conicity, running dynamics, wave wear, wheel-rail interactions, assessment of the internal rail condition and video monitoring of the elements making up the track.
- **Electric Traction:** contact line geometry and wear, pantograph-overhead contact line interaction, overhead contact line voltage and current, and electric arcs;
- **Telecommunications:** coverage and quality of the GSM/GSM-R voice channel and of the LTE data channel;
- **Signalling:** Euroradio, Eurobalise, BACC and SSC channels used in the protection systems of European (ERTMS/ETCS) and national trains (SCMT and SSC).

In order to create a single, effective tool to monitor the condition of the infrastructure, RFI also set up an information system for **centralised diagnostics**, to gather and collate the information provided by the diagnostics systems spread out throughout the country along the entire railway infrastructure.

With this growing application of diagnostics technology, the routine maintenance **policies** applied to the railway network have been modified in recent years. Instead of being almost exclusively cyclical in nature, maintenance is now **condition-based** when it was possible to apply diagnostic information on the infrastructure.

<sup>74</sup> Diagnostics train which carry out ultrasound checks on internal track defects.



Furthermore, over the past few years, **predictive criteria** have been defined to determine the most appropriate maintenance work to be carried out at the right time, based on the historic performance of diagnostics data, maintenance activities and the trend in faults, with an expected positive impact consisting of the optimisation of vehicles and resources.

### SHUNTING MONITOR

Device developed from the need to **aid shunting operations and make them less dangerous** for railway personnel.

Safety Aid that allows the Driver to have clearer information on what is happening at the head of the train, where the ground staff work during shunting operations.

The device consists of two communicating modules, called Slave and Master, which transmit warning and alarm signals in relation to the detected distance from a probable approaching obstacle. Artificial Intelligence is able to detect the distance from any obstacles/people that may be on the tracks, then sends a set of light and sound alerts that differ based on the set range.



### **Monitoring the safety performance of the National Railway Infrastructure (IFN)**

Railway safety on the national railway infrastructure managed by RFI is monitored using indicators calculated based on the data stored in the databases (accident database) in accordance with current international criteria (issued by the ERA - European Union Agency for Railways).

The main **indicators used to monitor safety performance** are as follows:

- indicators related to common safety targets;
- significant accidents (train collisions, rail derailings, accidents at level crossings, fires on-board rolling stock, accidents to people involving rolling stock in motion, excluding suicides and attempted suicides, other);
- overall accidents for which RFI was liable;
- significant accidents for which RFI was liable;
- typical incidents according to the UIC.

For some of these indicators, the ERA has also prepared and assigned common safety targets (CST<sup>75</sup>) at European level and national reference values (NRV<sup>76</sup>), based on historical data.

The table below shows the Group's actual safety data for 2022 compared with certain common safety targets (measurement unit expressed in FWSI<sup>77</sup> on a graduated scale)<sup>78</sup>. Specifically, the table below compares the accumulated data on RFI performance, the National Infrastructure Operator, for each risk category<sup>79</sup> and each indicator, with common safety targets (CST) along with specific national targets assigned to Italy (NRV). It should be noted that the CST and NRV refer to the entire Italian railway system. Accordingly, they cover damage caused by events on both the infrastructure managed by RFI and on networks operated by other Infrastructure Operators.

<b>COMMON SAFETY TARGETS</b>					
<b>Risk category</b>	<b>Measurement unit</b>	<b>Graduated scale</b>	<b>Targets</b>		<b>Actual</b>
			CST	NRV	
			Common (x10 <sup>9</sup> )	Italy (x10 <sup>9</sup> )	RFI (x10 <sup>9</sup> )
Passengers	Number of passenger FWSI per year calculated based on significant injuries/passenger train*km per year	passenger train*km per year	170.00	38.10	<b>10.10</b>
Employees or contractors	Number of employee FWSI per year calculated based on significant injuries/number of train-km per year	train-km per year	77.90	18.90	<b>5.67</b>

<sup>75</sup> Common Safety Targets (CST).

<sup>76</sup> National Reference Value: specific value assigned to the railway system of each member country based on the various CST.

<sup>77</sup> Fatalities and Weighted Serious Injuries (FWSI)

<sup>78</sup> Data updated to 4 January 2023. At the date of preparation of this report, the 2022 data set out in the tables below and analysed are not consolidated and may be subject to adjustment following feedback from the competent Authorities on suicides/attempted suicides and the conclusion of RFI's internal investigations (definitive quantification of damage/identification of liability).

<sup>79</sup> Type of people who could suffer injury from a railway accident.

## COMMON SAFETY TARGETS

Users of railroad crossings	Number of users of railroad crossings FWSI per year calculated based on significant injuries/number of train-km per year	train-km per year	710.00	42.90	<b>19.98</b>
Other people on the pavement	Annual number of FWSI to people classified as "Other" due to significant injuries/number of train-km per year	train-km per year	14.50	6.70	<b>0.00</b>
Other people that are not on the pavement					
Person crossing the tracks wrongly	Number of FWSI to people per year calculated based on serious injuries/number of train-km per year	train-km per year	2,050.00	119.00	<b>189.53</b>

An analysis of the table shows that the only target that was not reached was that for people who cross the tracks inappropriately (violation of safety rules by people outside the railway system), with numbers above the NRV index but below the CST index. As already pointed out, this figure, which is higher than last year (126.74), has not been consolidated yet at the time of drafting this report, therefore it might change following the findings on suicides/attempted suicides by the competent Authority.

Significant accidents<sup>80</sup> constitute a significant part of railway accidents given the severity of the consequences. There were 114 significant accidents in 2022 on Italian railway infrastructure managed by RFI, which overall caused 80 deaths and 27 serious injuries (person hospitalised for over 24 hours) in addition to financial damage to infrastructure, the rolling stock involved, third parties and service disruptions over 6 hours due to a main line interruption).

In the comparison with 2021, there was an overall increase in significant accidents of +28, mainly due to the increase in the number of 'Accidents to persons involving rolling stock in motion' (+32) - which, following the consolidation of the data on suicides/attempted suicides, as already mentioned, could undergo changes - and the parallel decrease in the other types of accidents. As regards the causes of the significant accidents, the increase in external causes, which rose from 70 to 105, should be noted. However, the number of events associated to internal causes was down, from 16 in 2021 to 9 in 2022.

The following table sets out the consequences of significant accidents recorded<sup>81</sup> in 2022 with regard to harm to people.

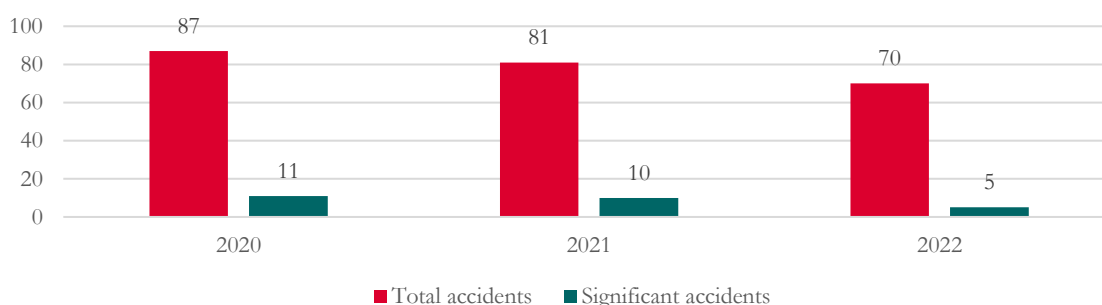
<sup>80</sup> According to the ERA classification criteria, a significant accident is any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded.

<sup>81</sup> Data updated as at 9 January 2023 which might be subject to changes based on the findings of the competent Authorities on suicides/attempted suicides.

HARM TO PEOPLE				
Type	Deaths		Serious injuries	
	2022	2021	2022	2021
RFI employees (including contractors)	2	1	0	3
Railway company employees	0	1	1	0
Passengers	3	1	1	3
Users of railroad crossings	7	4	4	2
People crossing the tracks wrongly	68	42	21	19
Other people on the pavement	0	0	0	0
Other people not on the pavement	0	0	0	0
<b>Total</b>	<b>80</b>	<b>49</b>	<b>27</b>	<b>27</b>

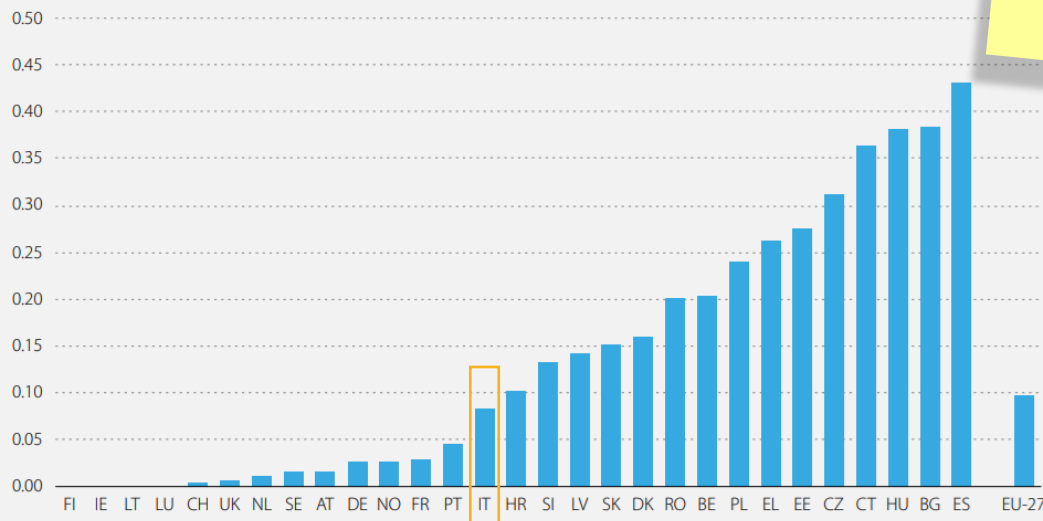
When looking at the number of significant accidents involving RFI alone, in 2022 there was a 50% decrease, down on the previous year (- 5 events); **the data for 2022 relating to overall accidents that RFI was liable for also decreased** with 70 events against 81 last year, down by around 14%.

Accidents for which RFI was liable



**Fatality rates for railway passengers**

*Deaths per billion passenger kilometres (2010-2020 average)*



Worldwide, the Italian figures are below the European average, proving the commitment towards the continuous improvement in safety performance

Source: ERA - Report on Railway Safety and Interoperability in the EU - 2022

Parallel to the monitoring of safety performance by means of the ERA classification, the Group also monitors performance in accordance with the UIC’s guidelines<sup>82</sup>, in order to be able to compare its performance in the international context. The group monitors safety performance, also which enables it to compare its performance with that of other European networks. Typical UIC accidents are weighted according to an overall index with respect to certain parameters such as: the type (train on train, train on people, train on vehicles, etc.); the extent of personal injury (number of deaths or injuries); the category of persons injured (any violations by the person); the liability (endogenous or exogenous).

Of the 12 typical UIC accidents that occurred in 2022 in the area of operations (-2 compared to 2021), 7 were of an exogenous nature (i.e. with responsibility related to causes external to the railway system), while the remaining 5 related to causes attributable to the reliability of the operation of the railway system. Of the total, the typical accidents with RFI responsibility recorded in 2022 are 2, a decrease of 50% compared to 2021.

<sup>82</sup> Typical accidents according to the UIC are: collisions, derailing, fires involving rolling stock, accidents involving dangerous goods and accidents at level crossings (collisions with obstacles or vehicles). They exclude accidents in which people are hit (including at level crossings), injuries to people as they inappropriately board/deboard moving trains, suicides and attempted suicides.

The UIC’s criteria for injuries/damage caused by the accidents are consistent with those for significant accidents:

- at least one death either immediately or within 30 days of the incident;
- at least one person seriously injured (hospitalised for over 24 hours);
- damage to rolling stock/infrastructure/third parties greater than or equal to €150,000;
- disruption of traffic on a main line for a period of time greater than or equal to six hours.

This classification is meant to measure the intrinsic safety of railway systems, assigning less weight to accidents caused by conduct in violation of railway regulations by people unrelated to the railway system (violations of Presidential decree no. 753/80) in railway contexts.

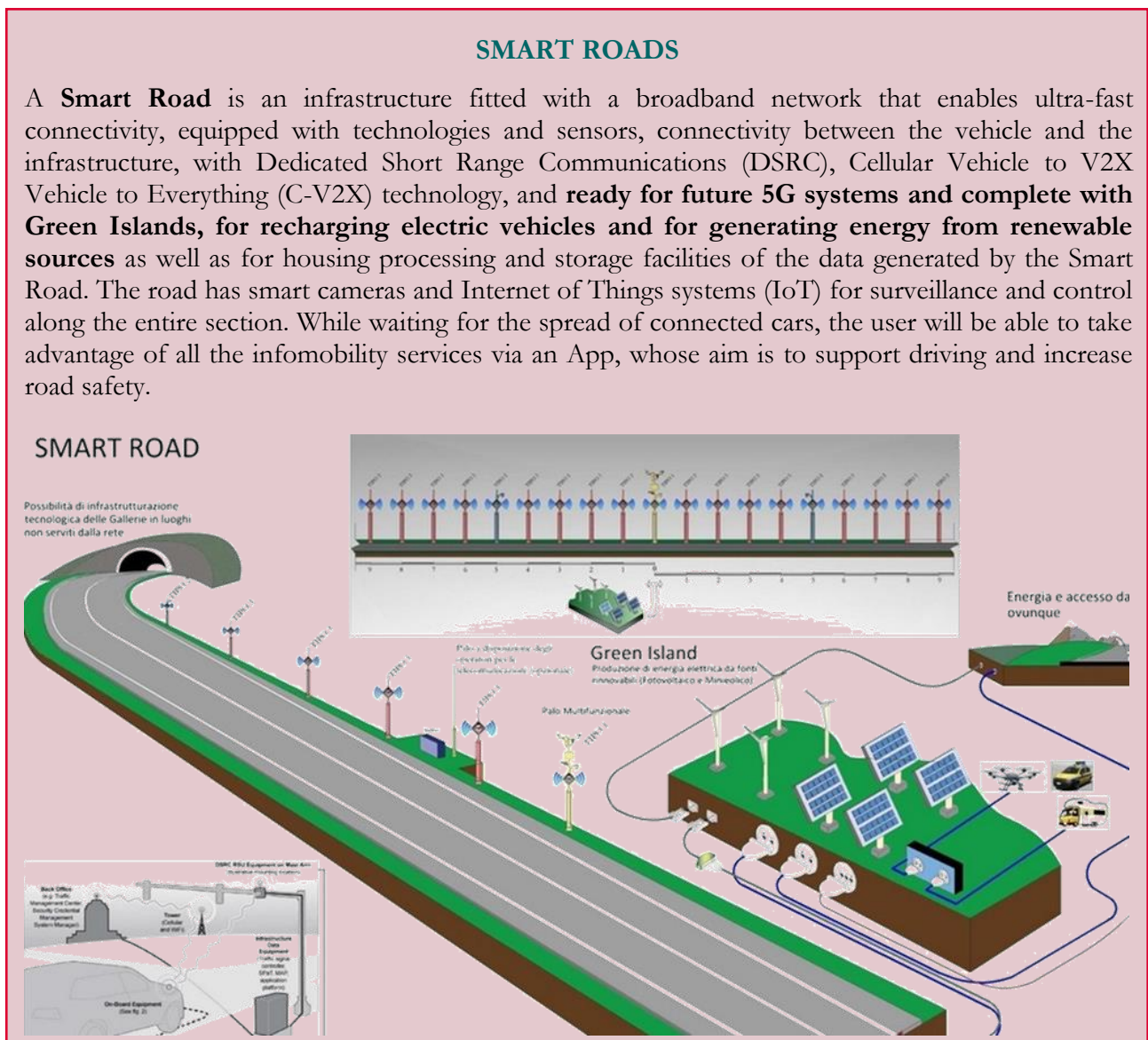
## Road safety

The Group’s goal is to **guarantee traffic safety in the network it operates**. An activity that requires constant and careful commitment on approx. 32,000 kilometres of roads.

It pursues this goal by spreading a culture of safety and respect for the rules of the highway code and through daily surveillance of the network, with operating personnel taking immediate action if needed and the national control room and unit control rooms performing ongoing operations.

The group has a road management tool (RMT) to continuously monitor the network. The RMT consists of various modules that manage road safety information and devices: fixed and mobile cameras, variable messaging signs (VMS), system diagnostics in tunnels and events management.

The technological solutions that we implement on our roads are aimed at reducing the rate of accidents and mortality.



The commitment of Anas to the implementation of the Smart Road project continued, for a total of 6,700 kilometres of roads. Activities continued on stretches of E45/E55, A2, A19, RA15, SS51, A90/A91. The Smart Road infrastructure was implemented on SS51 and C-ITS<sup>83</sup> Day 1 and 1.5 services continue being tested. The infrastructure was completed on A91 with a Smart Road Centre in the renovated Anas facility of Via Portuense 1531, and a collaboration phase with car makers started, to test vehicle connectivity.

At the same time as the development of technologies and processes, **the Group is actively promoting campaigns to raise awareness in order to prevent and fight accidents**, mainly dealing with topics such as traffic and safety while travelling. The campaigns are carried out in advance of traffic-critical periods on various media.

The Group also manages **scheduled routine maintenance** on the road network that it operates under concession, to protect assets and traffic safety, ensuring surveillance and immediate action in the event of emergencies on directly managed roads and motorways, by coordinating and directing the local offices, the situation room and the management of relationships with the traffic police and the national civil protection department.

In 2022, roughly 616 scheduled maintenance projects worth €1.57 billion were approved, mainly financed by the 2016-2020 Government Programme Contract. This work was mainly to restore the road surface and foundations, as well as road signs, recondition and update small and large road structures, repair slopes and sides and revamp technological and lighting systems.

In 2022, €173 million was invested in routine maintenance, specifically for snow removal, grass cutting, repair of localised sections of asphalt and guardrails, cleaning the road surface, appurtenances, road structures, hydraulic works and urgent road work.

The scheduled maintenance of technological systems entails fully replacing existing systems, identifying in the design stage the system architectures and equipment that give the maximum level of efficiency, while offering the same level of security, in order to curb energy consumption. Using only high-efficiency LED lighting systems along with high-performance electric engines and transformers show the group's focus on reducing energy consumption. The scheduled maintenance also include installing systems to monitor and control the working of the systems in order to manage the entire system efficiently and securely.

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<sup>83</sup> Cooperative intelligent transport systems.

## BUS FLEET MAINTENANCE

The Group conducts maintenance on the fleet through KPIs to monitor vehicle performance and safety and the performance of in-house maintenance units. The new fleet monitoring systems installed in latest-generation vehicles can collect increasingly more data and information for predictive maintenance, ensuring greater guarantees and safety.

The group is also committed to guaranteeing the safety of personnel and passengers with:

- video surveillance systems on board vehicles and protection for the driver's cabin;
- automatic vehicle monitoring (AVM) systems for the fleet;
- driver-assistance devices (ABS, ESP, ASR, etc.) with newly acquired latest-generation active safety systems (e.g., active braking assistance, distance sensors, lane departure warnings) and passive safety systems (e.g., collision warnings).





## Security, information security and privacy

The Group's priorities are **ensuring the utmost security in stations and trains**, to protect passengers and personnel **on duty, constantly supervising and protecting the Group's systems and infrastructures** through cyber security activities aimed at guaranteeing the continuity of its services, as well as the **confidentiality, integrity and availability of information**, both its own and that of customers, stakeholders and partners.

### Security

The security and protection of personnel, passengers/users at stations, assets and know-how are essential for the group.

The group constantly invests to guarantee and monitor travel safety and the security of the infrastructure and stations. To monitor security indicators, the group strengthened a partnership with the railway police (the branch officially responsible for preventing and repressing crimes in the railway sector).

#### STATISTICS ON THE SECURITY OF RAILWAY ASSETS

	2022 <sup>84</sup>	2021	2020	Delta % 2022/2021	Trend 2022/2021
Assaults on railway personnel*	358	330	223	+8.5%	↑
Thefts at the station	879	473	419	+85.8%	↑
Thefts on board trains	1,800	1,356	1,175	+32.7%	↑
Copper thefts from operating assets	171	171	138	0%	-
Copper thefts at depots	10	10	11	0%	-

In 2022:

- 1,800 thefts were reported by passengers on board trains. The figures are significantly down on 2019 (2,692 thefts), as is well known, a year not impacted by reduced commercial services;
- 879 thefts suffered by passengers at stations, up by 46.2% on the previous year, due to the fact that Covid-related restrictions led to a significant fall in numbers of passengers at stations. Compared to 2019, i.e., pre-pandemic figures, the numbers continue the positive trend recorded in recent years, with a 17% fall in the number of events recorded at national level.

<sup>84</sup> Data consolidated as at 30/11/2022.

## HEALTH EMERGENCY MANAGEMENT

During 2022, owing to the extended health emergency, ascertained with the declaration of the state of emergency of 31 January 2020 and subsequent Decrees of the President of the Council of Ministers, the Company Security team prepared a set of measures aimed at countering the spread of the virus. It should be noted that over time, the measures were duly modified in accordance with the provisions issued by the Competent Authorities from time to time.

Among the main measures:

- taking passengers' temperature via thermal scanners installed at HS and IC departure train stations and handling suspected cases of infection in compliance with the Note of the Ministry of Infrastructure and Transport of 2 June 2020;
- a new method for managing passenger flows in order to ensure social distancing (e.g., highly visible floor markings, creating specific paths using retractable safety barriers), in compliance with Law Decree no. 6 of 23 February 2020 and subsequent implementing Decrees of the President of the Council of Ministers;
- providing specific devices for frontline station personnel (social distancing, personal protection devices, procedures for handling suspected cases of infection);
- operational management of any cases of overcrowding, assistance and information to passengers on the regulations in force at the station;
- procurement of PPE for the Group's personnel;
- statistical/analytical monitoring of passenger transit at the large hubs where the Gate Project is active (Firenze Santa Maria Novella, Milano Centrale, Napoli Centrale, Roma Termini), aimed at providing Management with an exhaustive picture of the evolution of the situation, on the effectiveness of the measures so that the personnel operating in the area can be issued organisational and operational instructions.

The Group is obviously also committed to ensuring the **safety of on-board personnel** and in 2022:

- **the Board Support app was further developed** to regulate the access of Police Forces on regional trains, taking advantage of the free/subsidised tickets included in service contracts with the Regions. By pressing the specific button of the app, the train manager can contact any Police personnel on board the train;
- installations continued of state-of-the-art Video-surveillance Systems, showing the live feed on the on-board monitors, front cameras for monitoring the line and integration with the MUVI platform for remoting images;
- a new front camera and video-surveillance system was installed on two ETR 500;
- a new video-surveillance system was installed on Self-Service ticket machines.

The FS Group also **continued to pursue anti-mafia actions** by adopting measures beyond those provided for by law and collaborating with the competent authorities in a structured manner in order to achieve effective results in repelling any attempts by organised crime to infiltrate intercompany contracts and sub-contracts.

The **Travel Security model** set up by the Group ensures 24/7 monitoring of the countries where our colleagues of the FS Group, and provides assistance to employers and personnel abroad in the event of an emergency.

## Cyber security

The digitalisation of transport and mobility set off a process of human and industrial transformation of the entire sector. Widespread use of new technologies, such as blockchain, AI and IoT, will give the industry as a whole 'cognitive' capacities that would have been unimaginable just a few years ago.

As well as providing opportunities for developing a more efficient transport service portfolio, this new digital dimension could also enable cyber criminals to attempt cyber attacks to steal confidential information or block essential services, including acts of terrorism.

Railway assets, trains, buses, stations, platforms, employee devices and suppliers' IT systems will be increasingly more interconnected and the risk that just one of these assets be compromised and trigger a chain of effects generating inefficiencies in train circulation and impacts for customers cannot be excluded, nor is it acceptable.

Cyber attacks are an inevitable side effect of digitalisation. Not only FS as an essential service operator, but the entire Italian system is obliged to acknowledge and contain such attacks.

Intense work in the institutions has resulted in important decrees in recent years, aimed at identifying the operators who provide essential services for citizens and defining the scope of their technological systems, whose operation is essential to ensure the services are not disrupted. The recent EU directive on NIS (network and information security) concerning cyber security, transposed into Italian legislation with decree no. 65 of 18 June 2018, identifies the FS Group as an essential service operator and, as such, requires that it adopt technical and organisational measures to strengthen management of cyber risks and prevent cyber attacks as part of a national and European model based on cooperation and the integration of information between member states. Furthermore, the national cyber security scope was established with Legislative decree no. 105 of 21 September 2019. In addition to public entities, it includes private entities considered strategic operators whose protection is essential for the country to function. They are required to apply adequate technical and organisational security measures and to notify any security incidents.

In the first six months of 2022, the Cyber Security Solutions department provided the National Cyber Security Agency (ACN) with the updated lists of ICT assets, digitally signed and encrypted which, following the risk analysis, and according to graduality criteria, were included in the national cyber security scope for the services of the railway transport sector provided by the Group and indicated in that notice.

Considering the legislative obligations and rapid evolution of security threats, **the Group has adopted an integrated physical/cyber security steering and governance model** in which physical security and cyber security are managed under a single command and control point,

ensuring the adoption of general principles and consistent operating logic, to identify as quickly and reliably as possible the sources of a threat regardless of where it arises and irrespective of whether it is a physical, cyber or hybrid attack, in order to intervene immediately.

A single interface must liaise with the Institutions responsible for safety, as well as with the equivalent departments of railway companies in other countries. The Group has adopted an organisational model by which the Security&Risk – Security – Cyber Security Solutions Department operates to implement and manage the security model identified through the appropriate strategic guidelines by the Technology, Innovation & Digital - Cyber Security Strategy, Governance & Architectures Department.

From an operational point of view, the Security&Risk – Security - Cyber Security Solutions department completed and launched the new Cyber Security Operation Centre (C-SOC), an outstanding unit where state-of-the-art technological and human resources work together to identify, prevent, detect and fight cyber attacks. The C-SOC protects tens of thousands fixed and mobile group workstations throughout the country and the information systems supporting business processes and transport operation services harnessing the most innovative technologies on the market capable of exploiting the analytical potential of big data and AI to recognise and fight cyber attacks.

A real time security monitoring system detects cyber threats in the network and business systems, active 24 hours a day, 365 days a year at the Group's Cyber Security Operations Centre (C-SOC). In 2022, the team of security incident analysts **detected, countered and neutralised over 5,000 cyber attacks**.

The threat intelligence service plays a hugely significant preventative role in this regard. Expert analysts seek and detect new threats and specific attack routes in this complex preventative activity. They use technologies that can automate the gathering of information from certified channels, mainly institutional, and update the defence systems using links synchronised with the group's security devices.

The threat intelligence service is also supported by an internal malware analysis team of specialists that can break down malware code and analyse its behaviour. This enables them to detect unknown threats and publish internal newsletters with Indicators of Compromise (IoC), or attack vectors that could impact all segments, and share them with institutions or other essential service providers.

With a view to preventing and counteracting illegal access attempts, fraud or attempted fraud against the IT systems and technologies used by the Group, and in compliance with the Convention for the Prevention of Cyber Crime on management systems for Critical Infrastructure, the Cyber Security Solutions Department launched a joint training programme

with the C.N.A.I.P.I.C (National Anti Cyber Crime Centre for Critical Infrastructure) of the Italian Police, with particular regard to technical, organisational, legal, political, ethical and socio-economic issues for the promotion of cyber security at the company.

In 2022, the Cyber Security Solutions Department, in collaboration with RFI, launched a project for monitoring the security of traffic installations. The activity entailed designing and installing a self-contained solution, called CyberBox, which is implemented across the various installations to monitor their security, and sends any abnormal events it detects to the Group's SOC, which analyses them and sends any alarms in the event of security incidents.

The exposure of the Group's business services on the Internet requires putting in place advanced security systems capable of automatically detecting and countering attacks from the network and aimed at undermining the services provided. To this end, the Cyber Security Solutions department put in place a protection service against DDOS (Distributed Denial of Service) and Application attacks called Anti-DDoS and WAF (Web Application Filtering) using AKAMAI technology (Kona and Prolexic).

The widespread use of teleworking by Group personnel required providing company systems such as e-mail, collaboration tools, management systems etc. on the Internet, in addition to business systems. As a result, in order to enable personnel working remotely to access the company network and systems safely, a VPN (Virtual Private Network) service was implemented, using Akamai EAA technology. This is delivered through the Cloud Akamai Intelligent Edge Platform, which complements the ADDoS and WAF service, thereby contributing to reducing the exposure to Internet threats of the IT scope. During 2022, as also provided for by the Recovery Plan for the pandemic emergency, important steps were taken to increase the protection of IT services exposed on the Internet. One of the most noteworthy was the introduction of the Multi Factor Authentication system, as it enabled personnel who access company services remotely, e.g. from home, to use a further authentication factor, in addition to their personal password. This double authentication factor is activated in various ways, the most actively encouraged of which is by using a specific app installed on one's smartphone.

Finally, with a view to developing mechanisms for collaborating and sharing information with other Italian Critical Infrastructure, a Trusted Introducer accreditation process was launched by the FS Group's CERT, already active and ready to manage security incidents according to the regulatory framework and best practices in the field.

## **Data Protection and the Data protection officer**

The General Data Protection Regulation ("GDPR") and (It.) Legislative Decree 196/2003, as amended by (It.) Legislative Decree 101/2018 (known as New Privacy Code), expand the protection of natural

persons' rights and freedoms in relation to their personal data, as these rights and freedoms have been recognised as fundamental for EU citizens.

The FS Group designed and implemented an organisational framework to protect the data of its customers, employees, suppliers and other third parties. The Data Protection Framework comprises a group measure and an organisational notice. It defines the key personal data protection principles, the roles and related macro-responsibilities and information flows to/from the board of directors, senior management, the units involved in its creation and those involved in the processing of personal data, as well as the data subjects.

To strengthen data protection processes, the implementation of the distributed governance model was completed, by appointing company DPOs in the main FS SpA subsidiaries. Furthermore, the Group is implementing an IT management system to govern personal data protection processes.

## Our people and their value (2-7; 2-24, 2-25, 3-3, 401-1, 405-1)

Invaluable assets, **People** are at the centre of the Group's strategy. It undertakes to ensure their well-being and growth through communications, training, development and caring programmes at all organisational levels every day. The recruitment of new talents, performance assessments, training, development and career advancement are based on equal opportunities and merit.

2022 was characterised as the first post-pandemic year and in this context, the Group's HR projects supported the consolidation of the working methods (digitalisation and remote working) and at the same time supported the resumption of face-to-face activities, also by bolstering the internal relational network required for interpersonal well-being and for people to work effectively.

Furthermore, in keeping with the 2022-2031 Business Plan and with the ensuing important evolutions in the Group's Governance Model, the new People Strategy aimed at producing a significant evolution in HR logics and practices through following key actions, summarised in five steps: Simplify, Accelerate, Bring closer, Network, Build the Future.

Within this framework, Organisational Development activities focused on designing the new Group Governance Model and aligning the organisation accordingly, simplifying the body of regulations, which resulted in significant efficiency gains in the production of organisational documents, and a preliminary identification of areas for streamlining and increasing efficiency, aimed at focusing the Holding Company's activities on its strategic steering role.

**Development** activities boosted the pathway towards evolution with a view to increasing efficiency and valuing people and managers, and focused on building the Managerial Pipeline in order to ensure leadership of strategic positions, as well as on disseminating development skills and practices outside the HR professional category, by building an actual development network, consisting of coaches, mentors and buddies.

**Recruiting and Employer Branding** activities dealt with designing a new Group positioning strategy on the labour market, and on attracting the most interesting skillsets, by innovatively redesigning communication and recruitment methods. This was supported by efforts to identify Group-level critical roles, in order to define competitive remuneration policies. Networking activities with schools and universities evolved through new partnership agreements and research projects.

The Group's **training offer** was broadened and diversified and went hand-in-hand with all the main stages of the transformation, aimed at developing communication and relationship skills. The ongoing innovation in the training process is implemented through more accessible training tools that are also nimbler and closer to people's learning needs.

The FS Group is constantly committed to achieving sustainable economic development, integrating safety, respect for the environment and the social development of the contexts it operates in within its strategies and business objectives. Specifically, in 2022 the Parent Company's guidelines on

**Occupational Health and Safety** were updated, in line with the 2022-2031 Business Plan, confirming the strategic value for the development of the Group and the commitment to the constant reduction of accidents, with the ambition of achieving zero injuries in the medium and long term.

Furthermore, the Group's **Social Policies** were implemented along two main directions: actions wholly to do with solidarity and social support to disadvantaged people (National Observatory of Solidarity in Stations – ONDS; the Network of Help Centres and Shelters, the Solidarity Train project, Fundraiser), and that of the development of FS real estate assets that are not functional to railway operations, to be used for social purposes and for the benefit of the local areas and citizens (unmanned stations, abandoned lines). The ongoing collaboration with European partners aims at developing common, consistent strategies for corporate social responsibility, and that with academia and research focuses on the issues of social responsibility and creating shared value.

Furthermore, in 2022 the offer of **welfare** services to employees was further expanded and enriched by providing additional bonuses, also by taking advantage of the opportunities offered by specific regulations, aiming to curb the effects of the increase in the cost of energy and fuel and related decline in purchasing power. New agreements were also finalised, especially in the social-healthcare sector, to secure reduced rates and favourable terms for employees.

In terms of **People Caring**, the offering of webinars open to all the Group's people on topics such as wellbeing, care giving and work life balance grew exponentially, reaching approximately 31,000 users during the year.



The FS Group employs **85,361 people** at 31 December 2022, a net increase of 3,455<sup>85</sup> resources compared to 2021.

**85,361 people**  
+ 3,455 on 2021

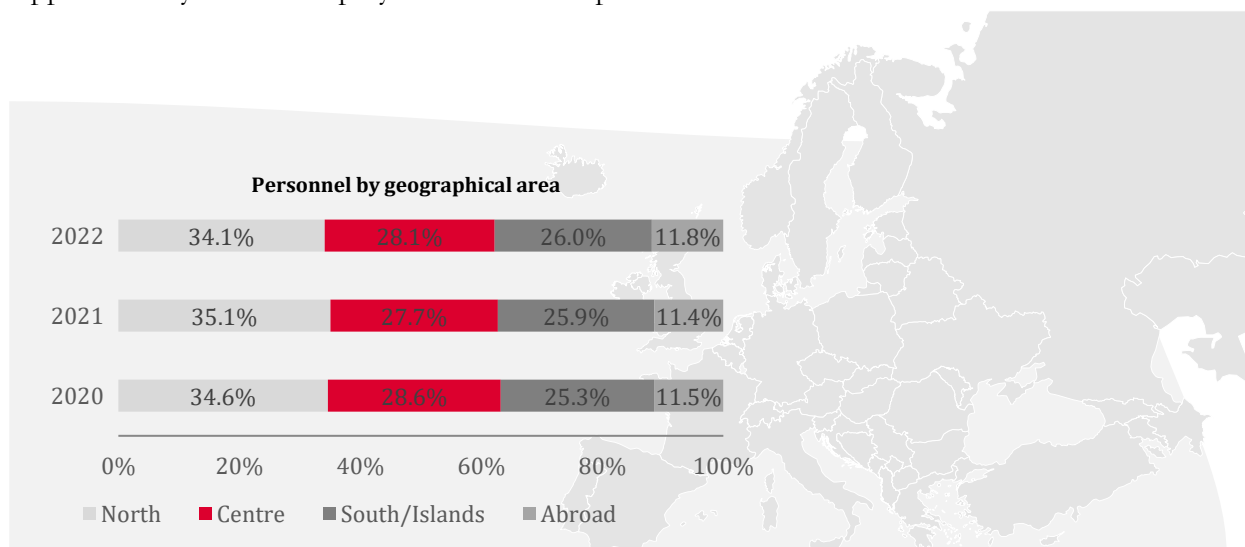
80% men



The percentage of **women in the workforce has increased constantly**, reaching 20% of total employees in 2022 (+0.9 percentage points), reflecting the Group’s objectives and actions to close the gender gap.

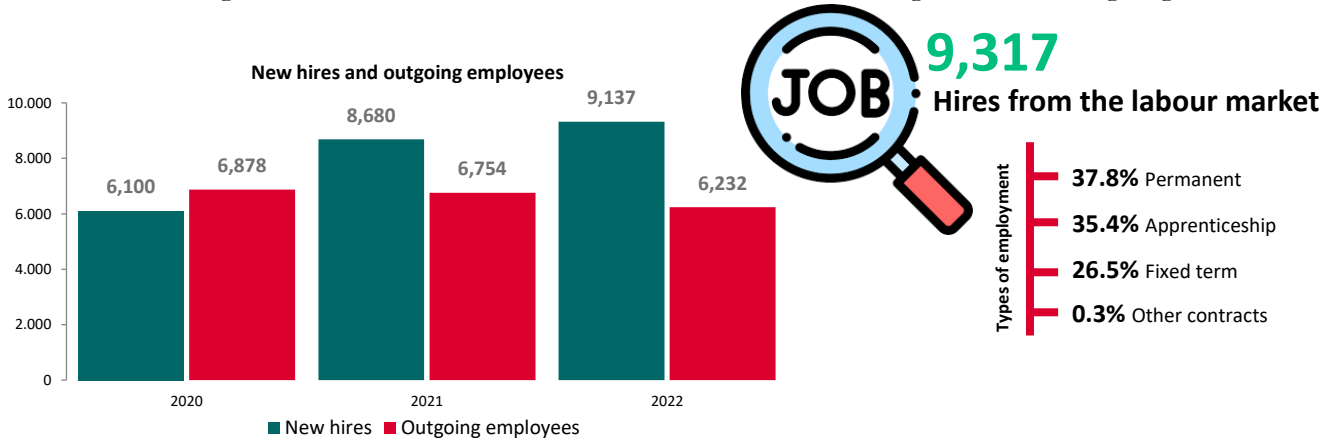
Breakdown of group workforce	Measurement unit	2022	2021	2020
<b>Executives</b>	<b>no.</b>	<b>1,070</b>	<b>998</b>	<b>1,004</b>
<i>women</i>	<i>no.</i>	271	237	215
<i>men</i>	<i>no.</i>	799	761	789
<b>Middle managers</b>	<b>no.</b>	<b>12,936</b>	<b>12,285</b>	<b>11,896</b>
<i>women</i>	<i>no.</i>	3,091	2,743	2,503
<i>men</i>	<i>no.</i>	9,845	9,542	9,393
<b>White-collar workers</b>	<b>no.</b>	<b>41,692</b>	<b>39,934</b>	<b>38,829</b>
<i>women</i>	<i>no.</i>	11,141	10,386	9,829
<i>men</i>	<i>no.</i>	30,551	29,548	29,000
<b>Blue collars</b>	<b>no.</b>	<b>29,663</b>	<b>28,689</b>	<b>29,680</b>
<i>women</i>	<i>no.</i>	2,528	2,261	2,291
<i>men</i>	<i>no.</i>	27,135	26,428	27,389
<b>Total number of employees at 31 December</b>	<b>no.</b>	<b>85,361</b>	<b>81,906</b>	<b>81,409</b>
<i>Of women</i>	<i>%</i>	20.0	19.1	18.2
<i>Of men</i>	<i>%</i>	80.0	80.9	81.8
<b>Average number of the year</b>	<b>no.</b>	<b>82,998</b>	<b>81,365</b>	<b>81,838</b>

Approximately 12% of employees work in companies based abroad.



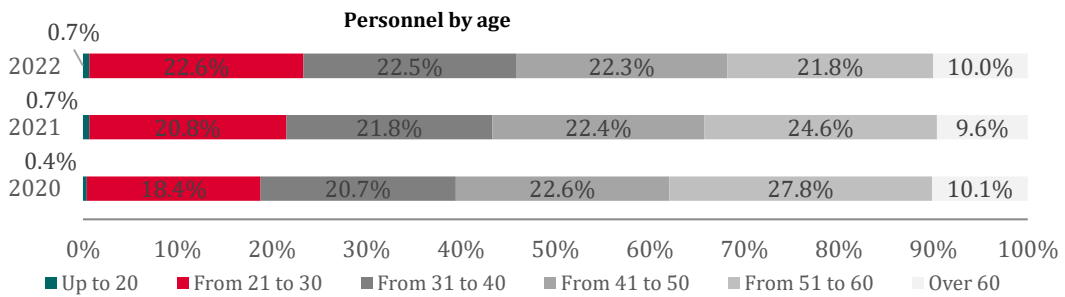
<sup>85</sup> The balance takes into account 370 resources resulting from a change in scope, 369 from Intermodalidad S.A. (a Trenitalia subsidiary) and 1 from FS Italian Railways USA Inc.

In 2022, the generational turnover continued, with 9,317 new hires against 6,232 outgoing.

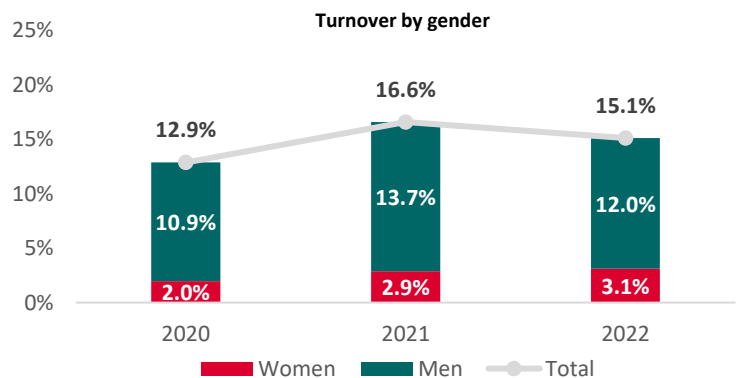


**42 years**  
average age  
- 1 p.p. on 2021

The Group’s commitment to investing in young people continued in 2022, as can be seen from the average age<sup>86</sup> of its workforce of roughly 42 years old, 1 year younger than 2021 and 2.4 years below 2020.



The turnover stands at 15.1%, compared to 16.6% the year before: the decrease reflects the overall growth of the Group’s workforce.



<sup>86</sup> The data refer to the following companies: FS Italiane S.p.A., RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani, Mercitalia Logistics, Mercitalia Rail, Mercitalia Intermodal, Busitalia Veneto, Busitalia Rail Service, Busitalia Campania, Grandi Stazioni Rail, Grandi Stazioni Immobiliare, Terminali Italia, Italcertifer, Nugo, FS Technology, Cremonesi Workshop, FS International and Ferrovie del Sud-Est. The total number of employees in this scope of analysis is 64,559, approximately 76% of the total workforce.

## Recruitment and HR management (2-7, 2-19, 2-20, 2-30, 201-3, 401-1, 401-2, 404-2, 405-1, 405-2)

### Recruitment

2022 saw the Group increase its commitment in all recruitment activities, based on the principles of merit, transparency and equal opportunities, with significant volumes.

In continuity with the promotion of professional diversification and development of the group's resources, each recruitment process for professional targets and middle management jobs involved preliminary job posting, resulting in 271 activated campaigns.

In keeping with the recent past, the recruitment process on the external market entailed digitalisation and the search and testing of innovative solutions. A total of 1,507 recruitment processes were carried out on the various targets at Group level. Specifically, with regard to new graduates, 40 events (recruiting days and assessments) were planned and carried out digitally, mainly for the selection of engineering profiles (90%), 1,557 candidates were interviewed, of whom 65% deemed suitable.

FS' database has more than 570,000 CVs, 23,000 of which were screened for job postings. After pre-screening over 85,000 candidates, in total for the whole Group, approximately 23,000 candidates were then interviewed.

In the external recruitment of professional and operational personnel, each company followed its own specific procedures while upholding the Group's guidelines. The implementation of digital recruitment activities also involved streamlining the Smart Recruiting area, assessing companies' needs, with the aim of adapting the recruitment tools to the complex conditions of the context. Smart recruiting allows the use of online assessment tools for evaluating soft skills via adaptive, random, inclusive scientific tests in line with EU standards.

Within the framework of these collaborations, over 40 agreements and partnerships were signed with academic, training and research bodies, to design internships, degree theses and Ph.D. programmes under the NRRP and strategic business projects (69 internships, 9 Ph.D. programmes).

The digital professional opportunity channels were managed to consolidate talent attraction and recruitment for all target roles: "fsitaliane.it/work with us" with an average of 279,258 visitors per month uploading or updating their CVs, in seven languages, looking up current job opportunities; the Facebook pages FS Careers and LinkedIn of FS Group Italiane with roughly 21,795 and 426,444 followers, respectively; with FirSt, the Group's first chatbot for recruiting, thanks to machine learning, responses were sent to 5,555 requests for information and support received from potential candidates.

In order to redefine the Group's positioning as major employer, FS set up the strategy for its Employee Value Proposition and scheduled its implementation in 2023.

For the third year in a row, the Group was **ranked first** in **Potential Park's online talent communication** ranking by students and recent university graduates of best experience in online job search.

It took one of the first spots as **Italy's best employer**, in the Transport and Logistics section, ranked by Corriere della Sera and Statista.

At the **Universum Award Italy 2022 - Students and young professionals edition** of Universum, the FS Group **on the Women in STEM award**, ranking first as the ideal employer for female STEM students.

These results were made possible by ongoing investment in promoting and implementing employer branding and employee attraction initiatives, partly through relationships with universities, including:

- Master's Degree in Engineering of Infrastructure and Railway Systems with la Sapienza University of Rome;
- Postgraduate Training School in Systems Engineering for Integrated Mobility with Alma Mater Studiorum of Bologna;
- Master's Degree in Transport System Engineering with la Sapienza of Rome;
- Two-year specialisation course in Transport System Engineering with Politecnico of Milan;
- Strategic partnership between FS Group and La Sapienza University on topics such as: recruitment, guidance and employability;
- 17 virtual career days and job meetings: opportunities for listening, job guidance and recruitment;
- 12 conferences, advisory and company presentations in academic settings.

## Remuneration and pensions<sup>87</sup>

The FS Group uses the following types of contracts: open-ended contracts (part-time<sup>88</sup>, full-time and apprenticeships) and fixed-term contracts (part-time and full-time). Approximately 96.4% of FS Group employees have open-ended contracts<sup>89</sup>.

Employees are also covered by collective agreements; in nearly all cases the national labour agreement for the Mobility/Railway sector<sup>90</sup> is the agreement used for the group's non-

<sup>87</sup> The scope of analysis includes the companies listed in the note at the start of this section, covering about 76% of all Group employees.

<sup>88</sup> Approximately 1% of open-ended contracts are part-time.

<sup>89</sup> Refers to the Group's consolidation scope. Approximately 9.42% are apprenticeships.

<sup>90</sup> The other national labour agreements applied are: the railway, tram and shipping workers' (Mobility-LPT) contract for Busitalia Campania, Busitalia Rail, Busitalia Veneto and Ferrovie del Sud Est, and the Logistics, Freight Transport and Shipping agreement for Mercitalia Intermodal, the national labour agreement for the tertiary sector, applied by GS Rail and GS Immobiliare.

management personnel, supplemented by the Group's contract of 22.03.2022. The contractual minimum wage for employees' respective positions is applied in both fixed-term and open-ended contracts.

Employees with apprenticeship contracts are, for the first 24 months, assigned remuneration that is higher than that established for one level lower than their position. They are then, for the subsequent 12 months, assigned remuneration equal to the initial remuneration established for their final position.

All employees, including newly hired employees, receive the contractual minimums plus some of the fixed remuneration items provided for by the national labour agreement (including seniority rises) and additional amounts related to the various types of employment. In addition, they may also receive extraordinary raises and one-time bonuses.

As provided for by the national labour agreement, the Group offers its employees supplementary healthcare plans<sup>91</sup> consisting of a standard package (with costs borne by the worker's employer) and the option to extend the coverage to their families and purchase additional packages at particularly advantageous rates. In addition, the group extended the insurance it took out for its employees to cover hospitalisation with Covid-19 also for 2022.

Within the scope of (It.) Law no. 81 of 22 May 2017, with the Agreement dated 20 April 2018, following a trial period, the Group made remote working a structural working mode, in order to support the work-life balance of its personnel. Subsequently, after signing the Agreement of 18.02.2021, the Group reached the decision of further promoting this working mode, and stipulated the option of working remotely up to 11 days a month.

Building on the experience gained in previous years and considering the application of remote working during the health emergency until 30.06.2022, the Group was able to ascertain that not only does this working method provide an effective tool for work-life balance, but where it was implemented in accordance with organisational and management factors, it resulted in a work organisation conducive to the achievement of corporate efficiency objectives. In 2022, the *Guidelines and procedure for Remote Working management in the FS Group* were updated based on the above, to provide a renewed organisational framework based on a more prominent role of the Manager and on raising remote workers' awareness of the need to achieve business objectives by combining several factors, including:

- flexibility in performing one's work;
- independence in organising one's work;
- strengthening of the trust-based relationship between Manager and remote worker;

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<sup>91</sup> In 2022, employees were able to purchase additional packages also through the Welfare One-Time share, where applicable.

- increased satisfaction;
- improved digital mindset;
- improved quality of the work performed;
- greater involvement in the company, also with regard to expected objectives;
- improved work-life balance.

The FS Group also carried out dematerialisation of the individual agreements signed, with significant impacts in terms of environmental sustainability and efficiency of administrative processes.

Furthermore, in 2022, Companies of the FS Group that apply the national labour contract mentioned above signed to renew the Group's contract that covered specific salary and welfare measures, including the increase in contributions to supplementary pension schemes and supplementary health care. Trade union agreements were also signed for granting one-off welfare credits to employees to be spent in 2022 on the various welfare measures available on the company platform and the two-party Observatory was established for the development of welfare initiatives and to promote better work-life balance. Plus, the agreement on the Performance Bonus for 2022 and 2023 was signed for employees of the companies that apply the FS Group's contract. Finally, on 12 December 2022, the Group's companies concerned signed specific agreements to access the New Skills Fund.

The remuneration system for FS Group managers implements that set forth by the relevant national labour agreement for managers of goods and service production companies with respect to the definition of the minimum guaranteed salary. Total remuneration - both fixed and variable - is defined considering the professional and managerial duties of each position and annual management and performance reviews. Each position is evaluated using a specific weighting method to obtain objective elements for planning and managing remuneration policies, organisational decisions and career paths.

The method to evaluate positions and compare their remuneration with similar positions within the group and on the market was developed by a leading international group in the rewards sector which boasts one of the most extensive databases on remuneration in the world.

Remuneration policies for group managers are based on market benchmarking to check that the remuneration offered is consistent with the market, to motivate managers, while also considering the complexity of the position held.

Remuneration policies are updated to support internal management and development policies and to reward personnel with a view to increasing their sense of belonging and motivation over time. Annual one-time bonuses are meant to reward and recognise the contribution of each

manager based on their performance in terms of ongoing excellence.

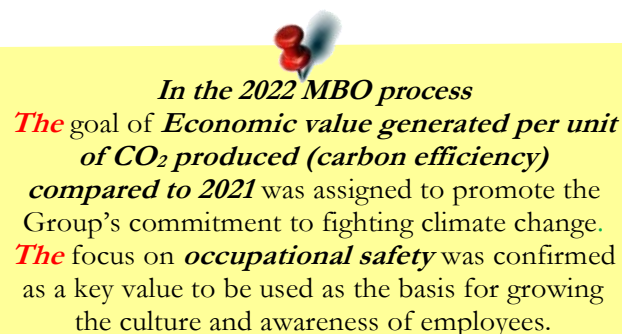
Managers also receive short-term incentives as part of the MBO plan, in which the variable component of remuneration is linked to the achievement of specific performance targets<sup>92</sup> for the company and the Group. The variable component of remuneration, linked to the achievement of specific performance targets indicated in advance, provides an incentive to reach the group's budgeted financial, project and sustainability results. Junior managers heading micro-organisational units that are key to the company's mission and to achieve the group's main purposes also receive the same incentives as managers.

Each manager and junior manager involved are assigned chiefly financial and/or project targets related to the company and their specific position.

Taking into account the key role of the FS Group as the subject implementing the investments intended for sustainable mobility infrastructure as part of the National Recovery and Resilience Plan (NRRP), the focus in 2022 was on financial and NRRP goals, always with an eye to the issues of environmental sustainability and workplace safety.

These were assigned on a top-down basis as defined by senior management and set out:

- *common* indicators, aimed at ensuring that performance is focused on reaching higher targets at Group/company level, especially regarding EBITDA and CO<sub>2</sub> emissions (carbon efficiency);
- *position-based* indicators, related to assigned responsibilities and aimed at rewarding individual contributions towards achieving company targets.



***In the 2022 MBO process***  
***The*** goal of ***Economic value generated per unit of CO<sub>2</sub> produced (carbon efficiency) compared to 2021*** was assigned to promote the Group's commitment to fighting climate change.  
***The*** focus on ***occupational safety*** was confirmed as a key value to be used as the basis for growing the culture and awareness of employees.

Total remuneration to managers is integrated with a series of benefits, mainly consisting of: insurance coverage for both occupational and other injuries and permanent disability due to illness and death, the supplementary health care plan (FASI), the supplementary pension fund (PREVINDAI) and additional supplementary healthcare insurance (ASSIDAI).

The compensation model for these employees is intended to offer remuneration that is consistent with the employee's position in the organisation and the assigned duties and to reinforce a goal-oriented approach by rewarding continuous performance improvement.

<sup>92</sup> The objectives must reflect the priorities set out in the budget and should be identified transparently so they can be measured and certified objectively through the Group's accounting and reporting systems, in line with the practices used by leading Italian companies and focused on environmental and financial sustainability.

These employees' remuneration includes a fixed component based on the complexity of their positions and an assessment of their potential, along with a variable component linked to the achievement of formally assigned objectives. Raises and bonuses are closely linked to duties and the continued achievement of the subjective and objectives targets associated with the position.

There are no differences in remuneration based on gender. Any average differences in remuneration between men and women, as reported in the table below, are due exclusively to the fact that they hold different positions in the companies, the ways in which they provide service and their responsibilities. For example, there are fewer women in transport operation jobs and, accordingly, average remuneration is affected by this factor (less compensation for shifts, working on holidays, working at night, etc.).



Employee remuneration - The gender pay gap		2022	2021	2020
Executives	GAR*	-12.0	-11.4	-10.1
	TAR**	-11.2	-13.9	-11.3
Middle managers	GAR	-0.4	+0.8	+1.5
	TAR	-3.3	-3.1	-2.8
White-collar workers	GAR	-2.8	-2.8	-3.3
	TAR	-15.4	-15.3	-14.5
Blue collars	GAR	+0.9	+2.4	+1.6
	TAR	-5.4	-4.7	-3.2

\*GAR: Gross Annual Remuneration

\*\*TAR: Total Annual Remuneration

Employees' pensions are financed through specific mandatory contributions shared by employees and employers. Employees pay contributions equal to 9.19% of their remuneration base. This rate increases by one percentage point for monthly amounts subject to pension contributions exceeding €4,023<sup>93</sup>. On the other hand, employers pay contributions equal to 23.81% of each employee's remuneration base for the calculation of contributions. Employers in the group cover, for all employees, additional costs for maternity leave, illness, social employment insurance (NASpi<sup>94</sup>) and ordinary contributions to the fund for income and employment assistance. Such fund implements actions for group company employees to promote training programmes for professional retraining and/or re-qualification, set up active income and employment assistance policies, and provide extraordinary allowances to support income due to employees under voluntary redundancy. With regard to the supplementary pension fund, group employees participate in the negotiation fund provided for by the railway national labour agreement (Eurofer) or certain open-end funds in accordance with the scheme established by law.

The employer and the employee share contributions to the Eurofer fund equally. Contributions are set at 1% of the monthly salary<sup>95</sup>, which was brought to 2%, effective 1.1.2023, by the renewal agreement of the national labour contract signed on 22.3.2022. Employees may increase their contributions on a voluntary basis, without any obligation for the employer to increase its share of the contributions. Furthermore, the Mobility Contract and the FS Group's contract of in force introduced additional increases in contributions to the Eurofer fund, including an annual contribution of €100 each for all employees and another €100 per employee for those who did not receive work/life balance benefits.

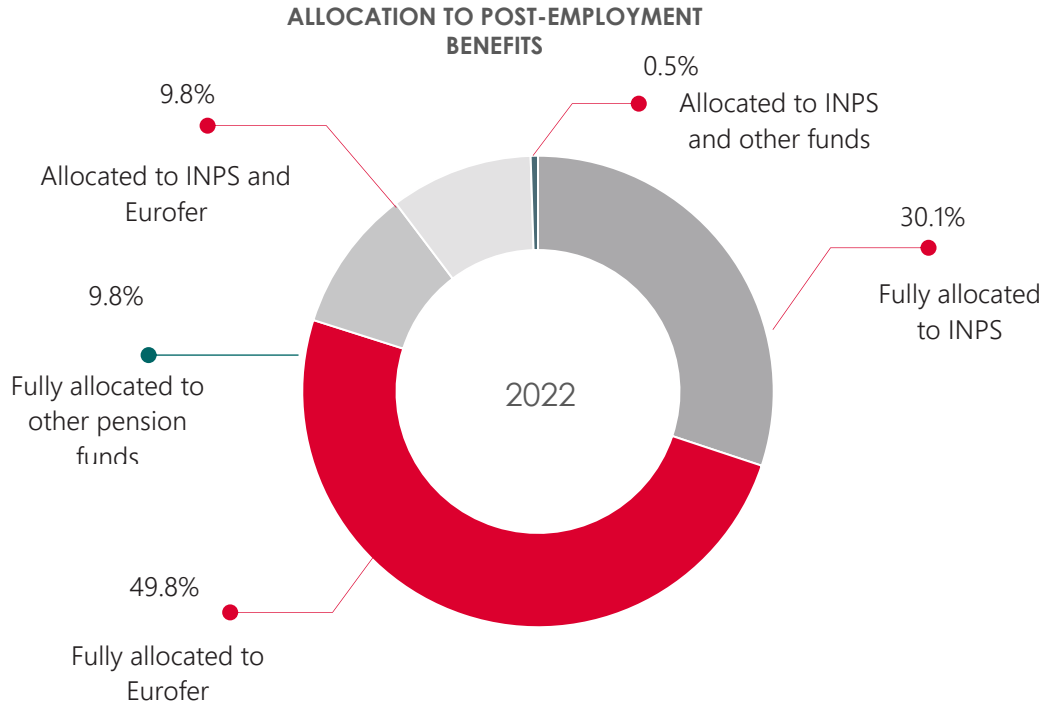
<sup>93</sup> Additional contribution under circular no. 15 of 28.01.2022.

<sup>94</sup> New Social Labour Insurance.

<sup>95</sup> According to article 22 of the FS Group's employment contract.

The employer is not required to match contributions to the open-end funds, to which the full amount of post-employment benefits required by Italian law is transferred.

The chart illustrates employees' selection of where to allocate their post-employment benefits.



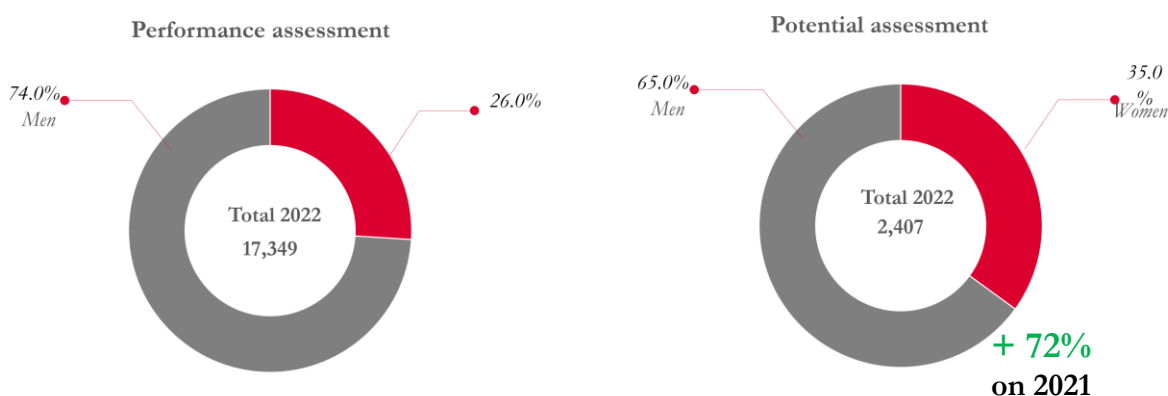
### Encouraging, training and upgrading skills (404-1, 404-2, 404-3)

The Group **rewards and nurtures people** according to transparent, merit-based criteria in order to achieve the objectives in the Business Plan.

The aim of the Group’s development model is to ensure that the professional and managerial structure is consistent with the needs established in the plan, business development requirements and those of the resulting organisational structure.

The purpose of the performance management process is to encourage better business performance, encouraging growth in the performance of people. In a performance assessment, the person has the opportunity to receive clear, measurable objectives and share open, structured feedback with their supervisor, in order to highlight their strengths and take specific action on their improvement areas, consolidating expertise.

With respect to the assessment of Potential, in 2022 work was carried out to optimise the feedback time frames and to build subsequent development plans, with a view to making full use of the potential profile tool, above all as a service available to people and managers to build actions of growth, professionalisation and improvement every day.



The 72% increase in the number of people whose potential was assessed, bears witness to the continued investments by the Group in activities aimed at highlighting and appreciating internal talent.

Conducted by employees’ HR managers on the integrated assessment system platform, the annual performance assessment involved 17,349 people<sup>96</sup>, (+15% on 2021), roughly 28% of the average workforce for the year<sup>97</sup>. Resources not included in the integrated assessment process have their

<sup>96</sup> Including 4% managers, 43% junior managers and 52% white collars.

<sup>97</sup> The percentage is calculated on the scope average (FS Italiane, RFI, Trenitalia, Ferservizi, Italferr, Mercitalia Rail, Mercitalia Logistics, FS Sistemi Urbani and Busitalia - Sita Nord, Ferrovie del Sud Est e Servizi Automobilistici, FS International e FS Technology).

performance informally monitored each year by their supervisors (e.g., feedback on strengths and weaknesses).

During the year, work was also done on upskilling the Community of in-company assessors and on building guidelines that make the best use of their professionalism and constantly feed their skills. The team of in-company assessors was significantly enhanced, and their numbers doubled through a specific and renewed certification and qualification process.

Finally, the foundations were laid to build the Managerial Pipeline, with the aim of ensuring strategic leadership, as well as to build a network consisting of Coaches, Mentors and Buddies, that promote the development and spread of skills and practices also outside the HR professional category.

The evolution of **digital learning** continued to be the recipient of significant investments, to support the development of know-how in a variety of skills domains. New training courses were redesigned and structured in line with the **People Strategy**, using more engaging, interactive, social and much more customised solutions to suit people's needs, to address requests for upskilling and reskilling courses. Digital training increased by approx. 80% in active courses compared to 2021, with a consolidation of in-company authoring skills (over 21% of self-produced courses). Digital courses were actively attended by approx. 158,000 participants (approx. + 2% on 2021), consolidating the growth of distance learning, which in 2021 had entirely replaced classroom training.

Many digital learning courses were provided on organisational culture, awareness raising and compliance issues during the year, including: the Group's Data Protection Framework (GDPR), the 231 Model, the ABC System, labour law, Smart Information and Confidential Female Counsellor<sup>98</sup>.

Approximately 815<sup>99</sup> thousand training man/days were provided by the main Group companies, roughly 24% more than 2021, in order to:

- **retain and refresh specialised technical skills** in all jobs and professional roles comprising the Group's ability to achieve results;
- **support the evolution of the culture and managerial skills** of the Group's people through ever more widespread and continuous training;
- **ensure the integration of new employees** in the productive system through induction programmes that are ever more engaging and customised according to people's needs;

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<sup>98</sup> "Smart" information: notice on the purposes and methods for personal data processing at the Company; Confidential Female Counsellor: Notice on support to workers for cases of sexual harassment.

<sup>99</sup> The scope of the analysis includes the following companies: FS, RFI, Trenitalia, Busitalia - Sita Nord, Ferservizi, Italferr, FS Sistemi Urbani, Mercitalia Logistics, Mercitalia Rail, FS Technology and Fondazione FS.

- **develop a stronger culture of safety in the workplace and in transport operations** throughout the Group's various business units.

The Parent Company's training activities, provided across all Group companies with pilot and consolidation projects, mainly concerned:

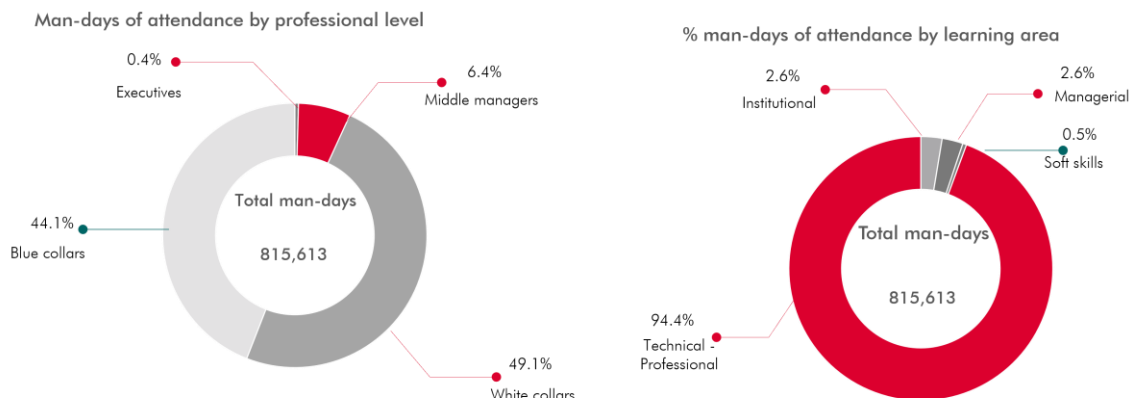
- **Leadership programmes** for the development of the Group's managerial team;
- new pathway for the Group's graduates, called **Young Talent** in order to better address the needs of the younger generations;
- training initiatives supporting **inclusivity**, including **Train the trainer Knowing and managing the passenger with disability and impaired mobility** and the project **Women in Motion**;
- development of an **international leadership** thanks to the first **International Induction** project of the FS Group, designed for new hires of foreign subsidiaries who joined some colleagues from Italian companies in a knowledge sharing training course for the first time;
- **engagement and communication activities targeting the management working on the Business Plan** which entailed, on the one hand, **Leadership Breakfasts** to increase and consolidate corporate networking and strengthen the relationship with industry experts and institutional representatives, on the other **Public Speaking** training courses, in order to spread a common communication culture;
- distribution of the **Company catalogue** offered by the Parent Company to support the development of the **soft skills** of all professionals;
- relaunch of the **Innovate programme** which allows multidisciplinary teams, with different seniorities and from different Group companies, to undertake a pathway to develop, promote and launch new business ideas and test new technologies;
- **technical and professional** training projects focused on learning and refreshing technical skills and qualifications/certifications typical of operating roles;
- refresher training by **Professional Category** to update Group know-how on core or common issues;
- training on **Occupational Health and Safety**, to gain extensive knowledge of regulatory issues;
- continued training on **sustainability** topics, consistently with and supporting the Group's focus, through its Business Plan, on the sustainability goals in line with the United Nations' Agenda 2030.

Furthermore, the training provided directly by the individual companies focused on:

- **development of technical and behavioural skills**, to ensure the safety of personnel, but also of passengers, consistently with past initiatives, supporting the culture of safety;
- **support to change processes**, consistently with the Group’s need to achieve its business objectives;
- **development of customer centricity skills** and focus on the market;
- **consolidation and development of skills supporting internationalisation processes**;
- **innovation and digitalisation**, including training and advanced tools for surveys and design and on BIM (Building Information Modeling) and enabling platforms.

Furthermore, around 20,330 man-days of training were provided to non-group personnel belonging to supplier companies in order to ensure compliance with consistent standards of expertise and safety.

The total cost of training days solely for employees amounted to €8.2 million, up 30.2% on 2021 due to the increase in training provided. Funding for training generated revenue of approximately €7.5 million.



## Health and safety (403-3, 403-5, 403-6, 403-9, 403-10)

Occupational health and safety are key factors in the 2022 -2031 Business Plan. They are the founding values for the Group, cornerstones of the Code of Ethics, and guide the actions and behaviour of all personnel and how production processes and relations with our works and service contractors are managed.

Predicating on these assumptions, the Group Organisational Notice no. 95/COA of 30 September 2022 – Occupational health and safety of the companies of the Ferrovie dello Stato Italiane Group – General guidelines 2022-2026 – defined the new prevention guidelines for Group companies, in keeping with the previous ones and building upon the positive results already reached. The stated aim was again to achieve an ever higher level of safety for any activity carried out by employees and to solidify a responsible culture of safety that is shared at all levels. The long-term goal, the Group's ambition, is zero accidents at work for its employees and promoting safe behaviours among partners, in line with the best prevention standards, to consolidate the Group's position in Europe among the leading companies in matters of occupational health and safety.

The improvement of safety performance, in terms of reducing the number of accidents and their frequency, requires technological and organisational investments, digitalisation in all business areas to improve workplace safety and the personnel's quality of life, the dissemination of a leadership style fostering a culture of safety and trust between the company and employees, the sharing of experiences and knowledge with our contractors, suppliers of goods and services, with a view to a common culture of prevention.

This approach led to the following steps:

- the Memorandum of Understanding signed in April by the Group and INAIL, whose aim is to strengthen policies for prevention and protection of health and safety in the workplace, to avert the risk of an increase in accidents, with a special focus on an increased ability to design and develop innovative technological, organisational and regulatory solutions to safeguard workers' health and safety, in the context of the major infrastructure works included in the NRRP, of which the Group is one of the main economic players;
- the Safety Innovation project, the aim of which is to pursue digital innovation projects on matters of occupational health and safety (agile working; digital systems; remote safety control; digital asset management; risk prevention) in Group companies, thanks to the involvement of digital startups, selected through a challenge launched by the Group's Innovation Hub in Catania.

In October – to mark the European Week for Safety and Health at Work – and November, the companies held the third edition of the Safety Day, a well-established event dedicated to projects to improve prevention and engage personnel.

During the year, the Group's holding company completed the procedure to certify its Occupational health and safety management system according to the UNI ISO standard 45001:2018 - Occupational health and safety management systems.

In 2022, the Group continued to strictly implement measures issued by the public authorities to curb and fight the spread of Covid-19 in the workplace.

The following table provides data on indemnified injuries currently being defined, as provided by the national labour insurance institution, INAIL. Although the results show a 30% reduction in accidents compared to 2021, it should be pointed out that the data may be subject to an increase and reach the average of recent years, as there was a delay in processing the reports by INAIL.

Injuries indemnified by INAIL <sup>100</sup>	2022 <sup>101</sup>	2021	2020
<b>Injuries in the workplace</b>	655	909	835
<i>Injuries - women</i>	106	132	108
<i>Injuries - men</i>	549	777	727
<b>Fatal injuries</b>	3	2	6
<i>Fatal injuries - women</i>	0	0	0
<i>Fatal injuries - men</i>	3	2	6
<b>Serious injuries in the workplace<sup>102</sup></b>	181	274	250
<i>Serious injuries - women</i>	28	33	28
<i>Serious injuries - men</i>	153	241	222
<b>Injuries in transit</b>	153	236	199
<i>Injuries in transit - women</i>	39	39	43
<i>Injuries in transit - men</i>	114	197	156
<b>Overall frequency rate<sup>103</sup></b>	9.63	15.28	13.98
<i>Frequency - women</i>	7.93	12.03	10.11
<i>Frequency - men</i>	10.05	16.02	14.82
<b>Severity rate<sup>104</sup></b>	415	591	613

In Italy, occupational diseases, which lead to immediate damage to employees' health, are reported by the employer to INAIL within the scope of injuries at work, as required by relevant legislation, and INAIL counts them among the category of injuries at work. In the Group's case, specifically, there are reports

<sup>100</sup> INAIL data for 2022 are partially consolidated.

<sup>101</sup> The data for 2022 include the following companies: FS Italiane, RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani, Italcertifer, Mercitalia Logistics, Mercitalia Rail, Busitalia - Sita Nord, Anas and FSTechnology.

<sup>102</sup> Serious injuries are those that result in more than 40 days of missed work.

<sup>103</sup> Frequency rate: [no. of injuries in the workplace/amount]x 1,000 employees, calculated in accordance with European ESAW standards.

<sup>104</sup> Severity rate: [number of missed days/amount]x 1,000 employees.



of injuries at work relating to the post-traumatic stress of train drivers (in cases of hitting people along the train tracks, generally suicides).

In addition, there are professional diseases originating in the long term due to pathogenic factors found in the workplace. In the group's case, professional diseases, which usually account for no more than 50% of reports, relate to organisational events dating back many years, in some cases decades. They arise slowly, gradually and progressively and mainly relate to obsolete organisations and work processes, which the companies have remedied by changing the environments and production processes.

The most common professional diseases in the railway sector are bone and joint or skeletal muscle problems as well as hearing impairment caused by noise. The following table sets out the data of the periodical medical check-ups, related to various risk factors, which are one of the most significant elements of Group companies' efforts to prevent occupational diseases.

Personnel who received check-ups	2022	2021	2020
Personnel who received health monitoring check-ups	47,612	36,530	38,472
Personnel who received railway safety medical check-ups	12,733	14,165	10,832

Roughly 13% of man-days in the technical/professional learning area were devoted to health and safety and environment training, for a total of over 95,000 man-days.

Below is a description of the main training courses provided on Occupational health and safety during the year:

- **Mandatory Workers' Health and Safety training**

- general training: includes basic concepts on occupational health and safety, workers' rights and duties, prevention principles;
- specific training: deals with issues of interest, specific and peculiar risks for the job, in order to provide the worker with the tools and knowledge required for risk prevention and management in the company.

- **Refresher course on Health and Safety for Managers**

- refresher course on protective measures for workers, through practical applications and examples of the sources of risk and related prevention measures.

- **Working from home**

- encourage a reflection on the impact of teleworking on how activities are organised and how to guarantee the quality of the work experience in a mixed setting (working at the office/remotely);
- promote the development of the skills required by the new work organisation.

- **Collaborative Intelligence**

- 
- support the definition of common objectives and a shared vision;
  - promote the development of team working and knowledge sharing skills.
  - **Get Moving!**
    - provide useful tools to prevent the physical consequences of unhealthy habits at work (e.g. poor posture, etc.).
  - **Technostress**
    - encourage a reflection on a healthy and specific use of the mobile devices commonly used at work (smartphone, tablet, phablet, laptops etc.);
    - contextualise the ‘technostress’ phenomenon with regard to an assessment of work-related stress;
    - knowing the main methods and tools to assess technostress from a psychological-social and organisational point of view.
  - **Safety Leadership**
    - promote the awareness of hazards and the impact of the human factor on workplace health and safety;
    - foster the development of the Safety Leader’s skills.

## Welfare and Diversity and Inclusion (405-1)

«We all have a mix of diversities that makes us unique. The end purpose of Diversity & Inclusion Management is to fully enhance and use each employee's contribution to achieve corporate goals and best equip the Organization to face the challenges and uncertainties coming from the global market. » (Code of Ethics, FS Group).

The group believes that diversity is a value to be recognised, understood and reinforced. It undertakes to create an open and inclusive work environment with the conviction that the diversity of its people is a source of organisational well-being and competitive edge for the business.

In its Code of Ethics, the Group endorses, inter alia, «the creation of a respectful and collaborative work environment, repressing any form of harassment; policies for personnel's mental and physical well-being, striving to balance the needs of the business with their personal and family needs; refusal to exploit labour, especially child labour, zero tolerance for any type of illegal labour and a commitment to ensure fair, merit-based, skills-based regulatory and remunerative treatment without any discrimination... ».

In addition, as confirmation of its commitment to inclusion and diversity and the respect for human rights and equal opportunities, in 2020, the **FS Group signed the Women's Empowerment Principles (WEPs), established by UN Women, the UN entity dedicated to gender equality.** These principles aim to enhance and promote equal opportunities for women in the workplace, the market and the community through which the group operates.

The activities and projects for the group employees are supported by both the National and Local Equal Opportunities Committees<sup>105</sup> and directly by specific internal structures.

## Corporate initiatives

### Diversity and inclusion

- the objectives of the *Diversity, Equality & Inclusion Policy of the FS Group* are appreciating uniqueness and creating an increasingly inclusive workplace, which it pursues by providing guidelines on inclusion to the various professional categories;
- **NOW (new way of working)**: an information campaign targeting remote workers and remote managers, with a focus on the various aspects of work-life balance (management, security, training, caring). Around 14,000 employees were involved in the two webinars organised on well-being, one designed for remote managers and one for remote workers, and a handbook with useful tips for properly managing one's own and others' remote working experience;

<sup>105</sup> A bilateral and joint corporate body set up pursuant to article 1.3.C) of the national labour agreement for the Mobility/Railway sector and article 3 of the Ferrovie dello Stato Italiane Group's contract of 16 December 2016. It consists of one national committee and 15 local committees.

- **drawing up and publishing the first *Gender Equality Plan of the FS Group***, included within the Horizon Europe projects, promoting the spread of an inclusive culture and the Group's position on the issue of gender equality;
- **improved integration of work-life balance and personal wellbeing**: webinars open to all Group employees covering a variety of topics;
- ***We care* – online space dedicated to the Group's people**: over 31,000 people signed up for the more than 50 webinars on a variety of topics (e.g. parenting, physical and psychological well-being, care giving, volunteering, inclusion of disabilities, mindfulness, kindness, authenticity, stress management, etc.) with over 60 experts from a wide range of universities, hospitals, research and training centres. The Italian sign language interpreting service is always ensured, for accessibility of the contents by people with disabilities;
- ***Train the trainer - Knowing and managing the passenger with disabilities and reduced mobility***: a training course designed for trainers of High Speed, IC and Regional train managers, to provide information on the main types of disabilities (sensory, motor, cognitive) and provide practical tools, through simulations, for choosing the proper communication, listening and welcoming styles for people with disabilities and reduced mobility on trains. 141 trainers were involved, who were responsible for cascading and training approximately 5,300 train managers on the same topics;
- **information campaign on the role of the Confidential Female Counsellor**: design and provision of an information webinar on the role of the FS Female Counsellor targeting all Structure Managers, which was followed by 530 managers;
- ***Women in Motion training*** (WIM): launch of the refresher course for mentors and neomentors for promoting gender equality in schools. 57 mentors were trained, including 6 men;
- ***4weeks4inclusion***: the second edition of the intercompany marathon dedicated to inclusion and appreciation of diversity with over 280 companies involved. FS took centre stage, with top management taking part in two awareness-raising events, three publications and a digital roundtable, organised in collaboration with Intesa Sanpaolo and with the participation of Stimulus, the title of which was *On the right foot to make a new start: actions against violence*, where conversations centred around visible and non-visible forms of violence, inside and outside companies.

### FS Italiane in the top 20 most inclusive companies in Italy

Ferrovie dello Stato Italiane is one of the twenty most inclusive brands in Italy in the rating of the **Diversity Brand Index**, curated by **Diversity** and the strategic consulting firm **Focus MGMT**, which measures the ability of companies to effectively develop a culture focused on diversity and inclusion. In 2022, the FS Group was ranked among the top 20 owing to three projects in particular: the station **Help Centres**, the **Sale Blu** with its services to people with disabilities and **Women In Motion** which focuses on women empowerment in schools.

### Events and Campaigns

- ***Together against violence on women:*** awareness raising campaign for the protection of women's health and safety marking the 25 of November, the International Day for the Elimination of Violence against Women: Group-wide call to action, with over 100 employees taking part in the campaign **#iononrestoaguardare (I will not stand by and watch)**, showing their commitment by sharing their picture wearing something orange, the colour chosen by UN Women to symbolise a brighter future without violence for all women and girls; one *Frecciarossa 500* was wrapped in orange and decorated with pictures of men and women united in front of the international signal for help; production of a webinar on the topic of gender-based violence.

### Welfare

- **welfare platform:** a single, integrated tool for finding all the welfare services offered by the group and using the ever expanding selection of assets and services. Specifically, on the FS Welfare portal, employees can: find out about the Group's welfare plan – covering three main areas: work-life balance, health promotion and Eurofer Pension Fund –, use welfare credits by either requesting reimbursement of expenses regarding work/life balance benefits or by availing of new welfare assets and services, and find information on the special agreements and discounts available for employees for numerous cultural initiatives;
- **company contributions:** after the Contract of the FS Group was renewed on 22 March 2022, the company contribution for employees who voluntarily decide to join Eurofer (2%) and the contribution for supplementary healthcare (300 euro) increased from 1 January 2023;
- **additional welfare contribution:** payment in 2022 of an additional welfare credit of €300 to each employee, taking advantage of the opportunities provided by the government measures passed to curb the effects of the increase in the cost of energy and fuel and related decline in purchasing power;

- **one-off welfare:** payment of a welfare credit of €350 to each employee to take into account their professional contribution to ensuring service continuity, even during the health emergency;
- **unilateral contributions:** in 2022, the Group provided for the disbursement of two contributions, one for the purchase of specific leisure welfare services such as holidays, gyms, training courses, etc., and another one for employees who take care of their children, towards the expenses incurred for nursery schools, study holidays, campuses and playrooms, baby-sitting services and care services for elderly or non self-sufficient family members;
- **assistance for disabled children:** the group once again offered monetary assistance (€800) to employees with differently abled children in 2022;
- **customer care for employees:** in 2022 the group provided again support to employees on welfare initiatives, including supplementary healthcare.

## Equal Opportunities Committee initiatives

- **Gender-based violence:**
  - meeting with the GOAP anti-violence centre of Trieste on the subject of domestic violence and harassment in the workplace.
- **Work conditions:**
  - ‘pink’ parking space in Rimini for female workers of railway companies on night shifts;
  - start of a survey on methods for adapting plants and Personal Protection Equipment (PPE) to the needs of female personnel.
- **Prevention of sexual harassment and sexism:**
  - analysis of the 2021 Annual Report of the Confidential Female Counsellor (appointed as part of the code of conduct for cases of sexual harassment in the workplace) with regard to the cases and geographical areas involved;
  - awareness-raising actions with the competent Group structures (e.g. training of structure managers, etc.);
  - meetings between the equal opportunities committees and the Confidential Female Counsellor to decide on how to act in potential cases of harassment, in order to become a point of reference for employees in this regard.
- **Communication and awareness:**
  - *Sicilian women in culture* event with leading female figures of Sicilian culture and open to Group employees to share women’s experiences spanning art, culture, sense of belonging and social commitment.
- **Gender data:**

- analysis of the data of the Biennial Report on Equal Opportunities with a focus on the gender pay gap.
- **Sustainable mobility:**  
analysis of the national mobility data with a focus on gender and communication actions on the topic at COP 27.

### FS Ambassador for women's rights

The FS Group was the designated **Ambassador Company for Women's Rights** at the 2022 Awards of **Differenza Donna Aps**, the not-for-profit organisation that has been active in fighting gender-based violence since 1989 and currently manages the national domestic violence hotline 1522 of the Equal Opportunities Department. **Ferrovie dello Stato** was awarded for its commitment in the annual fundraising drive within the company and in station ticket offices, which between 2019 and 2020 enabled the FS Group's people as well as all passengers, **to make a donation to the Association**. The award also recognised the activities put in place by the Group's Equal Opportunities Committee, which promotes the acquisition of tools and knowledge to allow all people, women and men alike, to recognise and combat violence in all its forms, whether visible or invisible.

## Relationships with trade unions (401-3, 402-1)

Relationships with trade unions are based on utmost respect for the commitments required by the relevant Italian legislation and applicable contracts.

The trade unions receive the required information and carry out bargaining activities in accordance with the national labour agreement<sup>106</sup>. Changes to the overall corporate organisational structures and those of the individual production units are disclosed to the trade unions.

The national labour agreement requires that before changes can be made to the organisation of labour and the structure of working hours, they must be specifically negotiated, with the negotiation procedure ending within no more than 20 days after it begins. Negotiations with the trade unions take place centrally through the respective national divisions and locally through the regional divisions, in conjunction with the unit trade union representatives.

The group has formal agreements in place with the trade unions protecting workers' health and safety, to promote projects that foster a culture of safety and prevention among workers by constantly updating employee training and with the introduction of new equipment and new technologies.

Additional information on relationships with trade unions is given in the group's 2022 Annual Report (Directors' report, "Commitment to sustainable development - Human capital" section).

<sup>106</sup> There are no risks to the freedom of association and bargaining within the Ferrovie dello Stato Italiane group.

The percentage of group employees who were members of trade unions was 62.5% in 2022, slightly down on the previous year (63% in 2021).

The absenteeism rate is 9.3%<sup>107</sup>, compared to 7.9% in the previous year. This increase was due to more sick leave taken in 2022.

### Parental leave

The FS Group applies the relevant legal and contractual regulations which include parental leave up until the child is 12 years old: in addition to the maternity/paternity leave, employees (father and/or mother) may in fact take parental leave for up to a maximum of six months for each parent, but the parental leave may not exceed a total of 10 months for both parents (up to 11 months if the father takes at least 3 months off). Based on the 2022 law amendments, they are indemnified by INPS (indemnity equal to 30% of salary) for a maximum of 9 months up to 12 years of age (3 non-transferrable months for each parent and 3 transferrable months between mother and father). The FS Group's Contract signed on 22 March 2022 provides for more favourable terms of remuneration, by integrating 100% and 80% of the INPS allowance in the first and second month respectively.

Also based on the provisions of the law, leave is granted for prenatal visits and checks and for a child's sicknesses. In the latter case, the FS Group's Contract of 22 March 2022 provides more favourable terms, in as that the salary is paid for one month of child sickness leave up to the child's third year of age.

The number of employees who took at least one day of parental leave in 2022 is detailed below:

Parental leave	number	days
women	1,245	27,714.5
men	4,531	55,345.5
<b>total</b>	<b>5,776</b>	<b>83,060.0</b>

<sup>107</sup> The data refer to the following companies: FS, Trenitalia, RFI, Ferservizi, FS Sistemi Urbani, Italferr, Italcertifer, FS Technology, NUGO, Cremonesi Workshop, Mercitalia Logistics, Mercitalia Rail, Mercitalia Intermodal, Terminali Italia, Busitalia Veneto, Busitalia Rail Service, Busitalia Campania, GS Rail, GS Immobiliare, FS International and Ferrovie del Sud-Est.



## Relationships with communities (2-24, 2-25, 3-3)

Involvement in solidarity initiatives is fundamental for FS Group, which is tangibly committed to carrying out projects and initiatives to help disadvantaged people.

In partnership with associations and Local Administrations, Ferrovie dello Stato Italiane has adopted a policy to support and plan social initiatives in railway areas that are a favourite gathering place, especially for all those groups of people without a safety network, in conditions of extreme marginalisation or unaware of the existence of more suitable organised services for meeting their social needs. This programme consists of collaborative welfare through a partnership between entities with the power to effect social change (local bodies and third sector organisations, along with networks and local businesses promoting social responsibility).

### Promoting social cohesion

#### Help Centres

The Help Centres are strategic in providing support and guidance to marginalised people and help them start their rehabilitation by collaborating with the social services and institutions.

The Group plays a crucial role in the Help Centres, offering premises on free loan inside or near railway stations to Third Sector associations and Municipal Authorities that deal with marginalisation and the social crisis so they can set up and manage help centres and shelters for vulnerable or marginalised people.

In order for the Help Centres to work in synergy, the Group relies on the close collaboration of the National Observatory for the Disadvantaged and Solidarity at Stations (ONDS), which is managed by the social cooperative Europe Consulting Onlus. The ONDS coordinates the centres, trains Help Centre operators and collects and analyses the data on the social support provided in the national network.

In the last twenty years, the network of Help Centres has grown, from the first few founding centres of the ONDS network (Rome, Milan, Florence) to 19 projects in as many railway stations (see the picture below). Most notably, Cagliari and Grosseto joined the network in 2022. The Cagliari Help Centre covers an area of 400 square metres, and offers, in addition to the standard support and social guidance services, day and night shelter for 50 people, with areas specifically designed for women and mothers with children. The Grosseto Help Centre is managed by CoeSo, a Healthcare concern of the Amiata Grossetana social and healthcare services. It is a key hub in local services planning, supported by the Tuscany regional Authority within a memorandum of understanding with FS that funds a station-based social services system covering various regional railway areas, with the Florence and Pisa Centres already in operation, soon to be complemented by the ones in Livorno and Viareggio. At the end of 2022, in terms of spaces,

the total surface granted to Station-based Help Centres was 4,399 m<sup>2</sup> <sup>108</sup> for a commercial value of €6,598,500 (estimating an average of €1,500 per m<sup>2</sup>).

### ACTIVE HELP CENTRES



**FS Group** supports and guides cooperation processes in many local areas within a logic of co-programming, liaising with a diversity of players: **Third Sector Bodies**, which deal with the day-by-day operation of the Help Centres and all the services they provide; the **Public Administrations**, who provide the social services and financial support; **Donors**: companies or private citizens who contribute to the daily needs of the centres with goods or volunteer work.

In 2022 there was a significant contribution by over 100 operators and 200 volunteers, who worked every day at the 19 Help Centres as well as by several **national and local companies** – from Coop in Liguria for distribution of unsold food to the Genova Cornigliano Help Centre and the network it coordinates, to Enel Cuore which over the years has supported the renovation of many Help Centres, to IKEA, which has been furnishing Help Centres and connected premises for over ten years.

The Help Centres network also established various collaborations with healthcare facilities, some of which during the pandemic, such as in Rome with IRCSS IFO Regina Elena San Gallicano for swabs, vaccines but also free dermatological, gynaecological and cardiological treatments to Help Centre guests, or others that have been going on for years, such as the partnership with the IncontraDonna Foundation for the specific healthcare needs of vulnerable women, with the foundation's doctors carrying out cancer screening nationally. Indeed, the analyses conducted by the Observatory show that the main purpose of

<sup>108</sup> The total surface area granted on free loan for the help centres in Bari and Chivasso is not included because these network partners use premises owned by them near the railway stations.

the Help Centres, which provided 335,000 low threshold services in 2022, is to produce a change in the lives of the people they serve.

The action of the Help Centres that make up the ONDS network differs according to the local socio-economic features, the available spaces, the partnerships and cooperation networks, the legal nature of the bodies operating them. The activities cover five macro-areas: **primary needs, night shelters, day shelters, social secretariat and case management, guidance**. Starting from the vulnerabilities observed in railway areas, each Help Centre implements concerted pathways that are rooted in the community and local network, systematically connecting with strategic territorial partnerships and combining resources (human, professional, institutional, social, economic, infrastructural) to solve critical issues. In this way, the station system and the city system establish a gradually more specialised relationship that dynamically contributes to enriching social programmes to deal with the changes within the various local areas, combining contributions that differ by nature, intensity and purpose by local, national and European players and bodies.

In 2022, the FS Group allocated €125,000 for activities and projects to help people facing social difficulties.

ACTIVITIES	DETAILS OF ACTIVITIES	AMOUNT
<b>CONTINUED ONDS ACTIVITIES</b>	Support for the social activities unit in the coordination and expansion of the help centre network, the monitoring of network data, international activities and specific training of social workers, including training on how to use the database.	€115,000
<b>THE SOLIDARITY TRAIN PROJECT</b>	As part of the solidarity train project, train tickets are issued free of charge for journeys involving the social and employment integration of people with serious social hardships identified by the ONDS.	€10,000 <sup>109</sup>
		<b>€125,000</b>

### The help centre network's main services

Since 2002, the ONDS network has been developing a data collection method that uses common indicators, partly based on interviews to local players and partly on an actual standardised IT system hosted by the Anthology®<sup>110</sup> platform that stores the main information and activities supporting the disadvantaged people who use the services of the Help Centres. The system standardises the ways of gathering and recording data on actions and the people assisted, in order to keep track of a structured path for assisting them.

<sup>109</sup> The contract for the solidarity train project was signed in December 2021.

<sup>110</sup> To date, the data of the help centres of Brescia?, Bologna, Catania, Florence, Messina, Naples, Pescara, Reggio Calabria and Rome are gathered via Anthology®, while the data related to other cities are gathered using a specifically structured form filled in by operators.

Evidence of the huge work carried out over the years is provided by the figures for 2016-2022: over 145 thousand people used the centres of the network for over 3.2 million social orientation projects (including almost 2.7 million low threshold projects - providing basic goods, food, clothes, blankets or basic sanitary services - and over 500 thousand support and social orientation projects) thanks to the intense daily work of the thousands of operators and volunteers who helped provide the services over the years.

New users, i.e., those using the ONDS social services available at the station for the first time, account for more than half of total users between 2016 and 2022 (56%).

Most of the beneficiaries were men (81%) and most users were foreign (64% non-EU citizens and 13% from the EU).<sup>111</sup>

With regard to 2022, although information is still being gathered at some Help Centres at the time of drawing up this report, an initial analysis shows an estimated increase of over 8% in the number of people who received assistance from the network compared to 2021, with particularly significant spikes in Catania (+97%), Florence (+35%), Rome (+28%), Messina (+22%) and Bologna (+15%). With regard to services provided, compared to 2021 there was a slight increase in case management and social guidance activities (+2%) against a decrease in low-threshold services. First-time contacts with the Help Centres went from 59% in 2021 to 63% in 2022, markedly above the average of recent years.

## Shelters

In addition to the help centres, through major Italian non-profit associations, many shelters have been set up in railway areas, particularly in Rome and Milan:

- the Don Luigi Di Liegro shelter in Rome
- the Rifugio Caritas shelter in Milan
- the Binario 95 day shelter in Rome
- the Progetto Arca shelter in Milan
- the Pedro Arrupe shelter in Rome for asylum seekers and political refugees, managed by the Centro Astalli association. It has been operating out of the former Ferrotel premises at the shunting site in Rome since 2002.

A total surface area of roughly 11,016 m<sup>2</sup> has been granted on free loan for the social activities carried out in the shelters, with a total estimated value of around €16,524,000 (average value of €1,500/m<sup>2</sup>). Overall, the total surface area granted on free loan for social activities (help centres and shelters) in 2022 was approximately 15,415<sup>112</sup> m<sup>2</sup>, with an estimated value of around €23,122,500 (average value of €1,500/m<sup>2</sup>).

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<sup>111</sup> More detailed data on the ONDS network are available on the website: [onds.it](https://onds.it) where the ONDS annual report is published every year. 2022 data are currently being consolidated and will be available in the 2022 ONDS annual report.

<sup>112</sup> The surface area includes the Help Centre network (4,399 m<sup>2</sup>) and the Shelters (11,016 m<sup>2</sup>). In addition, space was granted to the Museo della Shoah foundation for a symbolic fee for the Shoah Museum's social and cultural activities (7,000 m<sup>2</sup> at Milano Centrale).

## Social re-use of real estate and abandoned railway lines

In addition to the assets functional to core business operations, the FS Group owns unused real estate assets that are not readily usable for commercial purposes: these are portions of unmanned stations, former cantonment houses and other buildings.

In 465 stations - in agreement with institutions, local authorities and associations – these spaces have been earmarked for social, cultural and environmental activities, particularly for the enhancement of the territory and for services for the benefit of citizens<sup>113</sup>. A total of approximately 189,102<sup>114</sup> m<sup>2</sup> of space was allocated for such purposes. The institutions, local authorities and nonprofit organizations involved undertake to maintain the spaces allocated to them and at the same time provide services to the community, thus contributing to making the unmanned stations and other Group real estate covered by the agreements safer and more lively.

Abandoned railway lines that can potentially be used for social purposes and soft mobility span approximately 1,170<sup>115</sup> kilometers. **At present, roughly 537 kilometers of abandoned lines have been converted into tourist lines, cycling paths and greenways.**

Another initiative to use the group's railway assets for social purposes has involved using **railway routes for heritage/tourist trains**. This reuse preserves the infrastructure's function as a railway and the role of secondary lines, for which there is little demand for commercial transport.

## Fund raising campaign

Each year, the FS Group promotes and organises its traditional Christmas fund raising campaign in collaboration with leading social organisations. At the end of 2022, FS italiane supported the fundraising campaign in partnership with Insuperabili Onlus, a project that since 2012 has inaugurated 17 activities all over the country: to date there are 650 footballers wearing white-blue uniforms and 250 team staff who take the field each day with athletes. Insuperabili targets people with relational, cognitive, motor, behavioural, sensory disabilities, aged five and over. The team that takes the field is multidisciplinary and includes coaches, psychologists and specialised educators who combine their knowledge every day for a person's all-round development. The mission of Insuperabili is to use sport as a launch pad to achieve full inclusion of the person with disability, promoting a variety of activities that embrace a person's many dimensions, from relationships to work, to foster a cultural change in attitudes to disability, traditionally perceived as a weakness, which leads to a person's poor inclusion and quality of life.

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<sup>113</sup> The number refers to stations covered by at least one free loan agreement.

<sup>114</sup> The number refers to buildings granted on a free loan basis in and around stations. The group has granted the use of yards outside stations and/or land for roughly 4,424,001 m<sup>2</sup>.

<sup>115</sup> The assets of abandoned lines do not include those to be redeveloped as "railway lines for tourism" (185 km).

## National and European projects and social awareness campaigns

In Europe, since 2008, the Group has been a signatory of the European charter for solidarity (European charter for the development of social initiatives at stations), as one of 17 partners from different European countries<sup>116</sup>. The European social network includes non-railway operators that have signed parallel support pacts, including the European Federation of National Organisations Working with the Homeless (FEANTSA), the UIC and the Paris and Rome municipal authorities, among others<sup>117</sup>.

### The FS Group stands for the Ukrainian population

With the arrival of refugees **fleeing the country at war** in the European Union, many railway companies have joined forces to provide **additional carriages** on trains and allow Ukrainian citizens to travel for free. FS Italiane, a partner of CER (Community of European Railways and Infrastructure Companies) offered its support right from the start to refugees fleeing war in their country, letting them **travel for free** on its trains. Support for Ukraine also took many other forms, such as: the **freight train** that set off from **Tuscany to Eastern Europe** with aid and basic necessities (medicines, food and clothing); the **two buses** that transported 15 quintals of food **from Umbria to Poland** for the Caritas Collection Centre in Krakow, which assists Ukrainian refugees; the special transport of **45 fire-fighting vehicles** donated by the National Fire Brigade to Ukrainian colleagues, which set off from Cervignano del Friuli to Slovakia; the **fundraising** by the people of the FS Group supporting the initiatives by Save the Children and Caritas Italiana for the humanitarian emergency that has affected the Ukrainian people.

<sup>116</sup> Romania (CFR), Slovenia (Zeleznice), Norway (NSB), Bulgaria (NRIC) and Denmark (DSB), the Czech Republic (CD), Sweden (Jernhusen), Germany (DB), Croatia (HZ), Greece (TrainOSE) and Serbia (SZ).

<sup>117</sup> Additional members include the Spanish Railway foundation, ANCI (National Association of Italian Municipalities), the Sant'Egidio community, Fondazione Centro Astalli, the "Aux Captifs" association for the homeless, La Libération and FNARS, a leading federation of French organisations and associations that shelter socially disadvantaged people, and CINI, a non-profit organisation active at India's largest railway stations.

## Promoting culture and other social initiatives

### The group and culture

The FS Group fosters and supports the cultural development of the country. It is a natural vocation for a group that has been rooted for over a century in the civil, economic and social fabric of Italy and is a leading player in its infrastructural development. Indeed, FS Italiane plays a key role in relaunching Italy, in modernising and enhancing local areas and the beauty of Italy by developing the main rail and road corridors, speeding up and upgrading the high speed network and regional transport, fundamental to regenerate tourism and to create a digitalised, sustainable transport system.

The Group expressed its commitment to supporting all forms of culture with the many partnerships established with the art world: the exhibition Richard Avedon: Relationships at Palazzo Reale in Milan, the first Max Ernst retrospective in Italy, always at Palazzo Reale and the exhibition on Pieter Paul Rubens, at Palazzo Ducale in Genoa.

The main internationally-renowned major events, institutions and museums in which the group participated include:

- Rome Film Festival;
- Floathing Theatre event to support culture and sustainability;
- *Conversazioni* Festival in New York;
- Palazzo Strozzi in Florence and Scuderie del Quirinale in Rome with the 2022 exhibitions;
- Maxxi in Rome with the exhibition *Bob Dylan. Retrospectrum*;
- cultural events in large and small cities such as the Festival of communication in Camogli, Luci della Costiera in some hamlets of the Amalfi Coast and the Festival of Economics of Trento.

Ferrovie dello Stato Italiane also assisted Fondo Edifici di Culto of the Ministry of the Interior with the *Travelling with art* project to promote Italy's historical, artistic, religious and cultural heritage in a journey to discover the country's greatest treasures. As part of this unique exhibition route, the pictures from the Fund's calendar were exhibited in the high speed waiting rooms of the main national stations and on-board Trenitalia trains.

Furthermore, the long-standing partnership with Accademia Nazionale di Santa Cecilia, of which FS Italiane is a founding Partner, was confirmed and consolidated, resulting in the *Tempo Binario* project, which took classical music to the stations of southern Italy, in Sicily, Calabria and Campania, on board the heritage trains of Fondazione FS. The project took place in July in the three southern regions involved in some of the most significant investments planned by Group companies within the NRRP and the 2022-2031 Business Plan.

## Other social issues

In 2022, the Ferrovie dello Stato Italiane Group was a partner in key events dedicated to social sustainability, such as the Sustainable Development Festival promoted by ASVIS, for which a Frecciarossa was wrapped with the picture of the event, the CSR and Social Innovation Fair, and Trame, the festival of books on the mafia and other crime rings. In collaboration with leading charitable institutions and associations, the FS Group also promoted initiatives to protect health and diversity & inclusion. The main projects included:

- **Frecciarossa:** prevention travels by train. This initiative is dedicated to the treatment and prevention of breast cancer and education on correct lifestyles, sponsored by the Ministry of Health and promoted by the IncontraDonna non-profit organisation. In 2022 health and prevention started travelling by train again with specialists on board high speed, intercity and regional trains and at the Freccialounges in stations, who offered free cancer prevention consultations. In addition, online teleconsultations continued for the whole month of October on [frecciarosa.it](https://frecciarosa.it);
- **Race for the Cure:** the partnership consolidated FS Italiane's commitment to the largest event in the fight against breast cancer. During the 2022 edition, the FS Prize for scientific research was awarded, in addition to the usual participation by Group employees in the charity run and fundraiser to support the activities of the Susan Komen Italia Association;
- **The Women's Football Super Cup:** FS made a tangible contribution to the development of an inclusive sport where athletes are a symbol of female empowerment and leadership. *Professionalism and talent have no gender*, this is the motto of the initiative embodying FS Italiane's commitment to win the game of inclusion via projects, initiatives and rallies that mobilise the network of connections, relationships and resources surrounding female leadership;
- **Launch of the Julia Barton Adaptive collection at the Milan Fashion Week with FS Italiane's support:** the first Adaptive collection worldwide – the garments' universal fit “allows anyone to be themselves” – in keeping with the subject of inclusivity and sustainability. The launch of the collection was promoted by a video in which the “positivity influencer” Laura Miola talked about the FS Group's universe during the ride on the Frecciarossa from Rome to Milan for the Fashion Week, to promote inclusivity and accessibility, strategic issues at FS.



## Fondazione FS Italiane

Fondazione FS Italiane was established in 2013, and aims to preserve and make accessible the cultural heritage of historic trains, using documentary material (books, documents and maps, audio-visual materials) which are evidence of the history of the railway sector and Italian Society since the beginning of 1900.

### ITALIAN HERITAGE



20 steam engines  
21 electric and diesel engines  
13 electric and diesel railcars  
110 carriages and special vehicles  
28 wagons and luggage wagons  
18 presidential train carriages  
1 ETR 252 'Arlecchino' fast electric train



55 rolling stock on show  
39 to-scale station models  
1 library with roughly 2,000 volumes  
1 Trecentotreni model (18x2 m)  
1 model of the Tirano-Saint Moritz railway (56 m)  
1 plastic model of the Battipaglia station (4x1.8 m)  
1 De Marchi model (4.5x1.5 m)



12,000 plans and blueprints of the network and stations  
7,000 architectural drawings of stations and railway buildings  
7,000 rolls of technical drawings of historic engines and rolling stock  
10,000 photographs of trains, traction vehicles, carriages and wagons



60,000 historic volumes and periodicals  
2,000 blueprints and profiles



500,000 b&w and colour photographs, analogue and digital  
3,500 video cassettes  
3,000 films

Ferrovie dello Stato Italiane, Rete Ferroviaria Italiana and Trenitalia are the patrons of Fondazione FS.

Its main activities include:

- organising trips on historic trains<sup>118</sup>;
- promoting railway tourism;
- maintaining and rolling out historic vehicles;
- managing the Museum of Pietrarsa;

<sup>118</sup> The following railway lines reopened for tourism as part of the Timeless rails project, have been selected for inclusion in an actual moving museum: Ferrovia della Valsesia, Ferrovia del Tanaro, Ferrovia del Lago, Ferrovia della Val d'Orcia, Transiberiana d'Italia, Ferrovia dell'Irpinia, Ferrovia dei Templi, Ferrovia del Sannio, Ferrovia Pedemontana and Ferrovia del Monferrato.

- 
- promoting and organising events, shows and exhibitions;
  - conservation, digitisation and popularisation of the archival and library heritage;
  - renovating historical railway infrastructure to open to the public as museum hubs and historical archives:
    - Campo Marzio station in Trieste
    - Messina Marittima
    - Former ACE Substation Roma Termini
  - renovating historical railway infrastructure to open to the public as workshops for renovating/depot of historical rolling stock:
    - Milan, Pistoia and La Spezia historic train depots
    - Bologna Centrale hub
    - Roma Termini depot
    - Trieste Maintenance Shed
    - Casarsa della Delizia Engine Shed
    - Caltanissetta Engine Shed
  - construction of new maintenance hubs:
    - New Hubs of Sulmona and Paratico
  - redeveloping historic lines to open to the public:
    - opening scenic viewpoints to appreciate the landscape
    - redeveloping stations to create tourist hubs

## JOURNEYS ON HISTORIC TRAINS



710 individual journeys with historic trains for a total of 90,000 passengers

200 journeys with historic trains on Timeless rails\* for a total of 56,000 passengers

65,000 kilometres travelled

€3,500,000 in revenue

*\*railway lines, between nature and art, dedicated to historic-tourist trains, outside the main rail hubs and lines with intense traffic*

## NATIONAL RAILWAY MUSEUM OF PIETRARSA



220,158 visitors

1,167 historic train visitors

54 major events

€1,720,082 in revenue

## ARCHIVES, LIBRARY AND DIGITAL PRODUCTS



150 users in person

400 requests for document delivery/dissemination of the heritage

5,000 archival documents digitalised and published online

5 exhibitions/events in collaboration

The main social media channel used by Fondazione FS is Facebook which it invested in to boost its corporate identity. Thanks to strategic management of social media, the Fondazione's Facebook page has reached over 200,000 followers (+5.6% on 2021), garnering more than 5 million and a half accounts during the year, thanks to the variety of content that generated interactions from over 1 million users. Excellent results were also obtained by the Fondazione FS' official Instagram profile. The channel exceeded 25,000 followers, and the figure now stands at 26,400, +15% and interaction rate is over 3%. The Fondazione also revamped its Pinterest page which had 126,000 users in 2022, along with 5,500 users involved and over 8,000 interactions on the content promoted by the channel. The growth of the LinkedIn profile was also significant – opened in 2021, the channel had already been extensively used by the Group, as it makes it possible to reach specialised companies in the tourist sector and local concerns with a deep-rooted presence in the communities. The platform had over 9,310 page views (+780% on 2021) and 2,763 visitors (+802% on 2021).

Fondazione FS invests its revenue (mainly from hiring out historic trains, property leases and the sale of tickets to the museum in Pietrarsa) in creating social and cultural value for the country and the areas in which it operates. Specifically, maintenance and roll-out of historic trains, management and museum conservation of its assets (rolling stock, audio/visual material and designs) help preserve and highlight

the country's historical, social and cultural heritage.

#### THE RECOVERY OF RAILWAY LINES AND CULTURE

In 2022, thanks to the funds of the National Plan Complementary to the NRRP, the FS Italiane Foundation started the works to **reopen for cultural and tourist purposes the abandoned Sicilian Noto-Pachino railway section**, which had been inaugurated in 1935 and finally abandoned in 2002 after discontinuation of the commercial service in 1986. The approximately €40 million investment will cover the reopening of all 27 kilometres of the heritage line, which crosses an extraordinary natural and cultural landscape, already classified as railway section for tourist use under It. Law 128 of 2017. The route crosses the southernmost part of eastern Sicily, near the Gulf of Noto, through a picturesque landscape of low hills and dry stone walls. The first 2 kilometres were inaugurated in December 2022 with works involving the clearing of the entire line, the demolition and reconstruction of the railway infrastructure of the first 2 kilometres, the maintenance of the civil engineering works on the Noto-Noto Bagni section, while reopening of the entire section for tourist purposes is scheduled for the end of 2023.

In 2022 the Foundation also acquired all the shares of the publishing house DUEGI Srl. This operation is considered an essential opportunity for the growth of the FS Foundation's typical cultural activities and for strengthening corporate activities, as it will support better management of historical-cultural publishing and will make it possible to popularise and raise the public's awareness on the work carried out by the FS Foundation. It will also be possible to publish in a variety of formats studies, research and information materials, to directly provide the public with thorough information on the mission, the commitment to safeguarding and enhancing the historical, technical and industrial heritage of railways and the promotion of railway tourism in our country. An opportunity to inform an ever wider public on the technical progress and successes of the whole FS group.

An estimate of the social and cultural impacts generated by the foundation's activities is shown below.<sup>119</sup>

**CONTRIBUTIONS FROM MEMBERS<sup>1</sup>**

113 million Euro

**REVENUE FROM ACTIVITIES<sup>2</sup>**

28 million Euro

**VALUE OF ASSETS<sup>3</sup>**

10.6 million Euro

**VALUE FOR LOCAL COMMUNITIES<sup>4</sup>**

50.9 million Euro

*Passengers on the historic trains contribute to the development of the areas and districts (purchasing local products and artisanal goods) and to the development of the historical and cultural heritage of the trains.*

**NOTES**

- 1) Contributions from members refer to donations made by founding members during the 2014-2022 period for grants related to income (to run the Fondazione) and assets (to fund the Fondazione's investments in protection and maintenance projects and to increase property, plant and equipment and intangible assets).
- 2) Revenue from other activities includes: ticket sales for the Museum of Pietrarsa, hiring out historic trains and other commercial revenue during the 2014-2022 period.
- 3) The estimated value of the Fondazione's historical, social and cultural heritage was based on the appraisal performed by an external consultant to value assets transferred to the Fondazione when it was set up. This estimate prudently did not consider investments in improvements, maintenance and the rolling out of assets. If these investments were included, the historical, social and cultural heritage would amount to approximately €15.5 million.
- 4) Passengers on the historic trains contribute to the development of the areas and districts (purchasing local products and artisanal goods) and to the appreciation of the historical and cultural heritage of the trains. The estimated value created for local communities and areas was based on research carried out in 2013 by the government organisation "All Party Parliamentary Group on Heritage Railways" with the title of "The Social and Economic Value of Heritage Railways". Indeed, the research estimated that for every pound of revenue from ticket sales, 2.7 pounds are generated for local communities in terms of the purchase of local products, lunch/dinner, local museums, etc. This coefficient was adjusted on the basis of the ratio between total consumption in Great Britain and total consumption in Italy in 2017 (source Eurostat). The coefficient was therefore equal to 2.01.

<sup>119</sup> The impacts were also estimated on the basis of the framework defined by the Civita Association: From CSR to Corporate Cultural Responsibility how to enhance the value of Companies' actions in Culture.

## FS Group for the planet

### Highlights

Energy and emissions	
What we have accomplished	What we aim to do
The Group joined the decarbonisation project promoted by the <b>Science Based Target initiative</b> by <b>signing the commitment letter</b>	Achieving <b>carbon neutrality</b> by 2040 and reducing direct and indirect emissions by 50% and those from the value chain by 30% by 2030
An investment campaign on <b>energy production plants from renewable sources for an estimated power of 2GW</b> was included in the business plan	Development of electricity production systems from renewable sources that <b>cover approximately 40% of the company's electricity consumption needs</b>
<b>Level A-</b> of the <b>CDP score</b> on climate change was achieved	
<b>The Blues train</b> , the first triple-fuel hybrid train: electric, diesel and battery-powered, was launched.	Continuation of the <b>campaign to upgrade the railway and bus fleet</b>
Replacement of the thermal power plant and the steam distribution system at Milano Centrale, which will be replaced by <b>high-efficiency heat pumps</b>	<b>Fossil fuel phase-out</b> started at the industrial sites first
Responsible purchases	
What we have accomplished	What we aim to do
Within the <b>“Sustainable Supply Chain Management” project</b> , the model was defined ( <b>questionnaire template, KPI, scoring algorithm, etc.</b> ) for assessing and vetting the sustainability profile of the contractors and suppliers of the Group’s Companies	Launch the progressive application of the ESG assessment to contractors/suppliers of all Group companies, through a <b>specific IT platform</b>
Implementation of the first ESG work site of RFI, aimed at making the whole supply chain more sustainable and <b>formalisation of a catalogue of sustainability KPIs applicable in tenders with the lowest cost bid (OEPV)</b>	
The process was launched by Group companies for the implementation of the <b>Guidelines for the sustainable</b>	Integration of the procedure in company systems and <b>personnel training plan on sustainable procurement</b>

<p>management of procurement which involves departments specialised in purchasing, sustainability and other roles that take part in procurement processes</p>	
<p><b>Sustainable infrastructure</b></p>	
<p><b>What we have accomplished</b></p>	<p><b>What we aim to do</b></p>
<p>Launch of the <i>Talking Construction Sites</i> project to communicate strategic projects</p>	<p><b>Continuation of ESG Construction Sites</b>, featuring an interdisciplinary process and stakeholder involvement</p>
<p>The <b>Structural Health Monitoring (SHM) programme</b> was launched, enabling much broader control over the whole monitoring process of infrastructure health</p>	
<p><b>UIC Best Multimodal Partnership award for Stationland</b>, a functional tool for drawing up advanced analyses of the relationships between railway stations and the local areas</p>	<p>Implementation of <b>infrastructural, technological and management actions</b> (e.g. ERTMS HD), especially on nodes with heavy traffic pressure, to support high-frequency services, increasing capacity, and improving the quality and regularity of the service</p>
<p>The company employed a <b>sentiment analysis platform</b> which enables social media monitoring of strategic infrastructure projects</p>	

The environmental policy of FS Italiane entails developing mobility thanks to integrated and efficient infrastructure and modes of transport within a responsible growth strategy.

One of the main challenges of the transport sector is to meet the need for moving people and goods while reducing, and whenever possible eliminating the negative external effects they can cause on the environment, local areas and people. With a view to reducing environmental impacts to the minimum, the FS Group promotes the implementation of a circular logic in all processes, with a special focus on the reduction of greenhouse gas emissions, efficient use of energy and water resources, waste management and prevention of noise and soil pollution.

With its new business plan, the FS Group has made a solid commitment towards an environmentally sustainable economic transition, further boosting recent initiatives. The reorganisation into four business units seeks to improve the synergy of modes of transport and their relationship with the local area and its residents, highlighting the value of the infrastructures and of the services, promoting the demand for sustainable and intermodal mobility for passengers and goods. At the same time, the future of FS Italiane is marked by a steadfast commitment to address one of the Group’s main environmental issues: energy

consumption, with the attending CO<sub>2</sub> emissions. A plan of significant investments is in place to install renewable energy generation plants, mainly photovoltaic, on areas owned by the Group. The aim of the plan is to achieve energy production that covers approximately 40% of the Group's electricity requirements, while strengthening its commitment towards medium and long-term decarbonisation. In line with the goals dictated by Science Based Target initiative, in 2022 the FS Group made a commitment to achieving carbon neutrality in 2040 through intermediate targets, such as the 50% reduction, within 2030, of direct and indirect emissions and a 30% reduction of those derived from the value chain.

The nature of the activities carried out by the FS Group requires accurately monitoring a wide range of environmental impacts and implementing iterative processes that improve the ability to preserve the natural capital. The following paragraphs provide a description of the impacts, prevention methods and strategic framework that guide Group Companies in their effort to maximise environmental quality.



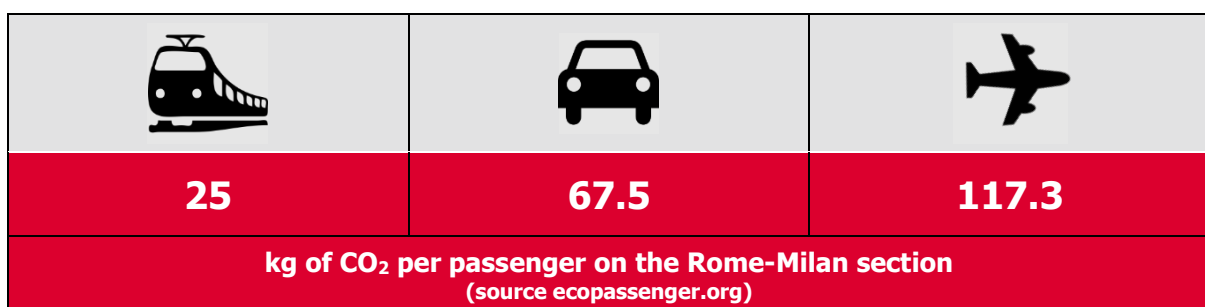
## Energy and emissions (2-25, 3-3)

### Strategies for decarbonising the transport sector

The transport sector is one of the main sources of greenhouse gas emissions and atmospheric pollution worldwide, with significant impacts on air quality and on climate change. As a matter of fact, mobility accounts for about one fourth of global greenhouse gas emissions and is a key factor in the ecological transition. In general, sustainable mobility is the key solution to reduce the environmental impact of the sector and requires an integrated approach involving public administrations, the transport industry as well as the active participation of society at large.

Resilient infrastructures and efficient transport systems are the key elements for driving the social, economic and environmental development of their context, and that is why they play a significant role in the achievement of the 17 Sustainable Development Goals (SDGS) of the UN’s 2030 Agenda. For instance, an adequately organised transport sector may have positive impacts on development, thanks to the driving role of infrastructures, supporting innovation (SDG no. 9), may be effective in promoting the sustainability of urban settings (SDG no. 11), promoting responsible consumption and production models (SDG no. 12), with a view to fighting climate change (SDG no.13).

The most effective way to reduce the sector’s carbon footprint is raising the share of eco-friendly transport, such as railway, collective transport by road and shared systems, in addition to improving the energy efficiency of systems and increasing usage of low/zero-emission energy. These measures can be summarised by the shift & improve strategies in which the railway sector is strongly engaged.



At the end of 2021, the UIC Global Railway Sustainability Taskforce published the document *Design a better future*<sup>120</sup> promoting a vision of zero emissions transport in 2030 by prioritising intermodality, customer experience, innovation and renewable energy, leading to a transformation to more connected and liveable cities and communities. To aim for the 2030 target, in 2022 the UIC published the document *Manifesto – Rail Solutions for a better future*, produced by the working groups of the companies in the industry,

<sup>120</sup> UIC, 2021, Design a better future, Vision of Rail 2030, uic-design-a-better-future-vision-of-rail-2030.pdf

which presents actual solutions for the railway ecosystem to act immediately and achieve the transition towards a sustainable future.

FS Italiane's strategy mirrors this approach. That is why the 2022-2031 Business Plan offers a vision capable of guiding people, skills, innovation and investments, to create shared value for the new generations. The Plan includes a programme to promote synergies between the various souls of the FS Group, thanks to the new organisation in business units. Energy and the ecological transition play a central role in the Plan: indeed, the Group has set its own long-term goal of achieving carbon neutrality by 2040, thus bringing forward the EU's decarbonisation ambitions by a decade. To achieve this ambition, the Group has drawn up a programme of initiatives and has defined medium-term targets for 2030, which consist, with reference to the 2019 baseline, of halving scope 1 and scope 2 emissions, and reducing scope 3 by 30%. In the summer of 2022 FS Italiane signed the commitment letter to certify these targets with SBTi (Science Based Target initiative).

The Group is one of the major energy consumers in Italy, with a share of approximately 2% of the national requirement. Accordingly, the initiative included in the Plan is especially significant, as it entails investing approximately €1.6 billion to install generation plants from renewable sources with production capacity of 2 GW, which will make it possible to produce annual energy totalling 40% of the company's electricity requirements, or about 2.6 TWh.

The Group is constantly engaged in upgrading vehicles, networks and hubs to meet its customers transport needs while simultaneously helping reduce the transport sector's emissions. For instance, the upgrade of the regional passenger transport fleet continues the drive towards more energy efficient vehicles. Partly acquired via Green Bond, Trenitalia's Pop and Rock trains consume approximately 30% less energy, compared to the more recent regional trains in circulation in Italy, in addition to the launch of the new hybrid power Blues trains. In order to further strengthen intermodal choices, thus reducing the sector's carbon footprint, the FS Group also continues offering benefits if customers opt for efficient and sustainable transport solutions to get to the station or continue your journey (e.g., Freccialink, train + bicycle, car sharing, micromobility, etc.).

The Plan seeks to expedite the electrification of lines – more than 2,000 kilometers over the next ten years – and, where this is not possible, to use hybrid trains powered by electricity, diesel fuel and batteries. In addition, the Group is also studying hydrogen powered rail travel, a technology which is already being used in its road transport network with QBuzz, Busitalia Sita Nord's subsidiary operating in the Netherlands.

To improve the prospects of building a sustainable infrastructure and transport system, the investments earmarked under the NRRP for railway transport will play a major role in the modal shift from private road transport to rail transport, thus cutting emissions.

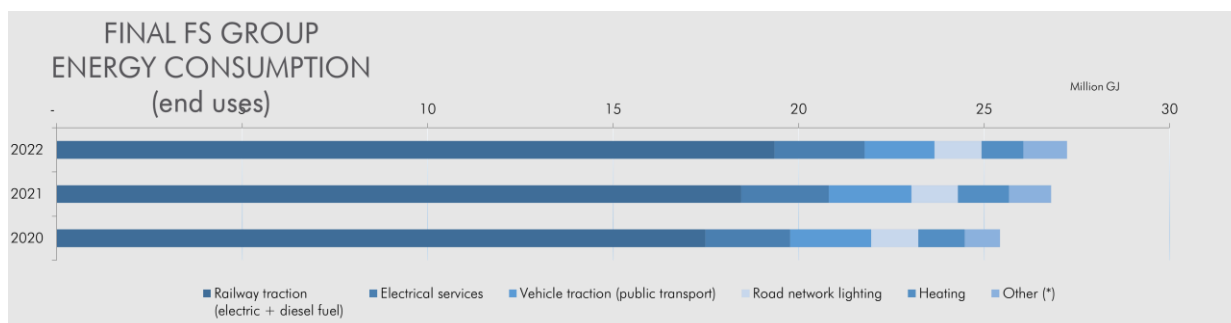
In a nutshell, the Group's strategy to counteract climate change is based on an integrated and systemic approach, aiming at leveraging synergies and strengths, implementing ambitious initiatives, investing in innovation and enhancing collective transport services, while improving people's well-being.

### Energy consumptions (302-1, 302-3, 302-4)

Total FS Group energy consumption	Measurement unit	2022	2021	2020	%Δ 22/21
Electricity for railway traction	GJ	16,268,047	15,198,255	14,349,986	7.0%
Electricity for other uses	GJ	2,589,189	2,505,258	2,409,571	3.3%
Electricity for road network lighting	GJ	1,265,328	1,245,243	1,266,235	1.6%
Diesel	GJ	5,649,721	6,144,431	5,864,840	-8.1%
Natural gas	GJ	1,127,079	1,397,711	1,236,602	-19.4%
Biodiesel	GJ	240,391	228,813	240,958	5.1%
Other <sup>a</sup>	GJ	97,507	87,179	63,183	11.8%
<b>TOTAL</b>	<b>GJ</b>	<b>27,237,262</b>	<b>26,806,901</b>	<b>25,431,375</b>	<b>1.6%</b>

*a) Heat, petrol, LPG, fuel oil, solar thermal, pellets and hydrogen*

Energy consumption is a crucial item in the FS Group's environmental balance sheet and is monitored in terms of sources and end use. Electricity consumption for railway traction is the most significant aspect. Transport services, in addition to maintenance and operation of road and railway infrastructure, indeed require the use of vast amounts of energy and absorb most of the FS Group's overall energy requirements.



(\*) Navigazione, autotrazione (autoveicoli e mezzi di lavoro), attività industriali

The evolution of the post-pandemic scenario after 2021 continued with the upswing in consumption. This led to an increase in energy consumption of approximately 1.6% on 2021, reflecting the recovery trend in the traffic of people and goods, especially in the second half of the year.

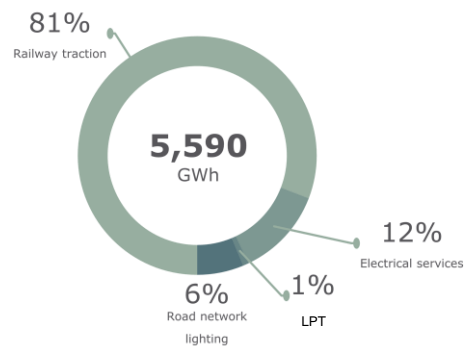
The total volume of energy consumed in 2022 was 27.2 million GJ. The increase can be seen in the changes in the main energy items linked to transport activities, specifically, electricity for railway traction (+7.0%).

Electricity was the largest share and highest percentage of total consumption considering electricity for railway traction, road network lighting and other uses (roughly 74%).

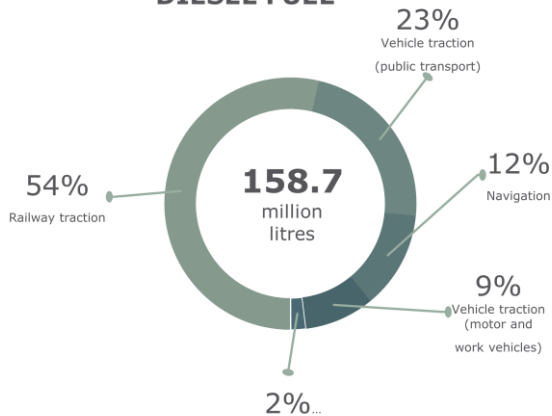
Electricity for railway traction absorbs 81% of the total 5,590 GWh of electricity consumed, owing to the fact that the majority of trains travel on an electrified network (over 70% in Italy). Using electricity makes it possible to benefit from renewable sources, towards which the FS Group is actively committed.

An examination of use by individual source shows

**ELECTRICITY**



**DIESEL FUEL**



how transport services also account for a significant amount of diesel consumption, though with lower percentages of the total than electricity. Railway traction absorbed over half of the 158.7 million litres of diesel fuel consumed, public road transport approximately 23% and waterway navigation 12%. The remaining portion was consumed by work vehicles (9%) and heating (2%).

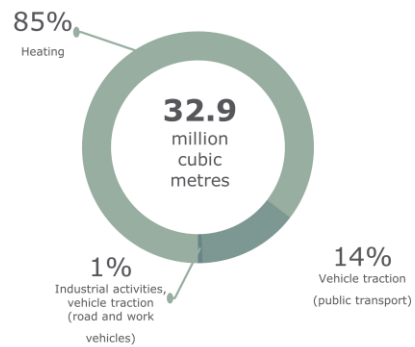
Natural gas is mainly used for heating premises (85%) and only residually for transport, mostly to power part of the public transport road fleet (14%).

The FS Group’s commitment to using energy from renewable sources is also evident from its consumption of biodiesel (introduced in 2020 and totalling roughly 6.5 million litres in 2022), consumption of hydrogen (introduced in 2021 and totalling roughly 108 tonnes in 2022), both used for

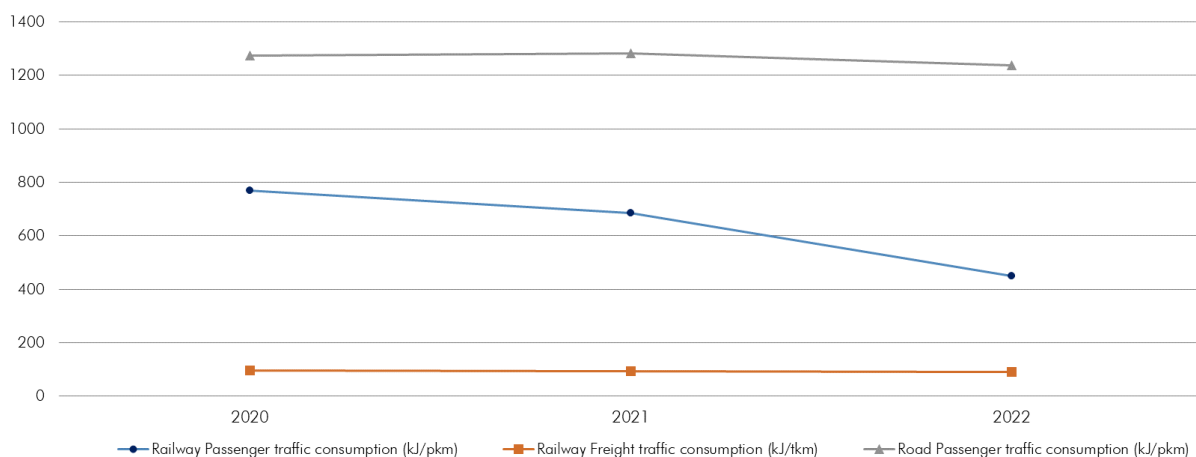
local public road transport, as well as self-generated energy from photovoltaic plants (roughly 6.8 GWh, approximately +34% on the previous year) and self-generated solar thermal energy (around 22 MWh in 2022).

In order to quantify performance of the services, specific end consumption is monitored, calculated as the ratio of energy used for railway activities on electric and diesel trains to the traffic units used to measure passenger and freight railway transport (respectively passenger and tonnes per kilometre). Affected by a variety of factors (e.g., speed, altitude, vehicles, load factor, transported weight, atmospheric conditions, etc.), this figure did not undergo any material changes in passenger traffic in 2020-2021, due to the downturn in passengers and restrictions on passenger numbers. However, it almost went back to pre-pandemic levels in 2022, around 450 kJ/passenger-km. The ratio of freight traffic, on the other hand, did not show any significant changes over the years (roughly 92 kJ/tkm in 2022).

**NATURAL GAS**



**FS Group final specific consumption**



**Emissions (305-1, 305-2, 305-4, 305-5, 305-7)**

Thanks to its business based on the offer of collective transport and rail freight transport services, and thanks to energy efficiency improvement initiatives and to the promotion of renewable sources, the FS

Group contributes significantly to curbing climate-changing emissions in the industry. As part of its process to fine-tune reporting and transparency on environmental issues, the FS Group signed up also in 2022 for the Carbon Disclosure Project (CDP), a global landmark on climate change. In the 2022 report, the Group was ranked “A-” (“Leadership” bracket), up on 2021, when it had been ranked “B”. The Group’s GHG Report, which had been first published in 2021, was published again in 2022, reporting on strategies, governance, results and actions to fight climate change. Furthermore, the Group’s companies set out ambitious initiatives in the Business Plan, aimed at reducing greenhouse gas emissions and phasing out fossil fuels.

In 2022, the group’s CO<sub>2</sub> equivalents emissions came to 2.01 million tonnes, just slightly under the 2021 total. The close connection between energy consumption and CO<sub>2</sub> emissions is mirrored in the volumes and variations in the total and individual items. As a result, the Covid-19 pandemic also had a huge impact on greenhouse gas emissions in the past three years.

The increase in consumption in 2022, as was the case in 2021, did not produce a rise in greenhouse gas emissions compared to the previous year, thanks to energy efficiency initiatives, such as the continuous upgrading of the railway fleet with more efficient vehicles and outside factors, such as the improved national emissions of the electricity generation mix.

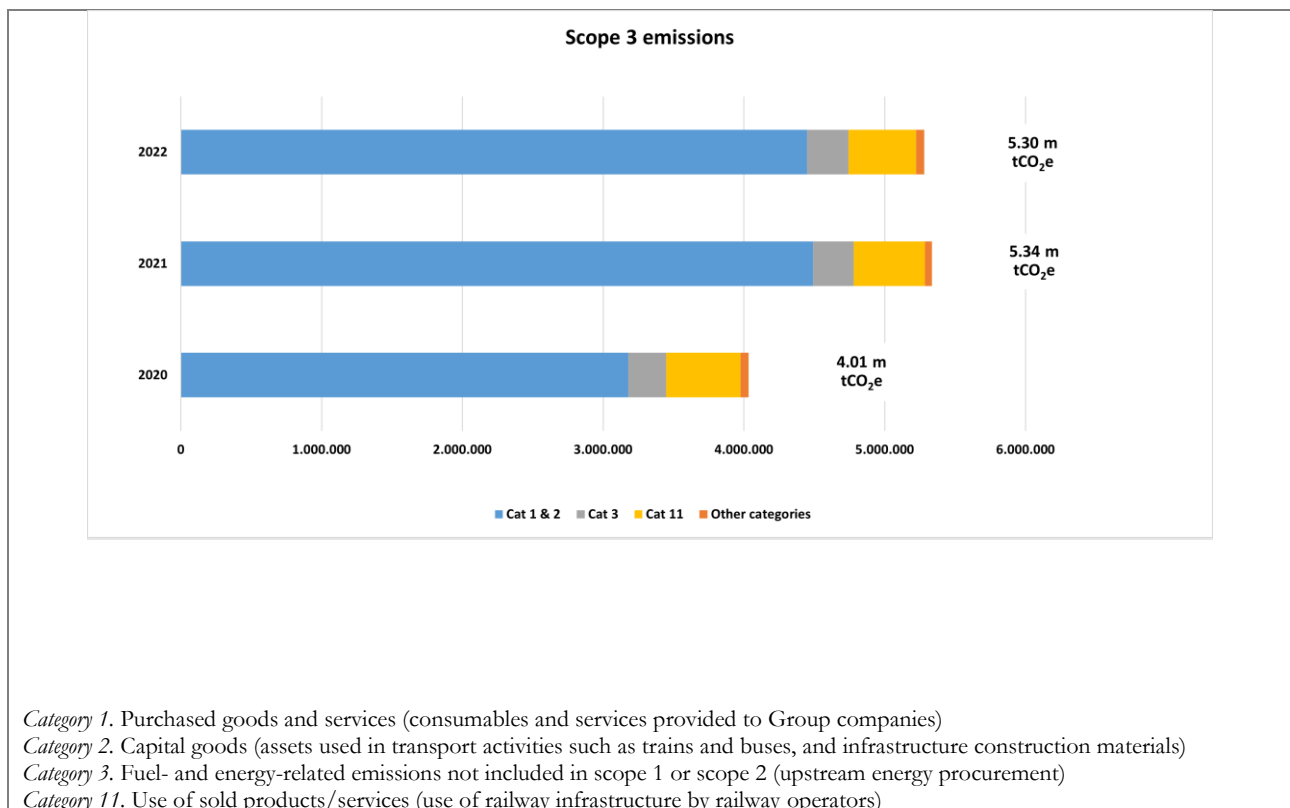
DIRECT AND INDIRECT CO <sub>2</sub> e EMISSIONS (location-based)	Measurement unit	2022	2021	2020	%Δ 22/21
Electricity for railway traction	tCO <sub>2</sub> e	1,212,660	1,229,165	1,269,842	-1.3%
Electricity for other uses	tCO <sub>2</sub> e	176,103	184,435	193,096	-4.5%
Electricity for road network lighting	tCO <sub>2</sub> e	91,952	96,728	105,313	-4.9%
Other <sup>a</sup>	tCO <sub>2</sub> e	18,689	19,940	16,827	-6.3%
<b>TOTAL Scope 2<sup>c</sup> (location based)</b>	<b>tCO<sub>2</sub>e</b>	<b>1,499.414</b>	<b>1,530.268</b>	<b>1,585.077</b>	<b>-2.0%</b>
Diesel	tCO <sub>2</sub> e	441,679	480,331	458,563	-8.0%
Natural gas	tCO <sub>2</sub> e	65,656	81,021	71,947	-19.0%
Other <sup>b</sup>	tCO <sub>2</sub> e	3,917	2,523	1,361	+55.3%
<b>TOTAL Scope 1<sup>c</sup></b>	<b>tCO<sub>2</sub>e</b>	<b>511,252</b>	<b>563,875</b>	<b>531,871</b>	<b>-9.3%</b>
<b>TOTAL (Scope 1 + 2 location-based)</b>	<b>tCO<sub>2</sub>e</b>	<b>2,010.666</b>	<b>2,094.143</b>	<b>2,116.948</b>	<b>-4.0%</b>
<i>a) Electricity for LPT and company vehicles, district heating, district cooling</i>					
<i>b) Petrol, LPG, fuel oil, biodiesel, pellets</i>					
<i>c) Scope 2. Emissions from the generation of electricity purchased and consumed by the organisation for electrical devices, heating and lighting in buildings; the organisation is indirectly responsible for the emissions generated by the supplier to produce the electricity required.</i>					
<i>Scope 1. Emissions from the direct combustion of fossil fuels purchased for heating, to generate electricity and thermal energy and to fuel transport vehicles.</i>					

Based on the Greenhouse Gas Protocol (GHG Protocol), the amounts in the table were calculated using the location-based method which calculates emissions applying average domestic emissions for the various countries where the electricity is purchased.

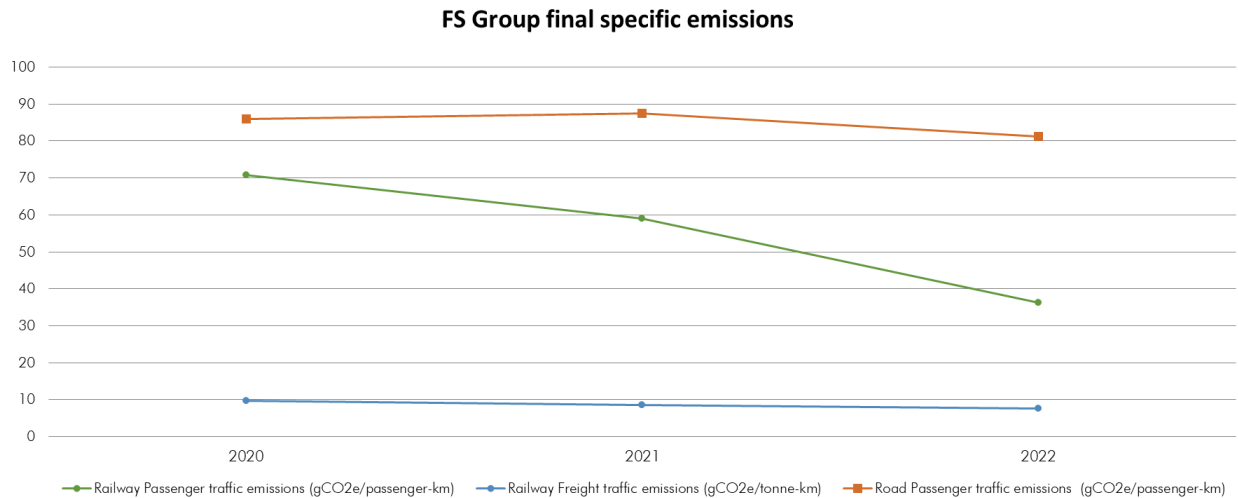
The attached *Performance indicators tables* containing the energy and emissions amounts also set out the amounts calculated using the market-based approach which calculates emissions based on emissions defined in the contract with the electricity supplier. This latter method highlights the gradual spread of energy from renewable sources certified with guarantees of origin in the company segments where this is possible.

In 2022 the parent updated and fine-tuned the analysis on the CO<sub>2</sub> emissions of the Group’s value chain, in line with GHG Protocol guidelines, strengthening the reporting of Scope 3 emissions. This analysis identified four significant categories of emissions related to the supply chain – purchased goods and services and capital goods—, third party railway operators that circulate on the RFI network, emissions linked to upstream processes of energy procurement. These emissions account for roughly 99% of the Group’s estimated overall Scope 3 emissions. The *Performance indicators tables* show the figures for all categories of emissions, in line with the GHG Protocol.

Despite the high use of materials in railway construction sites, in 2022 these emissions went down slightly compared to 2021, when there had already been a significant increase compared to 2020, characterised by the reversal caused by the health emergency, due to the increase in supplies of works, goods and services to Group companies.

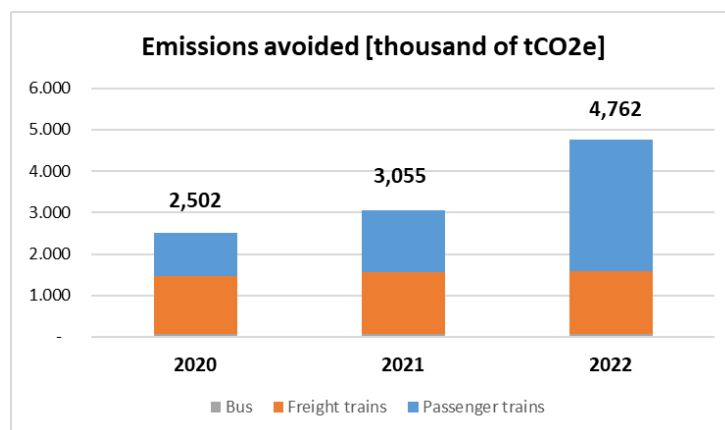


*Other categories:* Waste management, business trips (hotel and airplane), employees commuting, impacts of leased assets.



The performance of the direct (Scope 1) and indirect (Scope 2) specific emissions of rail transport in Italy is similar to that of specific consumption: emissions by traffic units transported in Italy amount to roughly 36.2 gCO<sub>2</sub>e/passenger-km for passenger traffic, a decrease following the gradual revival of transport services after the peak reached in 2020, and approximately 7.7 gCO<sub>2</sub>e/tonne-km for freight transport, a further decrease.

Overall, the advantages of sustainable mobility by using the FS Group’s collective means of transport have been estimated for passenger transport by rail and road, as well as for goods transport by rail. A significant amount of emissions was avoided in 2022 thanks to these modes of transport compared to private vehicles, such as cars and commercial vehicles, totalling approximately 4.8 million tonnes of CO<sub>2</sub>e. The trend is increasing in the three-year period, also owing to the increase in traffic after the pandemic emergency. The emissions avoided thanks to the modal shift reflect the growing positive impact of the Group in its sector and its growing commitment towards promoting sustainable mobility.





The transport sector also produces other emissions, such as particulate matter, sulphur dioxides and nitrogen oxides. Although the railway sector's emissions are marginal compared to other environmental aspects, atmospheric emissions should in any case be monitored, also with regard to the environmental impact of the Group's road transport services.

Also in this case, emissions of nitrogen oxide and sulphur oxide emissions and particulate matter are mostly the result of combustion for transport, mainly road. The FS Group's road transport companies are committing to upgrading the fleet, preferring more modern engines with significantly less harmful emissions. This commitment is apparent from the figures shown below. Despite the considerable resurgence of passenger traffic, the emissions remain low, in line with the levels of the previous two-year period.

OTHER ATMOSPHERIC EMISSIONS	Measurement unit	2022	2021	2020	% Δ 22/21
NO <sub>x</sub>	t	5,927	6,286	6,043	-5.7%
SO <sub>2</sub>	t	399	434	427	-8.0%
PM <sub>10</sub>	t	159	169	163	-5.8%

#### The FS Group and the Carbon Disclosure Project (CDP) rating

In 2022 FS entered the *Leadership* category of the CDP by reaching an "A-" climate change rating. CDP is a not-for-profit organisation that runs one of the top global environmental reporting platforms. It encourages companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests. The reporting platform counted over 18,700 companies that disseminated environmental data via CDP.

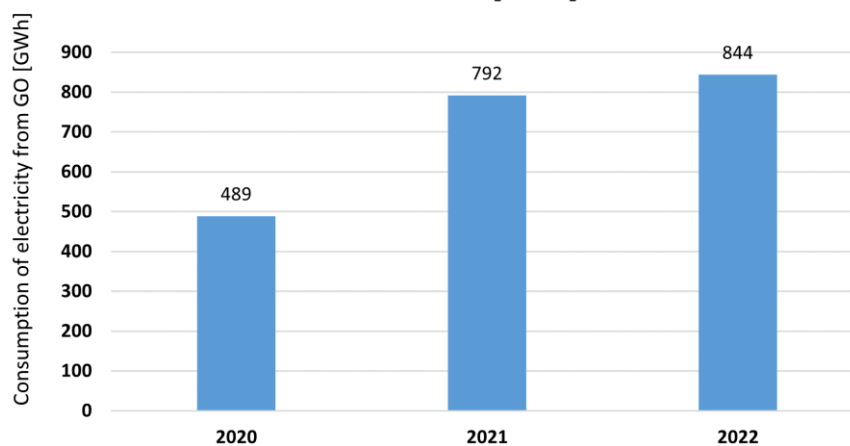
FS' score is higher than the European, global and sector average, evidencing the Group's ability to implement best practices in reporting energy consumption, emissions, actions taken to reduce its environmental impact and adopt adequate governance, strategic planning and climate risk management solutions throughout its value chain. The prior-year rating was "B", placing the Group in the "Management" category. This improvement shows the Group's commitment to compliance with the requirements for a tangible contribution to the fight against climate change.

### The Units and the initiatives to fight climate change (302-5)

The FS Group has undertaken to take a bold step in the fight against climate change, setting several objectives: most noteworthy, the self-production of energy from renewable sources. The 2022 – 2031 Plan objective, linked to energy self-production, led to the first European call for tenders, worth €130 million, for the construction of twenty photovoltaic plants in various Italian regions. This project, jointly with other actions to improve the efficiency of environmental performance, detailed in the attached

*Company highlights*, will make it possible to continue the improvement process, in line with the UN’s SDGs. Furthermore, continuing to use electricity produced from renewable sources for uses other than railway traction, certified with Guarantees of Origin, FS Group companies purchased energy certified with guarantees of origin that accounted for roughly 64% of their needs in 2022, progressively increasing the share over the years. Furthermore, the Group’s European integrated logistics company TX Logistik, part of the Logistics Unit of the FS Group, covers virtually all its consumption of energy for railway traction via energy certified with guarantees of origin.

**Procurement of electricity from certified Renewable Sources via GO [GWh]**



With regard to the Infrastructure Unit, there is an electrified share of over 72% of the entire railway infrastructure; an increase of over 2,000 km is expected over the course of the Plan to reduce diesel vehicles in operation to the minimum. What is more, the campaign to upgrade lighting systems, along with smart management systems to remotely control and manage lighting continues being carried out on the network of main stations.

Starting from August 2020, the road network has been using green energy to light roads and tunnels thanks to a supply contract for energy from renewable sources certified with guarantees of origin, as well as self-production with photovoltaic panels.

<b>72.4%</b>	<b>of the railway network is electrified</b>
<b>Over 2,000 km of further electrification is expected in the next ten years</b>	

<b>~96%</b>	<b>of energy used on the road network is from renewable sources (certified)</b>
<b>32,400 km of network, 1,612 of tunnels lit</b>	

The Passengers Unit of the FS Group aims to provide solutions that increasingly combine impeccable service quality with excellent environmental performance. The new regional trains Pop and Rock started coming into service in 2019, and continued being added in 2022. Designed to meet strict environmental

standards, they consume up to 30% less energy than other trains in the same segment and are equipped with, inter alia, smart air conditioning energy management systems and the green drive and smart parking functions. In addition, the first Blues trains, hybrid trains with triple power supply (diesel, electric and battery- powered) started circulating on the Italian railway network in 2022.

In the road transport segment, the Group aims to replace lower environmental category buses (Euro 2, 3 and 4) with vehicles meeting higher ecological standards, also by investing in hydrogen and electric hybrid vehicles, and making use of biofuels such as HVO (Hydrotreated vegetable oil). In 2022, energy consumption for low-emission LPT accounted for 68% of the Group's road vehicle fleet, progressively up on previous years.

<b>94.3%</b>	<b>Passenger traffic</b>	<b>On the electrified railway network</b>
<b>98.5%</b>	<b>Freight traffic</b>	

<b>68%</b>	<b>Energy consumption by low-emissions road vehicles* used in LPT</b>
<b>*Electric, diesel Euro 6, hydrotreated vegetable oil (HVO), gas-to-liquid (GTL) and H<sub>2</sub> vehicles</b>	

**The first hybrid train of Trenitalia**

The FS Group’s ongoing commitment to searching for innovative technological solutions is aimed at increasing the sustainability of its impact on society. In keeping with this strategy, the Blues train, the first Trenitalia hybrid train with triple electric, diesel and battery power supply, was introduced in Florence in March 2022.

The regional train travels with diesel engines on non-electric lines, with an electric motor on electric lines, and runs on batteries to travel the first and last mile on non-electric lines or when it stops in stations. The hybrid technology makes it possible to decrease CO<sub>2</sub> emissions compared to current diesel trains. The train was designed and built by Hitachi Rail and is going to be rolled out along with the Pop and Rock trains throughout the country, a further step forward in the evolution of Trenitalia’s Regional Transport, which entails an upgrade of 80% of its fleet over the next four years.

In 2022, the new train was delivered in Tuscany, and in 2023 the way people travel on these lines will be wholly different, with the introduction of over 100 Blues trains in the following Regions: Valle d’Aosta, Friuli-Venezia Giulia, Tuscany, Lazio, Calabria, Sicily, Sardinia.

## Responsible purchases (2-24, 2-25, 3-3)

### Our suppliers (2-6, 2-23, 204-1)

The FS Group negotiates purchases in accordance with EU antitrust directives and the Group's own *Regulation for Negotiations of Ferrovie dello Stato Italiane Group companies*<sup>121</sup>.



The Group's relationships with suppliers (including external contractors, consultants, intermediaries, sub-contractors, sub-suppliers and, in general, all parties in the supply chain) and business partners are based on **upholding the principles of honesty, integrity, impartiality and sustainability**.

We base all our actions and conduct on utmost integrity and legality, excluding any form of favouritism. We only work with reliable, honourable and highly reputable people and businesses.

This is why, as noted in the Code of Ethics, the group undertakes to:

- **encourage** suppliers and business partners to promote respect for human rights and environmental protection;
- **guarantee** total and effective competition and fair treatment;
- **select** suppliers, business partners and their products based on quality, price, environmental performance and company needs and use, in accordance with stated and transparent methods;
- **guarantee** diligence, good faith, integrity and respect for internal procedures in negotiations and contract performance with suppliers and business partners;
- **guarantee** the transparency of transactions and the traceability of financial flows;
- **respect and enforce** the confidentiality of information, documents and data;
- **not exploit** any contractual grey areas or economic weaknesses.

In line with the rules of the Public Contracts Code (Legislative decree no. 50/2016), suppliers are vetted on the basis of assessments relating to quality, price and other corporate pre-requisites (the supplier's location and nationality are not part of the vetting criteria). Based on the sustainable procurement guidelines issued by the parent, the group companies rolled out a process aimed at including mandatory or rewarding sustainability criteria in their calls for tender based on the materiality of the environmental and social aspects applicable to the main categories of goods, for example:

- Possession of environmental, social, health and safety and quality certifications (e.g. ISO 14001, SA 8000, ISO 45001, ISO 9001 etc.);
- the use of ecological materials and product certification (e.g. Ecolabel, Blauer Engel, etc.);
- improving energy efficiency and the procurement and use of energy from renewable sources;
- measures for the protection of health and safety in the workplace;

<sup>121</sup> The code of ethics is available online in the Group companies' procurement platforms.

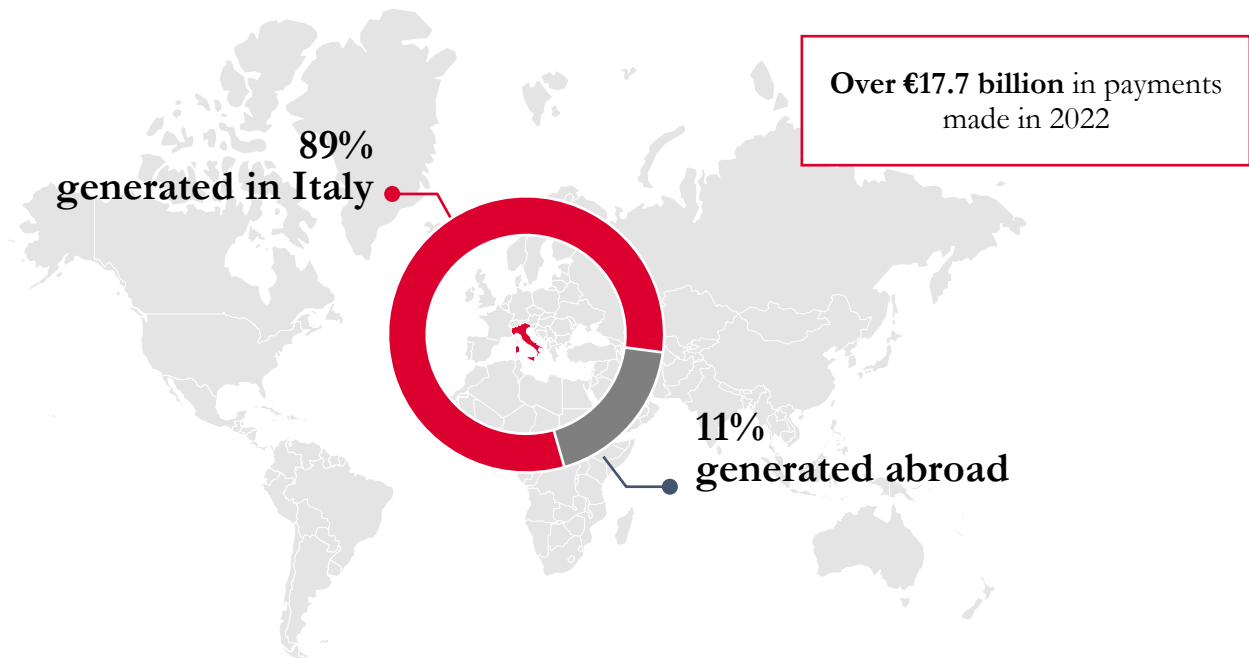
- enhancing diversity and supporting inclusion (% of women in project teams).



**16.8 billion**  
Economic value of  
contracts awarded

Over €16.8 billion of the economic value of contracts awarded by the group in 2022 (with environmental and social criteria included in over 90% of bids for tender).

In 2022, the Group companies paid suppliers over **€17.7 billion**, roughly 58% of which for the performance of contracts and 89% consisting of suppliers based in Italy and directly and indirectly generating income and job opportunities in the country.



## Sustainable procurement (2-28, 308-1, 308-2, 414-1, 414-2)

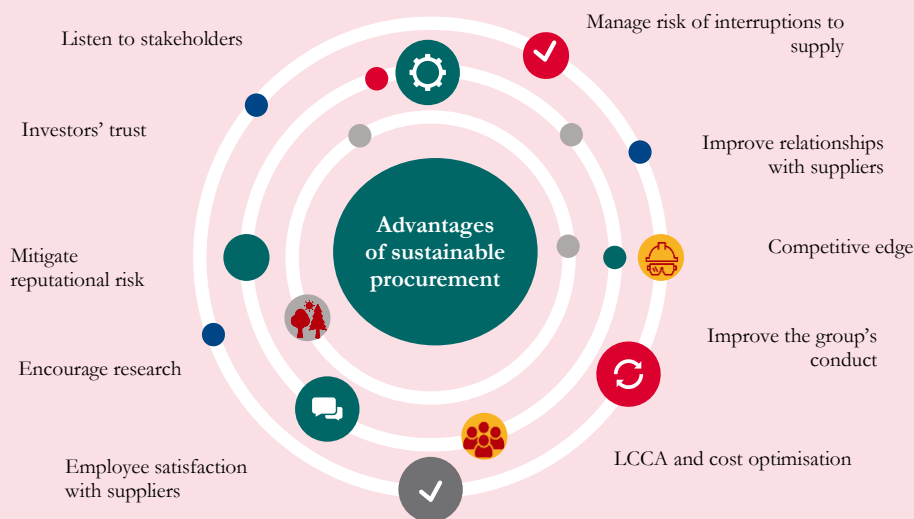
Responsible management of the Group’s supply chain begins with the inclusion of rules (labour and social security laws with the application of national labour agreements, occupational health and safety, Code of Ethics, etc.) in standard contractual clauses and continues, in certain instances as part of the Group companies’ management systems, with a **process to improve the environmental and social performance of their suppliers.**

FS Italiane S.p.A. also issued **Group guidelines for sustainable procurement** in line with the business processes at the various operating companies:

- The goal is to: pinpoint what is needed to define sustainable procurement policies and standards and establish them within the FS Group;
- standardise sustainability principles and drive their integration into purchasing procedures and management;
- integrate the requirements and guidelines provided by international standards on sustainable procurement.

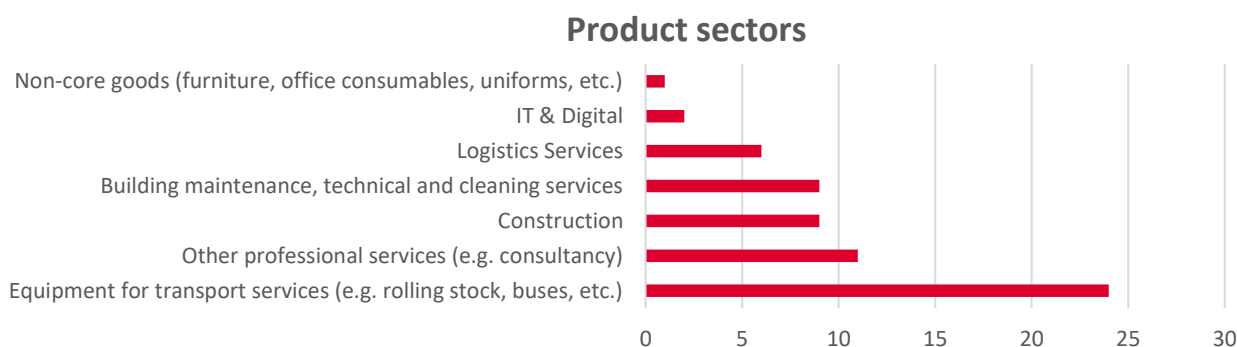
**The project to define guidelines involved the main FS Group companies and various company departments** (purchasing, sustainability, technical and legal departments).

**The process is broken down into six stages** from identifying which categories of goods should be subject to sustainable procurement criteria to reassessing the process itself. The results will provide input for designing the actions to be taken to **ensure continuous improvement and achieve the advantages offered.**



Based on this approach, the Group companies began to adapt their procedures, thanks to a process that involves specialised roles in purchasing, sustainability and other departments that take part in procurement processes.

**An online survey was used to continue monitoring the environmental and social impacts of the supply chain.** Comprised of around 100 questions broken down into six sections (general information, human rights, the environment, society, occupational health and safety and continuous improvement), in 2022 the survey was sent to 62 strategic suppliers<sup>122</sup> of the main Group companies in the following sectors:



Based on the replies received, each section is **scored and used to calculate an overall rating**, from 0 to 3 (translated in an alphabetical scale), of the **supplier’s environmental, social and governance performance**.

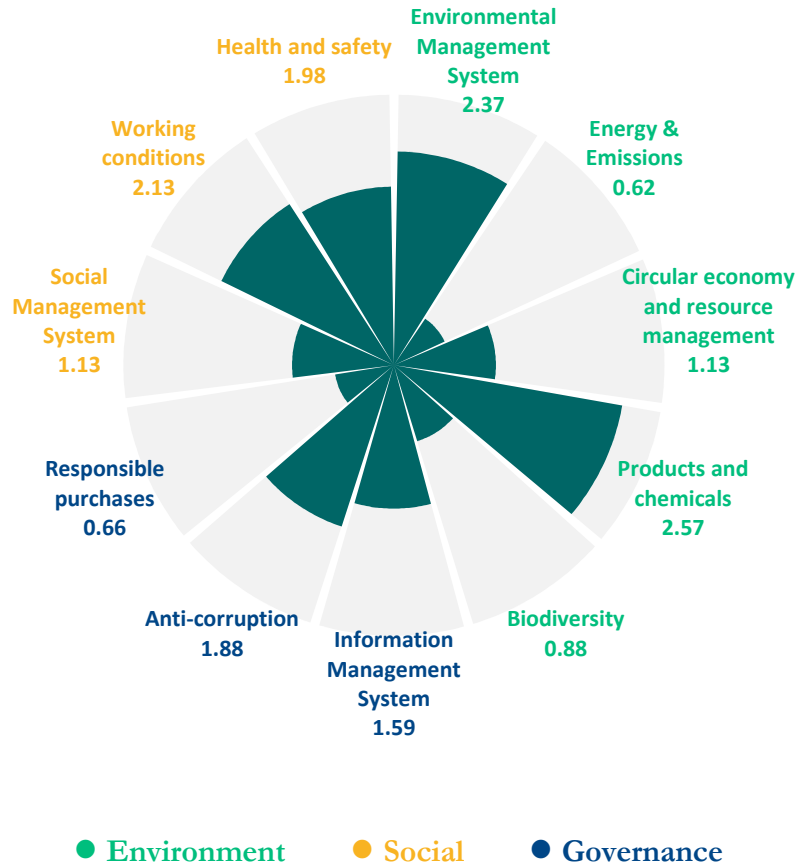
Score absolute value	ESG Rating
$0 \leq \text{score} \leq 0.90$	E
$0.90 < \text{score} \leq 1.50$	D
$1.50 < \text{score} \leq 2.10$	C
$2.10 < \text{score} \leq 2.70$	B
$2.70 < \text{score} \leq 3$	A

The **average scores of the assessed suppliers was 1.57 (ESG Rating “C”)**, with 13 suppliers obtaining an ESG Rating “B”, 18 suppliers within the average (ESG Rating “C”) and the remaining 31 whose performance fell between “D” and “E”.

**An analysis of the average scores of the individual areas** of the questionnaire, shows that “Energy & Emissions” and “Responsible purchasing” have the lowest scores. However, these are also the areas which the Group has started analysing to promote **a significant overall improvement in how these issues are managed by its suppliers**, for example by including new criteria in negotiation procedures

<sup>122</sup> Each Group company chooses suppliers for the self-assessment questionnaire based on the following materiality criteria: i) strategic & representative of the company’s business or strategy in a “non economic” way (e.g., for specific types of purchases closely connected to the continuity of the company’s core business); ii) economic - defined by setting a materiality threshold for each macro-category (goods, services, works) and calculated as the average of the last three years of purchases and the budget for the subsequent year and inviting suppliers to contribute at least 80% of such threshold.

to improve the carbon footprint and assure greater control over the whole supply chain (second tier suppliers and further).



RFI SpA has also assessed 712 suppliers<sup>123</sup> (14% of which, i.e. 101 were new suppliers assessed for the first time in 2022) based on the environmental and social criteria in the EcoVadis monitoring platform.



The **Sustainable Supply Chain Management** project was implemented during 2022, to ensure, starting in 2023, the **progressive application of the ESG scoring to the contractors/suppliers of all Group companies, through a specific IT platform.**

According to the 2022-2031 Business Plan, as of 2026, **all businesses who intend to work for the FS Group must undergo the ESG assessment through the IT platform implemented by FS.**

<sup>123</sup> Number of suppliers with an active assessment on the EcoVadis platform for 2022.



As part of “Railponsible”, an initiative that brings together major railway companies to promote sustainable purchasing, work continued to develop actions in two significant areas:

- Due Diligence of the supply chain, to define and develop common minimum requirements in the railway sector;
- decarbonisation of the supply chain, to assess methods and calculation tools of GHG emissions (scope 3).

## Sustainable infrastructure (2-23, 2-24, 2-25, 3-3, 203-1, 203-2, 304-1, 304-2, 304-3, 304-4, 413-1, 413-2)

An extensive infrastructure fits into society and culture, affecting the future of people and communities, their families and social activities and influencing local and national structures. It is ever more important to see infrastructure as an active component of landscape configuration and urban regeneration processes, with a view to promoting the prosperity of local areas and communities.

Upholding the principles of sustainability also concerns infrastructural design, which must view each project as an opportunity to enhance the local area and landscape, to address the needs of the community, to generate value by triggering new dynamics for social and economic development.

The railway and road infrastructure sector is one of the pillars of the FS Group's business, and should be developed according to sustainability criteria throughout the life cycle: design, construction, management, maintenance and decommissioning. The establishment of the Infrastructure Unit following the reorganisation introduced by the new business plan seeks to further promote the construction of accessible, integrated, resilient and interconnected road and railway infrastructure, forming the backbone for the economic and social development of the local area.

The inclusion of engineering projects, such as railway and road infrastructures, into the local area requires an integrated assessment of the environmental, social and economic impacts over the infrastructure's entire life cycle. As a result, systematic dialogue with the stakeholders in the construction process, which begins in the initial design stages and continues through infrastructure construction and operation, is crucial.

### ***Talking Construction Sites to communicate strategic projects***

A method of communication on construction sites has been developed to provide information on the history and progress of the project, sharing its objectives and critical issues. This platform is hosted by a website, where you can see via a webcam the progress of the country's strategic projects.

The project is called *Cantieri parlanti*, 'Talking Construction Sites', and was developed by the FS Group with the companies of the Infrastructure Unit of FS, RFI and Italferr, in collaboration with the Ministry of Infrastructure and Transport.

The aim of the project is to provide transparent information on the projects covered by the NRRP and more, and it will concern the construction sites of 30 large strategic projects throughout Italy. In other words, the construction sites will turn into actual communication hubs, identified by the claim *L'Italia del futuro è in corso*, 'Future Italy is in progress'.

Information boards at the construction sites will have a common graphic design and will provide details, data, advantages of the infrastructure being constructed.

In addition, the information provided directly at the construction site will also be available online, at <https://www.fsitaliane.it/content/fsitaliane/it/opere-strategiche.html>. The website will be constantly updated on progress of the works and activities and on anything that goes on in the local areas concerned.

A major focus of environmental studies is the analysis of the territorial context in which the work is located, assessing beforehand the temporary impact on the territory, linked to the activation and management of the site, and the permanent impact, following completion of the project, and identifying in advance the necessary mitigation and offsetting measures. This approach seeks to guide the project and operations stage, by setting up a model that also involves construction firms, and is able to identify the significant environmental aspects of a construction site that should be managed with a circular view, to preserve the value of resources and promote the regeneration of the natural capital and the ecosystem. In order to minimise the impacts in the construction and operation stages of the new projects or expansion of existing works, actions are aimed at reducing the residual environmental impact, such as: landscaping and naturalistic engineering of the road and railway appurtenances and tunnel entrances, maintenance of connectivity via ecoducts such as wildlife bridges and underpasses, treatment of construction site water, reduction of dust air pollution by dust abatement systems and installation of plant barriers also intended to mitigate the landscape impact.

The companies of the FS Group have a variety of tools to strengthen integration of the project in the local area.

A specific sentiment analysis platform has been set up to capture the wishes of the various stakeholders. This makes it possible to perform social web monitoring activities on strategic infrastructural projects by enabling active listening and providing large amounts of data from texts on the Internet (websites, social networks, blogs or forums), thus measuring the sentiment on key issues by the relevant stakeholders.

Pre-emptive archaeological studies and surveys are also important in the design stage. Based on the outcome of these activities, the territorially competent Archaeological Superintendencies provide their opinion on the projects, dictating the subsequent requirements for the executive stage.

A process of mapping, selection and quantification of the most significant environmental, economic and social performance indicators (KPI) is currently being developed, with the aim of assessing and measuring the sustainability of railway projects. This process seeks to measure, report on and communicate the level of sustainability of investments, through a pre-set matrix of sustainability indicators.

On road infrastructure, one of the priorities is to guarantee a level of safety of the structures, the safety of users and to streamline management costs and response times. In this connection, a Structural Health Monitoring program (SHM) may serve as an example. It entails developing an integrated system for risk survey, classification and management and dynamic infrastructure monitoring. This is carried out via a big data platform that enables monitoring of the health of engineering structures over time, especially bridges and tunnels.

Railway stations are an iconic item of the FS Group's infrastructural system. They are integrated and integrating hubs in urban fabrics and the core of past, present and future cities. In addition to being smart and interconnected, the new concept requires a station to be also pleasant and safe, as well as to drive

environmental regeneration and to bridge gaps in the urban fabric. Therefore, stations need to promote urban planting projects, and provide squares and spaces for new opportunities for recreation and socialisation, as well as serving their purpose as mobility hubs.

## Sustainable infrastructure in the NRRP

The investment programme under the National Recovery and Resilience Plan (NRRP) plays a significant role in providing opportunities for creating a sustainable infrastructure and mobility system.

In 2022, based on the *Guidelines for drafting technical and financial feasibility projects as a basis for public works contracts funded by the NRRP and SNP<sup>124</sup>*, the Group drafted sustainability projects, studies and reports related to the works planned under the NRRP in order to provide a clear overview of the potential of the infrastructure works to generate value for the community.

By measuring sustainability indicators, the analyses stressed the benefits offered by infrastructure projects in terms of economic, environmental, social and tourist development of the regions, and did not point to any significant critical issues. Projects that directly or indirectly involve protected areas (e.g. Nature parks, Special Conservation Areas, Sites of Community Importance, Natura 2000 network, etc.) undergo special scrutiny.

The studies and reports also evidence the attention paid, at the project development stage, to finding solutions that improve the levels of territorial cohesion, environmental protection, efficient use of resources in a circular economy perspective, to greater resilience of the infrastructure, to the creation of new connections for sustainable and high-value mobility for the development of local areas. For the technical-economic feasibility projects under the NRRP, specific assessments were also conducted with respect to the environmental objectives set by EU Regulation 2020/852 (European Taxonomy), such as climate change mitigation and adaptation, sustainable use and protection of water and marine resources, etc. These assessments take into account the entire life cycle of the infrastructure for application of the Do No Significant Harm principle (DNSH) and the sustainability report of the infrastructure must contain a specific statement of compliance with this principle.

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<sup>124</sup> SNP: Supplementary National Investment Plan, set forth with It. Law Decree of 6 May 2021, no. 59 converted, with amendments, by the Law of 1 July 2021, has the aim of integrating and enhancing the contents of the National Recovery and Resilience Plan.

**ANAS trials innovative, low environmental impact asphalt**

ANAS started trialling innovative asphalt and new, low environmental impact methods aimed at sustainability and reduced use of natural resources on the A2 Mediterranean Motorway.

The aim of the trial is to assess the feasibility of reusing the large amounts of asphalt milling produced by the demolition of existing pavements. Maintenance of the road network, whether superficial or deep, indeed generates large amounts of milled material due to the marked imbalance between the material obtained from milling and the current low possible reuse in the production of new materials.

In the first stage of the trial, the technical behaviour and performance indexes in the three pavement layers (subgrade, binder and draining wearing course) were analysed by using high percentages of milled material (60% subgrade - 60% binder -30% wearing course) with the inclusion of certain specific thermoplastic polymers and regenerating and antioxidant additives, with a view to achieving a self-sustainable and circular system in the production of bituminous conglomerates.

In the second stage, the trial concerned the use of machinery for deep cleaning of the draining wearing bituminous conglomerate. This might provide a great innovation since it would manage to restore the optimal or satisfactory performance indexes of the on-site wearing course, without handling or supplying any material, but only through deep cleaning.

It was also found that this technology makes it possible to consistently remove the fine parts from the structure of the pavement and of the bitumen around the particles, renovating the drainage layer by significantly enhancing adhesion and increasing water drainage.

These methods may result in advances in the area of green pavements and reuse of secondary materials.

**Biodiversity management and protection**

The development of transport infrastructures plays a delicate role with respect to biodiversity, as it can eliminate habitats, fragment ecosystems, increase mortality for certain species and have other negative repercussions.

The Ferrovie dello Stato Italiane Group is aware of the complexity and fragility of the ecosystems where it conducts its activities and, for this reason, has made this issue a top priority.

In drawing up projects for the construction of new infrastructures or upgrades to existing ones, special emphasis is placed on the assessment of the technical, natural and anthropic features of the land and area in which the infrastructures will be built, taking into due consideration environmental, landscape and archaeological aspects.

**FS partner of the RETURN project**

The RETURN partnership was set up to promote research against environmental, climate and anthropic risks. The FS Group is one of 26 partners, confirming the interest in a project that aims to strengthen national research networks on environmental, natural and anthropic risks and promote their participation into strategic European and global value chains. The companies of the Infrastructure Unit – RFI, Anas and Italferr – are at the forefront, owing to their interest in raising awareness of environmental and resilience issues in Italy.

The project will promote the synergy of academia, research centres and industry and thanks to the application of new smart assessment, monitoring, forecasting, and prevention methods, and the various strategies to be adopted, the outcomes will significantly contribute to improving the entire disaster risk management cycle.

Developing infrastructure that respects biodiversity must include the following actions:

- abstaining from building unnecessary infrastructures, assessing all alternatives, and possibly not involving protected areas;
- analysing the environmental factors involved, with a special focus on climate change, biodiversity, natural resources, accidents and calamities;
- avoiding, preventing and reducing the negative effects of the infrastructure, by taking appropriate mitigation measures (underpasses, overpasses, fences);
- restoring the overall balance of biodiversity that will be lost due to the construction of the infrastructure by re-establishing ecosystems, recreating alternative habitats elsewhere;
- analysing the resilience of the infrastructure, that is, its ability to withstand and adapt to unstable conditions caused by climate change.

The following table summarises the data for the main projects carried out in 2022:

Operative sites of infrastructures affecting protected areas (2022)						
Operative site	Geographical area	Protected area	Type of protection	Surface area of the site <sup>a</sup> (km <sup>2</sup> )	Activity	Value of biodiversity
Railway extension of the Orte – Falconara line (PM228-Castelplanio section; prog km 1+665 and prog km 7+110)	Marche	ZPS – IT5320017 Gola della Rossa and Frasassi  Regional Nature Park of Rossa and Frasassi	Natura 2000  Protected area	0.093 <sup>b</sup>	Railway infrastructure	Priority habitats: 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates, 91AA Eastern white oak woods
Railway extension of the Orte – Falconara line (PM228-Castelplanio section; prog km 3+395 and prog km 7+110)	Marche	SCI/SAC – IT5320004 Gola della Rossa  Regional Nature Park of Rossa and Frasassi	Natura 2000  Protected area	-	Railway infrastructure	Priority habitats: 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates, 91AA Eastern white oak woods

Operative sites of infrastructures affecting protected areas (2022)						
Operative site	Geographical area	Protected area	Type of protection	Surface area of the site <sup>a</sup> (km <sup>2</sup> )	Activity	Value of biodiversity
Railway extension of the Orte – Falconara line (PM228-Castelplanio section; the track skirts the eastern perimeter)	Marche	SCI/SAC – IT320003 Gola di Frasassi  Regional Nature Park of Rossa and Frasassi	Natura 2000  Protected area	-	Railway infrastructure	Priority habitats: 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates, 91AA Eastern white oak woods
HS/HC Salerno – Reggio Calabria line (Battipaglia – Potenza C.le)	Campania	ZSC - IT8050049 Rivers Tanagro and Sele	Natura 2000	0.005	Railway infrastructure	Habitat: 3250 Constantly flowing Mediterranean rivers with Glaucium flavum, 3270 Rivers with muddy banks, 6220 Pseudo-steppe with grasses and annuals, 92A0 Salix alba and Populus alba galleries
HS/HC Salerno – Reggio Calabria line (Battipaglia – Potenza C.le)	Campania	ZPS – IT8050021 Middle course of the Sele Persano river	Natura 2000	0.005	Railway infrastructure	Habitat: 3250 Constantly flowing Mediterranean rivers with Glaucium flavum, 3270 Rivers with muddy banks, 92A0 Salix alba and Populus alba galleries
HS/HC Salerno – Reggio Calabria line (Doubling Cosenza – Paola/S. Lucido)	Calabria	SCI/SAC - IT9310056 Mavigliano Wood	Natura 2000	0.003	Railway infrastructure	92A0 Salix alba and Populus alba galleries
State Road 389 Villanova – Lanusei– Tortoli section (Villagrande Junction – Arzana connector)	Sardinia	SAC - ITB022215 Riu Sicaderba	Natura 2000	0.005	Road infrastructure class C1	Habitat: 5330 Thermo-Mediterranean and pre-desert scrub, 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior
Variant to State Road 115 Sud Occidentale Sicula from Birgi Junction on A29 to the connection to State Road 115	Sicily	ZSC - ITA010014 Sciare di Marsala	Natura 2000	0.041	Road infrastructure class C1	Habitat: 5330 Thermo-Mediterranean and pre-desert scrub, 6220 Pseudo-steppe with grasses and annuals of the Thero-

Operative sites of infrastructures affecting protected areas (2022)						
Operative site	Geographical area	Protected area	Type of protection	Surface area of the site <sup>a</sup> (km <sup>2</sup> )	Activity	Value of biodiversity
						Brachypodietea
State Road 675 - Umbro Laziale - Infrastructural system for connection of the Civitavecchia port to the Orte intermodal hub. Monte Romano est - Civitavecchia section	Lazio	ZPS - IT6030005 Tolfetano-Cerite-Manziate Area	Natura 2000	0.0008	Road infrastructure class B	n.a.
State Road 4 Salaria - Trisungo-Acquasanta Section	Marche	SCI - IT5340006 Lecceto di Acquasanta SCI - IT5340018 River Tronto between Favallanciatà and Acquasanta	Natura 2000	0.0009	Road infrastructure class C1	Habitat: 91AA Eastern white oak woods, 92A0 Salix alba and Populus alba galleries, 9340 Quercus ilex and Quercus rotundifolia forests, 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior

a) Area permanently removed from the protected site by the project.

b) The SPA encloses the SCI Gola di Frasassi and Gola della Rossa.

## A circular concept of heritage

The useful life of an infrastructure can be extended by solutions that can regenerate it when it is no longer in operation (stations, railway lines and areas, roadman's houses, etc.), as part of redevelopment projects. Particular attention is paid, among other things, to the management of existing abandoned or decommissioned infrastructures and railway complexes, for which urban regeneration and recovery projects have been launched, involving heritage railways of naturalistic or tourist interest or of special engineering significance.

In recent years, for example, FS Sistemi Urbani, as part of the Reinventing Cities project, has made proposals for the sustainable transformation of underutilised sites in a number of Italian cities (Milan, Rome, Bologna, etc.). RFI promotes the redevelopment for tourism purposes of abandoned railway sections of great value in terms of landscape, history-archaeology and urban planning. This integrates the redevelopment of abandoned buildings and railways, in agreement with Local Administrations and other entities, to create social facilities, greenways and other initiatives for the benefit of local communities. The *Timeless Tracks* project of the FS Foundation also seeks to give a new lease of life to the railways that criss-cross Italy, creating an innovative formula of railway tourism. Thanks to the 2017 law on heritage railways, also brought about by the work of the FS Foundation, these lines are now protected and serve a new purpose, promoting the appreciation of the local areas, creating a widespread museum - a movable museum, in a manner of speaking of beautiful Italian hamlets and landscape.



**Atlas of greenways on FS lines: from disuse to reuse**

The commitment of the FS Group to achieving the right balance between sustainability and transport by recovering the built heritage, is embodied by the introduction of greenways. These decommissioned railway lines are now being redeveloped to complement the existing cycle-pedestrian network, connecting several communities while reducing pollution.

In 2022, RFI published the *Atlas of greenways on FS lines: from disuse to reuse* which presents the data on projects throughout Italy, places of interest nearby and the outlook, with the aim of actively contributing to the increase of slow mobility and tourism.

The atlas can be downloaded from: <https://www.rfi.it/it/news-e-media/publicazioni.html>

**FS Sistemi Urbani for the Tirrenica Cycleway**

FS Sistemi Urbani has signed with the Municipality of Diano Marina the deed for the transfer of roughly 37 thousand sq.m. of disused former railway track, for the construction of the Tyrrhenian Cycleway. The project is funded by the NRRP, and it should eventually link Ventimiglia and Civitavecchia. This agreement promotes the development of the Ponente Ligure cycle path, which was built on an old railway track, and already usable by pedestrians and cyclists. The current path is 24 km long, is wholly surfaced and has horizontal and vertical signage, surveillance and emergency call system.

**Work site management and oversight (301-1, 301-2, 403-9)**

When infrastructures are built, the FS Group plays the role of principal via the companies in the Infrastructure Unit, and uses subcontractors. It mostly assigns Group companies the role of technical party in addition to, depending on the requirements and specific type of contract, coordination and/or supervision of the works, with the duty of directly performing any agreed-upon monitoring activities before, during and after the works, identifying any critical issues and suitable corrective measures.

The Group contributes to disseminating a growing awareness of environmental management in the field of construction, by demanding the implementation of UNI ISO 9001, 14001 and 45001 Management Systems by subcontractors, while the railway infrastructure is built.

Consumption of the most significant materials<sup>125</sup> used in construction of the Group's railway infrastructure is set out below.

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<sup>125</sup> Any changes from the data provided in previous reporting periods are due to the change in the sample of work sites considered and the actual stage of completion of the work. The data on active work sites surveyed in 2022 cover roughly 90% of the total sample, in line with 2021 even if the sample quantity was higher. This percentage was calculated as the weighted average of the work amounts, including variations.

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Raw materials used by weight or volume (sites)	2022	2021	2020
<b>Non-renewable materials<sup>a</sup></b>	<b>7,793,118</b>	<b>6,909,546</b>	<b>4,225,577</b>
Soil - procurement	51,937	205,401	436,489
Concrete	4,679,316	4,473,439	2,676,502
Aggregates	2,875,035	1,973,892	964,240
Steel for railway superstructure	115	2,216	777
Steel for railway technology systems	5,786	2,792	5,745
CAP sleepers	1,821	37,550	4,909
Iron	178,879	213,875	136,780
Aluminium	29	73	11
Copper	200	308	124
<b>Renewable materials<sup>b</sup></b>	<b>9,933,588</b>	<b>8,088,261</b>	<b>7,368,805</b>
Soil – reuse in the infrastructure	4,720,860	2,400,368	1,723,284
Soil – use in other production cycles or environmental improvements	5,212,728	5,687,893	5,645,521

a) Pursuant to the GRI standard, non-renewable materials refers to resource that do not renew in short time periods (e.g.: minerals, metals, oil, coal, gas, etc.)

b) Pursuant to the GRI standard, renewable materials refers to materials that are derived from plentiful resources that are quickly replenished by ecological cycles or agricultural processes, so that the services provided by these and other linked resources are not endangered and remain available for the next generation.

Recycled raw materials (sites)	2022	2021	2020
Materials used that are recycled input materials	56.0%	53.9%	63.6%
Earth reused	99.5%	97.5%	94.4%

Environmental control at sites includes inspections and periodic supervisory audits conducted by a team of experts and environmental monitoring activities to check whether the construction work has caused any changes to the environment. Environmental status monitoring makes it possible to:

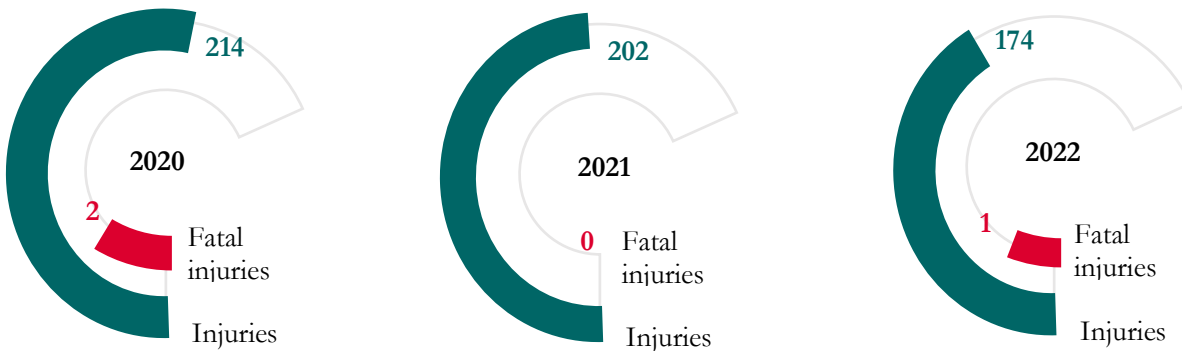
- check whether the expected impact has actually occurred;
- check that the bidding requirements are met, including those related to the sustainability of the works;
- check that the mitigation systems in place are effective;
- ensure proper environmental management at the site;
- monitor and immediately manage any environmental emergencies.

**The climate footprint in ITALFERR projects**

The certificate of compliance with UNI EN ISO 14064-1:2019 Standard *Method for quantification and reporting of greenhouse gas emissions generated by design and construction of transport infrastructure* was issued to Italferr SpA, Engineering company of the FS Group’s Infrastructure Unit. The method is used to obtain an estimate of the Carbon Footprint of infrastructures, understood as the sum of emissions originating in the production and transport of building materials to the construction site and during activities for construction of the infrastructure, and is used to assess impacts in terms of climate change.

The Group has always devoted utmost attention to making contractors aware of the importance of **safety at railway infrastructure sites** and holding them accountable for site safety. The main safety indicators are reported below<sup>126</sup>:

**Injuries involving employees of contractors (no.)**



**Frequency (F) and severity (S) rates**



<sup>126</sup> The data refer to sites for civil and technological contracts in which Italferr is involved as works manager/coordinator during performance and for the contracts for new HS/HC lines awarded to general contractors in which Italferr provides works management and safety oversight as well as contracts awarded to general contractors in which Italferr provides oversight for both works management and safety.

The **Frequency Rate<sup>127</sup>** is lower than recorded in 2021 (If= 13.19) while the **Severity Rate<sup>128</sup>** is **increasing** due to the occurrence of a fatal accident in 2022 compared to the absence of events in 2021. The number of hours worked **increased by approximately 17%** in 2022, a clear sign of the increased investments in the railway sector and **the Group’s renewed commitment to continue updating the country’s railway infrastructure network** as much by laying new sections as by equipping existing sections with latest-generation technologies.

**Alongside this increase in the number of hours worked, the number of injuries dropped** both in absolute terms (174 injuries compared to 202 in 2021) and in relative terms, as demonstrated by the lower frequency index.

**Frequency (F) and severity (S) rates**

Italferr and sector average (INAIL)



\*average INAIL rates for the construction sector for the years from 2008 to 2010 based on online publications and reflecting the most up-to-date information available at the preparation date of this document

An analysis of the average data shows how, while the frequency of injuries at work sites is higher than the INAIL average, Italferr’s **severity rate is far lower than INAIL’s rate for the entire sector.**

For additional information about the management and supervision of work sites to build infrastructure, refer to the *Sustainability* section of the websites and to wbsites of RFI ([rfi.it](http://rfi.it)), Anas ([stradeanas.it](http://stradeanas.it)) and Italferr ([italferr.it](http://italferr.it)).

<sup>127</sup> Frequency rate: [number of injuries/hours worked]x 1,000,000.

Hours worked are calculated by multiplying the number of daily working hours (conventionally 8h/day) by the number of man days of blue collars.

<sup>128</sup> Severity rate: [(days of prognosis + conventional days for the fatalities)/hours worked]x 1,000.

Conventional days for fatalities are calculated by multiplying the number of fatalities by 7,500. Hours worked are calculated by multiplying the number of daily working hours (conventionally 8h/day) by the number of man days of blue collars.

## Noise emission management

The Group companies, mainly belonging to the Infrastructure Unit and to the Passengers Unit, are constantly committed to preventing and reducing the noise impact. The normal operation of transport infrastructures generates noise, which may result in significant impacts on the environment crossed by roads and railway lines. The issue is addressed in the design stages of new infrastructures (including expansion of existing ones) and upon starting new, potentially noisy activities, by adopting forecasting models of noise impact. In the management stage, maintenance on the existing network is planned and performed seeking to reduce noise emissions (new circulation technologies, electrification, regular grinding of rails and train wheels to reduce roughness, installation of track mounted systems for gauge-face lubrication, installation of rail dampers, replacement or modification of the braking system, renovation of stations, sound-absorbing asphalt, etc.).

Group companies may also take advantage of the support by Italcertifier<sup>129</sup> to measure sound emissions and immissions and to carry out forecast studies.

In the railway sector, consistently with the guideline of carrying out mitigation actions directly at the source, the rolling stock is undergoing a gradual but significant process of renewal and efficiency improvement, which consists in the decommissioning of the oldest vehicles and in the commissioning of new railway vehicles, compliant with the latest technical specifications (EU and national) on noise emissions, when starting up, stationing and travelling. The Blues, the new Trenitalia train to be added to the regional fleet, is an example. The state-of-the-art hybrid technology translates into cutting-edge performance which, by switching off engines while approaching, stopping and departing from the stations, ensure the lowest noise levels, compared to current diesel trains, particularly when stationary for extended periods of time.

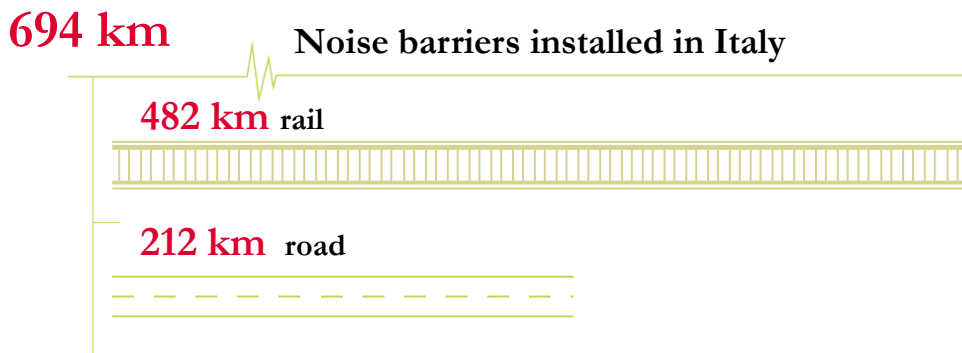
### **The green goods challenge: the maxi plan of FS to rejuvenate the fleet**

In order to rejuvenate the goods transport fleet of the FS Group – the average age will drop from 30 to 7 years – four hundred new electric and hybrid locomotives and 3,600 state-of-the-art wagons will be added. That is the green plan of the FS Group's Logistics Unit to boost the sustainability of logistics and achieve one of the goals of the Group's Business Plan. In addition, the upgrade of Mercitalia Intermodal's fleet of 240 wagons is being finalised. The programme entails replacement of the cast iron brake shoes with synthetic ones, the use of a state-of-the-art braking system and of the latest generation of thermostable wheelsets which significantly reduce noise emissions while braking.

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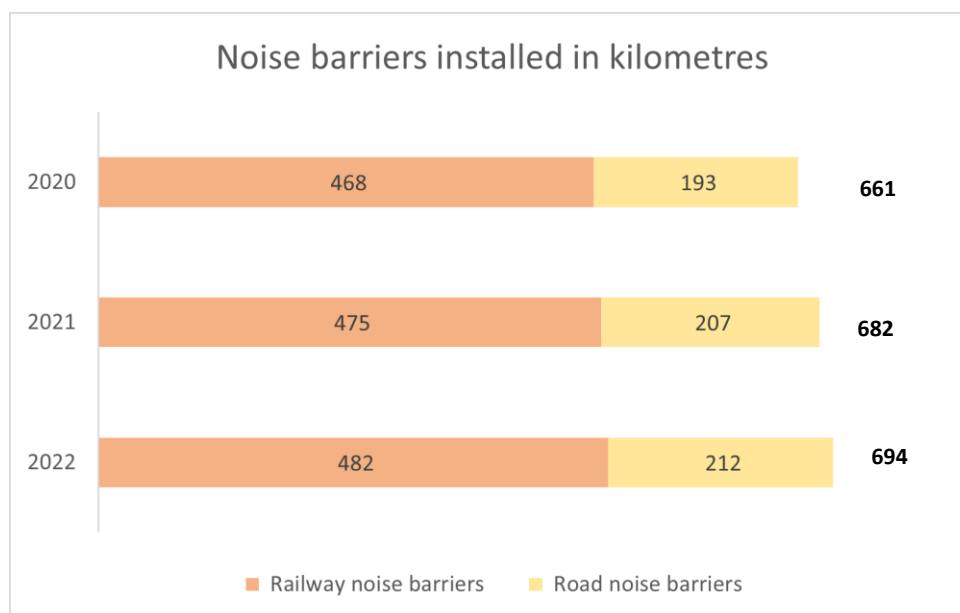
<sup>129</sup> A company of the FS Group that operates as a Conformity Assessment Body and as a Test Laboratory in the railway sector by virtue of the national and international accreditations issued by the main regulatory and control authorities, and which holds full responsibility for the impartiality of its certification, inspection and laboratory activities.

It should also be added that existing and new railway vehicles are constantly maintained also to ensure compliance with the expected noise emission levels. In some cases, on vehicles already in operation, modifications have been implemented to ensure the reduction of noise emissions even when parked. To curb noise immissions, actions are also taken directly along the noise propagation path, between the linear source (the infrastructure) and the final receptor, such as the installation of noise barriers, dunes and embankments, plant barriers or artificial tunnels.



For the road network, the Group’s efforts to find solutions that dampen noise along propagation pathways and comply with environmental and landscape restrictions cover two fronts: not only does it seek solutions on the market to meet its quality and sustainability requirements, but it also assesses increasingly innovative solutions, such as integrated multi-functional barriers (photovoltaic energy, safety, environmental and catalytic). With regard to buses, viewed as mobile sources of emissions, a process of upgrade of the vehicle fleet has been undertaken by the companies in the Passengers Unit, which will lead to the decommissioning of the old ones and their replacement with more efficient vehicles that comply with the stricter standards in terms of noise emissions, as well as exhaust gases.

Regarding newly built railway and road infrastructures, as well as the infrastructures already in operation and the mitigation actions carried out along the propagation pathway, the Group's commitment has produced the following results:



## Other environmental aspects (2-25, 3-3)

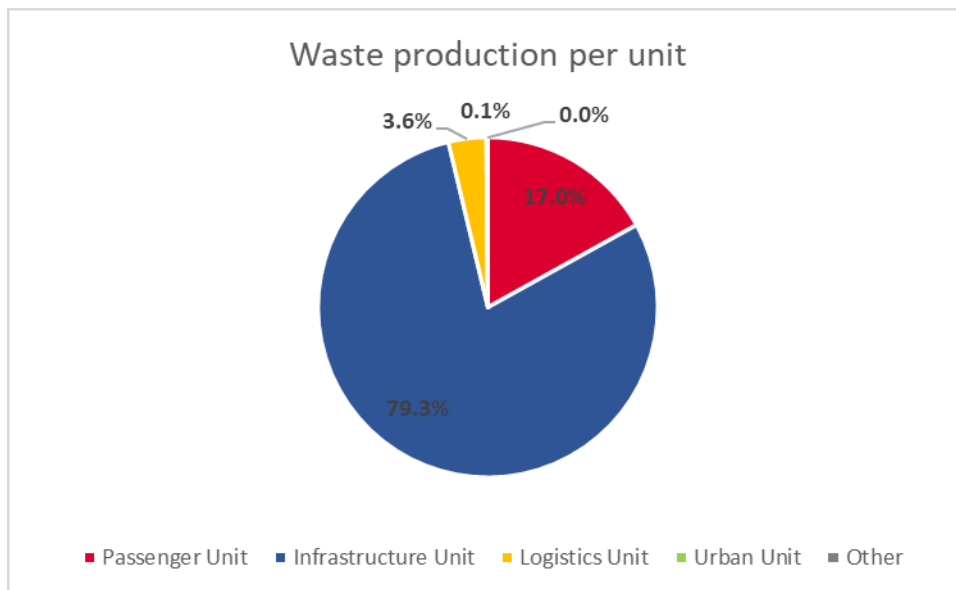
### Waste cycle management (306-1, 306-2, 306-3, 306-4, 306-5)

The FS Group strives to ensure the implementation of production models that aim to prevent and reduce waste generation, reuse goods and recycle the waste generated by its activities, engaging workers and customers, contractors and, where possible, the entire value chain. Sustainable procurement management and the continuous improvement of the waste cycle management are a priority for the Group: clear objectives set out in the Business Plan involve all Group companies. Indeed, FS Italiane is an active member of the Circular Economy Alliance, a network of many Italian industrial companies who aim to promote a transformative economy that preserves natural capital and combines competitive edge and sustainability.

The waste generated by the Companies in the Infrastructure and Passengers Units account for approximately 96% of the total waste generated by the Group in 2022, mainly consisted by special waste from the maintenance of the existing infrastructure network and the equipment and systems that use the infrastructure.

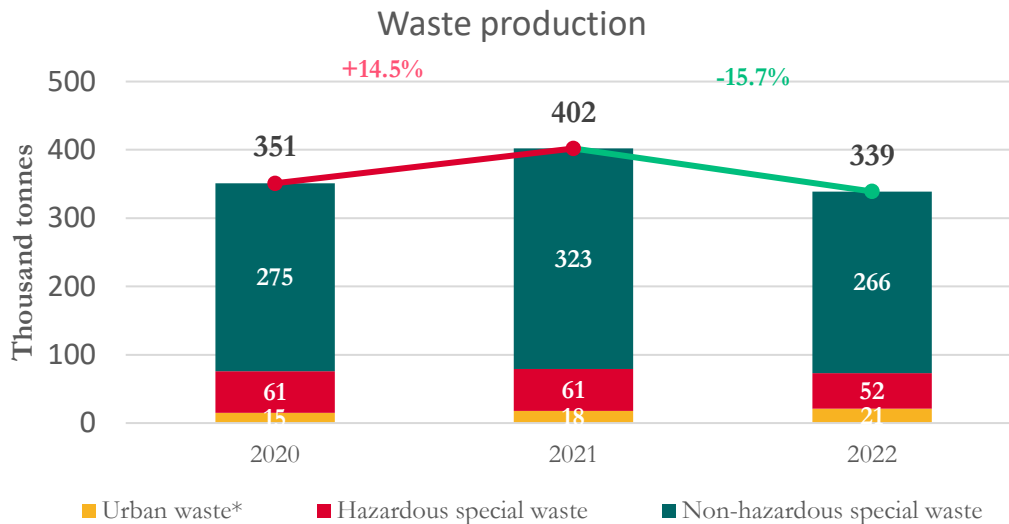


**Over 95%**  
of special waste sent for recovery



Group companies produce special waste and urban waste, the latter accounts for around 6% of the total waste produced and is mainly collected in areas open to the public used by the passengers of transport companies and station users.

Over 95% in weight of the special waste generated by the Group was sent for recovery, up on last year’s performance.



\*Includes urban waste in public areas at stations.

The special waste produced in 2022 decreased by around 17% on 2021 despite the fact that, during the year, transport services provided progressively picked up following the easing, and then discontinuation, of the anti-contagion measures introduced during the pandemic emergency. That is why there has been a growing trend in the volume of municipal waste collected in the stations in the last three years.

**New life for packaging and cigarette butts at the station**

Grandi Stazioni Rail, an RFI subsidiary that manages the 14 largest Italian stations, has developed two important projects to promote a circular waste economy model, directly engaging customers and station users.

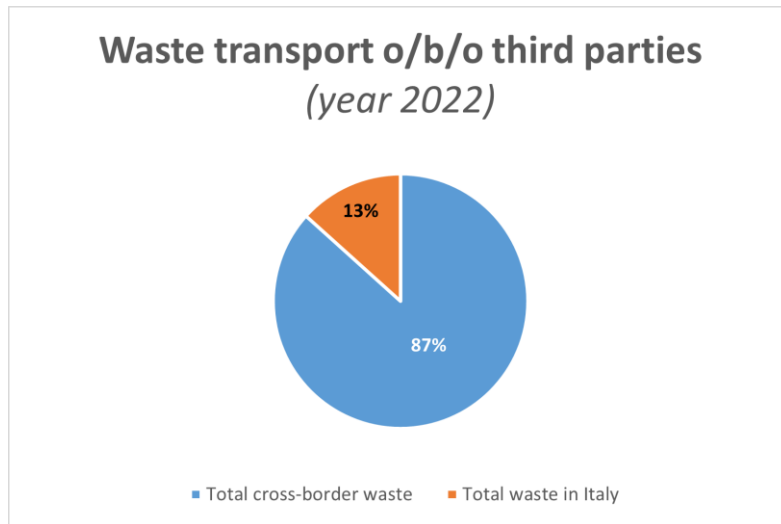
The projects aim to encourage separate packaging collection (plastic, aluminium and poly laminate) and cigarette butts. Compactors to encourage the collection of packaging and smoking points for the collection of cigarette butts will be installed in the station complexes managed by the Company, in strategic points of access and on train platforms.

The first project entails installation of 150 Recycling points, consisting of compactors fitted with a reward system managed via a mobile application. The project involves a number of partners such as Dussmann and L’Operosa, the CIAL, COMIECO and COREPLA consortia as well as Grandi Stazioni Retail and the FS Group to extend the reward-based system by engaging the station shops.

The second project has a threefold aim: reducing littering; preventing non-biodegradable filters from turning into microplastics that end up in the water networks; promoting the reduction in the use of raw materials, by reusing the material of cigarette filters in other production processes. Around 200 smoking points will be installed, fitted with special airtight containers for collecting cigarette butts, with special signs set up to engage users. A partnership is to be set up with Re-Cig, a company that collects and recycles cigarette residues, and turns them into a plastic polymer that is used to produce everyday objects, such as umbrella handles or optical frames.



On the other hand, with regard to waste transported on behalf of third parties by the Group, the Logistics Unit handled around 1,190,000 tonnes of waste in 2022 in cross-border transport and 182,900 tonnes nationally.



**FS and the Alliance for Circular Economy**

The Alliance for Circular Economy is the joint initiative by twelve Italian companies aimed at promoting circularity in entrepreneurial strategies. The Alliance was set up in 2017 by Made in Italy companies, leaders in various sectors, signing the Manifesto. The Alliance seeks to guide an overall evolution of the manufacturing sector with a view to the circular economy that highlights the specific features of Made in Italy production, promoting innovation and fostering the sharing of experiences and good practices, and supporting a constant exchange of ideas with the entire system of stakeholders. The companies that take part in the Alliance embody a transformative economy, innovatively rethinking the entire production cycle, the use of resources, the business models. During 2022, the Alliance produced two documents providing guidelines on circular statements and information and on circular procurement. The first document provided a handbook on the implementation of communication policies that adhere to the principles shared by the companies that form the Alliance. The document includes a shared definition of circular economy and a set of key principles that companies must take into account when making statements and providing information to do with the circular economy. The second document includes a set of criteria and tools aimed at including circularity criteria in procurement processes, a theoretical and organisational framework for the implementation of circular purchasing processes and a shared supplier engagement questionnaire.

These principles and criteria are built into the activities of the companies that form the Alliance to lead to a more consistent implementation of the concept of circular economy in the Italian business context, and may also provide a template for small and medium-sized enterprises to adopt them.

**Management of water resources (303-1, 303-2, 303-3, 303-4)**

The efficient use of water resources, the treatment of wastewater, and its reuse where possible, protecting the quality of the water provided to employees and third parties, scheduled checks and monitoring are

some of the main activities performed by the FS Group companies for proper water resource management.



**16.7 million**  
**cubic metres**  
**Water**  
**consumption**

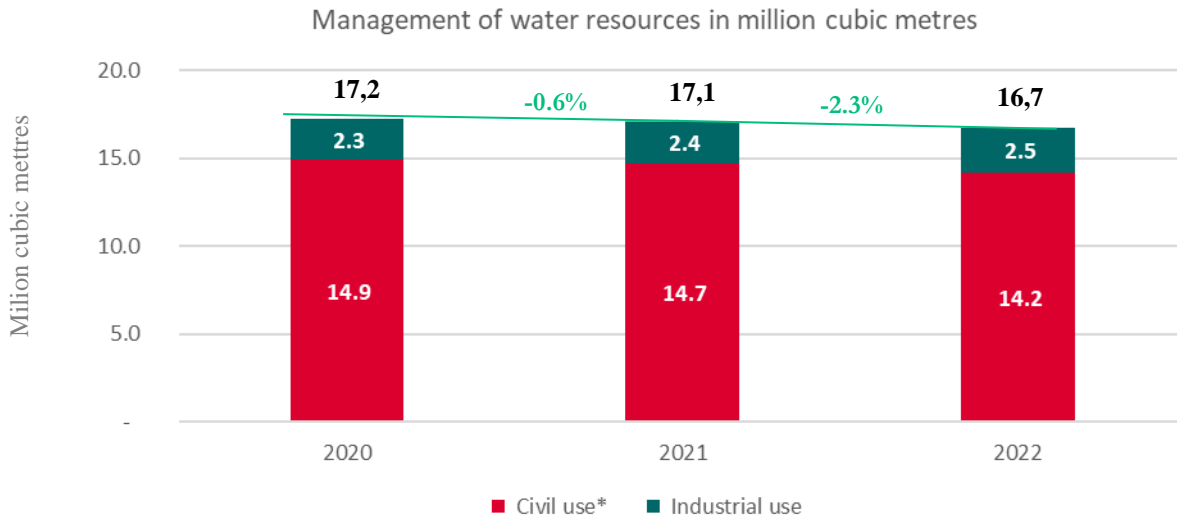
The typical business of the FS Group involves low water consumption. Water use is mainly intended for civil and sanitation use (about 85% for the offices, restrooms, showers in the workshops, canteens, fountains in stations and supply of the

toilet tanks on board trains), while the remaining 15% is due to industrial activities (cleaning and disinfection of trains and buses, external washing of vehicles and components, etc.).

Group companies organise frequent campaigns to raise the awareness of passengers, suppliers and workers of the need to use the resource responsibly. To this end, efforts mainly focus on reducing consumption, increasing reuse of water resources and ensuring effective wastewater collection and treatment for environmental protection, especially with regard to industrial uses. The technical specifications of tenders, whose activities involve a significant use of water resources (e.g. cleaning of transport vehicles and industrial installations), are increasingly taking into account the need to offer technological and management innovations and solutions aimed at ensuring water and energy consumption, as well as waste production, are reduced to the minimum.

However, with regard to the quality of the water supplied to employees and third parties, as part of the services provided by the various Group companies, it is guaranteed by monitoring and control campaigns as well as by the adoption of maintenance protocols of networks and distribution systems.

Data for 2022 show a downward trend on the whole, especially with regard to civil water use. The deviation is attributable to improved management of the resource and of the networks, also thanks to the growing awareness of users and providers. Furthermore, the analysis of the data relating to withdrawals shows that in the last year the Infrastructure Unit used more than 80% of the total volume of water withdrawn by Group companies to carry out its activities, followed by the Passenger Unit with about 18%.



*\*Includes water withdrawn for civil use in the stations*

The growing consumption of water resources, mainly linked to the dramatic increase of the global population, together with the sudden climate changes over the last few years has brought the water crisis at the forefront, turning it into an urgent global challenge to be managed and, above all, controlled. That is why the World Resources Institute has come up with the term ‘water stress’, stemming from a study and classification of regions based on the relationship between their renewable water availability and water withdrawals.

The Group introduced a monitoring programme of the water volume withdrawn and discharged in areas subject to water stress, according to the main environmental standards and guidelines provided by the World Resources Institute. The process is still being fine-tuned and was included in the 2022 report for the first time. The analysis highlights that, throughout the Group, 61 operative sites are in areas subject to water stress. Specifically, over 80% of the sites in question belong to the Passengers and Infrastructure Units.

**The ONMO Workshop of RFI and water recycling**

Founded in 1991, Catanzaro-based ONMO (National OTM Workshop), employs young and skilled workers together with technicians who have worked there since its foundation.

The workshop carries out maintenance on the on-track machines used in the maintenance of the railway infrastructure and has been designated as pilot plant for the design and construction of a system for wastewater reuse, for industrial purposes, after on-site purification. Indeed, the workshop is served by a washing platform that operates on and off according to production needs. Currently, the wastewater generated is collected and sent to a chemical-physical treatment plant to be purified and then conveyed into the municipal sewer network. Thanks to the new project, a portion of the purified industrial wastewater will be recovered and reused for washing the on-track machines. This water management system will allow the Catanzaro Workshop to save up to 80% of the water withdrawn in one year. Jointly with installation of photovoltaic and solar thermal systems and to the improvement of the efficiency of air conditioning systems, it will involve an investment of around €2 million.

## Independent auditors' report



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(This independent auditors' report has been translated into English solely for the convenience of international readers. Accordingly, only the original Italian version is authoritative.)

### Independent auditors' report on the sustainability report

To the board of directors of  
 Ferrovie dello Stato Italiane S.p.A.

We have been engaged to perform a limited assurance engagement on the 2022 Sustainability report (the "sustainability report") of the Ferrovie dello Stato Italiane Group (the "group").

Our procedures did not cover the information set out in the "Group activities through the lens of European Taxonomy" section of the sustainability report.

#### **Responsibilities of the directors and board of statutory auditors ("Collegio Sindacale") of Ferrovie dello Stato Italiane S.p.A. (the "parent") for the sustainability report**

The parent's directors are responsible for the preparation of a sustainability report in accordance with the "Global Reporting Initiative Sustainability Reporting Standards" issued by GRI - Global Reporting Initiative (the "GRI Standards"), as described in the "Introduction" section of the sustainability report.

The directors are also responsible for such internal control as they determine is necessary to enable the preparation of a sustainability report that is free from material misstatement, whether due to fraud or error.

They are also responsible for defining the parent's objectives regarding its sustainability performance and the identification of the stakeholders and the significant aspects to report.

#### **Auditors' independence and quality control**

We are independent in compliance with the independence and all other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our company applies International Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains a system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG S.p.A. è una società per azioni di diritto italiano e fa parte del network KPMG di entità indipendenti affiliate a KPMG International Limited, società di diritto inglese.

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**Ferrovie dello Stato Italiane Group**  
*Independent auditors' report*  
 31 December 2022

### **Auditors' responsibility**

Our responsibility is to express a conclusion, based on the procedures performed, about the compliance of the sustainability report with the requirements of the GRI Standards. We carried out our work in accordance with the criteria established by "International Standard on Assurance Engagements 3000 (Revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000 revised"), issued by the International Auditing and Assurance Standards Board applicable to limited assurance engagements. This standard requires that we plan and perform the engagement to obtain limited assurance about whether the sustainability report is free from material misstatement. A limited assurance engagement is less in scope than a reasonable assurance engagement carried out in accordance with ISAE 3000 revised, and consequently does not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures we performed on the sustainability report are based on our professional judgement and include inquiries, primarily of the parent's personnel responsible for the preparation of the information presented in the sustainability report, documental analyses, recalculations and other evidence gathering procedures, as appropriate.

Specifically, we performed the following procedures:

- 1 assessing the reasons for preparing both the consolidated non-financial statement required by articles 3, 4 and 7 of Legislative decree no. 254/2016 and the sustainability report and the elements differentiating the two documents;
- 2 analysing the reporting of material aspects process, specifically how the reference environment is analysed and understood, how the actual and potential impacts are identified, assessed and prioritised and how the process outcome is validated internally;
- 3 comparing the financial disclosures presented in the "Creation and distribution of value over time" section of the sustainability report with those included in the group's consolidated financial statements;
- 4 understanding the processes underlying the generation, recording and management of the significant qualitative and quantitative information disclosed in the sustainability report.

Specifically, we held interviews and discussions with the parent's management personnel and personnel of Busitalia Veneto S.p.A., Trenitalia S.p.A., Rete Ferroviaria Italiana S.p.A., Qbuzz BV and Netinera Deutschland GmbH. We also performed selected procedures on documentation to gather information on the processes and procedures used to gather, combine, process and transmit non-financial data and information to the office that prepares the sustainability report.

Furthermore, with respect to significant information, considering the group's business and characteristics:

- at group level,
  - a) we held interviews and obtained supporting documentation to check the qualitative information presented in the sustainability report;
  - b) we carried out analytical and limited procedures to check, on a sample basis, the correct aggregation of data in the quantitative information;
- we visited, including remotely, Ferrovie dello Stato Italiane S.p.A., Busitalia Veneto S.p.A., Trenitalia S.p.A., Rete Ferroviaria Italiana S.p.A., Qbuzz BV and Netinera Deutschland GmbH, which we have selected on the basis of their business, contribution to the key performance indicators at consolidated level and location, to meet their management and obtain documentary evidence supporting the correct application of the procedures and methods used to calculate the indicators.



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### **Conclusion**

Based on the procedures performed, nothing has come to our attention that causes us to believe that the 2022 Sustainability report of the Ferrovie dello Stato Italiane Group has not been prepared, in all material respects, in accordance with the requirements of the GRI Standards, as described in the "Introduction" section of the sustainability report.

Our conclusion does not extend to the information set out in the "Group activities through the lens of European Taxonomy" section of the sustainability report.

Rome, 28 April 2023

KPMG S.p.A.

(signed on the original)

Marco Maffei  
Director of Audit