SUSTAINABILITY
REPORT 2023

SUSTAINABILITY TAKES SHAPE

FERROVIE DELLO STATO ITALIANE

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FERROVIE DELLO STATO ITALIANE SPA COMPANY OFFICERS

Board of Directors	Appointed on 26 May 2021
Chair	Nicoletta Giadrossi
CEO	Luigi Ferraris[1]
Directors	Riccardo Barbieri Hermitte
	Pietro Bracco
	Alessandra Bucci
	Stefano Cuzzilla[2]
	Paola Gina Maria Schwizer[3]
	Tommaso Tanzilli[4]

Board of statutory auditors	Appointed on 3 May 2022
Chair	Rosalba Cotroneo
Standing auditors	Sergio Duca
	Marino Marrazza
Alternate auditors	Letteria Dinaro
	Francesco Tulimieri

COURT OF AUDITORS' MAGISTRATE APPOINTED TO AUDIT FERROVIE DELLO STATO ITALIANE SPA

Piergiorgio Della Ventura[5]

FINANCIAL REPORTING MANAGER

Marco Fossataro[6]

INDEPENDENT AUDITORS

PricewaterhouseCoopers SpA (2023-2031)

1. Appointed CEO on 3 June 2021.
2. In office until 18 May 2023, date of resignation.
3. Appointed by the Shareholders' Meeting on 6 August 2021.
4. Appointed by the Shareholders' Meeting on 30 May 2023.
5. Appointed in place of Giovanni Coppola, with effect from 1 January 2024, according to Article 12 of Law no. 259/1958.
6. Appointed by the Board of Directors' Meeting on 27 June 2023.

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LETTER TO THE STAKEHOLDERS

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The year 2023 was marked by strong geopolitical instability, with the continuing conflict in Ukraine and the violent deflagration of the Israeli-Palestinian crisis. Economically, the grip of inflation crushed post-pandemic growth and exacerbated inequality. The climate crisis caused problems all over the world: in Italy alone there were nearly 400 extreme events, with a death toll of 31 and billions of Euros in damage. For several years now, and in the last four even more so, there has been an urgent need for sustainability, for ensuring a dignified existence for all people but without impacting the planet, and its resources and ecosystems.
Sustainability is in the DNA of the Ferrovie dello Stato Italiane Group. It always has been. The train is, in fact, the most environmentally friendly form of passenger transport: it beats car and plane thanks to lower greenhouse gas emissions. Taking the train for your commute, then, means making a choice that benefits the environment and the community: in 2023 there were 45 million passengers who travelled by high-speed rail, resulting in a collective saving of about € 1 billion, mainly in terms of lower healthcare costs (considering the accident rate on the roads), and less damage to the environment, agriculture, properties and biodiversity. However, sustainability does not translate into a conquered goal, but rather a journey that needs forward-looking planning and the achievement of daily milestones. The Business Plan guides the company's path towards development where business activities fit into the environmental context without altering it and are capable of generating positive impacts. First of all, the Plan has set 2040 as the deadline for hitting the goal of becoming "Net 0," which it intends to pursue starting with a paradigm shift in energy procurement: moving from consumption to self-production from sources of renewable energy. This is a major breakthrough for an energy-intensive company that consumes more than Municipal districts like Florence and Bologna. An amount of € 1.6 billion has been allocated to self-produce, when fully operational, 2.6 TWh per year from renewable sources and thus arrive at covering 40% of electricity needs. In 10 years' time, trains will be able to travel by harnessing solar energy captured by panels mounted at stations, plants and other Group facilities and premises. The year 2023 began precisely with the launch of a European call for tenders of € 130 million to design and build the first twenty PV plants. Two months later, a new PV plant, capable of generating 1,400 MWh, equal to 20% of the plant's total needs, was inaugurated at the Cyclical Locomotive Maintenance Workshop in Foligno, for a saving of 800 tons of carbon dioxide per year. The Group will exceed 5.6 MW of self-generated PV energy between activations in 2023 and those planned for the first half of 2024.
The foundations are being laid for energy autonomy and action is being taken for efficiency improvement. At the same time, monitoring activities and precise reporting of the amount of greenhouse gases released are needed: in July, the Group obtained certification from SGS Italia, which, according to ISO 14064-1:2018 standard, attests to the quality of inventory and of the method to calculate CO_2 equivalent emissions. This means that data collection, and the calculation and reporting of climate-altering gas emissions are being carried out in a proper, accurate and transparent manner. In order to further anchor its climate change mitigation efforts in scientific evidence, the Group has decided to conform to the standards required by the Science Based Targets initiative (SBTi), the initiative of the Carbon Disclosure Project, UN Global Compact, World Resources Institute and World Wide Fund for Nature, which pushes the private sector to cut emissions to keep global warming within 1.5°C. By July 2022, the Group had signed the commitment letter, and in January 2024 it succeeded in getting the decarbonisation targets validated. In taking 2019 as the reference year, the intention is to halve direct and indirect emissions (scope 1 and scope 2) by 2030 and reduce those related to the value chain (scope 3) by 30% in order to achieve net zero emissions in 2040.
The effort in the direction of greener mobility is further demonstrated by the rating assigned to the Group by the Carbon Disclosure Project, the international organisation that helps companies measure and manage their environmental impact. In 2023 CDP confirmed the rating of A-, placing the FS Group above the European average and that in the rail sector. In general, all sustainability ratings recognised FS's leadership position in 2023. Beyond ratings and certifications, the new trains on which people board every day are a tangible sign of the ongoing ecological transition: last June, work was completed on producing the first fleet of tri-brid (electricity-, and battery-powered and diesel-fuelled) trains in Europe, which makes it possible to consume less

7. 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).

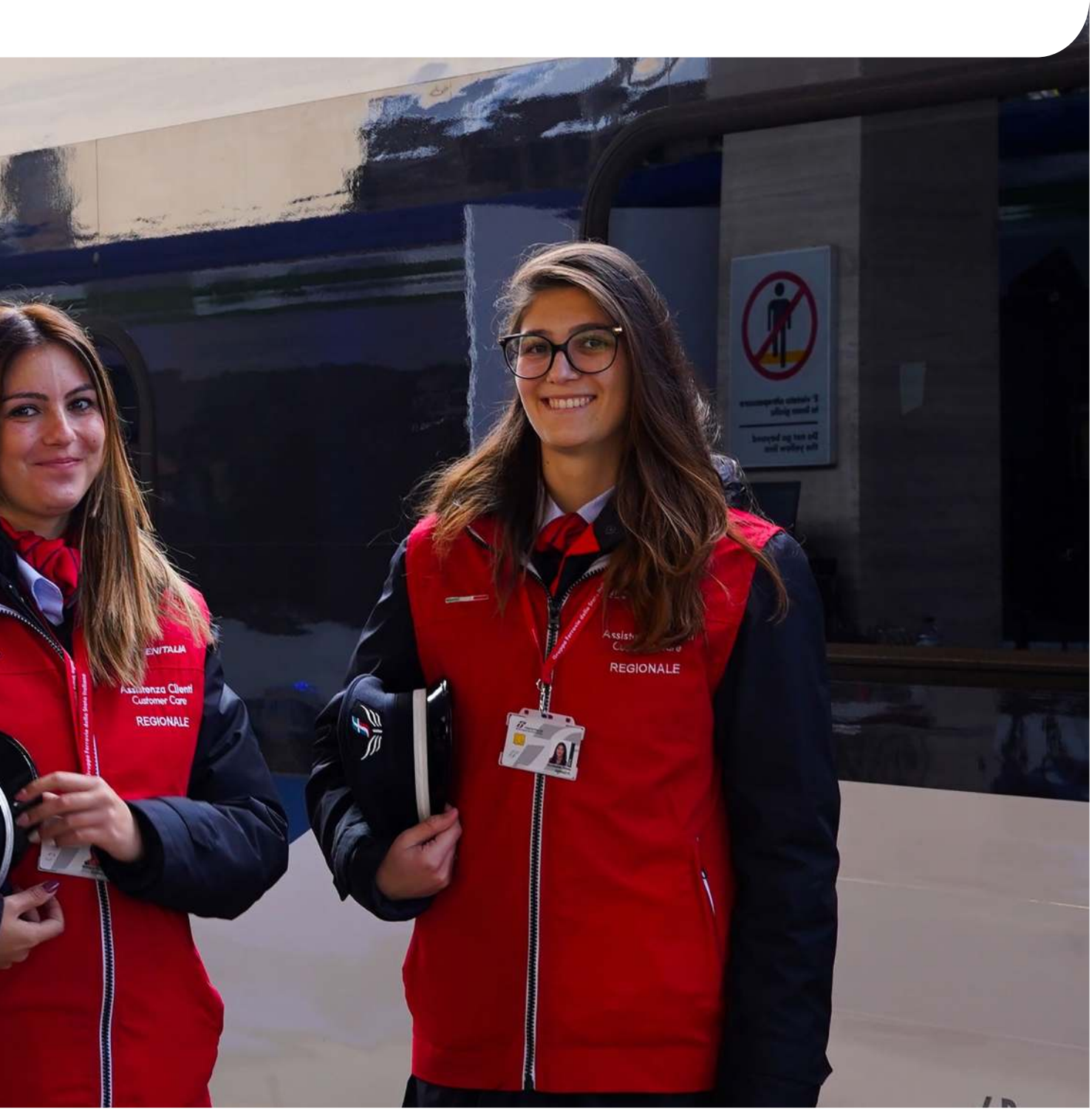
fuel and reduce emissions compared to current diesel trainsets. The completion of 20 regional Blues, commissioned by Trenitalia from Hitachi Rail, is the first tranche under a framework agreement that has put up € 1.23 billion for a total of 135 trains. The first arrived last summer on tracks in Lazio and Calabria. During the same period, the first train powered exclusively by pure HVO, a biofuel produced from renewable raw materials that can help reduce CO_2e emissions by more than 80%, ran in Calabria. Trains with increasingly high environmental performance, but also environmentally friendly buses that promote intermodality: Busitalia's first electric buses, equipped with 10 41.8 kWh batteries that allow a range of about 300 kilometres, are travelling in Veneto.
In logistics, sustainability also takes a key role in the development strategy that envisages renewing the fleet with new electric and hybrid locomotives, as well as intermodal terminals and services. The *Commuter Train* project - born from the partnership between Mercitalia Rail, Logistica Uno and Sanpellegrino Group - increases transport capacity, and effectively responds to the growing need for long-distance services, thus reducing CO_2 emissions by 85%, and helping to reduce road traffic congestion with its load capacity equivalent to 30 tractor trailers. The combination of innovation and logistics resulted in the *Commuter Train* taking home Assologistica's *The Logistics company of the year award* in November. Alongside eco-friendly vehicles, the FS-branded mobility system can count on the construction of new infrastructure designed according to sustainability criteria and the modernisation of that already existing. The year 2023 saw more than 80% of the RFI-managed NRRP projects in their implementation phase.
The mission to become a leading company in sustainable mobility is supported by a strong international footprint, confirmed by big numbers: in one year of operation, Iryo, the Trenitalia subsidiary operating in the high-speed sector in Spain, recorded more than five million passengers, while Trenitalia France - active since 2021 - crossed the two-million-passenger mark in December 2023. If the HS business is gaining significant shares across the border, the railway offer is being enriched with services dedicated to slow tourism in Italy: in July the company Treni Turistici Italiani was established, which absorbs the business in the historical trains sector and espouses the mission of making people discover the places of the Beautiful Country, even those off the traditional circuits.
Imprinted in the railway DNA is not only environmental sustainability, but also social sustainability. As Italy's first industrial company, FS is aware that it has a strong responsibility towards the country, which also derives from the Group's deep roots in local communities and areas, the potential to connect people and territories, and the vital importance of stations in the urban structure of large cities, as well as of small towns. It is precisely around the stations that two agreements signed by FS Italiane, Federfarma and the Italian Federation of General Practitioners (FIMMG) revolve, which are part of the broader project aimed at transforming railway stations into multifunctional places for wellness, health and social aggregation. Sustainable development for local communities also characterises the *riGenerazione futuro* (Future reGeneration) project, a call for ideas launched in Calabria and Sicily by the Civita association, in collaboration with the crowdfunding platform Produzioni dal Basso and realised with a financial contribution from the FS Group. It is a valuable opportunity to find and support innovative ideas by actively involving local entities in the services sector: projects have been selected on safeguarding the cultural heritage of depopulating villages; educating young people on the principles of legality; inclusion and combating prejudice; and enhancing traditions and ancient crafts.
If *riGgenerazione futuro* aims to create new opportunities in Southern Italy, *Mi riscatto per il futuro* (I redeem myself for the future) wants to offer a second chance through work. A memorandum of understanding between the FS Group and the Ministry of Justice has enabled five inmates, from the Milan Opera Prison, to follow a training course and subsequently obtain a fixed-term contract to work at stations for Rete Ferroviaria Italiana and Trenitalia. The strong social value of the project earned the Group the Robert F. Kennedy Human Rights Italia 2023 and Impact Awards. Stations can, therefore, become points of reference for a new start, as is also the case at the Help Centers that offer support to people in a state of fragility who gravitate to railway stations. In 2022[8], more than 583,000 interventions were carried out, with more than 19,000 people receiving support for food needs, housing requests, and job guidance. The profitable synergy between FS, the National Observatory on Solidarity in Italian Stations (operating the network of Help Centers), and local institutions, has been enhanced and strengthened through the innovative collaboration with the startup Ridaje: a training course was subsequently put in place following a challenge launched by FS Open Innovation in 2022, which was dedicated to people in social distress who had the opportunity to study and become gardeners in the urban areas of Rome.
In November, the CEO of FS, Luigi Ferraris, signed the *Businesses for People and Society Manifesto*, an initiative of the UN Global Compact Network Italy to pro-

8. Given the heterogeneity of the entities that operate the Help Centers, the data for 2023 will be made available by ONDS about six months after the end of the observed period.

mote business practices that contribute to the well-being of workers, consumers and communities. The manifesto crystallizes the existing approach built around people, and their needs, expectations and peculiarities. FS thus commits to: respect human and labour rights; promote the well-being of workers; disseminate practices that combat inequality; support actions that benefit the community; and ensure transparent reporting on its social impacts. The social dimension of sustainability also finds room in human capital management, which aims for individual enhancement and continuous development.

In 2023, the FS Group appeared in LinkedIn's annual Top Companies ranking, which lists the 25 companies that are most capable of fostering professional growth in Italy. Even in the recruitment phase FS stands out for the effective ways in which it interfaces with candidates, as highlighted by the ranking compiled by Potential Park, which analyses employer branding and how companies are perceived by job seekers. At the very end of 2023, the Group policy was published, which describes the new talent management system resting on continuous learning, the responsibility of managers who are called

upon to foster the development of skills, and the pro-activity of people who are directly involved in building their know-how and enhancing daily performance. The new approach to talent development goes hand in hand with the continuation of actions to enhance diversity, such as the school-to-work alternation programmes of people with neurodiversity, which are designed and activated to provide an educational experience to young people and enrich the company. The Group is among the top 10 most inclusive brands in Italy in the Diversity Brand Index 2024 ranking, which analyses companies' commitment to Diversity&Inclusion. Policies for inclusion and equal opportunity are reflected in the presence of women, which continued to grow, reaching 21% in 2023. The Sustainability Report 2023 recounts the story of a company in which sustainability is in the very nature of the business, but strives to ensure that this intrinsic characteristic becomes a constant drive for improvement. And that as many people as possible can benefit therefrom.



(2-6, 2-7)

SUSTAINABILITY IN NUMBERS

RESULTS OF OPERATIONS

FINANCIAL		
Profit for the year	€'million	**100**
Direct economic value generated	€'million	**15,047**
Economic value distributed	€'million	**13,074**
Technical capital expenditure[9]	€'million	**16,423**
PASSENGER AND FREIGHT TRAFFIC		
Rail traffic – passengers		
passenger-km	billion	**46**
train-km[10]	million	**318**
Rail traffic – freight		
tonne-km	billion	**21.3**
train-km	million	**43.9**
Road traffic – passengers		
passenger-km	billion	**1.8**
bus-km	million	**157.5**

THE FS GROUP FOR THE PLANET

ENERGY AND EMISSIONS		
Energy – Total Group energy consumption	GJ million	**28.5**
Emissions – Total greenhouse gas emissions	tCO_2e million	**2.2**
RESPONSIBLE PURCHASES		
Tenders awarded	€ billion	**26.5**
in which sustainability criteria were included	%	**88**

9. In addition to the consolidated investments (equal to €12,590 million), techincal Capital Expenditure also includes the investments accounted for in accordance with IFRIC 12 for Anas SpA and FSE SpA (for about € 3.2 billion) while the remainder is comprised of the investments of special-purpose entities not consolidated on a line-by-line basis (e.g.: TELT, BBT, etc.); for more details on the application of IFRIC 12, reference should be made to the 2023 Annual Report of the FS Group.
10. Medium and long haul and regional transport.

THE FS GROUP FOR THE PEOPLE

SERVICE QUALITY – PUNCTUALITY		
Railway passenger transport		
Market services (Frecce)	0-10 minutes	**75%**
Universal services (Intercity day and night)	0-15 minutes	**85%**
Regional services	0-5 minutes	**92%**
Road passenger transport		
Urban transport	0-5 minutes	**98%**
Suburban transport	0-15 minutes	**98.8%**
CUSTOMER SATISFACTION (ITALY)		
Railway passenger transport (overall journey)		
Medium and long haul transport	Satisfaction %	**98.7%**
Regional transport	Satisfaction %	**91.9%**
Infrastructure		
Overall quality of the station	Satisfaction %	**98.3%**
PROMOTING SAFETY		
Investments in safety		
Infrastructure	€'billion	**4.8**
Transport	€'million	**533**
OUR PEOPLE AND THEIR VALUE		
Total personnel	no.	**92,446**
Women	%	**21**
Men	%	**79**
Training	man-days (thousands)	**968**
Relationships with the community		
Re-use of assets		
Surface area under free loan for use	sq.m.	**188,353**
Surface area of Help Centers and shelters	sq.m.	12,603
Fondazione FS Italiane		
Value of assets	€'million	**10.6**
Value for local communities (2014-2023)	€'million	**59.7**

Roma Termini

The FS Group for Sustainable mobility

(2-25, 3-3)

THE FS GROUP FOR SUSTAINABLE MOBILITY

Once the period of the pandemic crisis has passed (on 5 May 2023, the World Health Organisation declared the end of the Covid-19 health emergency), the exogenous factors of strong influence on mobility dynamics have not ended. Indeed, the Russian invasion of Ukraine and the ensuing prolonged conflict have led to major setbacks in Europe on energy costs, inflationary spiral and household consumption, with pronounced impacts in the transport sector. In addition, after the speculative wave on energy prices, the new conflict following the terrorist attack on Israel could, according to many analysts, trigger a new spiral of rising energy costs at global level. Data from Isfort's "Audimob" Observatory[11] estimate a reduction in the volume of total travel by the Italian population (aged 14 to 85) for the first half of 2023, recording demand flows that would stand at a lower level than the pre-Covid threshold (**-8.7% between 2019 and the first half of 2023; -6.4% between 2019 and 2022**). Data from the Observatory on Mobility Trends of the Ministry of Infrastructure and Transport (MIT), show a demand for suburban **road traffic**, which has almost recovered and partly exceeded the values posted in 2019. In the fourth quarter of 2023, vehicle traffic on the Anas network recorded, in fact, a slight increase (+1%) compared to the same period in 2022 while it increased by +7% on the highway network. In the annual comparison with 2019 data, flows on the Anas network were still 5% lower while there was an increase of 2% on the highway network. **Collective transport**[12] continued its path to gradual recovery after the collapse it had reported in 2020 (halving of the modal share), but the 7.4% achieved in 2022, or even the 7.6% in the first half of 2023, were still a long way from pre-Covid levels (10.8% in 2019). The overall share of **low-impact travel**, i.e., made by walking, bicycling/micromobility, or public transport, fell below the 30% threshold in 2022, losing more than 5 points from the 2019 figure. It decreased from 31.3% in the first half of 2022 to 30.5% in the first half of 2023.

As highlighted by the Audimob report, the evolving scenario regarding the monitoring of **modal choices**, which is now consolidated in the post-Covid period, is problematic, since soft and light mobility (walking, biking, micromobility) has failed to take off after the positive triggers activated during the pandemic, as a result of evidently timid local public policies in strengthening the tools to deter motorised traffic and in incentivising green transport solutions through dedicated infrastructure and rules. **Public transport** in turn has not been able to recover, except to a partial extent, its market shares, as a result of the disaffection linked to the bad publicity about the virus contagion, and also certainly as a result of structural weakness, in some territories, in the quality of services, the distribution of supply, the network of dedicated infrastructure for rapid transport (urban tracks, reserved lanes, Bus Rapid Transit systems and so on), and in the widespread development of digital innovations for greater flexibility of the services themselves. The growth trend in the use of cars continued over the past year, starting moreover from a dominant market position, and arrived to satisfy two-thirds of all trips in 2022, almost four points higher than in 2019; in the first half of 2023, too, there was an increase in share compared to the first half of 2022. Against this backdrop, despite the critical issues described above, the strong push in the fight against climate change - confirmed by the European Green Deal and the Fit for 55 package (the EU's climate and energy plan), the NRRP funds, and the need to foster *Mobility-as-a-Service* (MaaS) – is now **an opportunity to be seized to foster increasingly shared and sustainable, resilient and inclusive mobility**, and to ensure long-term value creation for all stakeholders.

11. Report on the Mobility of Italians carried out by the High Institute for Transport Education and Research (ISFORT) with the support of the Ministry of Infrastructure and Transport (MIT), National Council for Economics and Labour (CNEL), and with the scientific contribution of the Confederal Agency for Transport and Services (AGENS) and Transport Association (ASTRA).
12. Travel made predominantly by cab (as a passenger), bus/coach, subway/tram/light rail, train, and ship/ferry.

Blues

(2-1, 2-6)

OUR 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)[13] 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

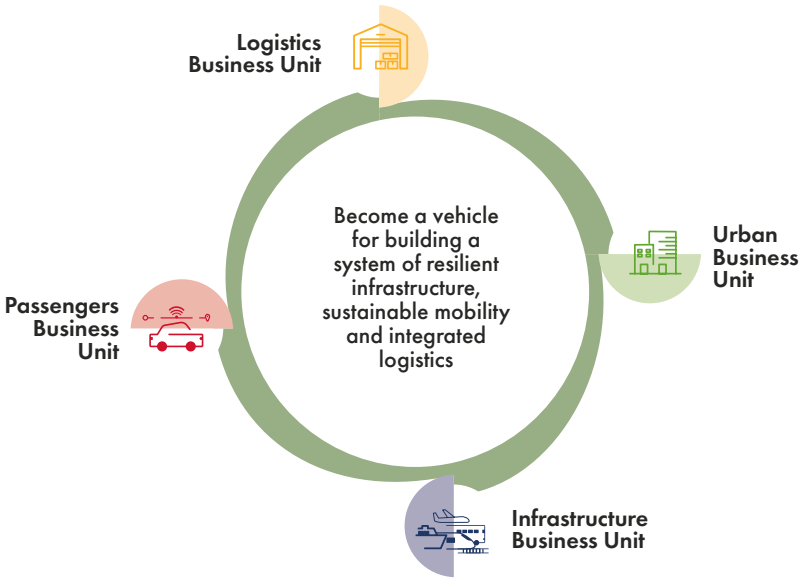
...for the Planet

Safeguard natural balances by implementing a sustainable development model

...for the People

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

THE GROUP'S VISION



13. 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

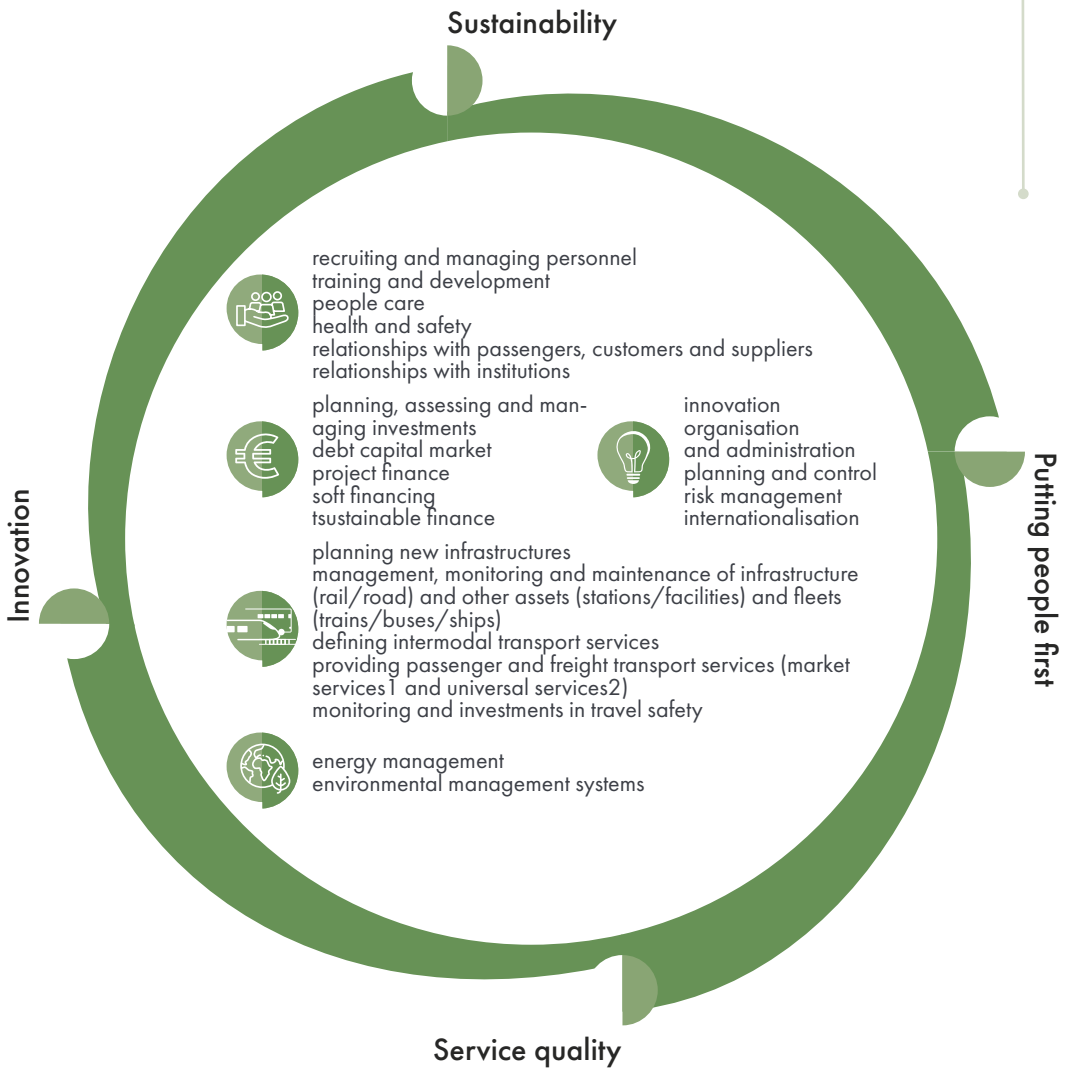
materials

Results

- regional services
- high speed services
- intermodal services
- integrated logistics services
- new infrastructures
- 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

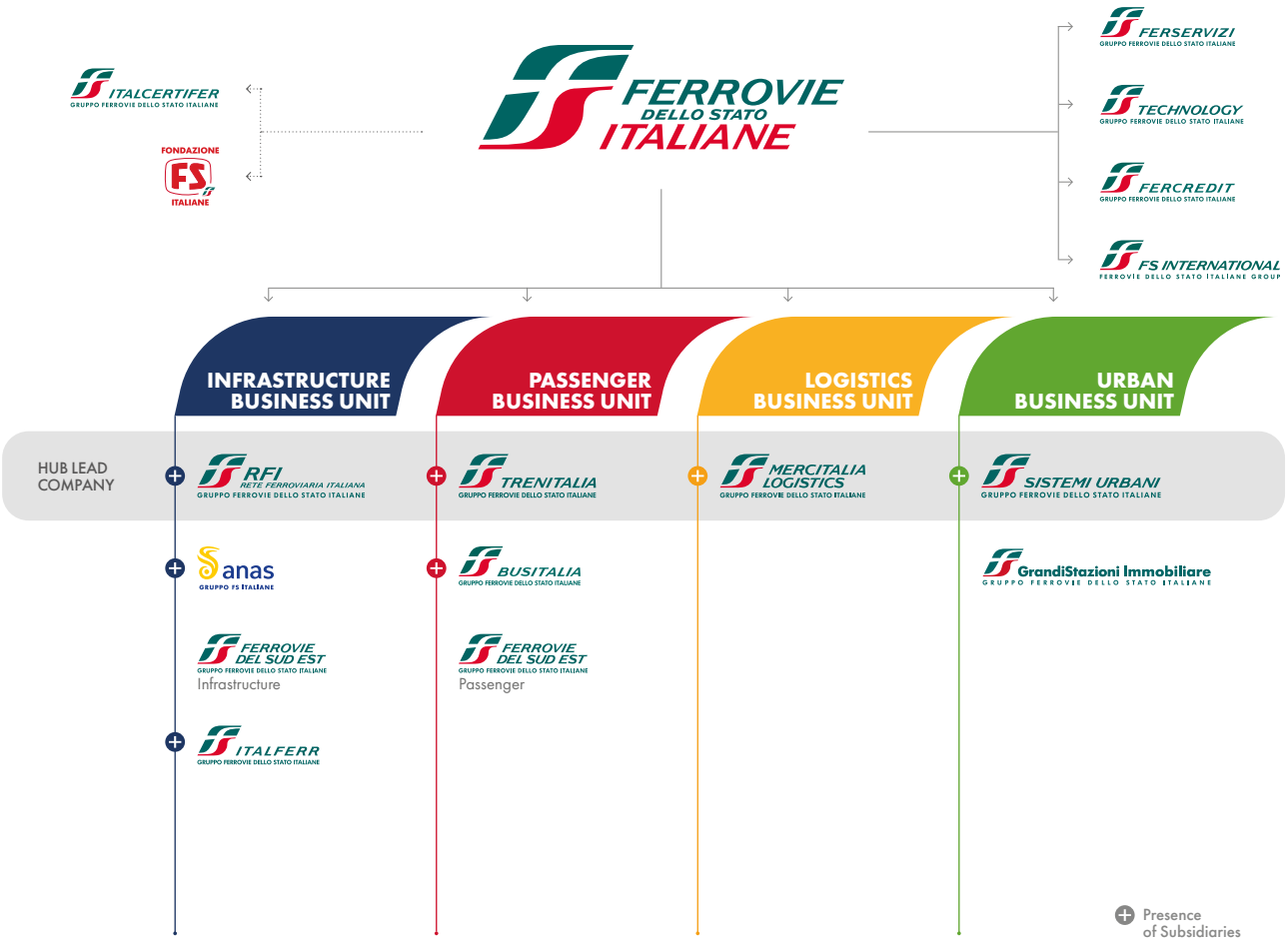


1. Services offered without commercial restrictions and without any government grants
2. Public transport services offered at the request of the government or regions under service contracts, whereby the transport companies receive considerations in exchange for meeting agreed requirements in terms of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

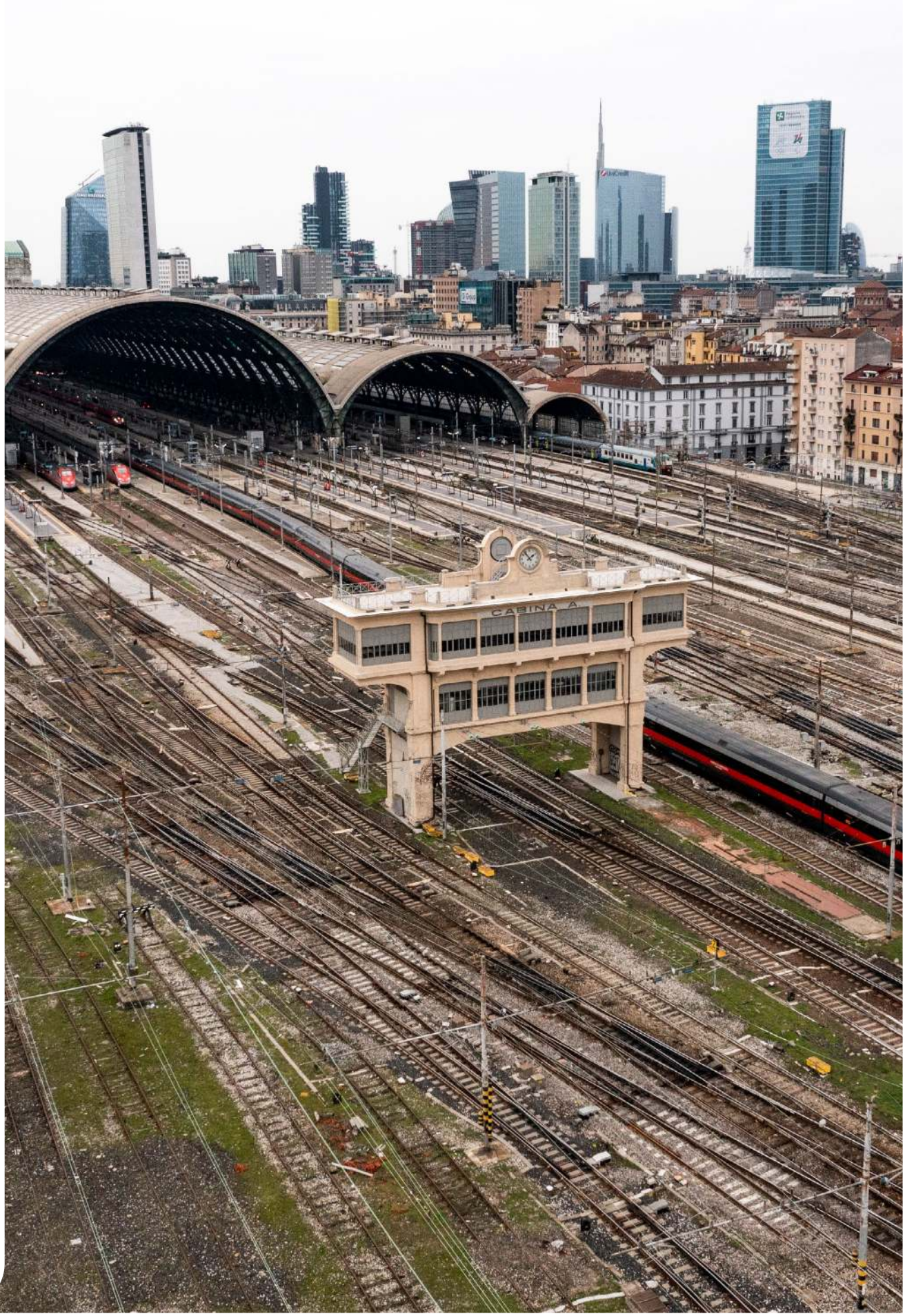
SUSTAINABLE DEVELOPMENT GOALS

Business units and geographical areas

The FS 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[14].
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 10-year 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 planning and design.
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 Business Unit.



14. The map of Ferrovie dello Stato Italiane's operating segments and equity investments was updated in February 2023. The chart shows the Parent's direct subsidiaries consolidated on a line-by-line basis and FS SpA itself.


CABINA A

FERROVIE DELLO STATO ITALIANE

Its mission is ensuring the design, construction, operation and maintenance of infrastructure networks for rail, road and motorway transport, both 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 Business Unit also includes the following companies:

- Anas, which operates the national roadway and motorway network;
- Ferrovie del Sud-Est (for the Infrastructure area only), for operating 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, both in Italy and abroad.

Infrastructure Business Unit

Its mission is coverage of the passenger transport business, both 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, both in Italy and abroad, managing both regional services and medium and long haul transport, including the noteworthy High Speed Frecce trains.
Other companies of the Passengers Business Unit are:

- Busitalia – Sita Nord, which manages with its investees[15] 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 Business 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.

Passengers Business Unit

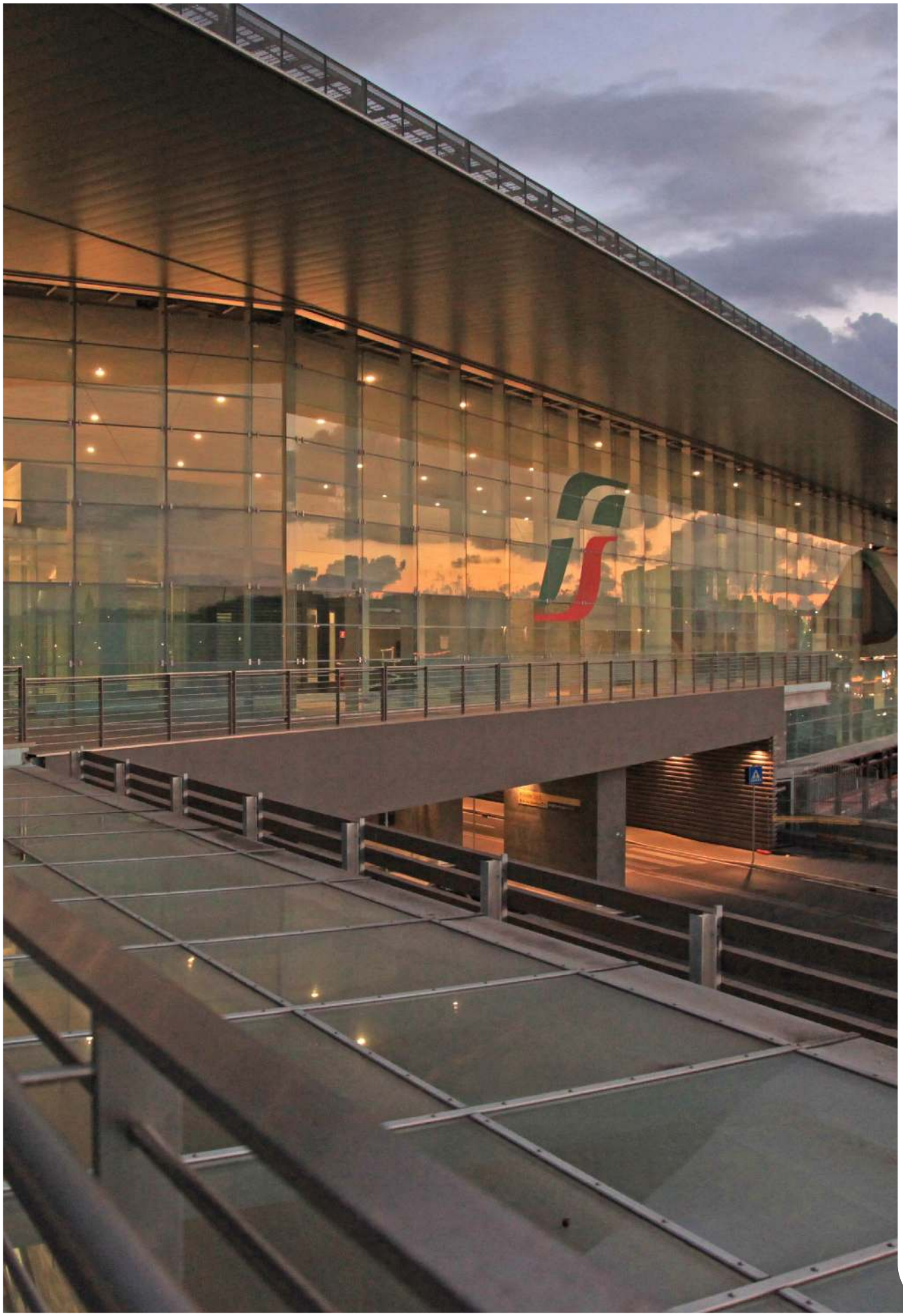
15. Busitalia - Sita Nord is also active in the Utrecht and Groningen – Drenthe area through QBuzz, the Netherlands' third largest local public transport operator.

Its mission is to ensure coverage of the logistics and freight transport sector, both 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 Business 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 companies; TX Logistik, which is Germany's second 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 operator in Europe; Mercitalia Shunting & Terminal, an Italian leading company in first and last mile railway services and one of the largest inland terminal operators in Italy; TerAlp (Terminal AlpTransit), specialised in the construction of cutting-edge terminal infrastructures.

Logistics 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 Business Unit also includes FS Park (formerly Metropark), which operates 75 parking areas in the main railway stations, and GS Immobiliare.
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.

Urban Business Unit



FS Italiane 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.

(2-22)

THE BUSINESS PLAN

The 10-year **Business Plan** provides new energy to the FS mission: to become the company that enables a **system of sustainable mobility and integrated logistics**, bolstered by a network of synergistic and resilient infrastructure.
The Plan moves from the challenge posed by the **UN's 2030 Agenda for Sustainable Development**, through the Regulation (EU) 2020/852 on Taxonomy, to and beyond the National Recovery and Resilience Plans (NRRPs) and related regulations, and, sensing the urgencies posed by the economic crisis and evolving geopolitical situation, is set to give a substantial contribution to the promotion of an inclusive, resilient and sustainable development model.
The structure of the Plan is divided into the following **four priority areas**, to which specific objectives are linked, on which the Group intends **to direct its strategic efforts**.

Priority areas:

HEALTH AND SAFETY
Creating and spreading a culture of safety, promoting occupational health and safety, and ensuring the highest travel safety standards for customers

CLIMATE CHANGE: ADAPTATION AND MITIGATION
Designing, building and managing infrastructure in accordance with criteria geared towards environmental and social protection and strengthening the adaptability of mobility systems to the consequences of climate change and land fragility. Contributing to the realization of European and national climate change mitigation goals

CIRCULAR ECONOMY AND RESPONSIBLE PURCHASES
Implement circular business models focused on recovery activities, such as the reduction, reuse and recycling of waste from the activities carried out. Avoiding, preventing and reducing negative impacts on biodiversity by adopting appropriate mitigation measures. Guiding supply chain participants along a shared path geared towards improving their environmental and social sustainability performance

INCLUSION, ENHANCEMENT AND DEVELOPMENT OF PEOPLE AND COMMUNITIES
Promoting inclusion, enhancing diversity and equal opportunities, accelerating the personal, professional and career development of all people in the Group, promoting the continuous updating of skills and ensuring their well-being and the work/life balance. Promoting and enhancing initiatives with high social impact on communities

Levels of ambition:

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 NRRP:

HEALTH & SAFETY

Fatal occupational injuries of employees **trending to zero over the Plan period**

Leader in Europe for travel safety

CIRCULAR ECONOMY AND RESPONSIBLE PURCHASES

100% of suppliers will be screened according to ESG criteria **by 2026**

≈ 100% special waste sent for **recovery by 2031**

100% of projects with sustainability a sustainability, stakeholder engagement and carbon footprint study

2.3 million square meters of green space in urban planning projects

12,000 trees and bushes planted as part of projects on stations

CLIMATE CHANGE

Net Zero by 2040 (Scope 1+2+3)

≈2.6 TWh self- produced from photovoltaic sources - 40% of electricity needed.

-50% of CO_2 emissions (scope 1 and 2) **by 2030** (baseline 2019)

-30% of CO_2 emissions (scope 3) **by 2030** (baseline 2019)

Over 50 million tons of CO_2 avoided* in ten years **thanks to the rail and bus** (about 50% due to the increase in railway traffic on 2021)

INCLUSION, ENHANCEMENT AND DEVELOPMENT OF PEOPLE AND COMMUNITIES

32.4% of managers will be women **by 2026 and 37.2% by 2032**

Continuous development of the Group's human capital

* Emissions avoided - Emission difference of the FS Group Transport vs. Road Transport, calculated comparing the emissions deriving from the use of collective transport means of the FS Group for rail and road transport of passengers and rail freight transport, with the emissions estimated simulating the use of private cars and heavy commercial vehicles

HEALTH AND SAFETY

Fatal injuries at work of employees **approaching zero in the last three years of the Plan (2030, 2031, 2032)**

Leader in Europe for travel safety

ACTION AREAS

Training, information and ongoing awareness raising

INFRASTRUCTURE BUSINESS UNIT

- Boosting the installation of ERTMS* on the network
- Removal/protection of all level crossings
- Introduction and extension of the state-of-the-art technologies for monitoring and maintenance process automation

PASSENGERS BUSINESS UNIT

- Active and passive safety systems on the whole bus fleet
- Installation of ERTMS* on rolling stock
- Introduction of state-of-the-art equipment and technologies for train maintenance

LOGISTICS BUSINESS UNIT

- Installation of state-of-the-art technologies for automation of shunting operations and monitoring and maintenance processes
- Sound adaptation of the wagon fleet

URBAN BUSINESS UNIT

- Maintenance and improvement of the parking quality standards
- Installation of advanced digital systems to ensure parking lot safety

* European Traffic Management System

CLIMATE CHANGE

≈2.6 TWh self-produced from photovoltaic energy – 40% electricity requirements
-50% CO_2 emissions (scope 1 and 2) **by 2030** (baseline 2019)
-30% CO_2 emissions (scope 3) **by 2030** (2019 baseline)
Over 50 m tonnes of CO_2 avoided in ten years **thanks to railways and buses** (roughly 50% due to the increase in rail traffic compared to 2021)

ACTION AREAS

Energy efficiency and self-production of green energy
Procurement

INFRASTRUCTURE BUSINESS UNIT

- Extension of HS network through the construction of new lines
- Electrification of the network
- Actions for the resilience of the infrastructure and climate change adaptation
- Extension of connectivity through integration of the railway network with other infrastructure and towns
- Development/upgrade of connections between railways and other modes for ever more integrated services
- Acceleration of road digitalisation and connectivity (Smart Roads)

PASSENGERS BUSINESS UNIT

- Fleet renewal with electric, hybrid, methane and battery-powered vehicles
- Use of low environmental impact fuels
- Actions to improve energy efficiency of fleets, plants and depots
- Modal integration solutions (including digital technology with a view to MaaS)

LOGISTICS BUSINESS UNIT

- Fleet upgrades
- Introduction of alternative solutions for powering engines
- Initiatives to improve energy efficiency of lighting and heating systems
- Analysis of cap&trade systems

URBAN BUSINESS UNIT

- Redevelopment of abandoned railway areas for the production of renewable energy
- Construction of parking lots supporting the modal shift
- Reactivation of abandoned railway areas to be used for first and last mile logistics

CIRCULAR ECONOMY AND RESPONSIBLE PROCUREMENT

100% assessed in ESG perspective **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

ACTION AREAS

Circularity and management requirements of the main product categories
Monitoring and improvement of suppliers' ESG profile

INFRASTRUCTURE BUSINESS UNIT

- Sustainability assessment of network maintenance and development
- 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

PASSENGERS BUSINESS UNIT

- 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

LOGISTICS BUSINESS UNIT

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

URBAN BUSINESS UNIT

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

INCLUSION, ENHANCEMENT AND DEVELOPMENT OF PEOPLE AND COMMUNITIES

32.4% women in managerial roles **by 2026 and 37.2% by 2032**

Continuous development of the Group's human capital

ACTION AREAS

INFRASTRUCTURE BUSINESS UNIT

- 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
- Project 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

PASSENGERS BUSINESS UNIT

LOGISTICS BUSINESS UNIT

URBAN BUSINESS UNIT

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. Finally, **people** will be

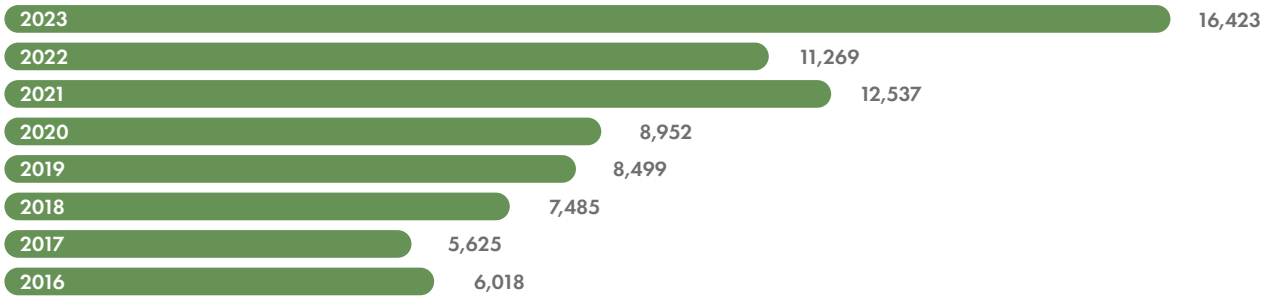
at the centre of this project, with their needs, expectations and peculiarities, to whom programmes will be dedicated for the dissemination of a culture of inclusion, respect for diversity and equity, and the enhancement of their uniqueness and continuous development of their expertise.

(203-1, 203-2)

INVESTMENTS AND NRRP

In an economic environment affected by the adverse effects of the considerable increase in electricity and commodity prices, the FS Italiane Group has managed to give continuity to investment development actions, thus continuing to be among the major investors in Italy and supporting the development and renewal of the transport, infrastructure and logistics sector.

Ferrovie dello Stato Italiane Group Investments
(€'million)*

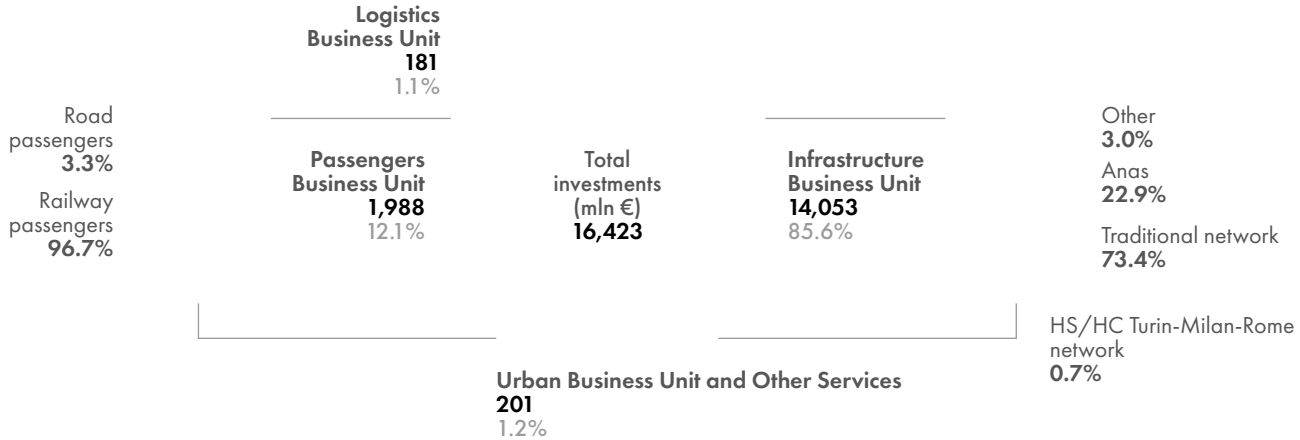


*Since 2019 they include the contractual advances paid to suppliers by RFI and Anas.

The FS Group's capital expenditure[16] totalled €16,423 million in 2023 (+46% compared to 2022); excluding the performance of contractual advances, amounting to €3,071 million for 2023 and €418 million for 2022, the Group recorded an increase of 23% in investment spending, compared to the volume of accounting entries made in 2022.
It should be noted that the FS Group's investment activities are 99% concentrated in Italy while the remaining 1% relates to companies operating abroad.

Investments are analysed below by business units.

Investments by business unit
(€ mil)

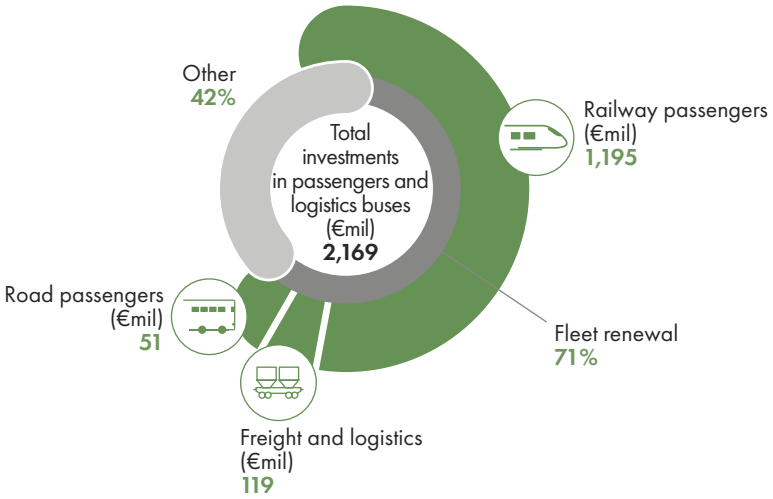


In the Infrastructure Business Unit, about 34% of investments were allocated to safety, technology and maintenance (of which €529 million were for latest-generation technologies to the railway network), and about 66% were dedicated to new works (roads and rails).

16. 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).

In the Passengers Business Unit, around 63% of investments (€1,246 million) were devoted to fleet renewal[17], affecting both rail and road transport. In the Logistics Business Unit, 65% of investment were devoted to fleet renewal.

Focus on fleet renewal
(€ mil)



In 2023, the FS Group, as part of the broader R&D sector, invested €18.6 million[18], of which about 75% in Technologies for traffic safety, 15% for innovative Diagnostics, and the remaining amount, equal to 10%, was devoted to studies and experiments on new components and systems, as well as the defence of environment and territory.

The NRRP and the development of transport in Italy

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[19] 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).
On 7 August 2023, Italy submitted the revised NRRP to the European Commission, which also included the REPowerEU Chapter, established with the entry into force of Regulation (EU) 2023/435 in compliance with the procedure for revising National Recovery and Resilience Plans set out in Article 21 of Regulation (EU) 2021/241, in order to take account of "objective circumstances" that are likely to jeopardise the implementation of certain Reforms or Investments as originally planned. Following the favourable opinion given by the European Commission, the Council approved the revision of the Italian NRRP on 8 December 2023, whose resources increase from € 191.6 billion to € 194.4 billion.
The revision of the NRRP involved on the one hand the revisiting of investment lines in terms of amounts and projects, and on the other hand the inclusion of a new mission, namely mission 7 related to REPowerEU.
The FS Group has been called upon to play a crucial role in defining and implementing the NRRP and the CNP. To date, **€26.39** billion of the funds have been allocated to FS Group companies in their role as implementing and managing entity, a total of €24.8 billion of which (94%[20]) (net of the impacts of the remodulation of milestones) 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 *Green revolution and eco-*

17. For passenger and freight rail transport, renewal includes both purchase and revamping of rolling stock.
18. These investments are part of the infrastructure sector investments.
19. Known in Italy as "Recovery Fund".
20. The remaining 6% (€1.56 billion) has been assigned to other Group companies (ANAS, FSE and Fondazione FS, etc.).

logical transition Component 2;
- €0.24 billion in Mission 5 *Inclusion and Cohesion* Component 2 and Component 3.

The reported values do not take into account the remodulation of the Plan being implemented through the planned enactment of decrees allocating funds from the Ministry of Finance to the beneficiary administrations.

The remodulation of the scope of interventions includes the following main changes:

a. the following projects were divided into separate lots:
o in Measure 1.1 Connections to the south:
  - on Naples-Bari line, lots Orsara-Bovino, Cancello-Naples and Cancello-Frasso;
  - on Palermo-Catania line, lots 3 Caltanissetta Xirbi-Lercara, 4a Enna-Caltanissetta Xirbi and 6 Bicocca-Catenanuova;
- in Measure 1.2 Connections to the north: lot of the Trento Ring Road project;
- in Measure 1.3 East-west connections: lot of the Rome-Pescara project.

b. in Measure 1.4 ERTMS remodulation of total km from 3,400 km to 2,785 km.
c. in Measure 1.8 Stations in the South remodulation of planned interventions.

MISSION 3: INFRASTRUCTURE FOR SUSTAINABLE MOBILITY

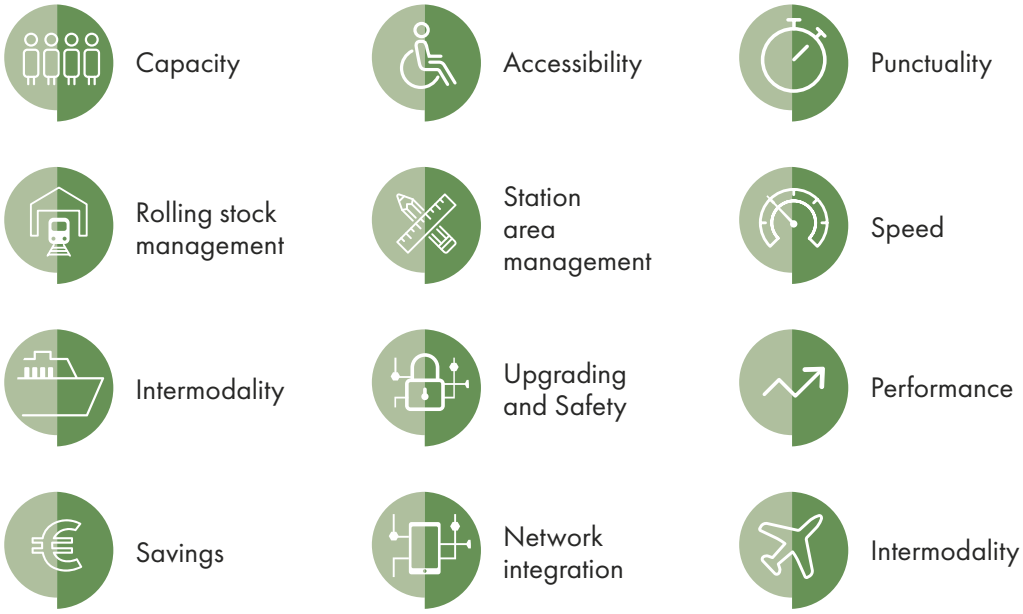
Upgrade and expand the national high speed railway network and enhance the regional railway network, especially in the south. Upgrade freight transport services using an intermodal approach regarding the airport network. Foster the optimisation and digitalisation of air traffic.

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_2 emissions by 90% by 2050 and to complete the Single European Transport Area set out in the 2011 White Paper. This approach 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.

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.

PNRR

MISSION
M3: Infrastructure for sustainable mobility

COMPONENT
C1: Investments in rail network

CONTRIBUTION TO AGENDA 2030 GOALS

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 (2023-2027) thanks to the resources allocated by the NRRP.

INFRASTRUCTURE BUSINESS UNIT OF THE FS GROUP: INVESTMENTS OF €43.5 BILLION IN STRATEGIC WORKS IN ITALY

In 2023, 83% of the rail works included in the NRRP are between the executive design phase and the set-up of worksites. About €43.5 billion have been allocated for works already started, and those in the process of being started, at construction sites on the part of the FS Group's Infrastructure Business Unit: a maxi-worksite – operated by Rete Ferroviaria Italiana, Anas and Ferrovie del Sud Est - spread across the various Italian regions to transform the country's mobility of people and goods with a view to an increasingly integrated and sustainable transport.

INNOVATION AND SUSTAINABLE FINANCE

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.
The 10-year Business Plan confirms 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; and Gigabitrail platform, which connects the railway infrastructure.
During 2023, the Group focused on the development of a strategic model for innovation equipped with tools that simplify the ways in which it relates and interacts with third-party entities in an effective manner, promoting new collaboration arrangements, such as, for example: **simplified contracts**, designed for experimentation with innovative entities; the **register of startups**, whose registration is free and online; **technical consultations**, whose goal is to reduce the time of **(technical)** discussions with companies, universities, entities and organisations; the **Group Framework Agreement for innovation**, which allows subsidiaries to reduce the time needed for engagement and contracting; and an **application form,** which allows start-ups to submit a **spontaneous application** enriched with details and due diligence elements that enable a preliminary assessment to be made.
In addition to the above, there is a further tool, also introduced last year, for the protection of intellectual property and the **intellectual property competence centre**, which makes it possible to create a space in which it is possible to share experience and expertise, protecting the economic and business interests of businesses through appropriate schemes for negotiating exploitation rights.
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. During 2023, work commenced on scouting activities under calls pertaining to the Horizon Europe programme through a guided selection process of funding opportunities. More than twenty calls of interest emerged from clusters four and five of Horizon Europe, pertaining to the areas of mobility, digital technology, industry, energy, and climate change, shared internationally with industry associations such as UIC (International Union of Railways) and ERRAC (The European Rail Research Advisory Council) with the aim of building project consortia during 2024.
In connection with **Europe's Rail** public-private partnership, in which the Group participates as a founding member, the **MaDe4Rail** project was launched in 2023, which was dedicated to innovative solutions for magnetic and pneumatic levitation applied to rail infrastructure. The project, in which RFI acts as the coordinator of the European Consortium, has a duration of 12 months and a budget of €2.56 million, of which an amount of €1.5 million is co-financed by the European Commission, and will see the participation of 16 European partners, including rail operators, engineering companies, technology developers, universities and research centres, coming from eight European countries.
In addition to its activities with industry associations and European institutions, the Group has been very active in interacting with major players in the innovation ecosystem

such as startup Incubators and Accelerators, Advisors, Observatories and Research Centres.
There were numerous Open Innovation initiatives in 2023: 7 Challenges; 12 Proofs of Concept (POCs); 1 Proof of Value (POV); 7 Accelerations; 2 vertical cases of scouting.
Specifically, the Challenges addressed the topics of improving the safety and protecting health of workers (Safety 2023), sustainable, smart and integrated mobility (Officine Mezzogiorno 2023), the optimisation of operations (OPT4RAIL 2023), or the search for new solutions capable of solving problems of collective interest (Digithon 2023, Open Italy 2023 and BYI Lazio Innova 2023). In relation to **social sustainability** and, in particular, the theme of social reintegration, the "**All Roads Start from Rome**" Challenge focused on identifying **innovative projects** in five areas of application: expanding modes of social insertion, improving usability of spaces and services, developing awareness plans, integrating environmental and social sustainability, and enriching the offer on the mode of reception. **Twenty-seven startups and innovative SMEs** responded to the call, each with their own idea and proposed innovative solution. Fourteen startups were selected as finalists, eight of which were selected as winners, including:

- **Ridaje**: deals with the reintegration of homeless and frail people through a professional course in urban gardening for the redevelopment of public green areas. Specifically, 12 people in a state of fragility were identified among the guests of the Rome Termini Help Center and trained to become green workers;
- **MineCrime**: develops a proprietary algorithm through which it manages to collect and systematise data on urban offences and social initiatives within a proprietary, georeferenced database. This makes it possible to provide a digital observatory to identify in space situations of danger and/or need on which to take action.

Proof of Concepts have focused on different areas, such as: hands-free **check-in/out** solution for rapid access to the means of transport; monitoring **defects in infrastructure of interest**, through image analysis; **flood alerts and warnings** monitoring with continuous processing of hazard maps; measuring **customer satisfaction** on business processes and services, with the support of AI and data analytics; **web listening; climate forecast data** extraction, useful for planning; monitoring of **moving flows** and enhancing **office automation**.
The Acceleration programmes completed covered: **AI-based software** to ensure safety in industrial areas through the use of video analysis and image detection; detecting the **proper use of PPE** by workers along the different areas of a railway yard through the implementation of computer vision (AI) software; **intelligent visual detection products** powered by Computer Vision and machine learning to support operators in better managing hazards and implementing safety and well-being of people using the highest standards of privacy and ethics; AI applications that make **CCTV cameras intelligent and efficient; social networks** to help people meet and organise trips and outings.
The year 2023 was also marked by a new strategic approach for the operation of **Innovation Hubs**, which envisages the evolution from a concept of "Physical Hub" to a concept of "Virtual Hub", to be understood as a provider of services delivered by innovation hubs in support of the FS Group companies.
The "Virtual Innovation Hub" will be supported by means of a new Web Platform, which is currently being developed: an interface that facilitates communication, connection and collaboration and is a single point of contact with the aim of creating a permeable channel and enabling action at the forefront of experimentation capacity between Group companies and External Ecosystems.
In terms of in-house initiatives, work was completed in 2023 on the third edition of "**Innovate**", which is a Group-wide corporate entrepreneurship programme that involved the workers, including its international subsidiaries, who were asked to submit ideas on the following issues:

- **connectivity, automation and Internet of Things,**
- **energy, fuels and new materials, and**
- **customer experience.**

At the end of the Idea Generation phase, over **500 colleagues** from the FS Group had submitted **216 ideas, 10 of which** were selected for the dedicated Boot Camp, the first of two project selection phases which identified **5 projects** to be developed under the acceleration programme, at the end of which a winning project will be selected.
The winning ideas were *ex aequo*:

- **Chamaleon Bus**: a solution for real time modification of the external appearance of a bus during the day or according to the route taken in order to optimise fleet management processes in the Dutch area of Utrecht, Groningen - Drenthe and DAV;
- **Musa**: a solution for a new way of travel research and organisation that allows the customer to obtain customised solutions, without the need to enter a destination, but by combining, through artificial intelligence and marketing automation tools, certain parameters chosen by the customer with the Passengers Business Unit's road and rail transport offer.

For more information on all of the FS Group's innovation projects, reference should be made to the page dedicated to Innovation Initiatives.

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 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.
In order to promote consistency and transparency in sustainable financial practices and finance projects with positive impacts on environmental and social sustainability, Ferrovie dello Stato Italiane developed a **Green Bond Framework** in 2017 (updated in 2019 and 2022) in line with the Green Bond Principles of the International Capital Market Association (ICMA) and aligned with European Taxonomy.
On 27 March 2018 the **Green Bond Working Committee** was set up to implement and maintain the Green Bond Framework, which is tasked with managing and updating the Framework, focusing in particular on the identification and evaluation of projects eligible for funding. This is done through dialogue with parties involved in the analysis of eligible green projects and the implementation of procedures for reporting and managing emission proceeds.
In confirming the importance of sustainable finance tools, from 2017 to December 2023, the Group issued **nine green bonds totalling €5.55 billion** (including three green bonds underwritten by the European Investment Bank (EIB) between 2021 and 2023 for a total amount of €1.05 billion), maintaining its role as Italy's leading corporate issuer of Green Bonds.
With the first issue in 2017, the Group launched a programme aimed at integrating financing decisions with ESG (Environmental, Social and Governance) 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.
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_2 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_2 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[21] of 64% and a green debt ratio[22] of 51%.

The Group placed three Green Bond issues in 2023:

- in May a dual-tranche transaction was concluded with the issuance of two green bonds (the seventh and the eighth ones) for a total amount of €1.1 billion with proceeds earmarked for both Trenitalia and RFI to finance the Eligible Green Projects under the Green Bond Framework. All financed investments meet the requirements of the European Taxonomy. The first tranche (with a six-year maturity) was placed in the amount of €600 million while the second one (with a ten-year maturity) in the amount of €500 million;
- in December the ninth Green Bond was issued with a nominal value of €500 million, underwritten by the European Investment Bank (EIB), whose funds will be used to purchase 102 new electric trains for the Italian regions of Campania and Lazio, as Eligible Green Projects under FS's Green Bond Framework and in line with the EU taxonomy. The subscription brings the number of FS green bonds purchased by the EIB to three, for a total of €1.05 billion.

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

- a green loan with BBVA in 2023, in the amount of €100 million to finance RFI's investment in High Speed Rail;
- a green (bank) loan from Unicredit in 2020, expired in May 2023, 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 issues. With the facility set to expire in June 2024, the FS Board of Directors approved its renewal for an additional 3 years.

21. 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).
22. 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 targets are as follows:

ESG TARGETS

Gender gap among management
Reducing the gender gap by increasing the number of **women in managerial positions**

ESG Rating
Improving the Group's **sustainability profile** as measured by the methodology of **Moody's ESG Solutions** rating agency

Easy Stations
Increased number of **architectural barrier removal interventions at stations** to give all passengers full autonomy while travelling (raising platforms, installing elevators and tactile walkways)

Integrated mobility
Increased number of **bike spaces** available on the **regional train** fleet in Italy in order to boost **modal shift** towards collective and shared mobility

The table below provides an update on the ESG targets of the sustainability-linked RCF[23]:

KPI	Measurement unit	Baseline	Target 2022	Target 2023	Actual 2022	Actual 2023	Status
ESG Rating – Moody's ESG Solutions (formerly Vigeo Eiris)	score	52	56	60	65	67	✓
Gender gap[24]	%	27.5	28.4	30	30.95	32.35	✓
Easy station							
Actions	no.	605	≥870	≥1,000	889	1,007	✓
Tactile walkways	km	53	≥70	≥80	84.56	98.86	✓
Integrated mobility							
Bike spaces	no.	5,050	≥6,000	≥6,500	6,198	6,832	✓

Key: Target achieved ✓

As shown in the table, the Group pursues its commitments, which were all achieved in 2023 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. In 2024 the term is expected to expire for the credit facility whose objectives, which are priorities for FS and Italy, have been monitored and measured on an annual basis.

23. 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.
24. The target has been spread over the next two years, starting from 2022. The scope of the analysis includes the following companies: FS SpA, RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani (net of personnel seconded to FS Park), Mercitalia Logistics, Mercitalia Rail, Mercitalia Intermodal, Busitalia Veneto, Busitalia Rail Service, Busitalia Campania, Grandi Stazioni Rail, Grandi Stazioni Immobiliare, Terminali Italia, Italcertifer, FSTechnology and Cremonesi Workshop.

European Union Taxonomy

In its communication of 8 March 2018[25], the European Commission published the Sustainable Finance Action Plan (hereafter the Plan) under which it launched an ambitious global strategy on sustainable finance, describing the measures it intends to take to steer the capital market towards a sustainable, inclusive model of development in line with the commitments made under the Paris Climate Agreement. One of the goals set under the Plan concerns the redirection of capital flows towards sustainable investments. The creation of a unified classification system for sustainable activities is the most important and urgent action under the Plan since it recognises that such redirection must be based on a common and shared understanding of the concept of environmental sustainability of activities and investments. Regulation (EU) 2020/852 (hereafter also referred to as Reg. 852 or Taxonomy Regulation or Regulation) represents, in this vision, the first concrete step aimed at identifying activities that can give a substantial contribution to environmental objectives through the creation of a common language (Taxonomy), which is useful for investors to make informed choices in evaluating projects and activities with a positive impact on the climate and the environment.

Below are the **environmental objectives set forth in the Taxonomy** and their regulatory references:

ENVIRONMENTAL OBJECTIVES	REGULATORY REFERENCES
1. Climate change mitigation	– Delegated Regulation (EU) 2021/2139 – Climate Delegated Act – Delegated Regulation (EU) 2021/2178 – Disclosure Delegated Act – Delegated Regulation (EU) 2022/1214 – Complementary Climate Delegated Act[26] – Delegated Regulation (EU) 2023/2485[27] – Delegated Regulation (EU) 2023/2486 – Environmental Delegated Act
2. Climate change adaptation	
3. Transition to circular economy	
4. Sustainable use of water resources	
5. Pollution prevention and reduction	
6. Biodiversity protection	

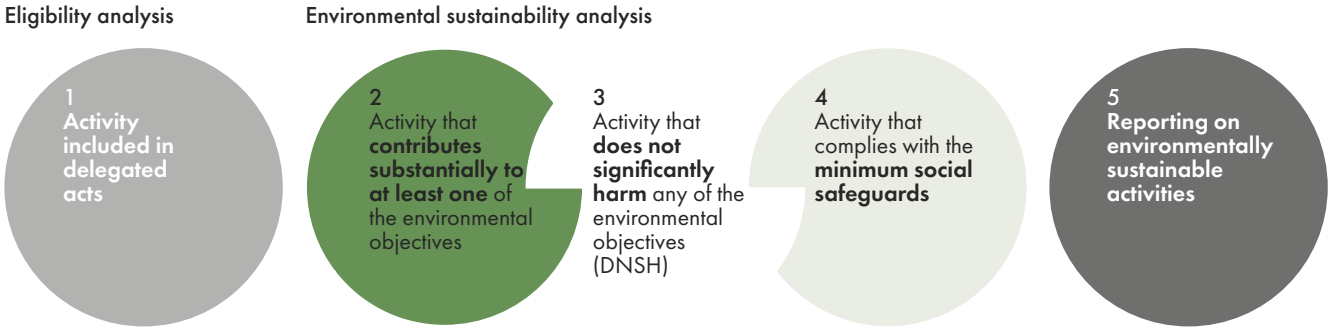
The FS Group's taxonomy reporting process is managed by a cross-functional working group composed of the following organisational structures of FS SpA:

- **Corporate Affairs/Sustainability:** specifically, the **micro-department of Sustainability Reporting and Control**, operating within the **macro-department of Sustainability Model, Planning and Control**, coordinates activities within the cross-functional working group and acts as a focal point vis-à-vis Group companies;
- **Administration, Finance & Control/Administration and Financial Statements**: specifically, **the macro-department of Report On Operations, Accounting Policy and Investee Analysis** provides support for the management and interpretation of accounting issues;
- **Security & Risk/Climate Risk Resilience**: the department provides support for the management and interpretation of technical issues related to climate risks and, in particular, to the Group's climate change adaptation activities.

In the management of information and accounting issues of the taxonomy disclosure process at the consolidated level, the working group is also supported by the **macro-department of Consolidated Financial Statements, Management and Coordination of Subsidiaries, and by the related micro-department of Consolidated Financial Statements.**
Each Group company, which is consolidated on a line-by-line basis, has identified contact persons and functions responsible for carrying out the analysis and reporting work required by the Taxonomy process and detailed below.

25. COM(2018) 97 final.
26. Regulation amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities.
27. Regulation amending Delegated Regulation (EU) 2021/2139 establishing additional technical screening criteria for determining the conditions under which certain economic activities qualify as contributing substantially to climate change mitigation or climate change adaptation and for determining whether those activities cause no significant harm to any of the other environmental objectives.

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



Eligibility analysis

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 Regulation.
Specifically, **screening work** was carried out, including through interviews and workshops organised by the FS SpA working group, **concerning the comparison between**:

- the economic activities listed and described under the Climate Delegated Act and the Environmental Delegated Act;
- the economic activities carried out by each company.

Below is the table of eligible activities identified for the Group and by Business Unit, broken down with respect to the Delegated Regulations:

Key
Infrastructure · Passengers · Logistics · Urban

ELIGIBLE ACTIVITIES	Infrastructure	Passengers	Logistics	Urban
Climate Delegated Act				
3. Manufacturing activities				
3.3. Manufacture of low carbon technologies for transport		●		
6. Transport				
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		●		
6.10. Sea and coastal freight water transport, vessels for port operations and auxiliary activities	●		●	
6.11. Sea and coastal passenger water transport	●			
6.13. Infrastructure for personal mobility and cycle logistics	●			
6.14. Infrastructure for rail transport	●			●
6.15. Infrastructure enabling low-carbon road transport and public transport	●			●
7. Construction and real estate activities				
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			●	●
Environmental Delegated Act[28]				
3. Construction and real estate activities				
3.4. Road and motorway maintenance	●			

28. Pursuant to Article 5 of Delegated Regulation (EU) 2023/2486, amending Delegated Regulation (EU) 2021/2178, non-financial corporations are only required to report the share of economic activities eligible and ineligible for taxonomy under the Environmental Delegated Act.

Environmental sustainability analysis

Regulation (EU) 2020/852 sets out the following **conditions** that an economic activity must meet in order to be considered **environmentally sustainable**:

- to contribute substantially to at least one of the six environmental objectives;
- to avoid significant harm to any of the environmental objectives (DNSH - Do No Significant Harm);
- to comply with minimum safeguards[29].

Substantial contribution analysis
Each Group company then verified, for each eligible activity, the capacity **to contribute substantially to the achievement of one or more objectives**, mitigation or adaptation[30], also distinguishing between **transition activities** (activities for which there are no lower-carbon alternatives that are technologically and economically feasible but nevertheless have performance that matches the best performance in the industry and provided that they do not impede the development and diffusion of lower-emission alternatives or result in dependence on carbon-intensive assets) **and enabling activities** (activities that directly enable other activities to make a substantial contribution to an environmental objective).

Verification of the principle of not causing significant harm to other objectives (Do No Significant Harm - DNSH):

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, for example:

- 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 (MECs) and/or other sustainability criteria included in negotiation procedures and in contracts;
- waste management procedures;
- carbon footprint measurement.

Compliance with minimum safeguards
With respect to compliance with the minimum safeguards, **the FS Italiane Group ensures and promotes the protection of human rights** in the framework of the United Nations' Universal Declaration of Human Rights and the International Labour Organisation's fundamental conventions.

The Group's approach in relation to the criteria set out in the Regulation is described below:

MINIMUM CRITERIA[31]	
Human rights	In 2017, the Group joined the United Nations Global Compact, undertak-ing to comply with the 10 human rights, labour, environmental and Anti-Corruption principles and integrate them in its business. These princi-ples integrate and reinforce the commitments already established in the **Sustainability Policy**, issued in 2019, on which the Group's actions are based, and, among which, respect for human rights and the commitment to creating a responsible chain stand out. This commitment was con-firmed in the Code of Ethics (which guides the Group in its relations with stakeholders).
Corruption	In conducting business we are guided by the principles of honesty, eth-ics and zero tolerance for corruption. As a further consolidation of this commitment, since 2017 we have voluntarily equipped ourselves with a single self-regulatory tool for the prevention of corruption, **Anti-Corruption Framework**.
Tax strategy	In 2019, the **Tax Strategy of Ferrovie dello Stato Italiane and the Group** was issued as the cornerstone of FS's broader tax risk control system, Tax Control Framework or TCF.
Legal competition	In 2019, the **Group's Antitrust Policy** was issued, which was the result of the Antitrust Compliance Program developed to further implement anti-trust prevention safeguards and to expand the dissemination of competi-tion culture within Group companies and among all personnel.

29. OECD Guidelines for Multinational Enterprises, UN Guiding Principles on Business and Human Rights, ILO Fundamental Principles.
30. For more details regarding the substantial contribution to the climate change adaptation objective, please refer to the paragraph *Climate Change Adaptation*.
31. For more details regarding the policies, tools and activities implemented by the Group, please refer to the paragraph *Business integrity*.

The overall analysis carried out by Group companies, with the coordination of the working group of FS SpA, led to the identification of the following environmentally sustainable activities:

BUSINESS UNITS	Taxonomic activity	Technical screening criteria
INFRASTRUCTURE	6.13. Infrastructure for personal mobility, cycle logistics	• **substantial contribution to mitigation:** the infrastructure built or operated is used for personal mobility or cycling: pavements, cycle paths and pedestrian islands, electric and hydrogen refuelling stations for personal mobility equipment • **DNSH compliance with applicable environmental targets:** adaptation, circular economy, water resources, pollution and biodiversity • **compliance with minimum safeguards**
	6.14 Infrastructure for rail transport	• **substantial contribution to mitigation and to adaptation:** design, construction, modernisation, operation and maintenance of an electrified railway infrastructure • **DNSH compliance with applicable environmental targets:** adaptation, circular economy, water resources, pollution and biodiversity • **compliance with minimum safeguards**
	6.15 Infrastructure enabling low-carbon road transport and public transport	• **substantial contribution to mitigation and to adaptation:** the infrastructure is dedicated to zero CO_2 emission vehicles: electric charging points • **DNSH compliance with applicable environmental targets:** mitigation, adaptation, circular economy, water resources, pollution and biodiversity • **compliance with minimum safeguards**
PASSENGERS	3.3. Manufacture of low carbon technologies for transport	• **substantial contribution to mitigation**: repair, maintenance and retrofitting of low-carbon road passenger vehicles in urban and suburban areas • **DNSH compliance with applicable environmental targets**: adaptation, circular economy, water resources, pollution and biodiversity • **compliance with minimum safeguards**
	6.1. Passenger interurban rail transport	• **substantial contribution to mitigation and to adaptation**: electric trains with zero direct (tailpipe) CO_2 emissions or bimodal (hybrids) trains • **DNSH compliance with applicable environmental targets**: mitigation, adaptation, circular economy and pollution • **compliance with minimum safeguards**
	6.3 Urban and suburban transport, road passenger transport	• **substantial contribution to mitigation**: urban and suburban electric passenger transport services with direct zero (tailpipe) CO_2 emissions or with EURO VI engine (until 31 December 2025) • **DNSH compliance with applicable environmental targets**: adaptation, circular economy and pollution • **compliance with minimum safeguards**
	6.6 Freight transport services by road	• **substantial contribution to mitigation**: road haulage services with vehicles with direct zero (tailpipe) CO_2 emissions, or vehicles classified as 'zero-emission/low-emission heavy-duty vehicles'[32] • **DNSH compliance with applicable environmental targets**: adaptation, circular economy and pollution • **compliance with minimum safeguards**
LOGISTICS	6.2 Freight rail transport	• **substantial contribution to the mitigation**: electric trains with zero direct (tailpipe) CO_2 emissions or bimodal (hybrids) trains • **DNSH compliance with applicable environmental targets**: adaptation, circular economy and pollution • **compliance with minimum safeguards**

32. Pursuant to (EU) Regulation 2019/1242.

BUSINESS UNITS	Taxonomic activity	Technical screening criteria
LOGISTICS	6.14 Infrastructure for rail transport	• **substantial contribution to mitigation**: the infrastructure and facilities are used for the transhipment of goods between modes: infrastructure and terminal superstructure for loading, unloading and transhipment of goods • **DNSH compliance with applicable environmental targets**: adaptation, circular economy, water resources, pollution and biodiversity • **compliance with minimum safeguards**
URBAN	6.14 Infrastructure for rail transport	• **substantial contribution to mitigation:** the infrastructure and facilities are used to transfer passengers from other modes to rail • **DNSH compliance with applicable environmental targets**: adaptation, circular economy, water resources, pollution and biodiversity • **compliance with minimum safeguards**
	7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	• **substantial contribution to mitigation**: installation, maintenance and repair of charging stations for electric vehicles in buildings • **DNSH compliance with applicable environmental targets**: adaptation • **compliance with minimum safeguards**

Also contributing, on a residual basis, to **the environmental sustainability of the Group's activities are the installation, maintenance and repair of renewable energy technologies**, classifiable under activity 7.6 of the Climate Delegated Act.
Activities related to the real estate management of assets that are not functional to railway operations (e.g. properties for sale, offices, buildings, etc.), although eligible, do not pass the technical screening criteria set out in the Regulation. The activities carried out by the Group's other companies, which concern, for example, cross-sector services and those of an administrative, financial, security, transport system and infrastructure certification nature, and the enhancement and care of historical heritage, were not considered eligible.
As of 2023, **the activities carried out by Anas and related to the maintenance of the road and motorway network have been considered eligible under the new Environmental Delegated Act**[33], and the analysis of the technical screening criteria defined to assess their environmental sustainability has been initiated.

33. Pursuant to Article 5 of Delegated Regulation (EU) 2023/2486, amending Delegated Regulation (EU) 2021/2178, non-financial enterprises are only required to report the share of economic activities that are eligible and ineligible for taxonomy under the Environmental Delegated Act.

Reporting on environmentally sustainable activities

Following the interviews and workshops held in the second half of 2023 and based on the guidelines provided by the FS SpA working group, the Group companies reported on the KPIs required by the Regulations through a "bottom-up"-type process structured into the following steps:

- **Data & Document Collection**: this first phase refers to the centralised management and monitoring of the process of collecting the accounting data processed by the companies and the useful documents/ evidence for the certification of compliance with the technical screening criteria prescribed by the Regulation, both with regard to the substantial contribution to the various environmental objectives and with regard to the Do No Significant Harm (DNSH) principle. In 2023, the **activity of collecting** data processed by the companies **was managed through the use of a new tool** implemented on the Group's sustainability reporting&control IT platform (ESGeo);
- **Data Engine & Reporting EU Taxonomy**: this second phase refers to the final disclosure process, during which KPIs (Turnover, OpEx and CapEx) were determined and reported at the Group level. As was the case for the 2022 disclosure, Group companies declared the book values through the **HFM (Hyperion Financial Management) consolidation module**, pertaining to the Oracle Cloud Enterprise Performance Management (EPM) system, and they were subsequently consolidated by the Parent Company.

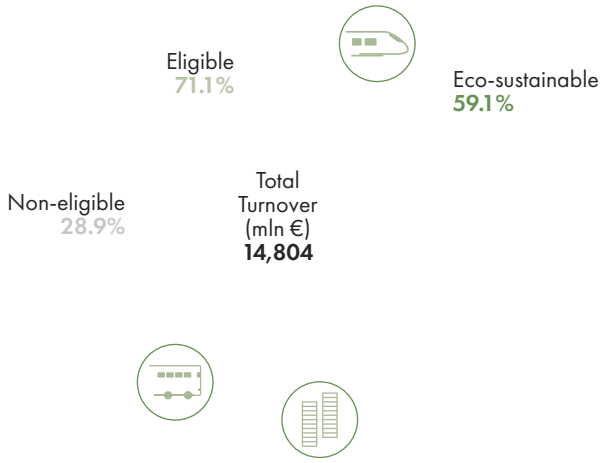
In 2023, the degree of alignment of the FS Group's economic activities with the EU Taxonomy, considering their substantial contribution to the climate change mitigation and adaptation objectives, in compliance with both the principle of DNSH to the other environmental objectives and the minimum safeguards, is illustrated in the tables below:

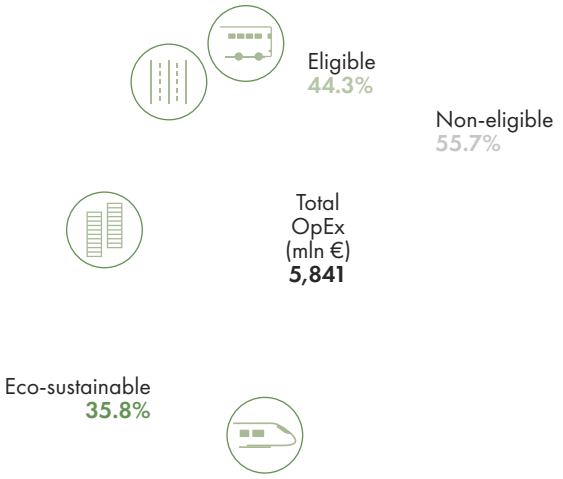
€ MILLIONS		2023		2022		Change	
Turnover KPI	Non-eligible portion	4,272	28.9%	3,784	27.7%	+488	+1.2 p.p.
	Eligible portion	10,532	71.1%	9,880	72.3%	+652	-1.2 p.p.
	of which environmentally sustainable	8,744	59.1%	8,274	60.6%	+470	-1.5 p.p.
	Total	14,804		13,664		+1,140	+8.3%
OpEx KPI	Non-eligible portion	3,251	55.7%	2,394	47.6%	+857	+8.1 p.p.
	Eligible portion	2,590	44.3%	2,634	52.4%	-44	-8.1 p.p.
	of which environmentally sustainable	2,091	35.8%	2,236	44.5%	-145	-8.7 p.p.
	Total	5,841		5,028		+813	+16.2%
CapEx KPI	Non-eligible portion	687	5.5%	295	3.6%	+392	+1.9 p.p.
	Eligible portion	11,903	94.5%	7,821	96.4%	+4,082	-1.9 p.p.
	of which environmentally sustainable	10,676	84.8%	6,830	84.2%	+3,846	+0.6 p.p.
	Total	12,590		8,115		+4,475	+55.2%

The percentage changes of the indicators in the taxonomy show **an overall trend in line with the 2022 statement**, with deviations of less than 4 p.p. for Turnover and CapEx, and a deviation of about 8 p.p. for OpEx. In analysing **absolute values**, on the other hand, there was **a general increase in all taxonomic KPIs in 2023**, both in terms of balance sheet values and in terms of the relative eligible and environmentally sustainable portions (with the exception of environmentally sustainable OpEx, which decreased by about €145 million). In particular, **the Group's CapEx increased by around 55% compared to 2022, with over €3.8 billion more green investments** than in the previous year. This figure - to be analysed in the broader context of the **environmentally sustainable investments that the Group plans to implement over the industrial Plan period**, amounting to **more than 80%** of all investments planned **over the next decade** - confirms the Group's commitment to offering green and resilient mobility solutions, capable of reducing carbon emissions in the transport sector, while adapting to extreme events caused by climate change.

Below is an analysis of the **2023 values for the following types of relevant activities:**

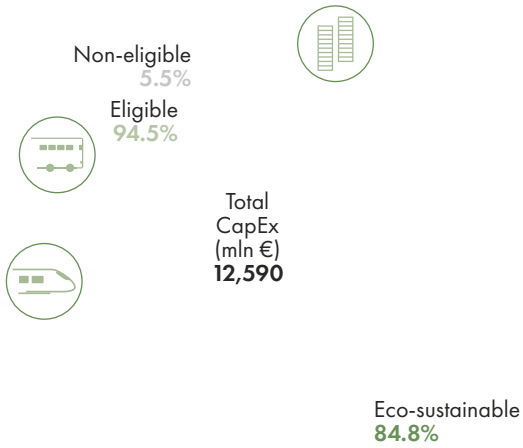
In 2023, approximately 60% of the Group revenue was generated from environmentally sustainable activities, with rail passenger and freight transport activities (44.9%, +2 p.p. on 2022), and **railway infrastructure operation** (11.4%, -2.1 p.p. on 2022), contributing the most to this percentage. Road transport contributed approximately 2.4%, with road infrastructure and real estate activities contributing residually with approximately 0.4%.
The numerator of the Turnover KPI does not include revenue from products and services associated with economic activities adapted to climate change.





With regard to the **operating costs**[34] defined in Annex I of the Delegated Act, Art. 8, **about 35.8% is attributable to environmentally sustainable activities**. The activities relating to railway infrastructure and rail transport contribute 10.6% and 17.1% respectively (compared to 18.7% and 17.4% last year), road infrastructure accounts for about 7% (+0.3 p.p. on 2022), road transport for 1.1% (-0.5 p.p. on 2022) and, residually, real estate activities also contribute to the environmentally sustainable portion.

Approximately 84.8% of the Group's capital expenditure is for investments in environmentally sustainable activities, demonstrating its commitment to **developing a sustainable mobility system**. In detail, 70.5% of aligned CapEx relates to the operation of the railway infrastructure (+€3.6 billion on 2022), while approximately 13.9% relates to railway transport and the remainder (roughly 0.4%) relates to road transport and real estate activities.
If we also consider Anas SpA's capital expenditure contributing to climate change adaptation (falling within the scope of IFRIC 12[35]), the portion of environmentally friendly capital expenditure would increase by approximately €408 million.



The annex on Performance Indicator Tables provides information tables in accordance with Article 8 of the EU Taxonomy Regulation.

34. Non-capitalised direct costs related to research and development, building renovation measures, short-term lease, maintenance and repair, as well as any other direct expenses related to the day-to-day maintenance of property, plant and equipment, either by the company or by third parties to whom such tasks are outsourced, necessary to ensure the continuous and effective operation of such assets.
35. For more details regarding the application of the accounting standard, please refer to the FS Group's Annual Financial Report 2023.

Below is an analysis, for each taxonomic KPI, concerning the contribution that each Business Unit makes to the Group's environmentally sustainable share[36].

ENVIRONMENTALLY SUSTAINABLE TURNOVER contribution to the Group (€ millions)	2023		2022		Point percentage change (p.p.)
INFRASTRUCTURE	1,740	11.8%	1,898	13.9%	-2.1
PASSENGER	6,166	41.6%	5,587	40.9%	+0.7
LOGISTICS	839	5.7%	789	5.8%	-0.1
URBAN	≈0	≈0%	0.1	≈0%	-
Total Group	**8,744**	**59.1%**	**8,274**	60.6%	-1.5

ENVIRONMENTALLY SUSTAINABLE OPEX contribution to the Group (€ millions)	2023		2022		Point percentage change (p.p.)
INFRASTRUCTURE	1,026	17.6%	1,276	25.4%	-7.8
PASSENGER	916	15.7%	852	17%	-1.3
LOGISTICS	149	2.5%	108	2.1%	+0.4
URBAN	-1[37]	≈0%	0.02	≈0%	-
Total Group	**2,091**	**35.8%**	**2,236**	44.5%	-8.7

ENVIRONMENTALLY SUSTAINABLE CAPEX contribution to the Group (€ millions)	2023		2022		Point percentage change (p.p.)
INFRASTRUCTURE	8,873	70.5%	5,254	64.7%	+5.7
PASSENGER	1,718	13.6%	1,472	18.1%	-4.5
LOGISTICS	83	0.7%	100	1.2%	-0.5
URBAN	2	≈0%	4	≈0%	-
Total Group	**10,676**	**84.8%**	**6,830**	84.2%	+0.6

36. Taxonomic activities across multiple Group companies have been included in the most relevant Business Segment.
37. The negative value arises from consolidation entries that resulted in the capitalisation of operating costs.

An analysis of the contributions of the Business Units to the Group's consolidated values shows a significant increase in the share of environmentally sustainable CapEx, both in absolute and relative terms, mainly due to the green investments implemented on electrified railway infrastructure, by the Infrastructure Business Unit (+€3.6 billion on 2022), and the fleet renewal campaigns of the Passenger Business Unit.

(3-3)

TRANSPARENCY AND BUSINESS RESPONSIBILITY

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**.

Integrity and honesty

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.

Responsibility and awareness

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.

Passion

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.

Courage and self-criticism

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.

Open-mindedness and respect

To be open-minded 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.

Teamwork

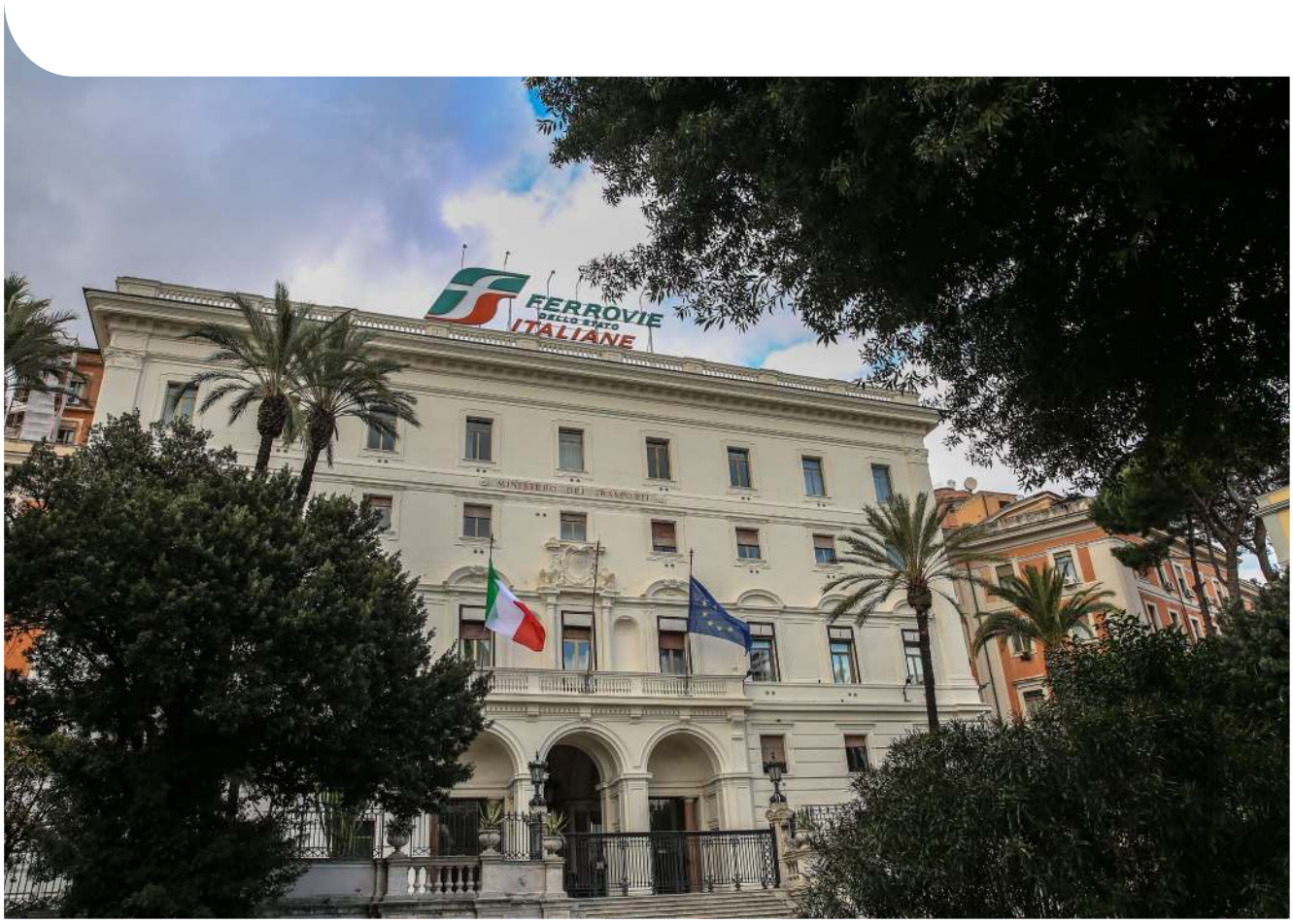
We belong to a team capable of facing great challenges by working together in a close-knit and integrated manner. To be a team also means to collaborate in a climate of open-mindedness based on constructive participation and feedback for our mutual well-being.

Source: Code of Ethics of the FS Group.

(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)

CORPORATE GOVERNANCE

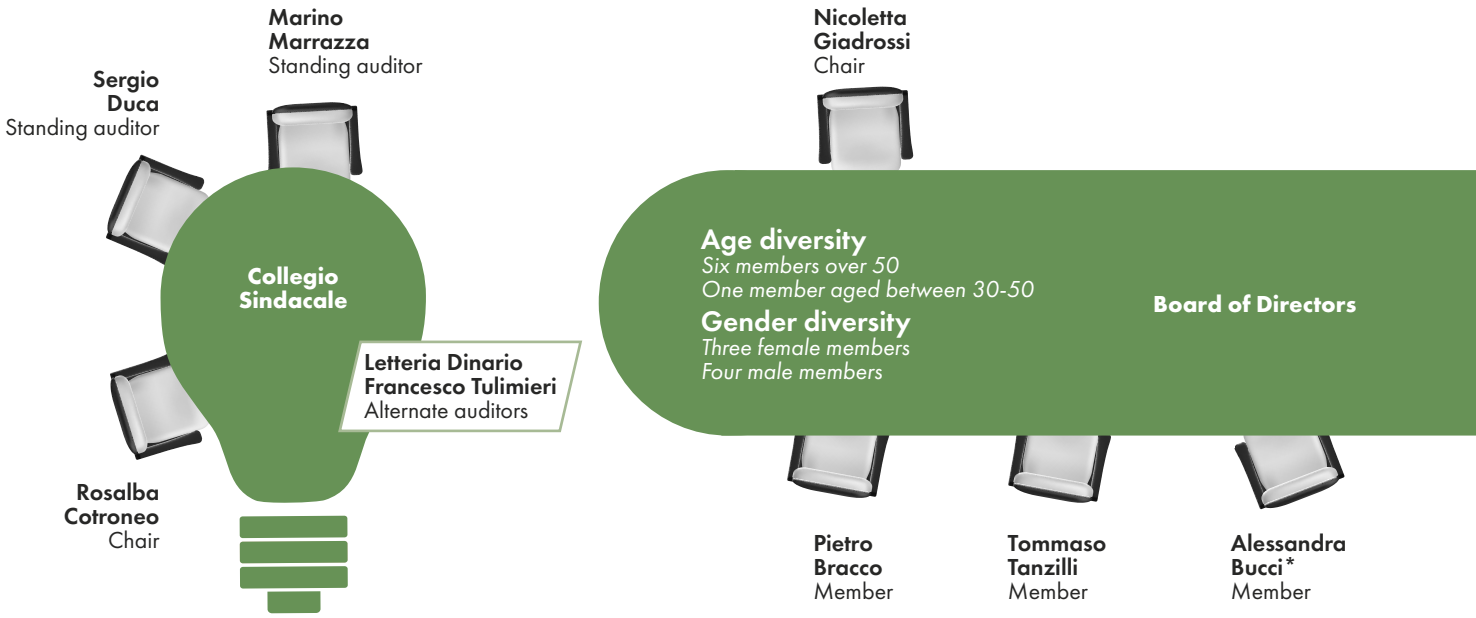
The corporate governance structure of FS Italiane SpA and its main subsidiaries is organised according to the traditional system: the Shareholders appoint a Board of Directors (the parent's BoD is responsible for management and is currently comprised of seven directors) and a board of statutory auditors (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, at the proposal of the Board of Statutory Auditors, the independent auditors[38], 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 SpA 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 gather information, provide consultation, or make proposals (two committees were set up in FS SpA: the Governance, Appointments and Remuneration Committee and the Control, Risk and Sustainability Committee); and (iv) appoints the Officer in charge of financial reporting in accordance with Article 154-*bis* of the Consolidated Act on Financial Intermediation (TUF).
The following chart represents FS SpA's corporate governance structure.
Additional information is provided in the Group's 2023 Annual Report (Directors' report, Report on corporate governance and the ownership structure).



38. PwC SpA was engaged to perform the statutory audit for both the Holding Company and the subsidiaries beginning from 2023. Based on the applicable special provisions set forth by Legislative decree no. 39/10 (article 16 et seq.), after FS SpA became an "Entity of Public Interest" by issuing the listed bonds in 2013, the engagement lasts for nine years (2023-2031). By a resolution of the FS SpA Shareholders' Meeting on 21 March 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

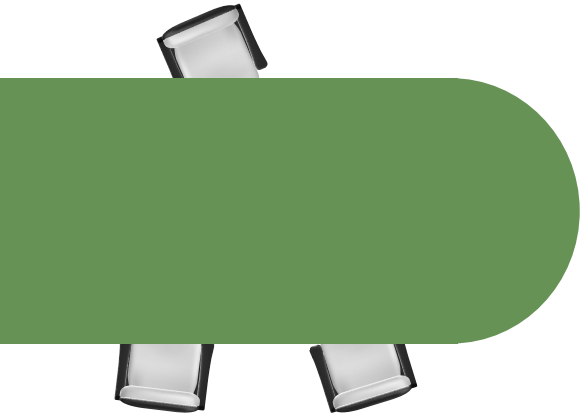
The board of statutory auditors monitors compliance with the law, the by-laws and the principles of correct administration, particularly with respect to the adequacy of FS SpA's organisational, administrative and accounting system and that it functions properly. When FS SpA became an Entity of Public Interest, its board of statutory auditors also became the "Internal Control and Audit Committee" pursuant to Article 19 of 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 of accounts, and, finally, the independence of the independent auditors, especially with regard to the type of any non-audit services provided to the audited company.



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



Riccardo Barbieri Hermitte
Member

Paola Gina Maria Schwizer
Member

PwC Italy SpA
Independent Auditors

Court of Auditors' Magistrate
Piergiorgio Della Ventura
Valentina Papa
Alternate member

Shareholders' Meeting

It is attended by the sole shareholder, the MEF, which exercises the shareholder's rights in agreement with the Ministry of Infrastructure and Transport.

Supervisory Body 231***

Maurizio Bortolotto
Chair

Liliana Cataldi
Désirée Fondaroli

Financial Reporting Manager

Marco Fossataro

Management

Administration, Finance & Control
Human Resources
Corporate Affairs
Communication
Technology, Innovation & Digital
Legal Affairs
International & Group Transformation
Security & Risk
Audit

* On 28 February 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, Risks 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, Risks and Sustainability Committee meetings dealing with the subject matter.
**Amendment to Article 12 of the Articles of Association resolved upon by the Shareholders' Meeting of FS SpA on 3 May 2022, effective from 1 June 2022.
*** FS SpA's current Supervisory Body was appointed by the Company's Board of Directors at its meeting on 20 December 2023 for a term of three years. The previous Supervisory Body of FS SpA, which remained in office until the appointment of the new Supervisory Body, was composed of three external members: Rocco Blaiotta, serving as Chairman, Maurizio Bortolotto and Umberto La Commara.
**** From an internal organisational standpoint, the Chief Executive Officer (CEO) of FS SpA has set up other board Committees with the function of guiding and supporting his work, whose members are appointed from among the holders of certain corporate functions for the time being.

Board committees

Governance, Appointments and Remuneration Committee

Tommaso Tanzilli (Chairperson), Pietro Bracco and Alessandra Bucci are the members of this Committee, which is tasked with gathering information, making proposals and providing advice to support the evaluations and decisions of the Board of Directors with regard to, among other things: alignment of the corporate governance system with regulations, Corporate Governance Code and best practices, setting out the structure of the Group and assessing organisational adequacy; methodologies for selecting and identifying executives with Strategic Responsibilities and members of the governing and control body of Group companies; guidelines and criteria on remuneration policy, and on incentive systems; criteria for measuring and evaluating performance objectives.

Control, Risks and Sustainability Committee

Pietro Bracco (Chairperson), Riccardo Barbieri Hermitte and Paola Gina Maria Schwizer 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, and its approval of periodic financial and non-financial reports, as well as the sustainability profiles of FS operations and its interaction with all stakeholders.

Other committees*

Green Bond Working Committee

It 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, and assesses any eligible new projects within the current GBF.

Ethics and Reporting Committee

It carries out advisory activities and sets guidelines within the framework of the principles and rules of the FS Italiane 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, ensure the utmost confidentiality of the whistleblower, provide support in the definition of ethics communication/training initiatives, examine any needs for amendments/additions to the Code of Ethics, coordinate and maintain information flows with the Supervisory Board and periodically inform the Board of Directors.

FS Group Supplier Qualification Committee

It evaluates the "Supplier Qualification" and "Commodity Category Management" processes, issuing specific clearances according to the rules and criteria set forth in the "Supplier Qualification" Policy. As part of "Supplier Qualification," it issues approval or rejection of proposals from Group companies on suppliers. For "Commodity Category Management," it issues clearance for the creation of new commodity categories or subsystems.

Sustainability Committee

It ensures the integration of social and environmental issues into the Group's economic-financial strategies, promotes the values and principles of sustainable development, identifies and updates strategic ambition, approved by the Board of Directors, manages dialogue with stakeholders, analyses materiality matrix, formulates sustainability goals and considers strategic initiatives, monitors performance, and sets out ways to share results.

Sponsorships and Partnerships Committee

It assesses and approves communication and/or 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 FS SpA and/or of the relevant Group Companies.

Group Crisis Management Committee

It assures coordinated management of serious crisis situations arising from man-made or natural events with significant impact on the operations and reputation of FS Group companies, activates resources to ensure business continuity, operation of networks and customer services, oversees "major critical issues and incidents" in railway operations, and manages any crises on the safety of Group workers abroad (Travel Security).

Credit Committee

It 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

It 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 functions 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 the state of progress.

*From an internal organisational standpoint, the Chief Executive Officer (CEO) of FS SpA has set up other board Committees with the function of guiding and supporting his work, whose members are appointed from among the holders of certain corporate functions for the time being.
**Issued by the International Capital Market Association.

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 business units leaders and "shared services" companies;
- the **business units leaders**, 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 business units leaders and are subject to management and coordination by the Holding Company;
- the companies that belong to each business unit.

Within the Governance Model, the Holding company plays the **role of management and coordination** towards the business units leaders 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.
The following sectors are established within the Group, according to the following structures:

- Infrastructure Business Unit (business unit leaders: Rete Ferroviaria Italiana SpA), with a mission to ensure the design, construction, operation and maintenance of rail, road and motorway transport infrastructure networks, both in Italy and abroad;
- Passenger Business Unit (business unit leaders: Trenitalia SpA), with a mission to cover the national and international passenger transport sector, including the promotion, implementation and management of initiatives and services in the field of passenger transport, through the development of an integrated offer of products/services and the operation of a comprehensive mix of distribution channels;
- Logistics Business Unit (business unit leaders: Mercitalia Logistics SpA), with a mission to cover the national and international logistics and freight transport sector, including the promotion, implementation, management and sale of initiatives and services in the field of logistics, mobility and freight transport;
- Urban Business Unit (business unit leaders: FS Sistemi Urbani S.r.l.), with a mission to cover real estate operations, as well as the sector of urban regeneration and intermodal transport and logistics solutions for the first and last mile of the supply chain.

Furthermore, the Group structure is completed by the companies that provide shared services (including Ferservizi SpA, Fercredit SpA, FSTechnology SpA, FS Security SpA and FS International SpA), as companies that do not belong to one of the aforementioned Business Units and that are cross-sectional to them.
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' or-

ganisational 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 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 SpA'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 SpA signs and authorises the organisational measures regarding the units/positions that report directly to him;
- the Chairperson of FS Italiane SpA 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 Human Resources 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 2023.

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 SpA'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.

Control, Risks and Sustainability Committee

Board of Directors

It 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 Legislative Decree no. 254/16 (NFS), with the Control, Risks and Sustainability Committee's prior approval.

Sustainability Committee*

- **RFI**
- **Trenitalia**
- **Mercitalia Logistics**
- **FS Sistemi Urbani**
- **Chief Officer di FS**

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 into the Group's strategies, including through dialogue with Stakeholders, and examines and validates the draft Sustainability Report.

Chief Corporate Affairs

It defines guidelines, methodologies and models for the proper implementation of sustainability policies, and also acts as **technical secretary for the Sustainability Committee.**

* Group organisational measure no. 46/AD of 7 November 2023 replaced Group organisational measure no. 243/AD of 15 December 2022 regarding the composition of the Sustainability Committee.

In order to oversee sustainability issues at the Group's operating companies, also aided by a suitable organisational structure, work continued on the change management process in 2023 by revising the "Sustainability" professional category

Work continued on the induction process, which had been launched at the end of 2022, targeting Boards and management of the main Group companies, to strengthen knowledge and commitment on the topic of sustainability and its strategic value for FS Group, promoting a growth of corporate culture.
After the completion of the Entry-Level Session, dedicated to the Boards, which provided basic knowledge on the main ESG topics, and involved over 20 Boards[39], which will be convened during 2024 for the second Deep Dive session, the course targeted at the managerial class of Group companies was activated in December 2023.
In order to foster widespread awareness of the importance of sustainable models and share the Group's strategic objectives pertaining to the area of sustainability, more than 50 first-level executives were involved in December 2023, to be followed during 2024 by the remaining executives and top managers.
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.

39. As from December 2022 the Entry-Level Session was attended by the Boards of Directors of: Anas, Bluferries, Blujet, Busitalia Campania, Busitalia - Sita Nord, Busitalia Veneto, Fercredit, Ferrovie del Sud-Est, Ferservizi, Fondazione FS, FS SpA, FS Sistemi Urbani, FS Park, FSTechnology, Grandi Stazioni Rail, Italcertifer, Italferr, Infrarail, Mercitalia Intermodal, Mercitalia Logistics, Mercitalia Rail, Mercitalia Shunting&Terminal, RFI, Terminali Italia and Trenitalia.

(2-12, 2-23, 2-24, 2-26, 205-1, 205-2, 205-3, 207-1, 207-2, 207-3, 403-1)

BUSINESS INTEGRITY

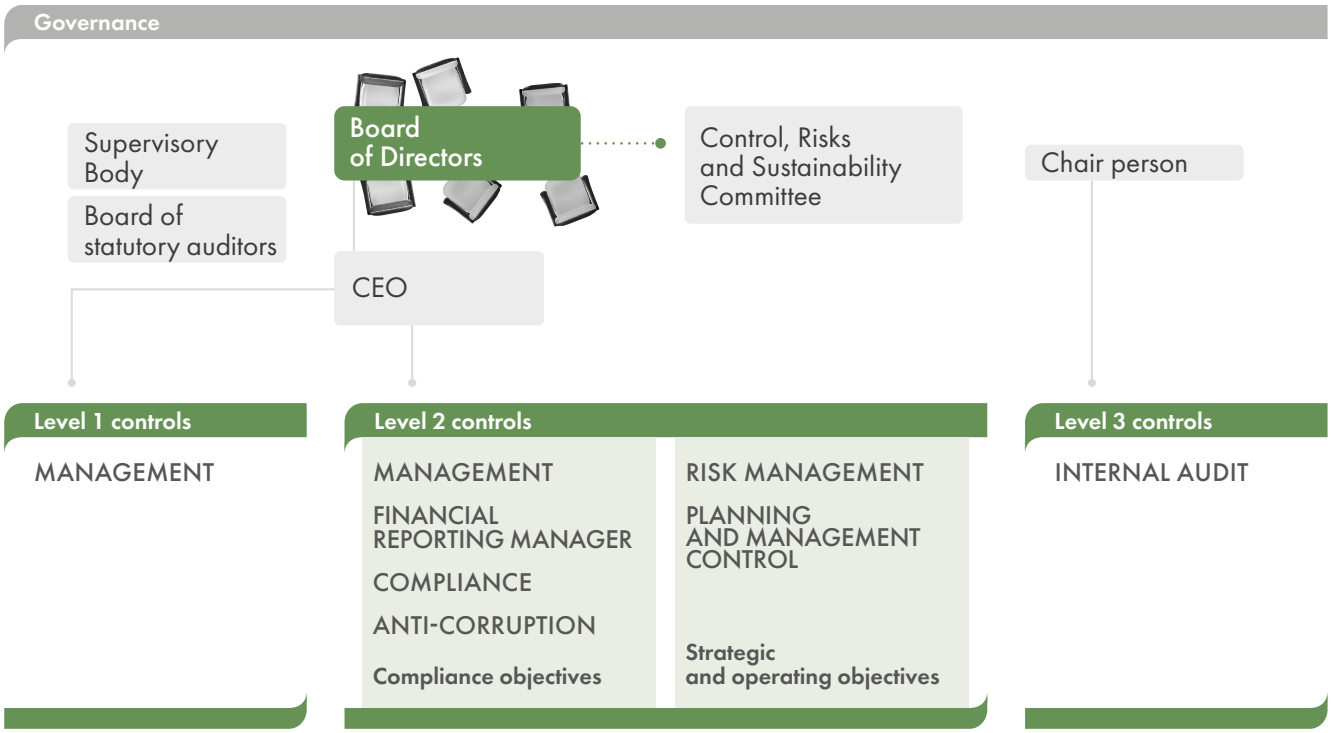
We promote a company culture based on integrity, ethics, loyalty, probity, transparency and respect for the law, which are determinant principles in governing complexity, encouraging knowledgeable decisions.
We prevent and abstain from any situation presenting a conflict of interest and reject and discourage 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 functions, to protect the Group's reputation and integrity and the stakeholders.

Internal control system

The internal control and risk management system (ICRMS) consists of a set of tools, organisational functions, and standards and company rules aimed at enabling sound, sustainable, proper and consistent business conduct with the business objectives defined by the Board of Directors, through an appropriate process of identifying, measuring, managing and monitoring the main risks, as well as through the structuring of appropriate information flows aimed at ensuring the circulation of information.
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. Responsibility for defining and conducting these controls rests with management, and operates at every level of the organisational structure and is carried out within the framework of day-to-day management;
- **Level 2 controls:** to monitor the main risks, and the adequacy and functioning of controls for safeguards against them. Level 2 controls also support level 1 in the definition and implementation of adequate management systems for the main risks and related controls. It is carried out by specific functions, like Risk Management, Compliance, Anti-Corruption and the Financial Reporting Officer.
- **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.



Financial Reporting Manager of FS SpA

The position of the Financial Reporting Manager (FRM) of FS SpA, created at the request of the Shareholder Ministry of the Economy and Finance as from 2007, became legally mandatory in 2013, thus falling, following the issue of bonds listed on the Irish Stock Exchange[40], within the scope of application of Article 154-bis of the Consolidated Finance Act.
At present the Financial Reporting Manager of FS SpA is Marco Fossataro[41], Chief Financial Officer, who will hold office until the approval of the 2023 financial statements.
According to Article 16 of the Articles of Association of FS SpA: 1) the BoD appoints the FRM, subject to the opinion of the Board of Statutory Auditors, for a period of no less than the term of office of the BoD, and no more than six financial years; 2) the FRM must meet the honesty requirements provided for Directors, and must be chosen according to criteria of professionalism and expertise from among those Executives who have gained experience commensurate with the scope and complexity of the assignment. The powers and means for performing the duties assigned to the FRM, as well as the FRM 's flows and interrelationships with corporate bodies, and control bodies and functions are formalised in the Rules on the activities of the Financial Reporting Manager, which were approved by the Board of Directors' meeting held on 2 August 2023.
In order to achieve a stronger and more effective enforcement of the rule, given the scale and complexity of the FS Group, the Board of Directors of the Holding Company has promoted the appointment of FRMs in major subsidiaries from the outset.
The FRMs have been appointed at the following subsidiaries: RFI SpA, Trenitalia SpA, Anas SpA, Mercitalia Logistics SpA, Mercitalia Rail S.r.l., Busitalia-Sita Nord S.r.l., Ferservizi SpA, Fercredit SpA, FS Technology SpA, Ferrovie del Sud Est S.r.l., FS Sistemi Urbani S.r.l. and Italferr SpA.

Compliance

The Compliance Unit ensures that the Compliance Model framework of the FS Group is defined and updated,

40. Following the event, FS SpA took on the status of Public Interest Entity (PIE), as per Article 16 of Legislative Decree no. 39/2010, since it is an "Issuer of Listed Financial Instruments."
41. He was appointed by the FS Board of Directors' meeting on 27 June 2023, with the approval of the Board of Statutory Auditors, to replace Roberto Mannozzi, former head of Administration, Planning & Control.

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 have been correctly implemented. 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 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. In addition, the Compliance organisational unit provides assistance and advice to Group companies on the relevant matters; ensures specialist support, also in coordination with other company function, for the implementation and management of internal control models and compliance programmes related to the Anti-Bribery & Corruption Management System and Antitrust; sets out methodological guidelines for the Models 231 of Group companies; and analyses the compliance profiles of third parties with respect to strategic Group initiatives (e.g., M&A transactions with strategic significance, sponsorships).

COMPLIANCE MODEL OF THE FS GROUP

In line with the organisational solutions adopted by the other control levels (2 and 3) of the more general ICRMS, the Group has a "decentralised" Compliance Model, which sees the presence of a Compliance structure as Group Functional Manager in the Holding Company, in the Legal Affairs area, and Compliance structures/units in the subsidiaries. This Compliance Model is transposed into the internal governance systems of the Group companies, which issue their own organisational measures in this respect to apply its content to their specific business organisations. Specifically:

- the FS Compliance structure defines the Group Compliance Model, ensuring its implementation at Holding Company level with reference to the regulatory perimeter of intervention that provides for a direct oversight role, in the areas of Business & Trade Compliance and Legislative Decree no. 231/2001, and a support role to the specialist functions that oversee the areas of Anticorruption, Antitrust, and Data Protection and Sustainability. It also provides specialist and methodological support to the Compliance functions/supervisors of subsidiaries on issues related to the implementation of the Group Compliance Model;
- the Compliance functions/supervisors of the Group's subsidiaries adopt the Compliance Model according to their own organisational and business specific features, as well as the operational complexity of their work, ensuring its implementation at the corporate level, each of them with reference to the regulatory perimeter under its own competence and with reference to the phases and activities under its own responsibility, and ensuring the application of methodologies consistent with those described within the Group Compliance Model.

This Model **protects against the risk of violating** national or international regulations or company rules, which could harm the companies' and Group's reputation and lead the national, foreign or supranational judicial 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 company and external rules and regulations, in order to ensure strict compliance with them and **promote a company culture based on principles of honesty, ethics, loyalty, fairness and substantial compliance with rules**.

ANTITRUST COMPLIANCE PROGRAMME

The **FS Italiane Group**, aware of the value of competition (both at a European and national level) as a determining and strategic element of its corporate culture and policy, compliance with which constitutes one of the guiding principles of the Group's Code of Ethics, has commenced the updating of the existing Group Antitrust Compliance Programme ("Programme"), in order to make it consistent with the new Governance model of the FS Italiane Group, which was adopted in 2022.
The Programme is made up of a series of rules, standards of conduct and activities, and is binding for all the FS Italiane Group Companies, which are required to apply them in their respective business organisations, adopting their own Organisational Communications on the matter. In particular, the Antitrust Compliance Handbook and the Antitrust Code of Conduct form an integral part of the Programme, respectively describing the limits imposed by the national and European antitrust laws and setting out in a simple and clear manner the main rules of conduct to be observed by every FS Italiane Group employee in order to ensure full compliance with the antitrust regulations.
The implementation and updating of the Programme are the responsibilities of the Body established, for the Holding Company, under the FS Italiane Group's Antitrust Policy, which is composed of the heads of the organisational units of Regulatory Affairs and Antitrust and Compliance, and which updates it over time in response to any changes in the context, as well as raises the awareness of FS Italiane Group personnel about antitrust issues by preparing specific training seminars.

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.
The Anti-Corruption Governance Model, which was published on 30 March 2023, defines the roles and macro-responsibilities of the Holding Company, Business Unit Leaders, and Group Sub-Holding companies, as well as the related system of interrelationships in anti-corruption matters. In this area, the Holding Company's Anti-Corruption function, operating in Security & Risk:

- ensures the definition of Group strategies, guidance, policies, guidelines and standards in the matter of anti-corruption
- oversee compliance for preventing corruption, including by verifying whether the general requirements of the management system for the prevention of corruption have been met, monitoring its implementation and reporting to governance and control bodies;
- supports the Chief Security & Risk Officer in the centralised oversight of the Anti-Corruption Professional Family.

Risk Management

Part of the ICRMS, the Risk Management organisational unit, operating within the Security & Risk area of FS SpA, ensures the direction and coordination of the relative activities carried out by the companies of the Group, through the definition of strategies and policies, of which it also guarantees the monitoring, implementation control and reporting to the corporate governance and control bodies, and to the internal stakeholders, with particular reference to the Control, Risks and Sustainability Committee.
The corporate Risk Management organisational units implement the strategies, guidelines and policies defined by the Holding Company, ensuring the monitoring of the risks of the company to which they belong. The functions of the Business Unit leaders' Companies also coordinate and verify the implementation of the Framework within the reference Business Unit.
The FS Group's Risk Management Framework consists of the overall system of rules, tools and taxonomies adopted for risk management through specific organisational documents. The 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, among other things:

- identify processes 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[42];
- establish common methods to interpret, analyse, quantify and present the findings of the risk assessment activities;
- promote the dissemination of a corporate risk-focused culture.

The risk approach adopted envisages that risk analyses are conducted by the corporate Risk Management function, together with the process managers concerned, in a differentiated manner depending on the characteristics of the activity being assessed:

- enterprise risk management, concerning all aspects of corporate operations;
- strategic risk management, concerning strategic planning and operational programming;
- international & project risk management, concerning project initiatives and capital allocation, also abroad.

In continuity with the past, in 2023 the main Group companies carried out a Risk & Control Self-Assessment (RCSA) campaign focused on operational and business risks, and one dedicated to the identification of top risks & opportunities on the strategic objectives of the Industrial Plan, with methodological coordination by the Holding company.
The Group's risk management activities are carried out in accordance with the rules and methodologies set out in the specific Framework, inspired by the Corporate Governance Code and national and international best practices, including the UNI ISO 31000:2018 standard "Risk Management - Principles and Guidelines" and the "COSO Enterprise Risk Management Framework - Integrating with Strategy and Performance".

Planning and Management Control System

In line with the strategic guidelines and objectives that the Board of Directors has defined:

- Administration, Finance & Control ensures the definition of the Group's strategies, strategic positioning and the development of the Group's business, and ensures oversight of the planning process, in line with the preset strategic guidelines and objectives, and budget and control, as well as the definition of the financial, budget, tax and Mergers & Acquisitions policies.
- Corporate Affairs ensures the definition of the Group's sustainability strategy, with a view to generating economic, environmental and social value for all stakeholders, and the development, consolidation and monitoring of related objectives and targets.

Internal Audit

This function is independent and objective, provides assurance and serves an advisory purpose, to improve the company's efficiency and effectiveness through a professional and systematic audit approach, aimed at assessing and improving control, risk management and Corporate Governance processes.
Within the FS Group, the head of the Internal Audit Department[43] reports to the Board of Directors, whose Chairperson ensures a liaison between the Internal Audit function and the collective body. The company's Control and Risks Committee - where one has been set up - monitors the Internal Audit function's autonomy, adequacy, efficiency and effectiveness, jointly with the BoD Chairperson.
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 its direct subsidiaries. For the other Group subsidiaries, both Italian and foreign, the creation of an internal audit function is established in agreement with the relevant function of the Business Unit leader company, subject to prior evaluation of: i) the specific features and respective risk profiles; and ii) the efficiency criteria, without prejudice to the objective of effectively monitoring its own ICRMS;
- FS SpA's Internal Audit Department providing guidelines, coordinating and controlling the implementation methods[44] regarding the internal audit processes adopted by the Group companies through: i) defining and updating guidelines, operational models, audit methodologies, IT systems for supporting and monitoring/controlling their correct application; ii) managing the internal audit professional category,

42. Risk analyses related to health and safety (including those required by Legislative Decree no. 81/2008, as amended and supplemented), infrastructure, transport and traffic safety, technical-operational and environmental regulatory compliance, fall for all purposes within the full and exclusive sphere of decision-making, management and operational autonomy of each company, as well as of the persons in charge pursuant to the regulations and provisions in force.
43. In addition to Ferrovie dello Stato Italiane SpA, 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, FSTechnology, ANAS and FS International.
44. With regard to the proper adoption of the internal audit standards defined by the function itself at the Group level.

as Group Process Owner, including the approval of the candidates to head the subsidiaries' internal audit departments.

For the 2023 financial year, FS SpA's Internal Audit function verified, both on an ongoing basis and in relation to specific needs, and in compliance with international standards, the operation and suitability of the ICRMS through an audit plan, based on a structured process of analysis of the main risks, prepared by the Chief Audit Officer and approved by the BoD, after consultation with the Control and Risks Committee and after hearing the Chairperson, the CEO and the Board of Statutory Auditors. It also prepared periodic reports providing adequate information on its activities and forwarded them to the Chairpersons of the Board of Statutory Auditors, the Supervisory Body (for the work falling under its competence), the Control and Risk Committee, and the BoD, as well as to the CEO.
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;
- compliance with laws, regulations, by-laws and applicable standards;
- protection of company assets.

In compliance with international professional standards[45] 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[46]. 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 2024, PwC SpA has performed the statutory audit of the Holding Company and its subsidiaries;
- **Court of Auditors' control**: the Court of Auditors verifies FS Italiane SpA'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 Legislative Decree no. 231/2001 and Supervisory Bodies

The Guidelines for the application of Legislative Decree no. 231/2001 within the FS Group, dated 31 October 2023, which replaced the previous measures introduced since 2002, promote the adoption, implementation, effective enforcement and updating by all the Group companies of their own Organisational, Management and Control Model to prevent unlawful acts covered by Legislative Decree no. 231/2001, as well as the establishment of a Supervisory Body vested with autonomous powers of action and control, and of appropriate reporting channels.
The aforesaid Guidelines, as a rule, require the Supervisory Bodies to have a collective form,[47] and be comprised of: (i) at least two members from outside the Group, one of whom - meeting the specific requirements of Legislative Decree no. 231/2001 - is named Chairperson; and (ii) the head holding office for the company internal audit department, or of another member from outside the Group. The non-Group member who is not Chairperson may be a member of the Board of Statutory Auditors.
Since 2003, FS Italiane SpA has had its own Organisational, Management and Control Model as per Legislative Decree no. 231/2001 (the "231 Model"), which identifies, among other things, potential corruption risks in the relevant sensitive activities, and is regularly updated to ensure ongoing improvement.
FS Italiane SpA has set up an inter-departmental team, "Team 231"[48], coordinated by the Compliance department, tasked with starting, among other things, 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.
All analyses and assessments performed are formalised within Risk Assessment & Gap Analysis documents and the creation of safeguards for each Group Process Owner.
The effectiveness of FS's anti-corruption strategy passes

45. 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.
46. The adoption of which is resolved upon by the BoD of FS and the BoDs of the Business Units Leaders and other subsidiaries listed in Annex 1 attached to the Group Regulations. The BoDs of the Business Unit companies pass resolutions on the adoption of the Audit Charter downstream of the act of adoption from the respective Business Unit Leader.
47. Group companies whose organisations are less complex and/or smaller in size may set up a Supervisory Body with only one member from outside the Group with extensive and specific expertise on the matter.
48. The composition and tasks of Team 231 were last updated with the Group Measure no. 242/LEG-COA of 13 December 2022.

through adequate coordination between the Organisational, Management and Control Model under Legislative Decree no. 231/2001, and the Anti-Corruption Management Model, without prejudice to their respective specific features and prerogatives prescribed by law. Such coordination is ensured by pursuing functional-operational integration between the two documents.
In addition, in line with best practices on the subject, during 2023 FS SpA adopted an International Compliance Program, i.e., a tool for the Group's foreign companies aimed at promoting behaviour based on the principles of loyalty, fairness, honesty and integrity through the definition of measures to prevent, mitigate and manage corporate responsibility risks, to be adopted in compliance with the relevant local regulations.
Model 231 sets out, among other things, any business processes/activities that are potentially related to corruption risk. Specifically, Model 231 identifies:
(i) 32 sensitive activities considered at risk for crimes against the Public Administration;
(ii) 34 sensitive activities considered at risk for the crimes of bribery among private individuals and incitement to bribery among private individuals.
FS SpA's Model 231, most recently updated on 26 October 2022[49] (General Part), and the International Compliance Programme, are available, in Italian and English versions, on the "Ethics, Compliance and Integrity" web page of the company's website, which includes sections dedicated to the Code of Ethics, the Anti-Corruption Policy, Model 231, the Anti-Corruption Management Model[50], the Antitrust Compliance Programme, and the Whistleblowing System, and are the object of periodic training sessions.

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 and Ferrovie dello Stato Italiane SpA internal control model on the recognition, measurement, management and control of tax risk*[51] (the "*Tax risk control model*" or 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, distinguishing them into:

1. **Compliance risk**, as the risk of failure to perform or improper performance of tax compliance;
2. **Interpretation risk**, as the risk of misinterpretation of tax regulations;
3. **Tax fraud risk**, as the risk of committing tax crimes of a fraudulent nature, as a result of relevant conduct by third parties[52].

In addition, the Model is characterised by the following aspects:

- it is a risk-based model, i.e. oriented to prioritise and modulate the different interventions on the TCF based on tax risk assessments;
- it is synergistic with the other safeguards of the internal control and risk management system of FS SpA and the FS Group;
- it is one of the safeguards envisaged under Model 231;
- it requires the involvement of functional managers/contact persons of relevant business processes in the definition and updating of the TCF;
- it ensures the adaptability of the TCF to the internal and external context as a function of the evolving regulatory framework, business operations, and company organisation, as well as of the developments and best practices in the area of tax risk management and control systems.

49. It should be noted that on 27 February 2024, the updated version of Model 231 was approved by the FS Board of Directors in light of the latest legislative developments that have occurred and company organisational changes related to the internal control and risk management system.
50. The Anti-Corruption Management Model was published in its first edition (2018) under the name "Anti-Bribery&Corruption management system."
51. Tax risk control model is adopted and implemented, with the necessary specifications, by Rete Ferroviaria Italiana SpA and Trenitalia SpA which, jointly with FS, have adhered to Cooperative Compliance. However, the Holding company 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 cooperative compliance scheme.
52. Third parties are defined as: individuals, companies or entities of any kind, other than Ferrovie dello Stato Italiane SpA, even if linked to the latter by employment, investment, collaboration, commercial or other relationships.

As for the **Compliance Risk Control Process**, the Model provides for:

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. preparing and sending the annual tax risk report to the Board of Directors and the Cooperative Compliance Office.

With regard to the **Interpretation Risk Control Process**, the Model regulates the detection, measurement, management and control of risk by providing for a decision escalation mechanism, which, based on the level of risk, gives rise to the enforcement of disclosure obligations to the Revenue Agency and the involvement of company top management.

Finally, with regard to the **Tax Fraud Risk**, the Model structures the Control Process into the following phases:

i. identification of Tax Fraud Risk processes;
ii. identification of the Tax Fraud Risk sensitive area and the control safeguards;
iii. assessment of the Tax Fraud Risk associated with sensitive areas and controls.

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 it 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, the Parent Company together with the subsidiaries Trenitalia SpA and Rete Ferroviaria Italiana SpA signed up to the tax cooperative compliance programme as per 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 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 Revenue Agency 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.

Related-Party Transactions

FS Holding has laid down rules for Related-Party Transactions with the aim of ensuring an additional safeguard to guarantee the transparency and substantive and procedural correctness of such transactions, and compliance for the purposes of Law no. 262/05. This initiative is inspired by the principles set forth in Article 2391-*bis* of the Italian Civil Code, Consob Regulation no. 17221/2010, and the applicable provisions of the MAR (Market Abuse Regulation), in compliance with International Accounting Standards and Article 2427 of the Italian Civil Code.

The aforementioned rules consist of the following documents:

- a Group Policy and an application procedure defining the process for the identification, approval and performance of Related-Party Transactions, specifying the principles, roles and responsibilities with which the corporate bodies and company departments of FS Italiane and its subsidiaries must comply in order to ensure the transparency and substantial and procedural fairness of the Transactions;
- the FS Italiane and Group's Administrative and Accounting Procedures governing the disclosure of Related-Party Transactions to be provided in the preparation of the Annual and Half-year Financial Reports, as well as the information flows to the competent departments responsible for the preparation of the aforementioned documents, in order to ensure the adequacy and substantial correctness of the financial reporting itself.

Certified Management Systems

Ferrovie dello Stato Italiane SpA and the main Group companies are steadfastly committed to implementing, maintaining and certifying their Management Systems, adopted on a voluntary basis, for the ongoing improvement of the Group's performance[53], using these tools to strengthen the environmental and occupational health and safety components of the internal control and risk management system.

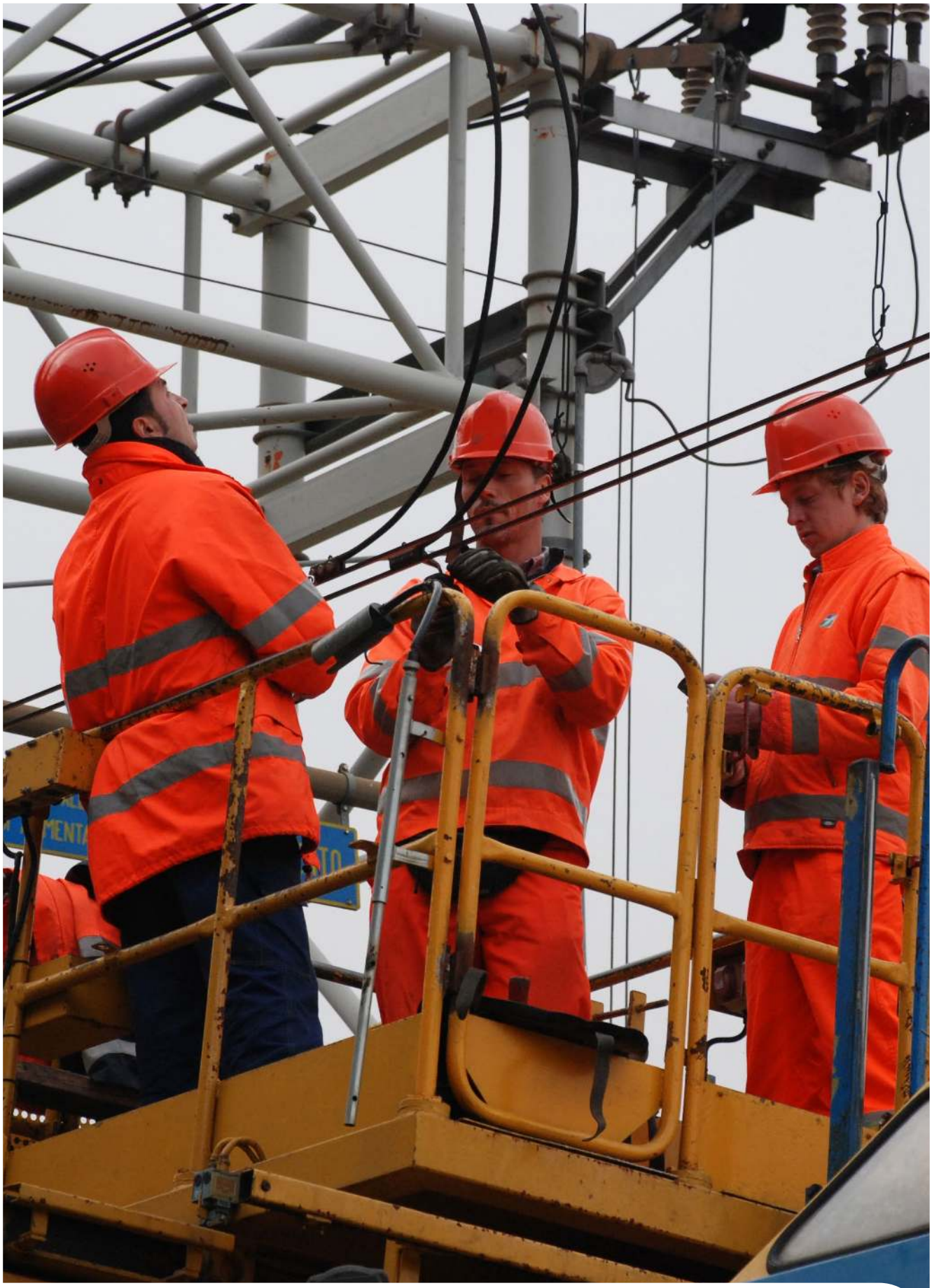
	QUALITY	ENVIRONMENT	OCCUPATIONAL HEALTH AND SAFETY
FERROVIE DELLO STATO ITALIANE		✓	✓
RFI RETE FERROVIARIA ITALIANA – GRUPPO FERROVIE DELLO STATO ITALIANE	✓	✓	✓
TRENITALIA – GRUPPO FERROVIE DELLO STATO ITALIANE	✓	✓	✓
ITALFERR – GRUPPO FERROVIE DELLO STATO ITALIANE	✓	✓	✓
BUSITALIA – GRUPPO FERROVIE DELLO STATO ITALIANE	✓	✓	✓
FERSERVIZI – GRUPPO FERROVIE DELLO STATO ITALIANE	✓	✓	✓
MERCITALIA LOGISTICS – GRUPPO FERROVIE DELLO STATO ITALIANE	✓	✓	✓
SISTEMI URBANI – GRUPPO FERROVIE DELLO STATO ITALIANE		✓	
FERROVIE DEL SUD EST – GRUPPO FERROVIE DELLO STATO ITALIANE	✓	✓	✓
anas – GRUPPO FS ITALIANE	✓	In process	In process

Key:

✓ Certification obtained

In process: Certification in the process of being obtained

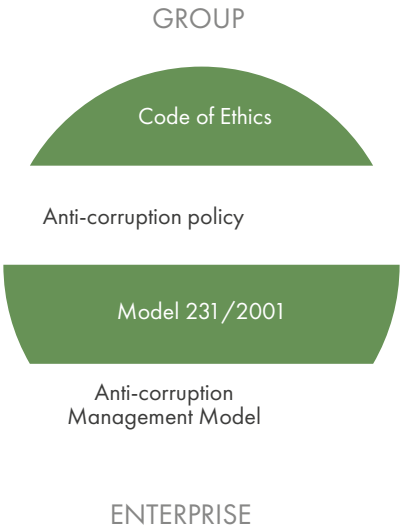
53. For more information about the certifications and the scope of the Group's operating companies' Management Systems, please refer to the tables in the *Company highlights* annex attached to this Report.



Corruption risk management: Anti-Corruption Framework

The Ferrovie dello Stato Italiane Group is committed to preventing and combating all forms of corrupt practices in the conduct of its business, according to the **zero tolerance for corruption** principle and through joining the United Nations' Global Compact, the tenth principle of which is to "work against corruption in all its forms". With a view to the continuous improvement of the corruption prevention management system, work was completed in 2023 on updating the composition of the "Anti-Corruption Framework" ("Framework"), which the Group has long had in place to systematically and uniformly ensure corruption prevention, and support its commitment to sustainable development, value creation and the dissemination of a culture of honesty, legality and fairness in its actions.
The Anti-Corruption Framework consists of the set of documents containing the principles, guidelines and rules on anti-corruption and, specifically:

- documents applicable at Group level:
  - Group Code of Ethics;
  - Anti-Corruption Policy of the Ferrovie dello Stato Italiane Group ("Policy");



- documents applicable at company level:
  - Organisational, Management and Control Model under Legislative Decree no. 231/2001[54], "Model 231", for activities and safeguards related to criminal offenses relevant to corruption;
  - Anti-Corruption Management Model ("Anti-Corruption Model")[55].

The project to strengthen the set of anti-corruption documents includes the publication of the review of the Anti-Corruption Policy and the Anti-Corruption Management Model during 2024.
FS Italiane SpA's direct and indirect subsidiaries have adopted the Framework, which they adjust to their specific organisation and business, while remaining in compliance with the applicable legislative obligations.
The Anti-Corruption Policy, the implementation of which is mandatory for all FS subsidiaries, both Italian and foreign, sets out and communicates the Group's strategy for preventing and combating corruption, with the aim of:

- standardising and integrating in a unified framework for all Group companies, both Italian and foreign, the Group's principles and safeguards for preventing and combating corruption;
- raising awareness of the rules and behaviours that Group people, wherever they operate (including abroad), and third parties with whom the Group establishes professional or business relationships (e.g., suppliers, business partners, consultants) are required to observe.

The Policy, in fact, also applies to and is mandatory for third parties: in order to ensure that it has been fully disclosed to, and to impose its observance by, all recipients, it is published - also in English - on corporate websites and intranets, as well as referred to in specific contractual clauses and/or statements that ensure that it has been fully disclosed to third parties and impose its observance.
The Policy provides for cross-cutting control principles and standards of behaviour for 14 risk areas[56]: the FS Group does not allow any behaviour contrary to the

54. Foreign companies for which, due to the activity they carry out, the regulations on the administrative liability of entities provided for in Legislative Decree no. 231/2001 apply, adopt the principles governed in accordance with the legal system of the country where the company has its registered office. For other foreign Companies, please refer to the rules and principles laid down in the applicable domestic regulations.
55. The Anti-Corruption Management Model was published in its first edition (2018) under the name "Anti-Bribery&Corruption management system".
56. The Anti-Corruption Policy identifies the following areas as most sensitive to corruption risk: a) Relations with the Public Administration (understood in all its structures) b) Relations with third parties, c) Business Partners, Promoters and Sales Consultants d) Gifts and hospitality e) Facilitation and extortion payments f) Relations with political and trade union organisations g) Advisory, specialist and professional engagements h) Contracting of works, supply of goods and provision of services i) Extraordinary transactions j) Selection, recruitment, management and development of Personnel k) Sponsorships, Co-marketing (and/or partnerships), contributions to associations, entities and foundations and donations l) Obtaining and managing public or private financing/grants m) Real estate management n) Accounting records.

principles, requirements and prohibitions under the Policy and the applicable anti-corruption regulations.
The strategies defined at the Group level in the Anti-Corruption Policy are applied and implemented at each company in the corporate Anti-Corruption Model by (i) identifying, on the basis of specific corruption risk analyses, prevention, control and organisational tools to address specific risks and company core processes, and (ii) defining the governance of the internal process of corruption prevention management with related planning, monitoring and reporting activities.
In compliance with the prerogatives of fully operational, organisational and risk management autonomy of Group companies, it is the responsibility of each company to adopt and effectively implement and maintain their own Anti-Corruption Model, according to specific organisational and business features and in compliance with applicable regulations.
With regard to FS, the Anti-Corruption Model sets out the following areas as being most exposed to corruption risk: Procurement and Contracting, Advisory Engagements, International Business Development, Membership Fees, Sponsorships, Co-marketing, Gifts and Donations, and Human Resources. The update of the Model will take into account the results of the anti-corruption risk assessment campaign, which was launched in December 2023 as part of the Company's periodic corruption risk assessment activities. Following the analysis of the findings, and the assessment and prioritisation of the areas that are most at risk, any related mitigation and reinforcement actions will be identified, even with a view to the continuous improvement of the management system for the prevention of corruption.
The current campaign follows the previous one carried out in 2020-2021, and was launched at a stage of preliminary stabilisation after the major transformation process that involved FS in the 2022-2023 two-year period.
The standards of conduct set out in the anti-corruption documents are implemented in corporate provisions, so that the rules to be complied with during activities are immediately apparent and can therefore be easily applied, and are subject to monitoring activities by the Anti-Corruption function (including in synergy with other control functions) and training sessions.
FS's Anti-Corruption function, operating within the Security & Risk area, oversees the adoption of the Anti-Corruption Management Model at FS SpA, and verifies whether it is actually implemented at the Company, reporting on the matter to corporate governance and control bodies and internal stakeholders, and, more generally, ensures compliance oversight for the prevention of corruption at FS SpA, including by verifying the fulfilment of the general requirements of the management system for the prevention of corruption.
As a function of the Holding Company, it also ensures the direction and coordination of the functions that make up the Anti-Corruption professional category.
The Anti-Corruption function sets out a time schedule on an annual basis, in which activities aimed at implementing and improving the anti-corruption system are identified, along with the relevant parties and the timing for implementation.
On 30 March 2023, the Anti-Corruption Governance Model was published, which formalises the Anti-Corruption professional category within the Group, and which defines the roles and macro-responsibilities of the Holding Company, Business Unit Leaders, Sub-Holding/Group companies, and the related system of interrelationships in anti-corruption.
As part of the UNI ISO 37001:2016 certification project on Anti-Bribery Management Systems, the first 2023 edition of the course for Internal Auditors 37001 was held with the participation of resources from the Anti-Corruption professional category, and other departments of FS SpA, and a Group campaign was carried out to collect spontaneous applications to participate in the next sessions. Given the very large number of registrations, an event was organised with all candidates (over 500 from 19 Group companies) dedicated to the initiative, which opened with a greeting from the Chairwoman of FS SpA, and speeches from the Chairman of ANAC and the Chief Security & Risk Officer.
The highlights of the event were disseminated on the intranet on the occasion of the "International day against corruption," as further evidence of the FS Group's commitment, starting with top management, to encourage and promote the spread of a corporate culture inspired by the aforementioned principle of "zero tolerance for corruption."
The Anti-Corruption function, including through the Chief Security & Risk Officer, has reported on three occasions to FS's governance and control bodies on initiatives undertaken, projects initiated, and developments in company rules under its competence.

Other rules and policies to safeguard processes at risk of corruption

The Parent Company also reinforced protection against corruption in 2023 by issuing specific rules and policies.

NEW UPDATE
Issue and revision of rules and policies safeguarding certain processes at risk of corruption

- NEW Sanction Policy
- UPDATE Procedure for Monitoring Corrective Actions deriving from Internal Audit activities
- NEW Procedure for considering litigation actions against Public Authorities
- UPDATE Management of purchases of goods and digital and technological services associated with and/or with digital impact
- NEW Qualified Supplier List Management
- UPDATE Petty cash, advance orders and company credit cards
- NEW Rules on Related-Party Transactions
- UPDATE Guidelines on Negotiation Activities of the Ferrovie dello Stato Italiane Group Companies
- UPDATE Procedure for handling whistleblower reports
- UPDATE Rules on the work of the Financial Reporting Manager of Ferrovie dello Stato Italiane SpA – Law no. 262/2005 – Art. 154-bis of the Consolidated Act on Finance
- NEW Application of the rules on Related-Party Transactions
- UPDATE Sustainable Procurement Management of FS SpA
- UPDATE Ferrovie dello Stato Italiane Group Guidelines on Gifts and Hospitality
- UPDATE Advisory Engagements
- UPDATE Guidelines on the application of Legislative Decree no. 231/2021 within the Ferrovie dello Stato Italiane Group
- UPDATE Procedure for the Appointment to Managerial Positions within the Ferrovie dello Stato Italiane Group
- UPDATE Procedure for the management of Sponsorships, Partnerships, Co-Marketing Initiatives
- UPDATE Talent Management System of the Ferrovie dello Stato Italiane Group
- NEW FS Group Risk Management Policy
- NEW Supplier Qualification
- NEW Vendor Rating
- NEW International Compliance Program

Whistleblowing and whistleblower report management procedure

In 2023 FS SpA adopted the updated **Procedure for handling whistleblower reports**, in accordance with Legislative Decree no. 24 of 10 March 2023 implementing Directive (EU) 2019/1937.
The Procedure governs, at Group level, the receipt, analysis and handling of reports sent (also anonymously) by people from inside or outside the FS Group on events that could involve: (i) any violation of the Code of Ethics and/or the Model 231, the procedures for their implementation, and/or of the Anti-Corruption Policy and the Anti-Corruption Management Model, and/or of company rules, which in any case could cause damage or jeopardise the FS Group, even just to its image or reputation; (ii) administrative, accounting, civil or criminal offences; (iii) unlawful conduct relevant under Legislative Decree no. 231/2001; and (iv) violations of European Union law and other unlawful conduct under Legislative Decree no. 24/2023.
The Procedure for handling whistleblower reports provides for the following forms of protection of the whistleblower, and, specifically: (i) the confidentiality of the whistleblower's identity is guaranteed from the receipt of the report; (ii) any direct or indirect form of retaliatory or discriminatory measures and conduct taken against the whistleblower as a result of the report, including those of omission, even attempted or threatened, as well as those aimed at third parties related to the whistleblower, such as relatives, colleagues, legal entities of which the whistleblowers are the owners or for which they work, which operate in a working environment related to the FS Group, is prohibited (and sanctioned to the extent permitted by its powers and authority).
The protection measures described above are guaranteed to the whistleblowers even if the report later turns out to be unfounded, as well as to the personnel who cooperat-

ed in the investigation activities on the reported facts. In order to ensure that retaliation against the whistleblower is not carried out even after some time has passed since the report was made, monitoring of the whistleblower's work situation for a period of two years from the date of the report is activated for FS Group employees by the Ethics and Reporting Committee/Supervisory Body.
The Company protects the rights of the persons involved, first of all by assuring, in order to ensure appropriate confidentiality, that any notice regarding their identity strictly follows the "need to know" criterion.
Upon receipt of a notice through the dedicated channels, the Ethics and Reporting Committee and/or the Supervisory Body, downstream of the preliminary audit, initiate, if the prerequisites are met, the relevant information-gathering activities, making use of the Audit function. Any reports concerning one or more Group companies are forwarded to the competent bodies of the company concerned for the relevant investigations.
The Ethics and Reporting Committee, and the Supervisory Body ensure periodic reporting flows on the reports handled to the Top Management, and the Governing and Control Bodies.

FS SpA set up an **IT platform** as a preferential channel **for handling 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 unlawful conduct or violations of:

- the Code of Ethics, and the Organisational, Management and Control Model under Legislative Decree no. 231/2001 of FS SpA, and the procedures for their implementation;
- the Anti-Corruption Policy and Anti-Bribery Management System;
- laws or regulations, or any further unlawful conduct under Legislative Decree no. 24/2023.

The Group's Code of Ethics, which was updated in February 2018 and is available on the company intranet and website, s**tates 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 2023, **FS SpA's Ethics and Reporting Committee received and processed 43 reports**, all relating to subsidiaries, 28 of which were closed/archived. Furthermore, during the same period, the Ethics and Reporting Committee also closed/archived 24 reports received prior to 2023, which also related to subsidiaries.
In 2023 **FS SpA's Supervisory Body received and processed 18 reports**, 1 of which concerned FS SpA, and the remaining 17 to subsidiaries, which were closed/archived. Furthermore, during the same period, the Supervisory Body closed 1 report received prior to 2023, concerning FS SpA.
In 2023 subsidiaries received a total of 480 reports, of which 240 were closed/archived in the same year. Furthermore, in 2023 subsidiaries closed/archived 295 reports received prior to 2023.

Anti-corruption policy awareness, communication and training

The Anti-Corruption Policy and Model recognise the strategic nature of training and communication as part of the anti-bribery management system, in the belief that knowledge of the rules placed to protect action and the dissemination of a culture of honesty are one of the indispensable prerequisites for the conscious application of the relevant regulations.
During 2023, the e-learning course on Legislative Decree no. 231/2001 and FS Model 231 was delivered to all employees with 74 % of the company population participating.
At FS SpA, two training pills (on Anti-Corruption Policy and Legality Protocols/Integrity Pacts) were also released in 2023; the digital course on "Hospitality and Gifts" (delivered from 2022) was updated; and the new course on "Facilitation Payment" (scheduled to be delivered in early 2024) was prepared. These "vertical" initiatives followed the e-learning course on the Anti-Corruption Model (launched in late 2019 and early 2020), which continued to be delivered for new hires.
The "Hospitality and Gifts" course and the above pills were made available to the Group's Anti-Corruption supervisors for the purpose of delivery at subsidiaries.
Four Anti-Corruption professional category meetings were held as a further means of disseminating and strengthening the anti-corruption culture in the Group.
As part of the UNI ISO 37001:2016 certification project, the first 2023 edition of the course for Internal Auditors 37001 was held with the participation of resources from the Anti-Corruption professional category, and other departments of FS SpA, and a Group campaign was carried out to collect spontaneous applications to participate in the next sessions. Given the very large number of registrations, an event was organised with all candidates (over 500 from 19 Group companies) dedicated to the initiative, which opened with a greeting from the Chairwoman of FS SpA, and speeches from the Chairman of ANAC and the Chief Security & Risk Officer.
The highlights of the event were disseminated on the intranet on the occasion of the "International day against corruption," as further evidence of the FS Group's commitment, starting with Top Management, to encourage and promote the spread of a corporate culture inspired by the principle of "zero tolerance for corruption."
With regard to **communication activities**, the International Compliance Program was published on the corporate intranet. In the "*Ethics, Compliance and Integrity*" section of the FS website, which houses in a single "environment" the Code of Ethics, Model 231, the Group Anti-Corruption Policy, the Anti-Corruption Management Model, the Antitrust Compliance Program, and the procedure for handling whistleblower reports - whistleblowing, as well as top management's notices/messages on the subject, in addition to describing the relevant organisational risk prevention safeguards, the procedure for handling whistleblower reports updated in line with the relevant regulations was published, and a subsection was added, which was dedicated to the International Compliance Program, also published in English.
In addition, work commenced on a training/communication plan on Whistleblowing.
The Anti-Corruption function, including through the Chief Security&Risk Officer, reported on two occasions to the FS governance and control bodies on initiatives undertaken, projects initiated, and developments in company rules under its competence.

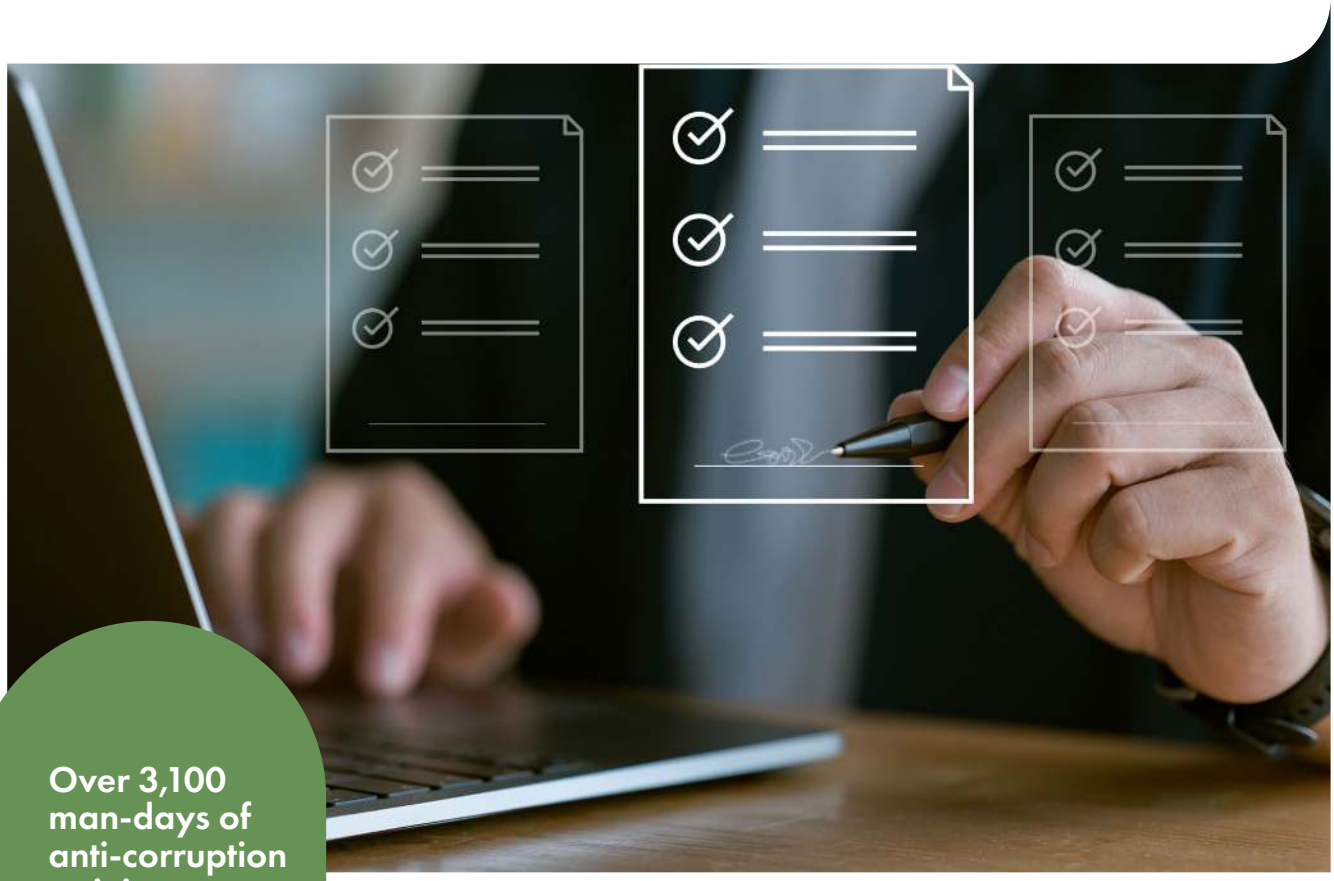
Protection of Human Rights

The FS Group promotes the protection of human rights among its stakeholders, 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. Specifically, 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 FS 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[57], Code of Ethics, Model 231, Anti-Corruption Policy and Anti Bribery Management Model. 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.

57. Issued in 2019. In subsequent years, the Group's main operating companies issued their own Sustainability Policy.



Over 3,100 man-days of anti-corruption training

Furthermore, in November 2023, the CEO of FS signed the "Businesses for People and Society" Manifesto, an initiative of the UN Global Compact Network, whereby it committed to strengthening the role of the social dimension of sustainability within company strategies while respecting, for example, human and labor rights, and generating value in supply chains.
The Group maintains its commitment to prevent any type of human rights violation, along the entire value chain, through:

- the use of specific, standard clauses[58] 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[59];
- the pursuit of better methods for supply chain management thanks to the participation in the Railsponsible works, with the major railway companies, and 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, services and works;
- rights protection for passengers with disabilities and reduced mobility through assistance services for passengers with physical, sensory or motor disabilities at 332 stations; the service is organised by the network of Sale Blu centres (15 local centres, and the new national Sala Blu centre, wide training dedicated to the operators involved (in 2023, 6 training sessions were provided, which were aimed at improving the technical-relational skills, which involved around 120 resources);
- protecting the rights of disadvantaged people who seek shelter at railway stations through the network of help centres at FS premises inside or near railway stations[60].

58. With specific regard to the awards 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.
59. In the second half of 2017, RFI introduced a new criterion for supplier qualification in tenders which considers 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.
60. For more details, please refer to the paragraph *Support to communities and local development.*

ESG ratings 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/ASSESSMENT	Ranking	Details
CDP SUPPORTER 2022	In 2023, the Group confirmed the score **A-** in the CDP Climate Change questionnaire, positioning itself in the **Leadership** range, above both the European average and the railway sector average. The CDP assessment – which involves more than 28,000 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.	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.
Moody's Analytics	The Group's ESG profile was rated "**Advanced**" in the overall assessment (total score: **67**/100), **ranking sixth** among 42 companies **at European level** in the "Transport and Logistics" segment.	Moody's Analytics provides reliable and transparent data and assessments in several risk areas-credit; climate; ESG (Environmental, Social, and Governance) - to enable market operators to identify opportunities and manage changing business risks.
MORNINGSTAR SUSTAINALYTICS	The Group received a **risk rating of 15.2**, falling under the low ESG risk bracket.	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.
MSCI	In 2023 the Group confirmed its rating **BBB**, in the **«Average» bracket.**	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.
Sustainable Fitch	The Group received a score of **69** (out of 100) for ESG Entity **Rating**, achieving the rating of **2** out of 5 (where 1 is the best and 5 is the worst).	Sustainable Fitch, Fitch's ESG rating system, assesses the sustainability performance and profile of issuers and their instruments, based on well-defined methodologies and data collected from the same sources normally used by the group for credit ratings.

In 2023, **the Group also received many awards**, most notably:

FS GROUP FOR THE PEOPLE

For the ***"Mi riscatto per il futuro"*** (I redeem myself for the future) project"[61],the FS Group received two awards: in Milan the "**Robert F. Kennedy Human Rights Italy 2023**" Award from the no-profit organisa-tion RFK Human Rights Italy, which each year honours individuals, institutions and organisations that have distinguished themselves in the defence of human rights; and in Rome the **international "Sustainability & Excellence EuroMed Award"** dedicated to those who have distinguished themselves in the fields of culture, business, art and cooperation among peoples.

The FS Group won the **SMAU Innovation Award** for supporting the projects of startups "Mine Crime"[62] and "Xrit"[63], with experiments to improve the activities of companies in the Infrastructure Business Unit.

Italferr, the engineering company of the FS Group, was firmly confirmed for the fifth consecutive year in the rankings compiled by **Engineering News-Record**[64].

The FS Group was confirmed as "**Best in Media Communication**", the award established by Fortune Italia and Eikon Strategic Consulting that testifies to the goodness of the FS Group's communication activities. To this must be added the special "**clarity of message**" award for the "**Talking Construction Sites**" pro-ject.

The FS Group remains among **the leaders** in the rankings compiled by **Potential Park**, a Swedish talent communication company, ranking second overall for the best online job search experience and achieving **first place** in two of the four search topics: **Career website ranking and Applying Online Ranking**.

The Logistics Business Unit won two awards, "**The Logistics company of the year**" in the sections of "**Innovation in Transport**", and "**Innovation in Technology and Logistics 4.0**." The award, given by As-sologistica, celebrates companies that stand out for innovation, operational efficiency and significant con-tribution to the growth of the industry. Specifically, the awards refer to the "**commuter train**"[65] and "**smart train**"[66] projects.

The FS Group won, for the second consecutive year, the **Minerva Rome Company of Excellence Award 2023 edition**, promoted by Unindustria Lazio and Federmanager Roma. The award ceremony aims to involve member companies in a path to enhance the contribution given by women to the world of la-bour, giving visibility to the most virtuous and innovative practices of personal and professional growth.

The business magazine Capital awarded "**Company of the Year 2023**" to Iryo, a subsidiary of Trenitalia, which operates in the high-speed rail sector in Spain. The Asociación de Relaciones Empresariales del Mediterraneo (REM) association, on the other hand, honoured Iryo as the best business entity in the Ali-cante area and beyond.

Anas won the **Mediastars award**, an Italian advertising award promoted by Media Star Editore, for the second consecutive year. The FS Infrastructure Business Unit company was honoured for its "**Everything for Her**" spot in the "**Just drive when you drive**" road safety campaign, winning the **Special Stars tech-nical award for Copy, in the Television Section**.

Ferrovie dello Stato Italiane is confirmed as the first company in the Transport Business Unit to appear in the **ESG Perception Index**[67].

The **Diversity Brand Index (DBI)[68])** includes FS Italiane among the 10 most inclusive top brands in Italy, obtaining the most important Italian recognition in D&I, the Diversity Brand Award.

61. The project stems from collaboration with the Ministry of Justice and the Prison Administration Department to reiterate the importance of a rehabilitative and re-education sentence, with a view to social reintegration. Thanks to this collaboration, some inmates of the "Milano Opera" Prison House have been hired on a fixed-term contract by Trenitalia and Rete Ferroviaria Italiana. The goal is to involve an increasing number of penitentiaries.
62. Mine Crime has carried out a trial focused on smart-data applied to the protection of FS Group assets with RFI possibly using this technology in the future with geolocated data to better understand any possible threats and risks to major Italian railway stations.
63. Through the XRS® hardware, it generates a 3D laser scan of construction sites and enables the efficiency of technical management of construction sites to be improved.
64. America's most authoritative engineering and construction magazine that reports on the top engineering companies based on their global revenue and in relation to international projects.
65. Logistica Uno's pioneering "commuter train" project, in partnership Sanpellegrino Group and Mercitalia Rail, offers an innovative rail transport solution: not only does it increase the availability of freight transport, but it is a concrete response to the growing shortage of long-distance road service. Through the efficient use of the rail mode, the project offers a flexible and sustainable solution, reducing CO_2 emissions by 85%, and relieving traffic congestion caused by heavy vehicles on Italy's main arterial roads.
66. Mercitalia Intermodal's "smart train" solution is applied to rail wagons in order to make freight transport more efficient, using a network of sensors installed on the wagons that provide greater connectivity through IT systems that send data to handhelds consulted by maintenance workers.
67. Developed by the Reputation Science Observatory, a reputation analysis and management company. The Observatory considers the largest companies in the Italian market to produce, every six months, a ranking of the top 200 companies perceived as most sustainable on the web. The analysis model assesses brand proximity to 17 pillars of sustainability defined by the UN, and produces for each of them an indicator from (0 to 100) based on qualitative-quantitative and structural parameters.
68. The Diversity Brand Index is research under the responsibility of Diversity and strategic consulting firm Focus MGMT to measure and reward the ability of companies to develop a culture geared toward inclusion and diversity.

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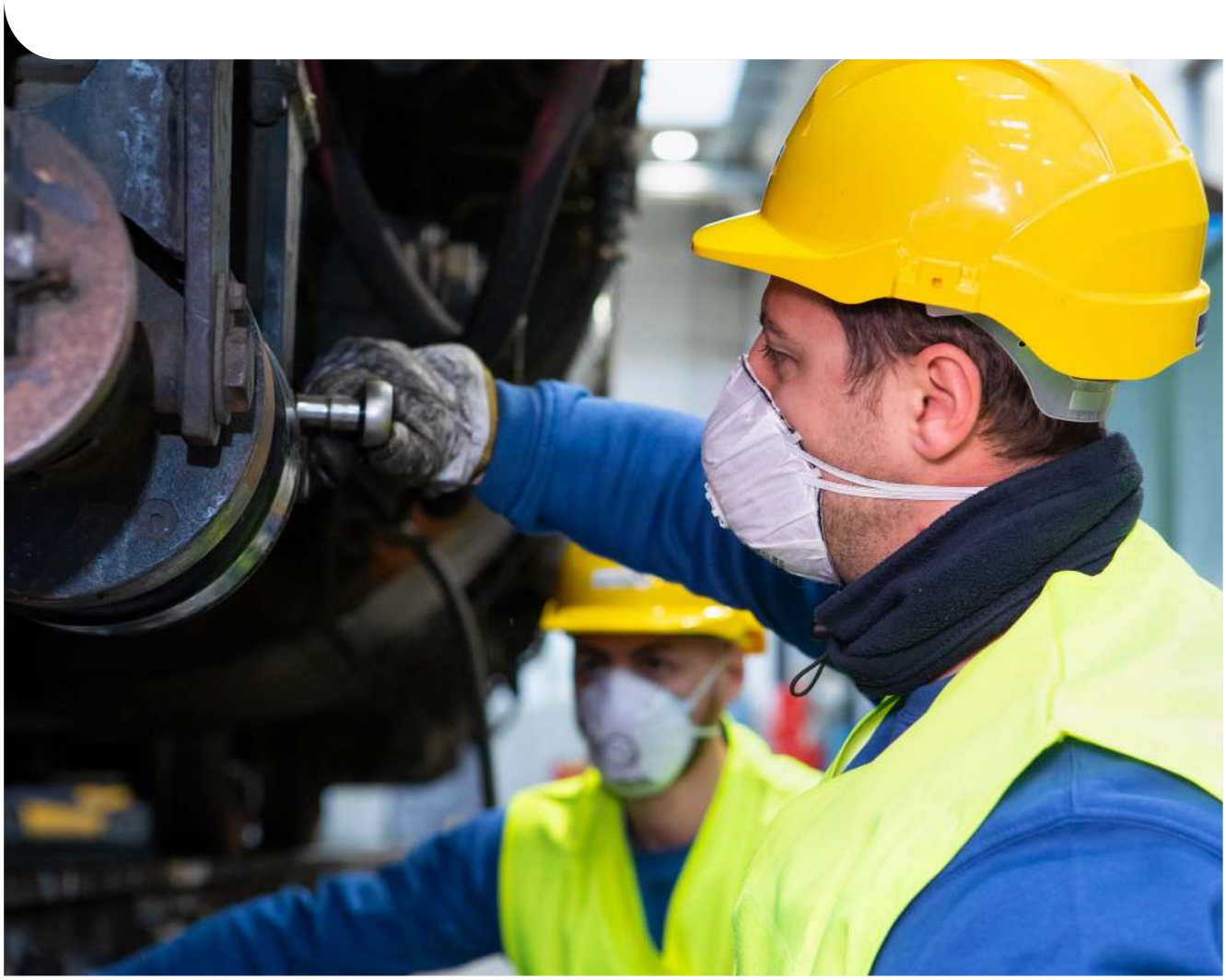
INTEGRATED MANAGEMENT OF RISKS AND OPPORTUNITIES

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.
For this reason, the Group adopts a Risk Management Framework, which forms an integral part of the Internal Control and Risk Management System (ICRMS), and applies to the entire Group. Within this framework, the Risk Management organisational unit of Ferrovie dello Stato Italiane, operating in the Security & Risk area, ensures direction and coordination of the related activities carried out by the Group companies, through the definition of strategies and policies, for which it also ensures the monitoring, implementation control and reporting to corporate governance and control bodies and internal stakeholders, with specific regard to the Control, Risks and Sustainability Committee.
The corporate Risk Management organisational units implement the strategies, guidelines and policies defined by the Holding Company, ensuring the monitoring of the risks of the company to which an entity belongs. In addition, the units of the Business Unit Leaders coordinate and verify the implementation of the Framework within the relevant Business Unit. In continuity with the past, in 2023 the main Group companies carried out a Risk & Control Self-Assessment (RCSA) campaign focused on operational and business risks, and one dedicated to the identification of top risks & opportunities on the strategic objectives of the Industrial Plan, with methodological coordination by the Holding company.
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 2023 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. In carrying out its risk management activities, the FS Group adopts the following taxonomy divided into 4 macro-categories (Strategic, Operational, Compliance, ESG) that group together specific types of risk:

STRATEGIC	**Market**	Risks arising from market developments that may impair or reduce the ability to create added value and profitability
	Macroeconomic	Risks describing macroeconomic shocks that may affect a country, a continent, or have global repercussion
	Financial	Risks involving unexpected variability of investments (exchange rate, interest rate, liquidity)
	International	Risks arising from the Group's initiatives in international contexts
OPERATIONAL	**Infrastructure & Means**	Risks with negative effects on the management and development of the rail and road network and infrastructure as well as the rail, bus, ferry fleets
	Technology, Digital & Cyber	Risks related to the digital transition process, development and management of IT systems, also in relation to cyber crime events
	Procurement	Supply chain risks (supplier qualification, negotiation process, contract management)
	People and Organisation	Risks arising from lack of in-house expertise, inadequate training programs, inadequate turnover planning process, and ineffective recruitment and retention policies
	Safety	Risks related to environmental protection activities, occupational safety, and operational safety

COMPLIANCE	**Regulatory**	Risks involving adverse change in the regulatory framework within which the Group and its Companies operate and risks of violations of international and/or national laws and regulations
	Legal and Contractual	Risk of breach of contract and litigation management
ESG	**Environmental**	Risks related to climate change and policies for the transition to a low-carbon economy
	Social and protection of human rights	Risks related to social tensions and lack of or reduced respect for human rights
	Ethics	Risks arising from intentional misconduct or corrupt behavior by persons inside or outside the Group, in order to obtain an improper or illicit advantage



The main events to which the FS Group is potentially exposed and an indication of the main management actions adopted are briefly and not exhaustively represented below, with the clarification that, based on the Governance model adopted by FS, the risk analyses relating to health and safety (including those provided for by Legislative Decree no. 81/2008, as amended and supplemented), the safety of the infrastructures, transport and traffic, as well as the technical-operating and environmental regulatory compliance, fall for all purposes within the full and exclusive sphere of decision-making, management and operational autonomy of the individual Group companies and of the persons in charge, in accordance with the laws and regulations in force.

STRATEGIC RISKS

Risks	Management actions	Opportunities
Market		
• Crisis in business-relevant sectors or customers • Increased competitiveness and new entrants • Changing or evolving customer habits and needs	• Customer retention activities through the improvement of the quality of service offered, dynamic pricing policies, differentiated marketing actions by segments and technological investments for the integration of sales channels • Strengthening and modernization of the fleet including through rationalization of the maintenance and sales network	• Legislative and market orientation toward environmentally sustainable mobility • Growth in tourism, leisure and bleisure travel • Industrial re-shoring and near-shoring
Macroeconomic		
• Inflationary scenario and price increases • Commodity and raw material price volatility • Unfavourable macroeconomic environment • Geopolitical instability and conflicts • Health and social emergencies	• Continuous monitoring of trends in key macroeconomic indicators and commodity and energy price trends • Energy efficiency of both fleet and industrial facilities including through self-generation of renewable energy • Search for insurance coverage and stipulation of contractual clauses (fuel surcharge)	
Financial[69]		
• Dependence on government grants • Failure to meet obligations by clients or counterparties to a financial instrument • Difficulty in meeting obligations associated with financial liabilities • Fluctuation in interest rates and exchange rates	• Definition of minimum requirements for financial counterparties • Due diligence of new relevant customers • Monitoring cash flow, financing, and liquidity needs • Opening dedicated credit lines • Hedging transactions through derivative instruments	
International		
• Exposure of foreign invested capital to political, social and economic changes (Country Risk) • Increased competitiveness (European open access market from December 2020 and mandatory tendering on all European public transport service segments from January 2024)	• Country attractiveness model and target countries • Centralization of the international business steering and coordination function • Capital Allocation Procedures • Continuous monitoring of the geo-political framework	• Export of expertise (e.g., engineering, consulting and certification services) • Development of transport services in European markets

69. The examination of risks and consequent actions is supplemented, merely for the financial risk component, by the broader disclosure provided in Note 43 to the consolidated financial statements.

OPERATIONAL RISKS

Risks	Management actions	Opportunities
Infrastructure & means		
• Critical issues/delays in the implementation of infrastructure works • Failure/obsolescence of facilities and technologies supporting rail and road infrastructure • Infrastructure performance and connectivity gaps • Intentional acts (physical or logical) to damage and/or destroy company assets • Fleet obsolescence/unavailability • Temporary unavailability of infrastructure	• Whole-life asset management model • Risk-based approach (project risk management) • FS-NRRP control room • Fleet renewal • Capacity enhancement of the rail network and enhancement of stations and related services • Monitoring of physical, economic and financial performance of infrastructure interventions • Advanced diagnostics and predictive maintenance • Strengthening of security and video surveillance systems	
Technology, Digital & Cyber		
• Excessive concentration of essential services on digital platforms • Critical issues in managing obsolescence of technology and digital architecture and infrastructure • New cyber vulnerabilities related to the introduction of new systems/platforms • Obsolescence/inadequacy/ unavailability of technology and digital tools • Failure to leverage enterprise data for business uses • Increased numerosity and sophistication of cyber attacks • Loss of confidentiality, integrity or availability of data	• Distribution of essential services across multiple digital platforms • Updating technological and organizational "up-to-date" measures • Definition of crisis management procedures • Activation of Enterprise Data Management methodologies and solutions • Strengthening of the Cyber Security Operation Center (C-SOC) • Adoption of Group common platform • Training and awareness initiatives	New digital (Artificial Intelligence) and technological tools (Quantum Computing)
Procurement		
• Criticality in the availability of goods/ services in the marketplace • Inadequacy of contractors/general contractors and/or technical subjects • Inadequate definition of needs for goods, services and works	• Supplier qualification system and vendor rating (including "ESG rating") • Definition of governance and procedures • Periodic monitoring of the procurement plan and any related updating of the requirements plan • Definition of flexible contractual instruments • Insourcing of critical processes	
People and Organisation		
• Specialized skills that are difficult to find in the marketplace • Loss of key personnel • Staff motivation, sense of belonging and worklife balance • Remuneration policies and compensation system • Critical issues in the area of labor relations • Staff understaffing	• Talent Performance Development System • Remuneration, training and job diversification policies • Development and optimization of tools and methodologies to support selection and training processes • Diversity&Inclusion plan and interventions to support the Group's internal people (internal caring, social policies, engagement) • Signing of agreements and understandings related to work organization • Strengthening of recruitment plan	Increased attractiveness of the Group in the labor market

COMPLIANCE RISKS

Risks	Management actions	Opportunities
Regulatory		
• Changes in national and international standards and regulations • Non-compliance with national and international legislation/regulations/ standards	• Monitoring of legislative and regulatory developments • Talks with public bodies and other national and international stakeholders • Definition, implementation and monitoring of compliance programs • Training/information initiatives	
Legal and contractual		
• Breaches of contract • Contracts not in line with current regulations/procedures • Disputes with suppliers, customers, staff or third-party entities	• Monitoring litigation developments • Accounting provisions for litigation losses	

ESG RISKS

Risks	Management actions	Opportunities
Environmental		
• Acute and chronic physical climate hazards • Transitional climate risks • Incomplete information for establishing adaptation plans	• Vulnerability assessment of assets and territories • Real-time monitoring of climate phenomena, assets and territories • Planning of asset-specific adaptation interventions • Design and implementation of natively climate-resilient assets • Scenario analysis for assessing business impacts and resilience	Access to capitals through sustainable finance instruments
Social issue and protection of human		
• Discriminatory practices • Critical issues with internal and external stakeholders	• Group Code of Ethics • Internal and external training, information and communica-tion campaigns • Diversity&Inclusion initiatives • Stakeholder engagement initiatives	Increased attractiveness of the Group in the labor market
Ethics		
• Bribery, fraud and/or collusive arrangements between employees and counterparties, both public and private	• Code of Ethics and Group Anti-Corruption Policy • Corporate management and control models • Adherence to the United Nations Global Compact • Internal and external training, information and communication campaigns • Signing of conventions, protocols and agreements with institutional Authorities/ Bodies • Monitoring implementation of NRRP works	

DIAMANTE 2.0
DIAMANTE 2
RFI

Climate-related risks and opportunities

In accordance with the European Commission's *Guidelines on non-financial reporting: Supplement on reporting climate-related information* (June 2019), and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), the main risks (and opportunities, if any) identified in relation to climate change, along with potential economic/financial impacts and associated mitigation safeguards, are outlined below.

Physical climate risks

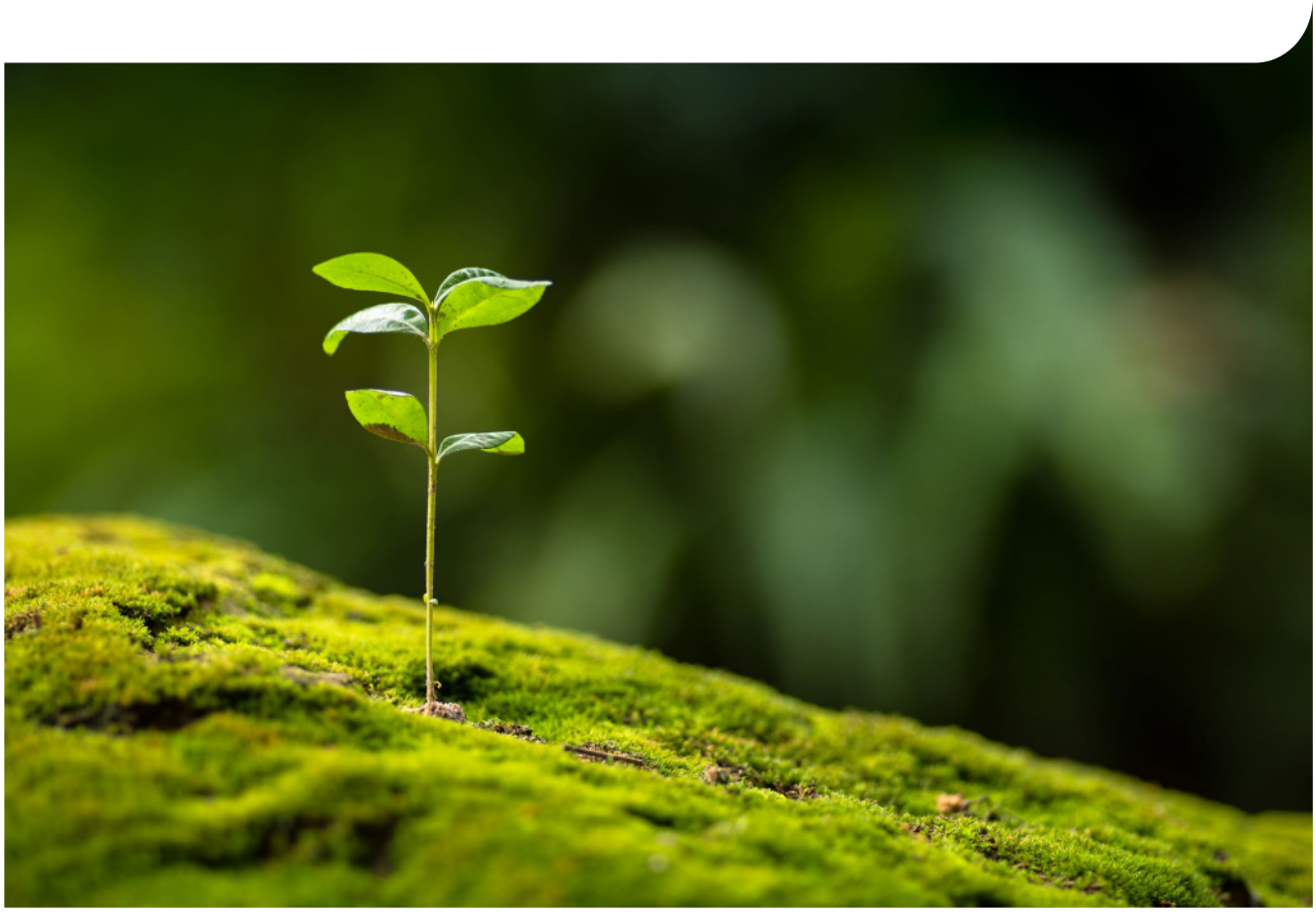
The FS Group aims to ensure increasingly climate-resilient infrastructure and mobility services through:

- vulnerability assessment (identification of assets exposed to climate risks);
- impact assessment (effects produced by climate risks on businesses, examined through medium- and long-term scenario analysis);
- definition of the response plan (designed and adopted adaptation interventions, structured into Grey/Soft/Green solutions).

Expected climate dynamics are examined through **scenario analyses** based on Representative Concentration Pathways (RCPs) defined by the Intergovernmental Panel on Climate Change (IPCC), with specific regard to two projections developed on a global scale:

- RCP 4.5 "Strong Mitigation," as the most likely trend;
- RCP 8.5 "Business-as-usual," as the worst-case trend.

The design of climate scenarios on a local scale (Italy) is adapted from public sources, and in particular from the National Climate Change Adaptation Plan (PNACC) prepared by the Ministry of Environment and Energy Security.
The FS Group promotes the sharing of methodologies and knowledge on climate change adaptation through participating in industry working groups, such as those promoted by the UIC (International Union of Railways) and the PIARC-World Road Association.
Specific programmes are also defined in response to physical risk from climate change in order to improve service performance and reliability, reduce emerging climate-induced costs, and enhance traffic safety.
The objective of the climate adaptation and resilience programme is to manage the uncertainty of the impact of such changes by identifying and planning the most appropriate physical interventions on the infrastructure network according to a proactive approach (par. Climate change adaptation).



Physical risks associated with climate change that could have a significant impact on the Group's assets and business, according to the European Commission Communication of June 2019 and TCFD, are classified as:

RISK	DESCRIPTION	CATEGORY OF IMPACT ON THE BUSINESS	POTENTIAL ECONOMIC/ FINANCIAL IMPACT	MITIGATION SAFEGUARDS
Acute physical risk	Extreme climate hazards (e.g., hurricanes, flooding, droughts etc.) whose increasing frequency and intensity are related to global warming	a. Destruction of assets b. Damage to assets c. Discontinuance of services d. Reduced business performance e. Market downturn f. Change in operational model g. Change in investment cycle	i. Lower operating revenues due to reduced supply ii. Higher operating costs (e.g., costs of restoring normal functionality of assets) iii. Reduced value of existing assets iv. Higher investment for increased infrastructure resilience capacity	i. Developing risk scenarios, vulnerability models and data collection for quantification of potential risk ii. Technologically advanced and environmentally sustainable tools for monitoring and checking the status of affected infrastructure and facilities iii. Design, implementation and maintenance of infrastructure aimed at making it more resilient to the effects of climate change, including through redundancy mechanisms (life-cycle management) iv. Including climate change issues in the development of strategic plans
Chronic physical risk	Longer-term climate changes (e.g., rising average temperature, water scarcity, sea level rise, loss of land stability, etc.)	a. Destruction of assets b. Damage to assets c. Discontinuance of services d. Reduced business performance e. Market downturn f. Change in operational model g. Change in investment cycle	i. Lower operating revenues due to reduced supply ii. Higher operating costs (e.g., costs of restoring normal functionality of assets) iii. Reduced value of existing assets iv. Higher investment for increased infrastructure resilience capacity	i. Developing risk scenarios, vulnerability models and data collection for quantification of potential risk ii. Technologically advanced and environmentally sustainable tools for monitoring and checking the status of affected infrastructure and facilities iii. Design, implementation and maintenance of infrastructure aimed at making it more resilient to the effects of climate change (life-cycle management) iv. Including climate change issues in the development of strategic plans

TRANSITIONAL CLIMATE RISKS

Risk	Description	Category of impact on the business	Potential economic/financial impact	Mitigation safeguards
Regulatory developments	Change in the regulatory framework for greenhouse gas emissions	Imposition of energy efficiency requirements, revision of emission tariff framework, introduction of a carbon price	i. Higher operating costs ii. Higher costs for investments and impairment of assets	i. Ongoing regulatory oversight with monitoring of the evolution of the greenhouse gas emission permit system ii. Setting and monitoring of targets relat-ed to energy consumption and related emissions
Legal affairs	Exposure to litigation in case of failure to take measures to mitigate adverse climate effects	Possible reputational and financial impacts if not enforced	i. Higher operating costs	i. Implementation of an Environmental Management System to supervise compliance with the relevant regulatory framework
Target markets	Change in passenger and customer behaviour towards greener products and services and uncertainty in the supply market	Increased competition and reduced demand for transport	i. Lower operating revenues ii. Higher operating costs for procurement of raw materials (e.g. energy)	i. Monitoring of passenger and customer needs and development of new customised services ii. Promoting modal shift in favour of collective mobility and rail transport for passengers and freight, respectively
Technological evolution	Diffusion of new low-emission technologies	Failure to adopt cutting-edge (low-carbon) technologies and develop related management skills	i. Lower operating revenues ii. Higher operating costs (R&D)	i. Continuous investment in new technologies with lower environmental impact, staff training and selection of people with specific skills in managing new technologies
Reputation	Loss of reputation related to increased public awareness of climate change issues	Possible stakeholder dissent to new works (e.g., new infrastructure) due to potential negative externali-ties, leading to possible delays in implementation	i. Lower operating revenues ii. Higher operating costs	i. Agreement to national and international initiatives aimed at strengthening emission reduction efforts ii. Stakeholder engagement initiatives to communicate any possible impact (both positive and negative) of new works in a transparent manner iii. Monitoring and reporting on multi-year targets set out to counter climate change

Finally, in addition to the risks, the Group has identified the opportunities that climate change may present:

SCOPE	TYPE OF OPPORTUNITIES	DESCRIPTION	IMPACT ON THE BUSINESS	POTENTIAL ECONOMIC/FINANCIAL IMPACT	POSSIBLE ACTIONS
Resource efficiency	More efficient modes of transport	Use of more energy-efficient modes of transport for passengers and freight	Reduced energy con-sumption and emis-sions, and offering distinctive services compared to competi-tors	ii. Higher operating revenues ii. Lower operating costs	i. Continuo presidio delle nuove tecnologie a basso impatto ambientale ii. Monitoraggio delle esigenze della clientela
Energy sources	Use of renewable and/or low-impact energy source	Use of renewable and/or low-impact energy sources	Reduced emissions and offering distinc-tive services compared to competitors	i. Lower operating costs ii. Higher operating revenues	i. Continuous oversight of new technologies with low environmental impact

SCOPE	TYPE OF OPPORTUNITIES	DESCRIPTION	IMPACT OF THE BUSINESS	POTENTIAL ECONOMIC/ FINANCIAL IMPACT	POSSIBLE ACTIONS
Products and services	Offering green services	Developing or expanding low-CO_2 emission services	Improved services offered and reputation of the Group	i. Lower personnel costs ii. Lower operating costs iii. Higher operating revenues	i. Continuous oversight of new technologies with low environmental impact, continuous monitoring of customer needs and offering distinctive services ii. Monitoring opportunities arising from sustainable finance instruments
Markets	Access to new markets	Offering distinctive services even in foreign markets and opportunities to increase competitive advantage	Increased revenues through outlet into new markets and improved competitive position in domestic markets	i. Higher operating revenues	i. Continuous monitoring of customer needs and offering distinctive services with low environmental impact
Resilience	Resilient infra-structure	Design, implementation and maintenance of infrastructure aimed at making it more resilient	Reduced risk of asset impairment and discontinuance of service	i. Lower operating costs ii. Higher operating revenues iii. Protection of the value of assets	i. Design, implementation and maintenance of infrastructure aimed at making it more resilient to the effects of climate change, including through redundancy mechanisms

Climate change adaptation

Adaptation is an imperative priority to cope with increasingly severe and frequent extreme and chronic climate events. The FS Group has prepared a plan for responding to physical risks resulting from climate change, based on four areas of actions:

- vulnerability assessment of assets and territories;
- real-time monitoring of climate phenomena, assets and territories;
- planning of specific adaptation actions by assets;
- design and implementation of natively climate-proof assets.

With specific regard to real-time monitoring, the FS Group is working on:

- innovative techniques for forecasting particularly adverse weather events through forecasting platforms that exploit a network of sensors spread throughout the country. In order to prevent situations of particular alert and more generally improve the quality standards of the railway infrastructure, a campaign is being carried out to install rainfall, hydrometric and radar sensors that will allow the optimisation of the forecasting phase and related warnings on the management of railway operations during an event and/or alert;
- innovative projects for structural monitoring of works of art through the installation of sensors aimed at refining the ability to forecast extreme events.

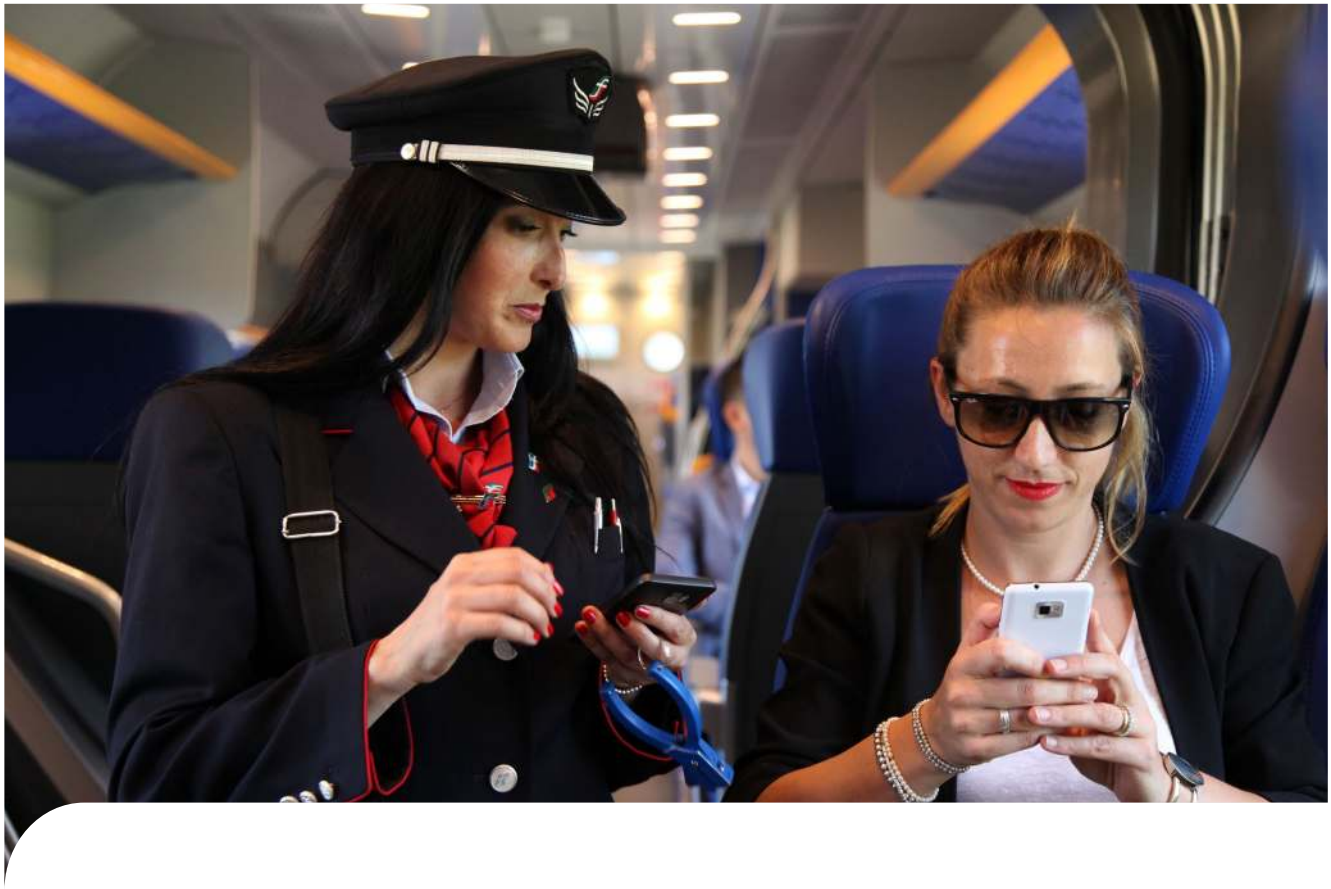
With regard to the design and implementation of natively climate-proof assets, RFI is including climate adaptation practices within its design manuals (adaptation by design). Specifically, the manuals will contain criteria for implementing adaptation measures and a set of solutions to be provided for different types of assets and hazards.

(2-12, 2-28, 2-29, 201-1)

MATERIALITY AND STAKEHOLDER MANAGEMENT

Each year, the Group updates the **materiality analysis**, an essential tool used to plan and manage sustainability performance and to adequately report the Group's objectives and the results it has achieved. The update of the methodology used in the materiality analysis in 2023 was characterised by the approach required by the GRI 3 Material Topic 2021 reporting standard, which is based on the concept of **impact**. The standard provides for the identification of material topics according to the most significant impacts – both positive and negative, current and potential - generated by the Company on economy, environment and people, including any impact on human rights (**Impact materiality**). These issues are the priorities for action on which the Group sets its levels of ambition in the medium and long term, and the content on which it focuses its sustainability reporting. Detailed information about the materiality analysis process can be found in the paragraph "Materiality Process - Impacts Generated," in the appendix to this document.

The materiality analysis process includes an important **stakeholder engagement** activity, which enables the listening and inclusion of stakeholders who influence or could influence the Group's activities. The ongoing management of relationships with its stakeholders, through a programmatic and proactive approach that uses various tools to engage stakeholders, is a key priority for FS. This approach is intended to guide the Group's strategic choices, since it firmly believes that understanding their expectations and satisfying their interests guarantee the effective creation of long-lasting value. At the same time as the process of updating the materiality analysis, the mapping of stakeholder categories with which the Group interacts directly and indirectly was reviewed, including with the support of the operating companies involved in the process. In accordance with the international AA1000-Stakeholder Engagement Standard (SES), eleven categories were identified, as represented below.



Main categories of stakeholders and respective channels of communication and modes of involvement[70]

HUMAN RESOURCES
- Intranet portal of the Group – WE
- Events/Webinars
- Valuation interviews
- Approval surveys
- Newsletters
- Whistleblowing

SUPPLIERS
- Audit
- ESG surveys

BODIES AND INSTITUTIONST
- Specific meetings
- Corporate communications
- Surveys
- Protocols of understanding
- Panels with institutions and local organisations

FINANCIAL COMMUNITY
- Regular presentations
- Individual and group meetings
- Roadshows
- ESG surveys

BUSINESS COMPETITORS, PARTNERS & MARKET PLAYERS
- Work groups/meetings
- Conferences
- Participation in trade fair events

CUSTOMERS AND PASSENGERS
- Special surveys
- Market research
- Workshops, seminars
- Special communication channels
- Social networks

CIVIL SOCIETY ORGANISATIONS
- Specific meetings
- Work groups
- Press releases
- Social networks
- Interviews

SHAREHOLDERS AND GRANTORS
- Regular presentations
- Individual and group meetings
- Shareholders' meeting

THE MEDIA
- Press releases
- Social networks
- Events
- Interviews

TRADE UNIONS
- Trade union panels and group meetings

SCIENTIFIC COMMUNITY
- Regular presentations
- Participations in panels

70. The main changes made in the process of updating stakeholder categories in 2023 with respect to the FY2022 reporting are: "FS People and Trade Unions" was split, given the different modes of engagement for the two categories; "Customers and Passengers" was changed to "Customers and Travellers," in order to also enclose users transiting road and rail infrastructure; "Shareholders" was changed to "Shareholders and Grantors" to better identify the role of Ministries with respect to infrastructure; "Suppliers", previously found in "Suppliers and Business Partners," has been given a stand-alone value while the "Business Partner" core has been enriched to "Business Competitors, Partners and Market Players." In addition, the category of "Scientific Community" was added while "Civil Society and Local Communities" was named "Civil society organisations."

Stakeholder relevance at the corporate level was then assigned through a rating made on a scale of one to five based on the following parameters:

- **Dependence**, the importance of the relationship to the stakeholder, expressed in terms of direct or indirect dependence on FS Group activities, products or services and the performance associated thereto;
- **Influence**, the importance of the relationship to the FS Group, in terms of the stakeholder's influence on the decision-making, strategic and operational process;
- **Urgency**, temporal dimension of the relationship i.e. how much immediate attention the stakeholder requires from the Group, with regard to financial, economic, social and environmental issues.

In 2023, the analysis carried out at the Group level revealed the need for collaboration with the "Suppliers" stakeholder, which confirms the commitment the Group has made for several years to a path aimed at improving their environmental and social performance. Also with regard to the "Human Resources" stakeholder category, the analysis demonstrates the role of its people as a key player in the Group's strategy, in line with the business management model that aims to ensure their well-being and growth through communication, training, development and caring activities addressed to all organisational levels.

In order to gather, moreover, the perceived **prioritisation of material topics**, some of the many listening initiatives carried out during the year by the different functions of Holding and Group companies involved in the materiality process were mapped and enhanced, including: customer satisfaction surveys, questionnaires from sustainability rating agencies, customer complaints, institutional relations, and industry studies and surveys. For this purpose, proper consideration was given to any information collected through the Datamaran platform, which analyses the main laws and directives in all countries where FS operates, and reports published by other peers and comparables in the European and international arena. The results, shown below in aggregated form, indicate the increasing degree of relevance of Level I and Level II topics. The data aggregation methodology took into account: relevance, size and organisational weight with respect to the type of business in which the company operates in addition to the number of stakeholders involved.

THE JUST TRANSITION IN THE TRANSPORT SECTOR

Italy is committed to contributing to the EU climate goals to achieve climate neutrality by 2050. In order to meet these goals and take advantage of the many growth opportunities offered by the development of a decarbonised economy, the country will face many challenges. The transport sector is at the center of these challenges.

One of them, certainly among the most important and strategic, which the European Union summarizes in the phrase "just transition," is that of a transition to a low-carbon economy that is fair and equitable, so as to ensure that no one is left behind.

Given the Ferrovie dello Stato Italiane Group's key role in promoting the country's sustainable growth and given the enormous potential offered by the rail service with a view to environmental and social sustainability, the FS Group launched, with the collaboration of the Foundation for Sustainable Development, the project on "The Just Transition in the transport sector" with the aim of promoting a reflection on the social and distributional impacts related to the adop-tion of climate change mitigation and adaptation measures.

Within the framework of this initiative, FS organised two workshops involving a selection of stakeholders representing various categories, such as Bodies and Institutions, the Scientific Community and Civil Society Organisations, in order to initiate as plural and shared discussion as possible on the topic of just transition in the transport sector, particularly of its most significant and problematic issues, to gather ideas, views, and experiences related to the topic and on the role that the FS Group can play in this perspective. The project sets as an end point the drafting of a Report that will be presented publicly during 2024.

Relevance of topics (1st-2nd level)[71]

SUSTAINABLE, RESILIENT AND INTEGRATED INFRASTRUCTURE
- Climate change adaptation of infrastructure
- Development and improvement of infrastructure
- Socio-economic development of the area

MITIGATION OF CLIMATE CHANGE
- Energy
- GHG emissions

OCCUPATIONAL HEALTH AND SAFETY
- Occupational health and safety for employees of the Company and of other contractors

INCLUSION, ENHANCEMENT AND DEVELOPMENT OF PEOPLE
- Involvement and caring for people's well-being
- Including and amplifying diversity
- Selection, enhancement and development of people

DATA PROTECTION AND IT SECURITY
- IT systems and networks security and data protection*
- Responsible management of data

SAFETY OF TRANSPORT, INFRASTRUCTURES AND OTHER ASSETS
- Safety and reliability of rail and road infrastructure
- Railways (lines and stations)
- Protection of travelers, infrastructure, means of transport and property assets from damage caused by third parties
- Safety and reliability of other assets (i.e. workshops, car parks, buildings, terminals, etc.)
- Safety and reliability of means of transport

SUSTAINABLE RESILIENT AND INTEGRATED TRANSPORT SYSTEMS
- Climate change adaptation of mobility means and services
- Sustainable and integrated mobility for goods
- Sustainable and integrated mobility for passengers

ENVIRONMENTAL PROTECTION
- Emissions in the atmosphere
- Light emissions
- Noise and vibration
- Protection of soil
- Protection of biodiversity
- Protection of water

VALUE FOR CUSTOMERS
- Relationship with customers
- Usability and accessibility of services

ETHICAL AND RESPONSIBLE BUSINESS
- Business ethics, integrity and transparency
- Business soundness

CIRCULAR ECONOMY
- Management of materials
- Waste management

SUPPLY CHAIN SUSTAINABILITY
- Responsible management of suppliers
- Responsible purchases

SUPPORT FOR COMMUNITIES AND RESPONSIBLE USE OF LAND
- Support for communities
- Protection and responsible use of land

Key: The colour intensity in the picture denotes the topic's level of relevance to external stakeholders, from low (light background) to high (dark background).

71. During 2023, the tree of material topics underwent changes from the previous financial year, specifically: "People's safety: values, technology and culture" was split into "Occupational health and safety" and "Safety of transport, infrastructure and other assets"; "Circular economy and responsible purchases" was split; "Innovation, digitalisation and cybersecurity" was remodulated into "Data protection and cybersecurity" while "Innovation and digitalisation" was eliminated, as they were considered cross-business tools; "Design of infrastructure and responsible use of the land" has been changed to "Support for communities and responsible use of the land", thus including the topic of "Support for communities", which stood alone in the previous reporting; "Resilient infrastructure and mobility systems" has been split into "Sustainable, resilient and integrated infrastructure" and "Sustainable, resilient and integrated transport systems."

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 Italiane 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.

CREATING SHARED VALUE
Reconciling financial, social and environmental objectives, generating value for the company, for stakeholders and for the regions it works in

COMMUNITY AND STAKEHOLDER ENGAGEMENT
Activate systematic processes for stakeholder engagement

SAFETY FOR PASSENGERS AND WORKERS
Assuring an ever higher level of health and safety and consolidating a culture of risk management and prevention

QUALITY OF SERVICES
Improving customers' experience, paying attention to actual quality as well as perceived quality

VALUE OF EMPLOYEES
Actively attend to people's care and development, avoiding any form of discrimination

EFFICIENT USE OF RESOURCES AND ENVIRONMENTAL PROTECTION
Promote an efficient use of energy resources and support the adoption of an LCA l logic in all processes

RESPECT FOR HUMAN RIGHTS
Protect human rights in its activities, among suppliers and business partners, contributing to the creation of a responsible supply chain

Other forms of dialogue

Each year, the Group promotes a number of initiatives to inform, advise, discuss and partner with the various stakeholders. In 2023 the FS Group joined WEC Italia (World Energy Council), and also took part in the activities of the following associations: Confindustria and its local branches, Agens, Federtrasporto (of which we appointed the President in 2023), 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 (International Union of Railways) and the ERA (European Railway Agency). Furthermore, the FS Group collaborates with the following organisations: Alliance for Circular Economy, the Italian Association for Sustainable Infrastructure, Asvis, the Foundation for Sustainable Development, Green Building Council Italy, Global Reporting Initiative, the Kyoto Club, Legambiente, Railsponsible and the United Nation Global Compact Italy. A protocol was drawn up with consumers' associations, which was signed in February 2023.

There were no non-conformities in advertising in 2023. 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 2023, the Group was active with the national, regional, local and international media, as well as online publications, websites and blogs.
The news agencies covered by the activities were: Ansa, Agi, Adnkronos, Askanews, Dire, Italpress, La Presse, MF-Newswires, Nova, Radiocor, Teleborsa, Vista, 9 Columns, Agir, Datastudio, Ferpress, Gea, Public Policy.
The print newspapers covered by the activities were: Sole 24 Ore, Corriere della Sera, Repubblica, La Stampa, Milano Finanza, Italia Oggi, Il Tempo, Il Messaggero, QN, Avvenire, Libero, Il Giornale, La Verità, La Notizia.
TV channels covered by the activities were: RaiNews, Skytg24, Tg1, Tg2, Tg3, TgR, Mediaset, La7.
Activities with the media were also carried out through external communication channels, 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 & Social Media Management

For its **internal stakeholders**, the Group has:

- shared the progress of the Industrial Plan and created an ecosystem of continuous dialogue with all people in the Group;
- developed a communication plan dedicated to sustainability with the creation of the *Sustainable Glossary* and *#whatdayis* column;
- developed a communication plan dedicated to sustainability on the company social media weshare with posts and postcards with graphics intended for the *Sustainable Glossary* and *#whatdayis* columns;
- continued the Tell Welly initiative, a company communication channel to listen to the needs of colleagues, gather suggestions and best practices to improve the environment and work processes;

THE GROUP IS PRESENT ON THE FOLLOWING SOCIAL MEDIA:

- continued wespeak activities, a communication channel for massive outreach to the corporate population via online broadcasting;
- disseminated sustainability issues through the *#100AmbassadorxFS* project, a community of 100 colleagues called upon to tell firsthand the news of the FS world.

Creation and distribution of value over time

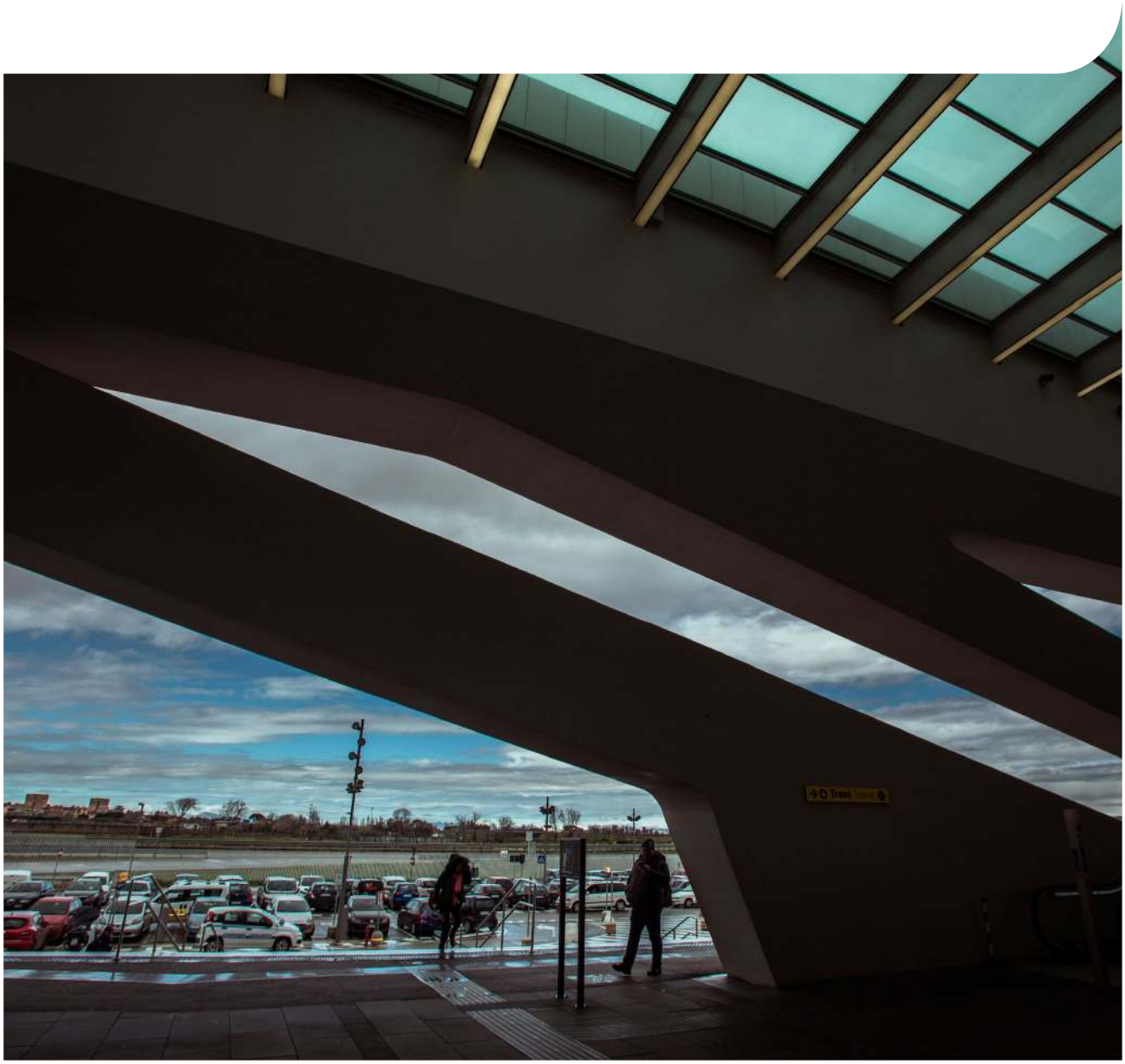
Creating value for the Group and its stakeholders is a priority for the sustainability of the business in the medium to long-term.
Based on the reclassification of the consolidated income statement, the table below illustrates the impacts of the Group's activities on its stakeholders. Specifically:

- 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 (about €2 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	2023	2022	2021
Directly generated economic value	**15,047**	**13,835**	**12,416**
Revenues from sales and services	14,261	13,169	11,835
Other sundry income	786	666	581
Economic value distributed	**13,074**	**11,698**	**10,532**
Operating costs for materials and services	6,991	6,495	5,424
Personnel expense	5,284	4,723	4,764
Payments to financial backers	456	221	160
Payments to public bodies	343	259	184
Economic value withheld	**1,973**	**2,137**	**1,884**

In million Euro



Our Performance

(3-3)

SUSTAINABLE, RESILIENT AND INTEGRATED INFRASTRUCTURE AND TRANSPORT SYSTEMS

(2-23, 2-24, 2-25, 203-1, 203-2, 304-1, 304-2, 304-3, 304-4, 413-1, 413-2)

Sustainable infrastructure

Sustainability has become a key driver in guiding infrastructure implementation, concretely supporting the ongoing transformation by focusing on environmental protection, efficient use of resources, protection of cultural, landscape and biodiversity assets, infrastructure resilience, and promotion of sustainable mobility.
Major infrastructure works constitute a fundamental pillar within the landscape, deeply influencing sociocultural and environmental life and contributing to the development of territories and communities.
In this specific segment, it is the FS Group's Infrastructure Business Unit that deals with accessible, integrated, resilient and interconnected road and rail works. Infrastructure is developed according to sustainability criteria throughout its life cycle: design, construction, operation, maintenance and decommissioning. Moreover, the incorporation of these works into the territory requires an integrated assessment of environmental, social and economic impacts with respect to the entire useful life cycle of the asset.
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.
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.
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 Italiane Group's infrastructural system. They are increasingly 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.

STATIONS OF THE FUTURE UNDER THE SIGN OF THE ENVISION PROTOCOL

Rete Ferroviaria Italiana and ICMQ (Institute for Certification and Quality Mark), the certifying body of the Envision protocol in Italy for construction, have jointly drafted a vademecum aimed at all players involved in the design of interventions involving railway stations, whether existing or soon to be built. The document aims to ensure, from the earliest design stages, high quality standards and high performance in terms of environmental, social and economic sustainability. The adoption of the protocol allows to meet and guarantee, through a rigorous rating system certified by an independent body, the achievement of these objectives in the design and construction phases. The Envision protocol is a functional tool for guiding projects in compliance with high quality standards and from a sustainable perspective. Its strategic approach makes it possible to integrate the interventions planned for the stations into the environmental, historical and social context of reference, in order to best meet the needs of an increasing number of people passing through the stations and experiencing their urban "surroundings."
The beneficiaries of the guideline will be RFI's company units and all FS Group companies involved in design activities, third-party designers who were awarded Framework Agreements, and the operators involved in the construction of the works.
The guidelines may be applied to the following interventions:

- new railway stations;
- existing stations to be redeveloped;
- existing stations, suspended from operation, to be reactivated and refunctionalised.

The perimeters of the works to be designed and executed may cover rail infrastructure areas and include the construction or redevelopment of squares, roadways, bicycle paths, green areas and rest areas.
An essential element, and a key factor for success, is the active and synergistic involvement of all stakeholders.

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.
Over the past few years, sustainability projects, studies and reports of the works planned under the NRRP have been developed according to the *Guidelines for drafting technical and economic feasibility project to be used as the basis for awarding public works contracts of the NRRP and the NCP*[72], with the aim of providing a clear reading on the potential to generate value for communities.
With regard to the contribution of railway infrastructure to climate change mitigation, specific assessments considering the environmental objectives as per the EU Taxonomy Regulation (EU) 852/2020 for the application of the Do No Significant Harm (DNSH) principle are carried out as part of the design. In support of the environmental objectives proposed by the Taxonomy, for projects for which a potential impact is assessed, such as to deem it appropriate to start an Environmental Impact Assessment (EIA) procedure, or those financed by NRRP/NCP, specific assessments of climate vulnerability and risk are carried out with the identification, if necessary, of specific design solutions for adaptation to the current and future climate.
In addition, for those projects that envisage the Environmental Site Project, an analysis is carried out of the constraints of the site areas, such as hydraulic, hydrogeological, geomorphological, etc., while in those that

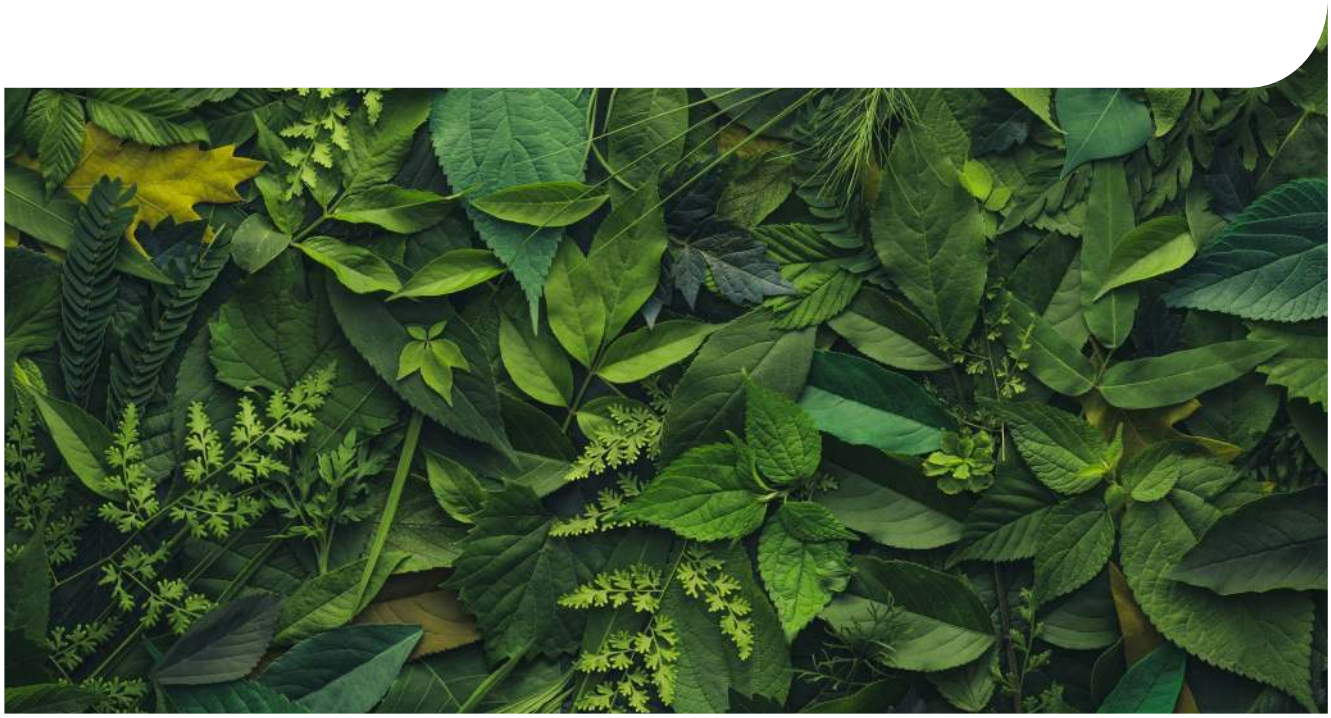
72. NCP: the National Complementary Plan, set forth with Law Decree no. 59 of 6 May 2021, as converted, with amendments, by Law of 1 July 2021, has the aim of integrating and enhancing the contents of the National Recovery and Resilience Plan.

envisage the Environmental Impact Study, the project is also analysed with reference to the National Strategy for Adaptation to Climate Change.
Furthermore, 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.

Biodiversity management and protection

The development of a transport infrastructures plays a delicate role with respect to biodiversity, as it can potentially 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.
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.
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, and the analysis of the ecosystems concerned. In the study of the work, environmental, landscape and archaeological aspects are taken into account in order to ensure the permanence of ecological balance and the preservation of cultural heritage.
Developing infrastructure that respects biodiversity must mandatorily include the following actions:

- abstaining from building unnecessary infrastructures, assessing all alternatives, and possibly making sure that the route does not involve regions where protected natural areas or endangered habitats are present;
- preliminarily assessing the environmental factors affected, identifying potential risks to biodiversity;
- developing mitigation strategies by identifying appropriate measures designed to minimise, or even nullify, any direct or indirect, short-, medium-, or long-term effects or impacts on plant and animal populations, habitats, and site integrity, both during the construction phase of the route and subsequently during operation (e.g., ecological passages for the safe passage of wildlife, fencing, noise barriers);
- restoring or creating new habitats to compensate for those lost due to infrastructure construction, restoring the overall biodiversity value;
- assessing the resilience of the work, i.e., the ability to withstand and adapt to disturbing or catastrophic events caused by extreme weather events, natural disasters, or other critical scenarios.



The table below summarises, by way of example, the main data of infrastructure works projects that directly affect protected sites and for which an Incidence Assessment (VIncA - 92/43/EEC Habitat) has been prepared:

OPERATING SITES THAT DIRECTLY INVOLVE PROTECTED AREAS (2023)

Operating site	Geographical area where the protected area is locat-ed	Protected area	Type of protection	New area/ project falling in the protected site[73] (km^2)	Activity	Value of biodiversity[74] (operating site)
Elimination of the Level Crossing at km 223+027 in the municipality of Crotone (KR)	Calabria	ZPS - IT9320302 Marchesato and Fiume Neto	Rete Natura 2000	0.00585	Road infrastructure cat. F1	Farming context. No habitat of Community interest.
New HS/HC Line Salerno – Reggio Calabria (Roma-gnano – Buonabita-colo and Buonabi-tacolo - Praia)	Campania Basilicata	ZSC - IT8050022 Montagne di Casalbuono ZSC – IT9210265 Valle del Noce	Rete Natura 2000	-[75]	Railway infrastructure	Rocky substrate. The project does not involve the elimination of habitats of Community interest or of species of Community interest.
Electrification of the Cagliari – Oristano Railway Line	Sardinia	ZSC ITB030033 Stagno Pauli Majori di Oristano ZPS -ITB034005 Stagno Pauli Majori Permanently Protected Wildlife Reserve – Pauli Maiore Natural Reserve Pauli Majori Ramsar Area Stagno di Pauli Majori IBA218 Sinis and Stagni di Oristano	Rete Natura 2000	-	Railway infrastructure	Habitat 1150 Habitat 1310 Habitat 1410 Habitat 1420 Habitat 3170* Habitat 92D0 Fauna: 45 bird species protected under Annex I of Directive 2009/147/EC (ex. Moustached Warbler, Common Kingfisher, Tawny Pipit, Purple Heron, Squacco Heron, Ferruginous Duck, Eurasian Bittern, Stone-Curlew, etc.)
S.S. 685 delle Tre Valli Umbre – track amendment and adaptation of the type C2 section from km 49+300 to km 51+500	Umbria	ZSC -IT5210046 Val-nerina	Rete Natura 2000	0.00002	Road infrastructure Cat. C2	Habitat 91E0 Habitat 9340

73. Area within the protected site permanently affected by the construction of the work.
74. For further details regarding the biodiversity (vegetation, reserves, aquatic zones, etc.) present in the protected area, the presence of habitats interfered with by the work, and the proposed mitigation measures for these habitats, please refer to the detailed public documentation concerning the project and available on the Ministry of Environment and Energy Security website in the area dedicated to EIA-SEA-IEA Procedures.
75. Affected sites are traversed by the work in a natural tunnel.

OPERATING SITES THAT DIRECTLY INVOLVE PROTECTED AREAS (2023)

Operating site	Geographical area where the protected area is located	Protected area	Type of protec-tion	New area/ project falling in the protected site[73] (km²)	Activity	Value of biodiversity[74] (operating site)
Rationalisation of the road system in S. Giovanni Rotondo and construction of the connecting rod from San Giovanni Rotondo to Foggia – 4th Functional Section - S.S. 693 SVV in the Gargano area - S.S. 89 Gar-ganica - Connection Vico del Gargano - Mattinata Section Vico del Gargano - Vieste	Puglia	Gargano National Park ZSC - IT9110004 Umbra Forest ZSC - IT9110016 Marzini Pine Forest ZPS - IT911039 Gargano Promontory IBA 203 the Gargano Headland and Humid Zones of the Capitanata area	Rete Natura 2000 EUAP - Elenco Ufficiale delle Aree naturali Protette (Official List of Natural Protected Areas)	0.18	Road infrastructure	Habitat 9540 Habitat 6220
PZ138 - PZ139 - Murgia-Pollino Mid Link. stretch Gioia del Colle - Matera - Ferrandina - Pisticci and Materia by-pass	Puglia	SIC e ZPS IT9120007 – High Murgia IBA 135 - Murge	Rete Natura 2000 IBA - IBA Important Bird Areas	0.00659	Road infrastructure Cat. C1	Habitat 62A0
BA291 - S.S. 100 in Gioia del Colle functional completion and works to secure S.S. 100, between km 44+500 and 52+600 (San Basilio).	Puglia	SIC e ZPS IT9120007 – High Murgia SIC -IT9130005 – South-East Murgia EUAP0894 – Natural Regional Park Terra delle Gravine IBA 135 - Murge	Rete Natura 2000 EUAP - Elenco Ufficiale delle Aree naturali Protette (Official List of Natural Protected Areas) IBA - IBA Important Bird Areas	0.05959	Road infrastructure	Habitat 6210* Habitat 62A0 Habitat 8210 Habitat 8310 Habitat 9250 Habitat 6310 Habitat 6220* Habitat 9340
E45- Road Hub of Perugia. Piano-Collestrada Stretch.	Umbria	ZSC - IT5210025 Ansa degli Ornari ZSC - IT5210077 Boschi a farnetto di Collestrada	Rete Natura 2000	-[76]	Road infrastructure	No habitat of Community interest.
Variation of the State Road S.S. 115 Sud Occidentale Sicula from the Birgi exit on the A29 motorway towards the link to state road S.S. 115 at km 48+000 around Mazara del Vallo	Sicily	ZSC - ITA010014 Sciare di Marsala	Rete Natura 2000	0.041	Road infrastructure cat. C1	Habitat 5330 Habitat 6220

76. Affected sites are traversed by the work in a natural tunnel.

OPERATING SITES THAT DIRECTLY INVOLVE PROTECTED AREAS (2023)

Operating site	Geographical area where the protected area is located	Protected area	Type of protec-tion	New area/ project falling in the protected site[73] (km^2)	Activity	Value of biodiversity[74] (operating site)
State Road S.S. 4 Salaria - Trisungo-Acquasanta section: 2nd lot from Km 155+400 (Valgarizia tunnel) at km 159+000	Marche	SIC - IT5340006 Acquasanta Holm-Oak Grove SIC - IT5340018 Tronto River between Favalanciata and Acquasanta	Rete Natura 2000	0.00094	Road infrastructure cat. C1	Habitat 91AA Habitat 92A0 Habitat 9340 Habitat 91E0
SS 675 - Umbro Laziale – Infrastructure System for the connection between the Civitavecchia Port with the Orte intermodal hub. Monte Romano est - Civitavecchia section – 1st Section Monte Romano est - Tarquinia	Lazio	ZPS - IT6030005 Tolfetano-Cerite-Manziate district	Rete Natura 2000	0.0008	Road infrastructure cat. B	ND
S.S. 389 Villanova – Lanusei – Tortolì Stretch Junction Villagrande Lot – Arzana exit from Km 51+100,00 of S.S. 389 Variation at Km 177+930.00 of S.S. 389	Sardinia	ZSC - ITB022215 Riu Sicaderba	Rete Natura 2000	0.005	Road infrastructure cat. C1	Habitat 5330 Habitat 91E0

Assessments of the interference and impact of infrastructure works on habitats that fall within protected sites are carried out not only in cases where the new work directly affects these sites, but also in cases where the protected areas fall within a five-kilometre band of the work itself.

TRAVEL

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

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

TRAIN

- Italy, Germany, France, Great Britain, Greece and Spain
- approx. 46 billion passenger km
- approx. 318 million train km (medium and long haul transport and regional)

INFRASTRUCTURE

RAILWAY NETWORK

- approx. 17,600 km of infrastructure in Italy and abroad
- approx. 7,730 km double-track lines
- over 12,200 km electric lines

ROADWAY/ MOTORWAY NETWORK

- over 32,000 km state roads
- over 1,500 km motorways and motorway connectors

STATIONS

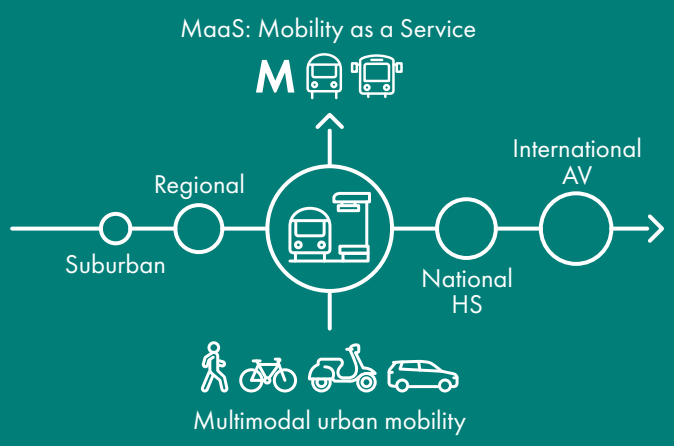
- approx. 2,200 stations in Italy, with active passenger services (with 90% of passengers using 620 stations)
- 60 stations in Germany

BUS

- Italy, Germany, Greece and the Netherlands
- approx. 1.8 billion passenger km
- approx. 157.5 million bus km

Station...place 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, even in the name of the new quality of infrastructure that increasingly require approaches capable of creating value and attractiveness for local areas, reducing travel costs and times, and 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. With this in mind, we are committed to an **integrated station development plan** that focuses on people's needs and environmental and social sustainability, tends to make stations and surrounding areas safer and more pleasant, and to increase access points to the rail network by upgrading and improving usability, accessibility, public information, intermodality, and by building new stations.

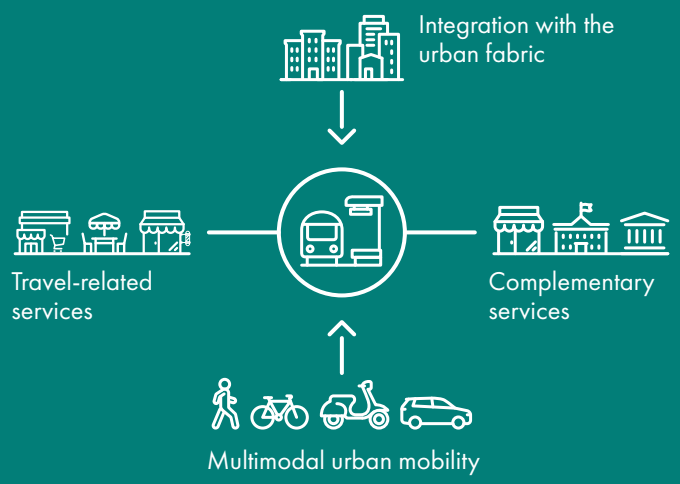


INTERMODAL EXCHANGE NODE

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 STATION DEVELOPMENT PLAN

To increase the role and capacity of **stations**, 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 2023**:
- **energy efficiency interventions and the design of PV systems at several stations** (e.g., Roma Ostiense, Roma Tiburtina, Pescara and Ancora) for the supply/self-production of renewable energy;
- **improvement interventions for the inclusion and accessibility of station spaces and services** (e.g., raising sidewalks, installation of new elevators, installation of tactile paths);
- **construction of station access demarcation barriers and the start of the pilot project on motion-detection**, with Intelligent Video Surveillance System (S.V.I.), **for the detection of accidents to travellers** engaged in the use of elevators, escalators, etc;
- **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).

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.

RFI-OPERATED RAILWAY LINES	16,832 km[77]
CLASSIFICATION	
Main lines	6,460 km
Complementary lines	9,422 km
Hub lines	950 km
TYPE	
Double-track lines	7,734 km
Single-track lines	9,098 km
POWER	
Electric lines	12,205 km
- double track	7,658 km
- single track	4,547 km
Diesel fuel lines	4,627 km
FSE-OPERATED RAILWAY LINES	474 km
NETINERA-OPERATED RAILWAY LINES	300 km

ANAS-OPERATED ROAD NETWORK	32,500 km
of which motorways	1,574 km

Data updated at 31 December 2023.

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 the environment. 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 transport.
- regional.

77. Including 70 km outside Italy

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 SERVICES

INTERCITY

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

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, Skopje)

SPAIN
Trenitalia, as part of the ILSA consortium, was among the first private operators allowed to enter the Spanish HS market. The commercial services 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).

Buses and tram...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 **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, Padua, Perugia and Salerno. In addition to other cities in Campania, Puglia, Umbria and Veneto.
Passenger transport commercial services, including direct link with The Mall Florence outlet.

LONG HAUL
integrated service consisting of dedicated buses that connect medium-sized cities and tourist cities, in certain periods of the year (e.g. Pompei, Sorrento, Cortina d'Ampezzo, etc.) with the HS Frecce trains from Bologna, Bolzano, Florence, Lecce, Milan, Naples, Rome, Salerno, Turin, Venice and Verona.

INTERNATIONAL

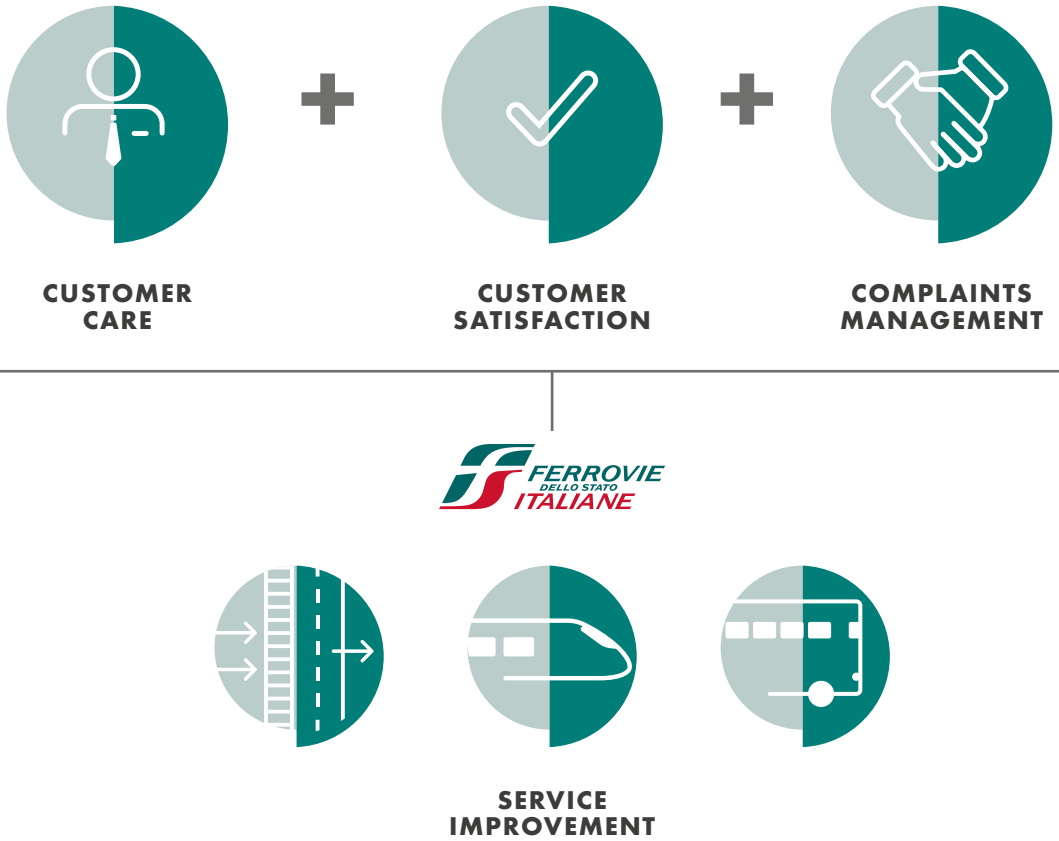
GERMANY
public road transport in the North Rhine-Westphalia, Frankfurt-am-Main, Hamburg and Hanover

THE NETHERLANDS
local public transport in the metropolitan area of Utrecht, Groningen - Drenthe, DAV (Drechtsteden, Alblasserwaard en Vijfheerenlanden) to which must be added two additional concessions from December 2024; Randstad area (between Amsterdam and Rotterdam and The Hague) and the province of Fryslan (Frisia)

(2-27, 2-29)

FOCUS ON PEOPLE

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[78], 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**[79] 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.

78. The Service Charter is the tool whereby the company discloses and reports its principles and commitments to improve the services it offers.
79. 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.

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. With regard to the **perceived quality goals**, which are linked to the percentage of satisfied travellers (grades 6-9) for the services offered at stations, the 2023 customer satisfaction results show substantially stable values compared to 2022.

ENVIRONMENT IN THE STATION

Indicator		2023 Result	2022 Result	Change in percentage points (p.p.)
Travel comfort in station premises	overall perception of the station	98.3%	98.7%	**-0.4**
Modal integration	perception of ease and convenience of arrival at the station	97.8%	98.1%	**-0.3**
Security in the station	perception of overall security	94.8%	95.5%	**-0.7**

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 pas-sengers.

For a more detailed analysis of the 2023 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: while the quality of the station as a whole also presents in this case as for the satisfied ones almost stable values (90.5%, -0.3 p.p. compared to 2022), **the perception of the ease and comfort of arriving at the station grows**, from 94.2% in 2022 to 94.4% in 2023 (+0.2 p. p.), as does security, from 80.8% in 2022 to 83.4% in 2023 (+2.6 p.p.); the latter thanks to the **excellent performance recorded on stations in the RFI network** (81.6%, +3.4 p.p.). The values recorded in 2023 for the **quality of Sale Blu centre services** provided between January and December, with percentages of travellers satisfied with the service overall (grades 6-9) at 99.6% and fully satisfied (grades 7-9) at 98.9%, substantially **remained at the levels of excellence** already acquired in previous years.

Complaints/reports totalled 7,968 in 2023, compared to 6,495 in 2022. The number of annual requests exceeded for the first time the number recorded in 2019, a year after which, following the emergency caused by the COVID-19 pandemic, there had been first a sharp reduction and then a resumption in the receipt of requests from users. The number of inefficiencies also increased proportionally: 8,513 inefficiencies (+ 22% on 2022). 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**.

The customer satisfaction survey, which is carried out every three months to investigate 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 in 2023** (on the first nine months of the year). A steadily increasing index since 2016 (6.8/10). Specifically, the indices measuring customer satisfaction are divided into four dimensions that make up the overall index of contact quality: response quality, operator quality, contact quality, and response usefulness. **Contact quality was rated 7.6, operator quality 7.9, response quality 7.5, and response usefulness 7.2**.

THE ROAD CALLS, ANAS RESPONDS

In 2023, Anas Customer Service handled a total of 166,330 contacts:
- 60% immediately resolved by the User Relations Front Office;
- 30% of contacts were independently resolved by customers through digitized processes;
- 10% were handled by the User Relations Back Office of the Head Office and Local Units Department.

Requests were handled within the terms required by MIT and reported in the Anas Service Charter. Customers who contact the "Pronto Anas" Service receive an immediate response directly from Contact Center staff: in the case of complex requests, the response is provided within 30 calendar days from the date of receipt.

RAILWAY PASSENGER TRANSPORT

Railway passenger transport can be split into two main segments:
- medium and long haul transport;
- regional.

Italy[80]

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 regard to the punctuality factor, **the regional service confirmed in 2023 a percentage of trains arriving within 5′ of the scheduled time above 90%** and in line with last year's performance. In **analysing the Frecce and Intercity trains**, both types of service showed a **slight deterioration in performance**.

80. The reference perimeter includes services offered by Trenitalia and Ferrovie del Sud-Est and Servizi Automobilistici.

PUNCTUALITY

Indicator		2023 Result	2022 Result	Change in percentage points (p.p.)
Market services (Frecce)	% of trains arriving within 10 minutes of the scheduled time	75.5%	77%	-1.5
Universal Service (IC day and IC night trains)	% of trains arriving within 15 minutes of the scheduled time	85%	86.2%	-1.2
Regional Services	% of trains arriving within 5 minutes of the scheduled time	92%	92.2%	-0.2

Data updated at January 2024.
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 showed an increase compared to 2022.

REGULARITY

Indicator		2023 Result	2022 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	98.21%	97.05%	+1.16
Regional	% of trains arriving at their destination out of all scheduled train services (excluding trains cancelled due to strikes)	98%	97.5%	+0.5

Data updated at January 2024.

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[81] and short haul journeys and local/regional transport[82]). Surveys are conducted using face-to-face and telephone interviews[83].

81. 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.
82. Surveys are conducted once 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.
83. 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.

In 2023, **"overall journey" was satisfactory for 98.7% of medium- and long-distance train customers**, an increase of 1 percentage point from the year 2022. Overall, all major aspects showed improvements from the previous year.

MEDIUM AND LONG HAUL TRANSPORT

Indicator	2023 Result	2022 Result	Change in percentage points (p.p.)
Overall journey *	98.7%	97.7%	+1
Punctuality	94.4%	92.5%	+1.9
Cleanliness	98.1%	96.4%	+1.7
Comfort	98.4%	97.4%	+1

* 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. 91.9% of passengers reported satisfaction with the overall journey**, up 0.1 p.p. on 2022. Overall, all of the main aspects recorded improvements on the previous year, specifically, "comfort" and "punctuality".

REGIONAL

Indicator	2023 Result	2022 Result	Change in percentage points (p.p.)
Overall journey *	91.9%	91.8%	+0.1
Punctuality	83.7%	83.5%	+0.2
Cleanliness	82.8%	82.2%	+0.6
Comfort	93%	92.5%	+0.5

* 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.

In 2023, the number of trips related to medium- and long-haul transport increased by about 26% compared to 2022, leading to an increase in reported inefficiencies (up 19% from the previous year) against an overall stable number of complaints (43,738 complaints received in 2023 compared to 43,840 in 2022).
The types of inefficiencies reported most frequently concerned 'regularity and punctuality' (67% of inefficiencies reported in 2023) while the other categories recorded a general decline compared to 2022.

MEDIUM AND LONG HAUL INEFFICIENCIES

Regularity and punctuality	Service level	Cleanliness	Modal integration	Safety
2023: 19,508 (67%) 2022: 11,937 (49%)	2023: 5,399 (19%) 2022: 6,993 (29%)	2023: 316 (1%) 2022: 351 (1%)	2023: 4 (≈0%) 2022: 8 (≈0%)	2023: 75 (≈0%) 2022: 79 (≈0%)
↓	↑	—	—	—

● improvement ● worsening ● stable

Reports also increased in **regional transport services**, as a result of the rebound of rail traffic, from 23,366 in 2022 to 25,845 in 2023 (+10.6%). 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'.

REGIONAL INEFFICIENCIES

Regularity and punctuality	Service level	Cleanliness	Modal integration	Safety
2023: 9,345 (32.8%) 2022: 7,981 (29.7%)	2023: 9,143 (32%) 2022: 9,462 (35%)	2023: 136 (0.5%) 2022: 143 (0.5%)	2023: 12 (≈0%) 2022: 47 (≈0%)	2023: 158 (0.5%) 2022: 349 (1.3%)
↓	↑	—	—	↑

● improvement ● worsening ● stable

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 2023, 1,785 files on medium and long haul services were processed, of which:

- 110 received in 2022 and closed in 2023;
- 1,675 received in 2023[84].

The fair settlement procedure was also introduced for passengers of Trenitalia's regional services as from 2022, and about 400 applications were received in 2023 (compared to 300 in 2022). Extending the fair settlement procedure to regional transport after the long and well-established experience in medium and long haul transport (Frecce and Intercity) confirms Trenitalia's attention to the people who chose to travel on its regional trains every day.

84. Broken down as follows for High Speed segment: no. 1,234 (of which 1,085 were valid and 149 were not valid), and Intercity service: no. 441 (of which 362 were valid and 79 were not valid).

In 2023, Trenitalia continued its external communication campaign "**Our gestures together make a difference"**, which, after advice on energy efficiency, focused on the **theme of sustainable mobility**, with the aim of raising customers' awareness of moving responsibly by using the train, including in combination with other low-impact modes, such as biking and sharing. During the year, the second edition of "**Trenitalia school Fair**" was also carried out: meetings in evocative locations such as museums and historical buildings, with the aim of informing and raising awareness among teachers of primary and secondary schools throughout Italy about the benefits, advantages and ways of organising educational trips in a sustainable way, enhancing the environmental aspect of the train and the Italian artistic heritage.

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 continuous improvement. Customer satisfaction is monitored through the random administration of questionnaires. The rating for each rail transportation variable surveyed is expressed by a scale of 1 to 9, where 9 expresses the highest satisfaction and 1 the highest dissatisfaction. Travellers who gave a score of 7 or higher to the different factors surveyed are considered satisfied.
In 2023, 77.4% 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 registered mail.
In 2023, 365 complaints on the railway service were received, of which 97% was closed within 30 days.

ROAD PASSENGER TRANSPORT

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

Italy[85]

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. **In 2023, the criteria used for monitoring punctuality data were updated**, directed to detect departing and no longer arriving trips, resulting in the inability to compare values with what was recorded in previous years. The data collected using the new methodology record **about 98% of departing trips on time, relative to services in the urban area, and 98.8% in the suburban area**.
Customer satisfaction was also monitored in 2023[86].

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.
The survey method was CAPI interviews (face to face), in an urban as well as suburban setting. The sampling plan was stratified by customer basis 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	2023 Result	2022 Result	Change in percentage points (p.p.)
Overall score	91.5%	91%	**+0.5**
Service regularity and organisation	81.9%	80.5%	**+1.4**
Cleanliness	82%	81.5%	**+0.5**
Comfort	83.8%	82.3%	**+1.5**

85. The reference perimeter includes LPT services through the companies in the Busitalia Group and Ferrovie del Sud-Est e Servizi Automobilistici.
86. Customer satisfaction surveys 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 customer basis against the corresponding number of passengers carried.

SUBURBAN

Indicator	2023 Result	2022 Result	Change in percentage points (p.p.)
Overall score	88.7%	88.6%	**+0.1**
Service regularity and organisation	79.8%	77%	**+2.8**
Cleanliness	79.1%	78.6%	**+0.5**
Comfort	84.4%	83.5%	**+0.9**

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 Regulatory 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 3,140 reports/complaints were managed in 2023, mainly regarding the local transport services in Veneto, Umbria and Campania and, to some extent, the market service in Tuscany (Florence market service - The Mall Outlet), as well as to railway and navigation services, and alternative mobility services operated in Umbria. Compared to 2022, the number of reports increased by approximately 20%, corresponding to the full resumption of all services after the pandemic period and easier and clearer customer access to corporate communication channels.

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, 1,244 complaints reporting 2,270 inefficiencies were received in 2023 with regard to the urban segment (compared to 1,040 complaints received in 2022 reporting 1,615 inefficiencies).

URBAN INEFFICIENCIES REPORTED

Service regularity	Company/customer relationship	Punctuality	Comfort	Passenger information
2023: 621 (27%) 2022: 455 (28%)	2023: 250 (11%) 2022: 158 (10%)	2023: 464 (20%) 2022: 275 (17%)	2023: 112 (5%) 2022: 87 (5%)	2023: 149 (7%) 2022: 75 (5%)
—	—	↓	—	↓

● improvement ● worsening ● stable

In 2023, 1,828 complaints reporting 3,410 inefficiencies were received with regard to the suburban segment (compared to 1,504 complaints received in 2022 corresponding to 2,220 inefficiencies reported).

SUBURBAN INEFFICIENCIES REPORTED

Service regularity	Company/customer relationship	Punctuality	Comfort	Passenger information
2023: 965 (28%) 2022: 643 (29%)	2023: 270 (8%) 2022: 111 (5%)	2023: 762 (22%) 2022: 408 (19%)	2023: 244 (7%) 2022: 177 (8%)	2023: 182 (5%) 2022: 74 (3%)
—	—	↓	—	↓

● improvement ● worsening ● stable

Ferrovie del Sud-Est e Servizi Automobilistici (FSE)
With regard to road transport services carried out by FSE, the percentage of overall satisfied customers in 2023 (measured through the same methodology described above for rail service, but with a satisfaction level starting from 6) was 82.3% of respondents.

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 registered mail.
In 2023, 1,774 complaints on the road service were received (73% of which was closed within 30 days).

The following is the main information regarding c**ustomer satisfaction surveys carried out by Group companies offering rail and road transport services abroad.**

United Kingdom

The FS Group operates in the UK through Trenitalia c2c, a company that provides passenger transport services between London and Essex.
During 2023, a survey was conducted through Wavelength, which collected 1,578 responses showing a steady trend regarding customer satisfaction, which stands at a score of 78/100.

France

In 2023, 96% of customers using services offered by the FS Group in France through Trenitalia France were satisfied, with 49% of them giving the highest score (9/9), compared to 36% recorded in 2022. Travelers say they "recommend Trenitalia" and would "repeat the travel experience offered," dimensions of analysis that recorded significant values in the 2023 customer survey (8.3/9).

Spain

Since 25 November 2022, the Group has also been active in Spain, through Iryo, an investee company of Trenitalia. Customer Satisfaction surveys are conducted through an online survey in which travelers are asked to give a score from 1 to 10 to different dimensions of analysis (travel satisfaction, waiting, experience on board the train, etc.). The 2023 data recorded a Net Promoter Score (NPS)* of 62.4%.

* The Net Promoter Score is an index that measures the willingness of customers to recommend a company's products or services to others. The index is calculated by subtracting the percentage of "detractor" customers (those who gave a rating of 6 or less) from the percentage of "promoter" customers (those who gave a rating of 9 or 10).

The Netherlands

Qbuzz BV's passenger satisfaction monitoring system involves conducting a nationwide "OV Barometer*" survey for all routes and concession companies. In 2022, Qbuzz scored 7.8 out of 10 with regard to the LPT services offered in the Utrecht area, while in the Groningen-Drenthe and DMG (Drechtsteden-Molenlanden-Gorinchem) areas the value stood at 7.9/10. The 2023 survey, as of the date of this document, has not yet been published.

* *"OV-Klantbarometer"* is a national survey, conducted by a third party, of the opinions of public transport (urban and regional) travelers. Travelers have the opportunity to evaluate various aspects of the service. The survey is conducted annually, on a quarterly basis, on buses, streetcars, subways, regional trains and ships. The survey areas largely correspond to areas where public transport service concessionaires operate.

Greece

Hellenic Train monitors passenger satisfaction quarterly (e.g., through surveys and mystery client technique). The analysis is conducted by a third party. The sample analyzed was 2,000 passengers (includes all business segments: long-haul, intercity, and regional transport). In 2023, the value for "overall journey satisfaction" was 59.4%, recording a decrease of about 16.5 p.p. from the 2022 value (75.9%). The data, related to the analysis of the third quarter of 2023, is affected by the train accident that occurred in February*, which resulted in service disruptions by Hellenic Train, due to issues attributable to the railway network operator (a company outside the FS Group); several initiatives by Hellenic Train's management aimed at recovering expected service quality levels are currently under way.

*On the night of 28 February 2023, a train accident occurred between a passenger train (chartered by Hellenic Trains and owned by the public company Gaiaose) and a freight train near the town of Tempi in central Greece on the route between Athens and Thessaloniki. A total of 57 people lost their lives and 164 were injured. At the time of the accident 351 people were on board the passenger train, including 342 passengers, 7 employees of Hellenic Trains and 2 employees of the company operating the restaurant car, while 2 staff members were on the freight train. Investigations by the competent authorities at the investigation stage are currently underway.

Germany

The Netinera group, for monitoring punctuality and passenger satisfaction, uses a methodology defined by the Public Transport Authority on a regional basis and according to the type of service offered. For this reason, no summary indicators are available at the group or company level.

INTEGRATED LOGISTICS

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

The Group Business Plan'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 Business 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).

LOGISTICS TERMINAL
Integrated logistics hub
Companies in Italy, Germany, Greece
Integrated logistics platforms

TRAIN
approx. 21.3 billion tonnes km, of which 10.5 abroad
approx. 43.9 million trains km, of which 20.4 abroad

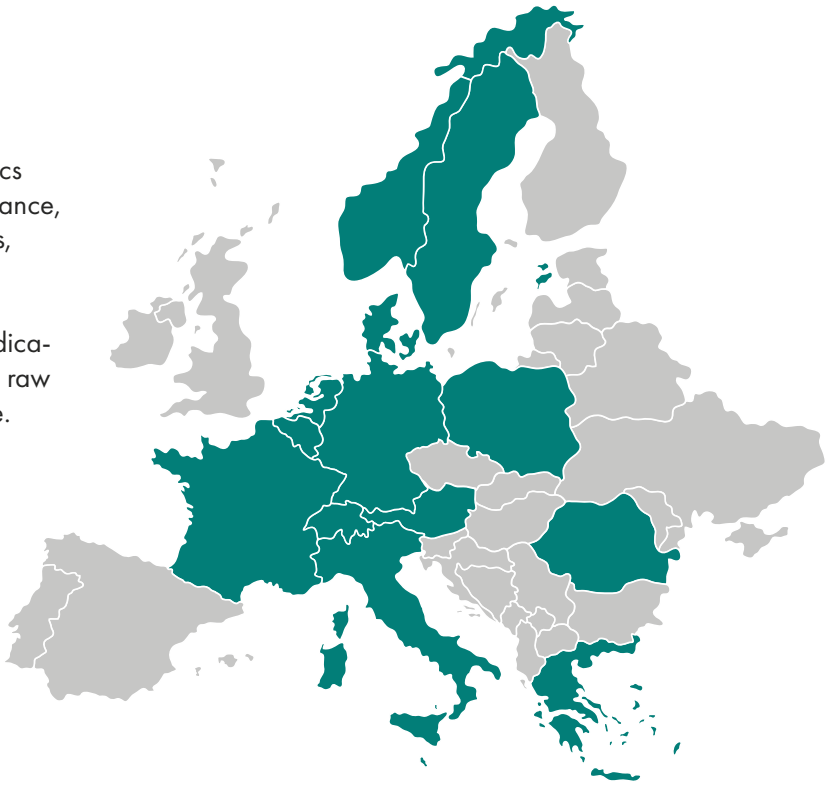
The Group's commercial offer is based on a wide range of Italian and international connections. It meets the needs of the different product sectors, also through a reorganisation by Business Units which guarantees the least time-to-market for customers:

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

INTERNATIONAL FREIGHT TRANSPORT

At international level, the Group offers logistics and railway 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.



Customer centricity is one of the core values for the Logistics Business Unit Companies, and to measure the level of satisfaction with the services provided, a Customer Satisfaction survey[87] is conducted through the administration of an online questionnaire structured so that the customer can provide a score, on a scale of 1 to 10, on aspects of the service provided that are considered essential.

During 2023, TX Logistik AG, a subsidiary of Mercitalia Logistics, **finalised the acquisition of Exploris** Deutschland Holding GmbH Hamburg, a European rail freight company, thus becoming the second largest rail freight operator in Germany.
With the closing of the deal, the **Logistics Business Unit is now present in eleven countries**, including through Exploris' companies, including Via Cargo, HSL Logistik and Delta Rail, strengthening the FS Group's presence in the European market with an enrichment of traffic to and from Italy also benefiting the import and export services of Italian industry.
In addition, among the most significant initiatives undertaken during the year was the start of work on the **construction of the intermodal Milano Smistamento terminal**.
The intermodal Milano Smistamento terminal will be built on an area of approximately 240,000 square meters and will be equipped with technologically advanced state-of-the-art equipment that will make it possible to adopt **the highest standards of safety and efficiency and generate the least possible impact on the surrounding environment**.
In line with the investments for the Logistics Business Unit, progress is being made toward the construction of a new hub to increase the quality of intermodal transport and expand the rail traffic network **to meet European targets in Italy and reach 30% of goods transported by rail by 2030**.

87. The customer satisfaction survey was not carried out in 2023.

(3-3)

SAFETY OF PASSENGERS AND PEOPLE

(416-1, 416-2)

Promoting safety

The safety of people is a priority for the Group as well as a strategic factor, which translates into a daily commitment to ensure the highest standards on its network (rail and road) and for all services offered.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 2023 amounted to:

- for the Infrastructure Business Unit at approximately €4.8 billion (+28% compared to 2022);
- for the Passenger and Logistics Business Units at approximately €533 million (+32% compared to 2022).

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.
The **equipment and systems for traffic safety** to date used on the Italian network are diversified and integrated with each other according to the characteristics of the lines and the type of traffic on them (passenger or freight; long, medium or short distance) and ensure:

- traffic operation in stations, junctions and other service locations, enabling safe operation of switches, signals, etc., in relation to the tracks assigned to each train[88];
- train spacing, allowing safe distance between trains on the lines to be maintained at all times[89];
- protection of train running[90];
- supervision and remote control of traffic[91];
- the protection of traffic at points of intersection with the road network (rail crossings);
- the acquisition and transfer of ground and on-board information[92].

88. Central equipment: ACE - Central Electric Equipment, ACEI-Central Electric Itinerary Equipment, ACC Central Computerised Equipment, ACC-M Multistation Computerised Central Equipment.
89. 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.
90. SSC - Driver Support System, SCMT - Train Operation Control System, ERTMS - European Rail Train Management System.
91. SCC - Command and Control System, with its evolutions designed for HS along lines, SCC-AV, SCC-M) and CTC - Centralised Traffic Control system.
92. Dedicated GSM-R telecommunication system, where R stands for Railway.

NETWORK SAFETY TECHNOLOGIES

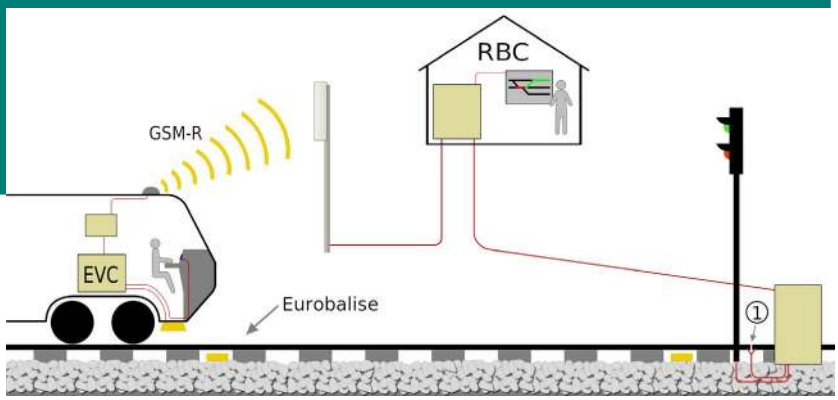
		km of lines
ERTMS/ ETCS	The Group was among the first in Europe to implement the level 2 European Rail Traffic Management System/European Train Control System (ERTMS/ETCS) on the High Speed/High Capacity network, and is today implementing an accelerated plan to implement the system on the entire network in advance of the deadlines imposed by the EU. The system represents a state-of-the-art technology that can ensure that trains in different European countries can run safely and seamlessly on all lines that are equipped with it, improve infrastructure functionality and performance (i.e., greater capacity), and enable a reduction in energy consumption and emissions related to traffic.	**1,177**[93] Kilometres of line equipped with both ERTMS Level 2 and ERTMS Level 1
SCC, CTC and ACCM	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.	**13,625**
SCMT	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. 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.	**13,224**
SCC	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.	**2,312**
GSM-R	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.	**11,712**

93. Kilometres of line equipped with both ERTMS Level 2 and ERTMS Level 1.

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 (fixed) beacons mainly act as location references. Through the radio channel, the SSB (On-Board Subsystem) and specifically, its smart core, the EVC (European Vital Computer), 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 (as from 2005) to implement the Level 2 European Rail Traffic Management System/European Train Control System (ERTMS/ETCS)** on the new High Speed/High Capacity network.
In accordance 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 EU obligations at 2050. The equipping of conventional lines is underway with ERTMS Level 2.
Among the benefits of the new system: increased safety in rail transport, reliability, punctuality and speed, reduced costs of installation and maintenance as well as implementation of the Central Computerized 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 "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 10% of electricity for railway companies.



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

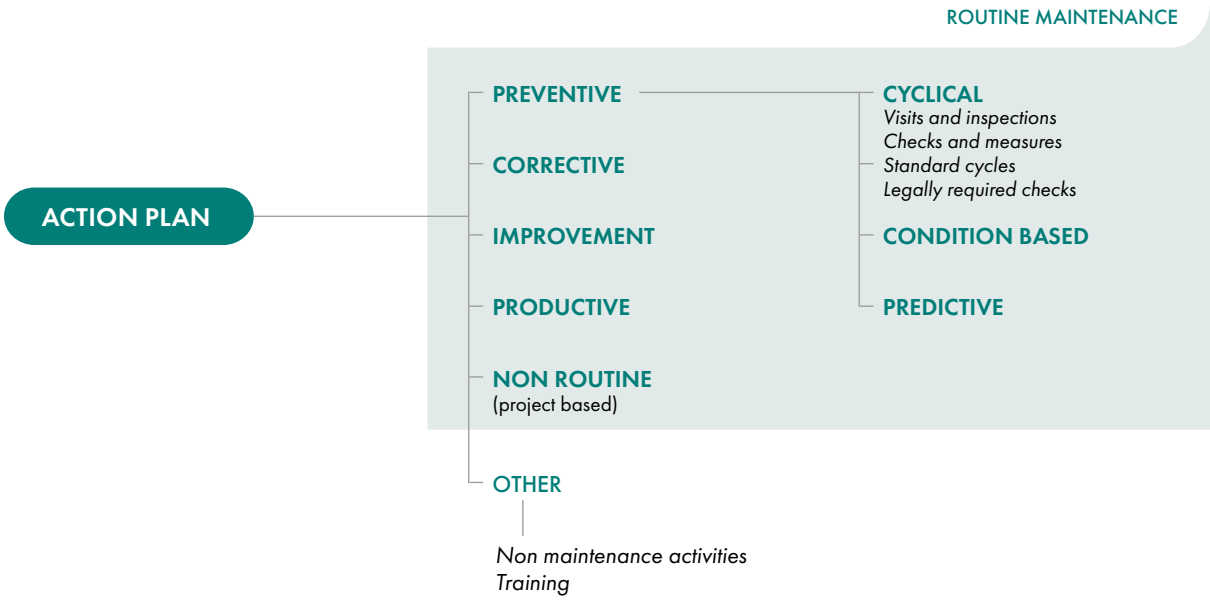
The Maintenance of Railway Vehicles is one of the key processes in ensuring that operational safety is maintained and improved and to meet established quality standards.

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 **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;
- proactive/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.



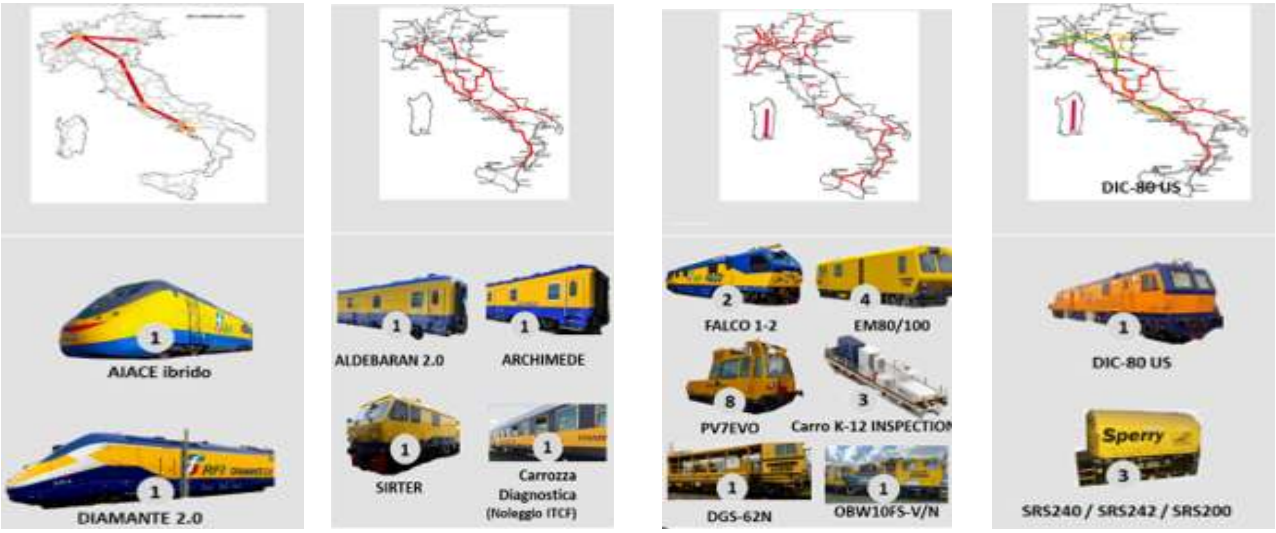
Maintenance is carried out according to plans that are also developed by extensively **monitoring the network through the diagnostic activity**.
Diagnostics enable operators to automatically determine the conditions of various infrastructure components, assessing their wear and tear through an efficient IT system.

Diagnostics 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** systems 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 **into classes** 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			Ultrasounds[94]
1st class (2 weeks)	2nd class (2 months)	3rd-4th class (4-6 months)	(6-12-24 months)



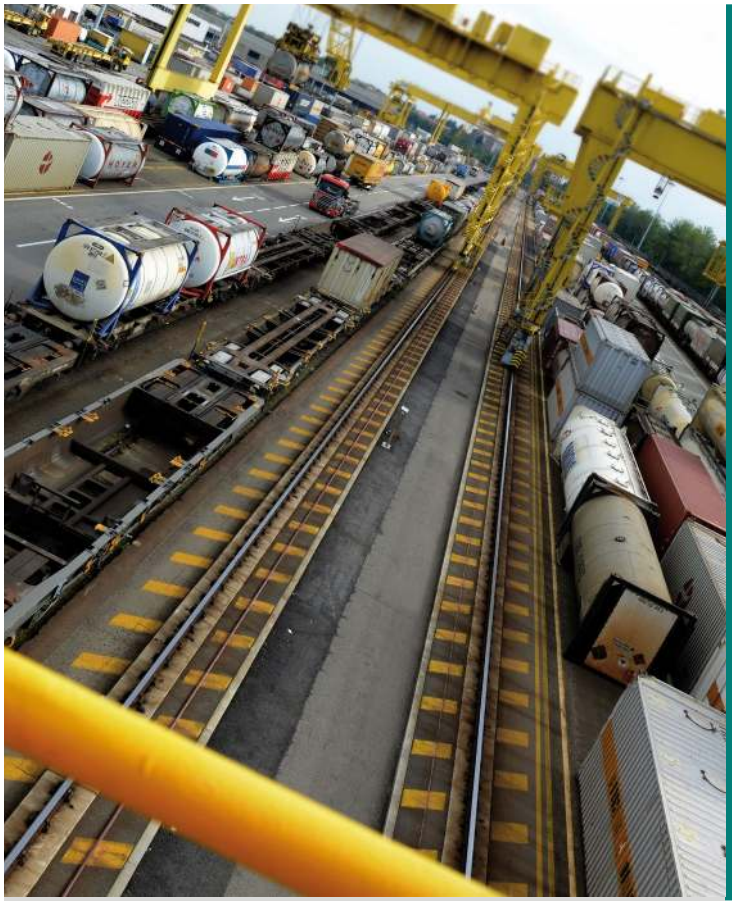
RFI has a fleet of 29 diagnostic vehicles (3 of which for the HS/HC network), set to be extended up too approx. 40 vehicles in the coming years.
An operating schedule is prepared annually for the diagnostic fleet in order to meet diagnostic and monitoring requirements prescribed by current procedures. 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 both mobile and fixed 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.

94. Diagnostics trains 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 (NRV) operated by RFI

Safety on the national railway infrastructure operated 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, train derailments, accidents at rail 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[95]) at European level and national reference values (NRV[96]), based on historical data.
The table below shows the Group's actual safety data for 2023 compared with certain common safety targets (measurement unit expressed in FWSI[97] on a graduated scale). Specifically, the table below compares the accumulated data on RFI performance, the National Infrastructure Operator, for each risk category[98] and each indicator, with Common Safety Targets (CSTs) along with specific national targets assigned to Italy (NRV) under Directive 2013/753/EU. It should be noted that the

95. Common Safety Target - CST.
96. National Reference Value: specific value assigned to the railway system of each member country based on the various CSTs.
97. Fatalities and Weighted Serious Injuries.
98. Type of people who could suffer injury from a railway accident.

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.

COMMON SAFETY TARGETS

Risk category	Measurement unit	Graduated scale	Targets		Actual
			CST	NRV	
			Common ($x10^9$)	Italy ($x10^9$)	RFI ($x10^9$)
Passengers	Number of passenger FWSI per year calculated based on significant injuries/passenger train*km per year	passenger train*km per year	17.00	38.10	0.32
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	16.49
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	5.32
Other people on the pavement Other people that are not 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	0.00
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	171.05

It should be noted that, from the data analysis, the only value above the NRV[99] index threshold was still found to be within the European "acceptability" criteria.
From the analysis of significant accidents[100] it emerges that there were 104 significant accidents in 2023 on Italian railway infrastructure managed by RFI, which overall caused 70 deaths and 26 serious injuries (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 2022, there was an overall increase in significant accidents of +7, mainly due to the increase in the number of "Accidents to persons involving rolling stock in motion" (+15). As regards the causes of the significant accidents, the increase in external causes, which rose from 82 to 88, should be noted. With regard to significant accidents associated to internal causes, there was an increase in accidents to "RFI employees (including contractors)" as shown in the table below on the consequences of significant accidents[101] with reference to personal injury.
In this regard, an update of the accident that occurred in Brandizzo in 2023 is given below.
Criminal Proceedings No. 4309/2023 RGNR (General Register of Crimes): on 30 August 2023, at approximately 11.50 p.m., along the Turin-Milan railway line, near the **Brandizzo** station, a train not in commercial service ran over 5 workers of a subcontractor carrying out maintenance work on the infrastructure, causing their death. The Ivrea Public Prosecutor's Office filed criminal proceedings against 4 legal entities and 11 natural persons. The companies RFI SpA, SiGiFer S.r.l. (subcontractor), CLF SpA and UNIFERR S.r.l. (contracting companies) are under investigation for the administrative offence referred to in Article 25-*septies* of Legislative Decree 231/01. With regard to natural persons, the RFI SpA employee in charge of the interruption and the site manager of SiGiFer S.r.l. are under investigation for the crimes of murder (Article 575 of the Italian Criminal Code) and railway disaster (Article 430 of the Italian Criminal Code). In addition, a manager and an employee of RFI and representatives of SiGiFer S.r.l., CLF SpA and UNIFERR S.r.l. are under investigation for the crimes of multiple culpable homicide with violation of the regulations on the prevention of accidents at work (Article 589, paragraphs I, II and V of the Italian Criminal Code) and of culpable railway disaster (Article 449 of the Italian Criminal Code). The criminal proceedings are at the preliminary investigation stage.

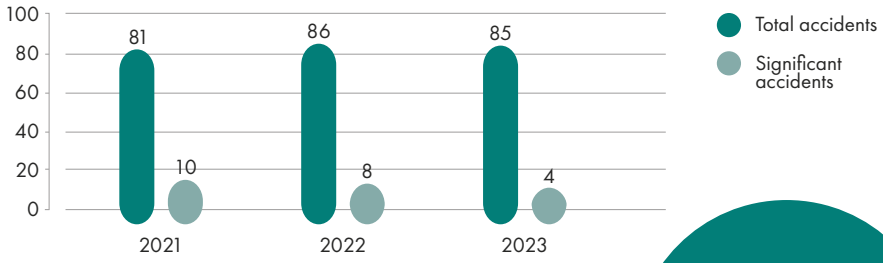
99. - relating to persons unduly trespassing or crossing the tracks (violations of safety regulations by persons outside the railway system).
100. According to the ERA classification criteria, a significant accident is any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person (hospitalisation > 24h), or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded.
101. Data updated as at 8 January 2024, 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	
	2023	2022	2023	2022
RFI employees (including contractors)	5	2	2	2
Railway company employees	1	0	0	1
Passengers	0	3	1	0
Users of railroad crossings	2	9	0	2
People crossing the tracks wrongly	62	48	23	18
Other people on the pavement	0	0	0	0
Other people not on the pavement	0	0	0	0
Total	**70**	**62**	**26**	**23**

When looking at the number of significant accidents involving RFI alone, in 2023 there was a 50% decrease, down on the previous year (-4 events); the data for 2023 relating to overall accidents that RFI was liable for remained stable with 85 events against 86 last year.

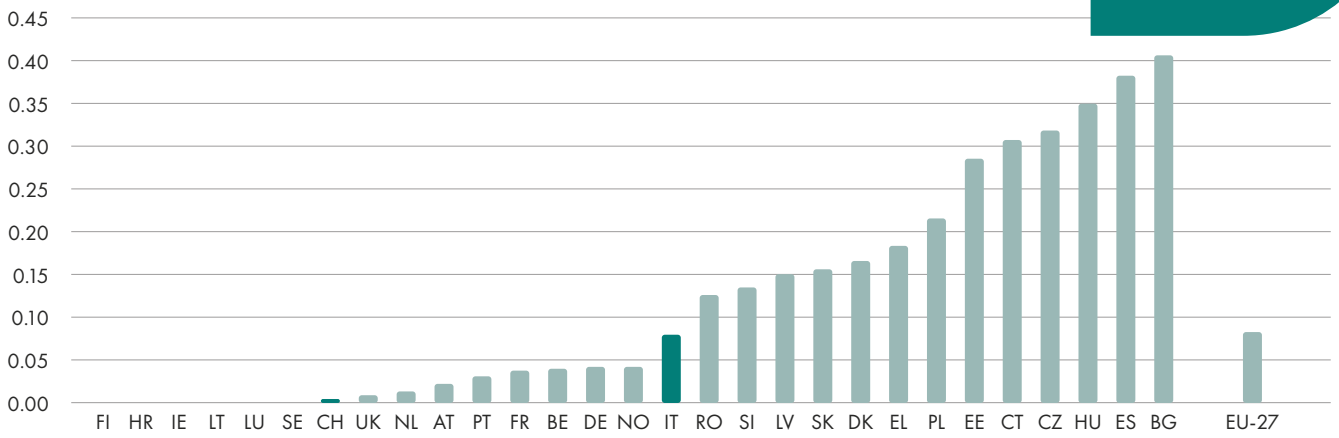
Accidents for which RFI was liable



Worldwide, **the Italian figures are below the European average.**

Fatality rates for railway passengers

Passenger fatalities per billion passenger kilometers (2011-2021 average)



Source: ERA - Safety Overview 2023

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[102], in order to be able to compare its performance in the international context. 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 18 typical UIC accidents that occurred in 2023 in the area of operations (stable compared to 2022), 5 were of an exogenous nature (i.e. with responsibility related to causes external to the railway system), while the remaining 13 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 2023 were 2, a decrease of 33% compared to 2022.**

Road safety

The Group's goal is to guarantee **traffic safety in the network it operates**, in line with the "**EU Strategic Action Plan on Road Safety 2021-2030**."
For the Group safety means:
- designing a safe road;
- maintaining a safe road;
- operating a safe road.

This is an activity that requires constant and careful commitment **on approx. 32,500 kilometres of roads**, and that affects various components of the road infrastructure, including: pavement, facilities, and restraint systems.
Commitment to safety is ensured by daily surveillance of the network, thanks to a widespread presence in local areas, the prompt intervention of operations personnel in case of need and emergency, the ongoing operation of the National Operations Room, the Compartmental Operations Rooms, and the management of relations with the Traffic Police and Civil Defense bodies and entities.
Each intervention on the network is aimed at increasing the level of user safety in its two aspects of **active safety** (accident prevention) and **passive safety** (reduction of consequences). The technological solutions that are implemented aim to reduce accident and fatality rates, increase traffic flow levels, constantly monitor the network, and improve driving comfort.
In order to raise the safety standards of the network under operation, high-speed fiber-optic electronic communications networks, cameras and video surveillance systems, weather monitoring stations, new Variable Message Panels to communicate traffic-related information to users in real time, and utility messages such as driving tips, systems such as "Vergilius plus" to monitor compliance with speed limits have been installed.
The road surface is crucial for active safety, and even when there are no visible signs of degradation and the surface appears smooth, it needs to be kept under control, which is why Anas monitors the quality of road surfaces through various means on an ongoing basis.
The high-performance multifunctional equipment ERMES - Equipment for Routine evaluation of Macrotexture Evenness and Skid resistance enables the survey of all parameters necessary to measure performance indicators related to the surface characteristics of road pavements. In 2023, the survey of **24,000 km** of road surface was carried out. Thanks to the **T.S.D. - Traffic Speed Deflectometer**, it is possible to detect, continuously, at high speeds up to 70 km/h, safely and without disrupting normal traffic circulation, the structural characteristics of flexible road pavements (bearing capacity), allowing immediate assessment of the quality of the mixture, effective and timely control of the materials used during the construction of the work and verification of the useful life of the infrastructure.
In year 2023, the pavement bearing capacity of **10,600 km of roads** was evaluated.
The Mobile Mapping system called **Cartesio** for topographic road surveying helps prevent asphalt wear and tear, thanks in part to the acquisition of images using high-resolution cameras and specific sensors for the surface defectology of road pavements.
In 2023, surveys with Cartesio were carried out on **8,600 km of roads**.
Through the **high-performance Mobile Laboratory called DELPHI - Delineation Photometric Instrument** the night retroreflection (RL) of road markings of any nature and species, both on the margin and dashed, is measured.
In 2023, more than **36,000 km** of road markings were monitored, an increase of about 10% over the previous year.

102. 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.

The **TIRESIA Mobile Laboratory** is a dynamic measurement system, developed in cooperation with the National Institute of Metrological Research "INRIM," which is capable of performing photometric characterisation of road and tunnel lighting systems in compliance with current regulations.
In 2023, the survey involved a sample of **177 tunnels**.

SMART ROAD

A **Smart Road** is an infrastructure fitted with a broadband network that enables ultra-fast connectivity, equipped with technologies and sensors, connectivity between the vehicle and the infrastructure, with Dedicated Short Range Communications (DSRC), Cellular Vehicle to V2X Vehicle to Everything (C-V2X) technology, and **ready for future 5G systems and complete with Green Islands, for charging electric vehicles and for generating energy from renewable sources**, as well as for housing processing and storage facilities of the data generated by the Smart Road. The road has smart cameras and Internet of Things systems (IoT) for surveillance and control along the entire section. While waiting for the spread of connected cars, the user will be able to take advantage of all the infomobility services via an App, whose aim is to support driving and increase road safety.

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.
In 2023, roughly 779 scheduled maintenance projects worth €2.25 billion were approved, mainly financed by the 2016-2020 Government Programme Contract and by the Bridges, Viaducts and Tunnels Programme. 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, the adjustment of security barriers, and revamp technological and lighting systems.
In 2023, €186 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 in response to unforeseen and unpredictable events.
In order to strengthen the **surveillance of the works**

of art, the process of visual inspection of the works has been coupled with the installation of **SHM Structural Health Monitoring (SHM)-type structural monitoring systems**. The intent is to monitor and supervise, in real-time and from a predictive perspective, the state of preservation of the works through the continuous analysis of certain response parameters, to identify, any behavioural changes, a symptom of overriding changes in the structural system and therefore possible damage. This is done through the combination of IoT sensors, Big Data platforms and Machine Learning algorithms, in particular, the processing of the acquired data is entrusted to an analysis algorithm developed by Anas in collaboration with the Polytechnic University of Milan, the University of Padua and the University of Perugia, delivered and validated in 2022.
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 operate the entire system efficiently and securely.
For operation, surveillance, first response, and company routine maintenance, **about 1,750 women and men** (including Chief Roadmen, Trackmen, and Specialist Operators) and 3,500 vehicles were employed in 2023.

For the management of winter activities, a company vehicle fleet consisting of 672 vehicles (including 97 snow cutter turbines) was used, and about 1,400 company resources were employed; this workforce was added to by up to 414 seasonal Specialist Operators in early 2023 (January/April), and up to 259 resources in November/December 2023.

BUS FLEET MAINTENANCE

The Group also 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 ensuring the safety of transported personnel and passengers, including with:

- video surveillance systems on board vehicles and protection for the driver's cabin;
- 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).

(403-3, 403-5, 403-6, 403-9, 403-10)

OCCUPATIONAL HEALTH & SAFETY

Occupational health and safety are key factors in the ten-year Business Plan as distinctive elements of the commitment to spreading a culture of safety and well-being of personnel while integrating with the values of sustainability in environmental, social and economic dimensions. 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 aims to confirm itself among the leading industrial companies in the area of health and safety, with the ambition of pursuing the goal of zero accidents at work in the long run through a path of continuous performance improvement.
During 2023, Group companies continued the development of projects under the FS-Inail Protocol, signed by the parties in 2022. In particular, the main initiatives concern: experimentation of technological, innovative and organisational solutions in the construction of infrastructure works; collaboration in the field of health and occupational medicine on training, risk assessment and the application of digital solutions; and a conference for the sharing and dissemination of best practices for prevention with the involvement of other industrial entities, Scuola Superiore Sant'Anna of Pisa and Trade Unions. Startups and SMEs, both Italian and foreign, were involved in the FS Group's Safety Innovation Challenge 2023, which aimed to identify digital and innovative solutions to be applied to occupational safety. In December, the Challenge's winning startups and SMEs were identified and an event was held to meet with Group companies and develop actual use cases.
Between October and December 2023, the companies held their respective Safety Days, now in their fifth year, dedicated to prevention improvement projects and staff involvement. The initiatives, with the presence of top management representatives from the different companies, focused on the themes of digital and technological innovation employed in order to increase prevention. During these events, more than 400 artistic awards were presented to personnel from the companies who had distinguished themselves for virtuous practices and behaviour in the area of safety.

For an analysis of accidents, the table below is added for the year 2023[103]:

	2023
Rate of recordable occupational accidents[104]	11.69
Rate of occupational accidents with serious consequences (excluding deaths)[105]	1.96
Rate of deaths resulting from occupational accidents[106]	0.09
Number of recordable occupational accidents	1,588
Rate of occupational accidents with serious consequences (excluding deaths)	266
Rate of deaths resulting from occupational accidents	12
Number of average worked hours[107]	135,896,669

103. The data relate to the accident rates of the following companies: FS, Trenitalia, RFI, Ferservizi, Italferr, FS Sistemi Urbani, Fercredit, Italcertifer, Ferrovie del Sud Est, Anas, FS Technology, FS Security, FS International, FS Saudi, FS Usa, Terminali Italia, Grandi Stazioni Rail, Trenitalia France, Trenitalia c2c, Hellenic Train, Netinera, ILSA, Cremonesi Workshop, Mercitalia Logistics, Mercitalia Rail, Mercitalia Intermodal, TX Logistik, Mercitalia Shunting & Terminal, Busitalia Sita Nord, Savit, Busitalia Rail Service, Busitalia Veneto, Busitalia Campania, Firenze City Sightseeing, Qbuzz, Grandi Stazioni Immobiliare. The perimeter accounts for 99.4% of the total, a result achieved in 2023 thanks to a project aimed at structuring a centralised collection process in the medium to long term for occupational health and safety data; 2022 and 2021 data are, therefore, not available.
104. Ratio of the number of recordable injuries (assessed as the number of all injuries with a duration greater than or equal to 1 day of prognosis) to the number of hours worked (assessed on the basis of the average number of employees and the estimated average hours worked by each employee).
105. Ratio of the number of injuries with serious consequences, excluding deaths (assessed as the number of injuries with a total duration of more than or equal to 40 days of prognosis) to the number of hours worked (assessed on the basis of the average number of employees and the estimated average hours worked by each employee).
106. Ratio of the number of fatalities resulting from occupational injuries to the number of hours worked (assessed on the basis of the average number of employees and estimated average hours worked by each employee).
107. The number of hours worked is calculated according to the average number of employees and the estimated average hours worked by each employee.

The table below provides data on injuries indemnified by INAIL (National Institute for Insurance against Accidents at Work), which claims are in the process of being settled in 2023. In comparing the data, there was a general downward trend in the number of accidents and their frequency over the past year, as confirmed by the decrease in the general incidence index. In addition, as shown by the trend in the general severity index, there was also a reduction in the severity of accidents that occurred.

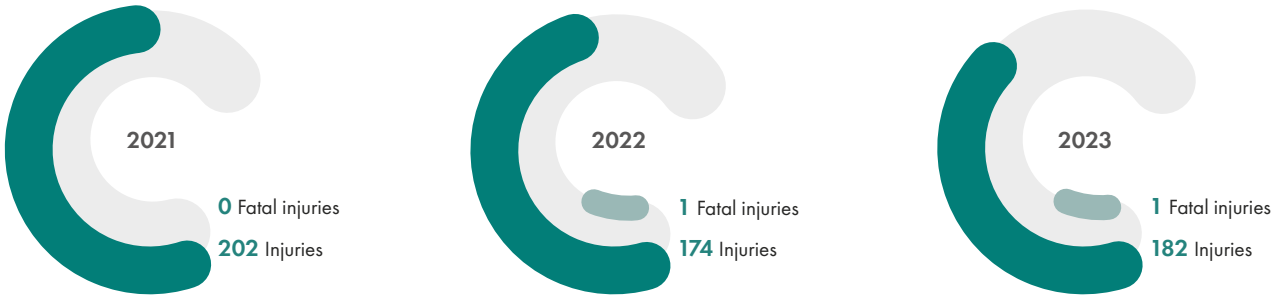
INJURIES INDEMNIFIED BY INAIL[108]	2023[109]	2022	2021
Injuries in the workplace	**765**	**939**	**909**
Injuries – women	*118*	*155*	*132*
Injuries – men	*647*	*784*	*777*
Fatal injuries	**3**	**3**	**2**
Fatal injuries – women	*1*	*0*	*0*
Fatal injuries – men	*2*	*3*	*2*
Serious injuries in the workplace[110]	**210**	**271**	**274**
Serious injuries - women	*26*	*43*	*33*
Serious injuries- men	*184*	*228*	*241*
Commuting accidents	**189**	**240**	**236**
Commuting accidents –women	*44*	*56*	*39*
Commuting accidents – men	*145*	*184*	*197*
Overall frequency rate[111]	**10.70**	**13.82**	**15.28**
Frequency – women	*7.78*	*11.60*	*12.03*
Frequency – men	*11.04*	*14.36*	*16.02*
Severity rate[112]	**559**	**705**	**591**

108. The 2023 and 2022 data include the following companies: FS Italiane, RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani, Italcertifer, Mercitalia Logistics, Mercitalia Rail, Busitalia - Sita Nord, Anas e FSTechnology. The 2021 data include the following companies: FS Italiane, RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani, Italcertifer, Mercitalia Logistics, Mercitalia Rail and Busitalia - Sita Nord.
109. The INAIL data for 2023 are consolidated partially, since investigations by the competent authorities were in progress at the date of preparation of this document.
110. Serious injuries are those that result in more than 40 days of missed work.
111. Frequency rate: [no. of injuries in the workplace/amount]x 1,000 employees, calculated in accordance with European ESAW standards.
112. Severity rate: [number of missed days/amount]x 1,000 employees.

Construction site safety

With regard to **safety at rail infrastructure construction sites**, the Group pays close attention to the responsibility and awareness-raising activities carried out by contractors. The main indexes on safety are shown below[113]. The data do not include all the Group's contractors, but concern civil and technological contracts in which Italferr is involved as Works Manager and/or Coordinator during the Performance of Works, as well as contracts related to new HS/HC lines awarded to General Contractors in which Italferr provides Works Management and Safety Oversight, and finally contracts to General Contractors, in which Italferr provides oversight for both Works Management and safety. For more information regarding events that occurred to contractor personnel from significant rail accidents, please refer to the paragraph *Other Information* of the Annual Financial Report 2023.

Injuries involving employees of contractors (no.)



Frequency (F) and severity (S) rates

Frequency Rate[114] and Severity Rate[115] showed a lower value than during 2022.

The **number of hours worked increased by approximately 24%** in 2023 compared to 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 increased both in absolute terms (182 injuries compared to 174 in 2022) and decreased in relative terms, as demonstrated by the lower frequency rate.

113. 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.
114. 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.
115. 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. In 2023, 16,330,372 hours worked were recorded, up compared to 2022 (13,119,750).

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, **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, please refer to the Sustainability section of the websites and to websites of RFI (rfi.it), Anas (stradeanas.it) and Italferr (italferr.it).

OCCUPATIONAL DISEASES

The monitoring of occupational diseases is an important tool for knowledge of past and current occupational risks and makes it possible to verify and, if necessary, improve risk assessments and target primary prevention interventions, worker information and training, and health surveillance with increasing effectiveness, and also to ensure that workers receive proper insurance protection and recognition for damage to health that may arise due to work.
The National Prevention Plan 2020-2025 indicates among its objectives the knowledge of occupational diseases and their trends, and this is particularly important in a complex and constantly evolving technological entity such as that of the FS Group.
INAIL regularly publishes data on reported and recognised occupational diseases on its institutional website on an annual basis.

Until 2020, data received annually from INAIL were regularly processed by the Occupational Medicine office of the Group's Health Department and transmitted to the relevant company functions, but in recent years this flow was interrupted and pending its restoration the data that follow are exclusively those that the Occupational Medicine office received from company functions and not from INAIL.
In the three-year period 2021-2023, 265 reports of occupational disease complaints were received (92 in 2021, 80 in 2022, and 93 in 2023), only in 7 cases did the complaint involve women, and only 28% were younger than 63 years of age at diagnosis.
Approximately 40% of the complaints could have been recognised by INAIL, a percentage in line with what emerged in the study prepared in collaboration with INAIL during the year on occupational diseases in the

Group's personnel on the cases recognised in the period from 2015 to 2019, considered by INAIL to be more significant because it is consolidated.
The large difference in the number of cases identified between the genders, is certainly to be sought in the different railway activities where there is still a small presence of the female gender, but for this very reason it is necessary and desirable that the assessment of biological, environmental and social variables, on which differences in the state of health between genders may depend, becomes an increasingly careful practice in order to improve the appropriateness of prevention interventions and contribute to strengthening the centrality of the person.
Similar attention must be paid to age differences, and in recent decades in Italy there has been a gradual aging of the population in relation to increased life expectancy, linked to improved social conditions and advances in early diagnosis and treatment of diseases, and a reduction in the birth rate. Likewise, as a result of changes in the social security system, there has been an increase in the average age of workers and thus in the presence of chronic degenerative diseases mainly affecting the osteoarticular and cardiovascular systems that generally accompany aging and affect work performance, physical fitness and the incidence of occupational diseases.
The most common professional diseases in the railway sector are bone and joint or skeletal muscle problems with a residual but still substantial number of asbestos-related diseases linked to past exposure. Disease prevention actions include the large system of health surveillance involving railroad personnel, in accordance with regulations governing both occupational health and safety, and safety of railway operations.
The table below shows the data of medical fitness examinations conducted on Group personnel over the past three years.

PERSONNEL WHO RECEIVED CHECK-UPS	2023	2022	2021
Personnel who received health monitoring check-ups	57,475	47,612	36,530
Personnel who received railway safety medical check-ups	13,386	12,733	14,165

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 113,592 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 training on Workers' Health and Safety**
  - refresher course on protective measures for workers, through practical applications and examples of the sources of risk and related prevention measures.
- **Managers' Health and Safety**
  - training divided into four modules, each dedicated to a specific topic (legal/regulatory issues; safety management and organisation; risk identification and assessment; communication, training and consultation of workers), addressed both from a content/technical point of view and from a more individual/behavioural point of view, to ensure a dissemination of safety culture that combines knowledge with knowing how to do/be.
- **Refresher training on Managers' Health and Safety**
  - refresher course on protective measures for workers, through practical applications and examples of the sources of risk and related prevention measures.
- **Fire fighting training and refresher course - medium and high risk**
  - provide those responsible for implementing fire prevention and firefighting measures with the necessary knowledge and skills to recognise and take appropriate measures for protection and evacuation of the workplace in the event of emergency response, and the relevant refresher training.
- **First aid and refresher training**
  - provide the personnel in charge with the necessary knowledge and skills to effectively exercise their role, distinguished into a theoretical part and a more practical-exercise part, and ensure the proper performance of the duties of first-aid officers.
- **Training and refresher course for Safety Officers**
  - train the Safety Officers on the basic knowledge of occupational health and safety, highlighting the relevant duties and responsibilities within the safety management system, and the relevant updating.
- **Role qualification ASPP/RSPP**

– training to qualify for the role of ASPP (Prevention and Protection Service Officer).

- **Remote working**
  – encourage a reflection on the impact of remote working 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.
- **Aggression prevention and management**
  – the course involved accompanying and front-line staff and was aimed at offering tools, methods, and experiences to prevent and respond properly to the phenomenon of aggression.

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 ensuring 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.
With this in mind, **FS Security**, the new FS Group company fully dedicated to train and station security, has been operational since 1 January 2023.
About 700 professionals, coming from Trenitalia and RFI's Corporate Protection departments, have been concentrated in a single organisation in order to offer professional security services within the FS Italiane Group. This integration aims to maximise efficiency and significantly improve the quality of security services in support of the most relevant business processes. FS Security is also called upon to implement diversified crime prevention, monitoring and counter-crime initiatives, in close cooperation with the Police and in support of the Group's main companies.
The Group constantly invests **to monitor and ensure travel security and that of the infrastructure and stations**.
To monitor security indicators, the Group strengthened a partnership with the Railway Police (the body that is officially responsible for preventing and repressing crimes in the railway sector). The main offenses under attention are reported below.

STATISTICS ON THE SECURITY OF RAILWAY ASSETS

Unlawful acts	2023	2022	2021	Delta % 2022/2021	Trend 2023/2022
Assaults on railway personnel	340	358	330	-5%	▼
Thefts at the station	1,122	877	473	+28%	▲
Thefts on board trains	1,834	1,800	1,356	+2%	▲
Copper thefts from operating assets	164	230	171	-29%	▼
Copper thefts at depots	8	11	10	-27%	▼

Source: FS Security database and Ministry of the Interior data regarding theft at stations and theft on board trains.

In 2023:

- 1,834 thefts were reported by passengers on board trains. The figures are significantly down on 2019 (2,692 thefts), a year not impacted by reduced commercial services and in line with the data recorded in 2022;
- 1,122 thefts suffered by passengers at stations, up by 27.9% on the previous year (2022: 877 thefts), due to the fact that Covid-related restrictions, which were removed in June 2022, led to a significant fall in numbers of passengers at stations.

The Group is obviously also committed to ensuring the **safety of on-board personnel** and in 2023:

- to extending to the Veneto region the agreement concerning the **Board Support app** 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 onboard monitors, front cameras for monitoring the line and inte-

gration with the MUVI platform for remoting images;
- a new front camera and video-surveillance system was installed on two ETR 500;
- to providing specific training to frontline personnel with the aim of conveying cognitive-behavioural tools to deal with/avoid critical situations that may give rise to aggressive episodes.

In 2023, too, activities were carried out to make railway assets more secure. On the one hand, separation baffles, turnstiles and access gates were installed at railway stations to improve order and overall appearance. On the other, new video surveillance, access control/intrusion control, and passive protection systems were installed to provide greater asset security. Finally, work continued to improve the hardware and software used by the Group.
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.

Cyber security

In the era of digital revolution and technological innovation, we are witnessing significant transformations in contemporary societies and the entire transport and mobility sector. This digitisation process has transferred a wide range of activities, both licit and illicit, from the physical to the virtual world, incentivising malicious actors from various fields - such as cyber crime, cyber terrorism, cyber espionage, and cyber warfare - to progressively refine their attack techniques and strategies.
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.
The year 2023 represented a critical time for cybersecurity challenges, with a significant increase in the quantity, frequency, and severity of cyber attacks on a global scale. This increase took place in an already complex context, exacerbated by international tensions and widespread cyberwarfare. Moreover, the Clusit report emphasised how Italy is now a more frequent target, accounting for 9.6% of global attacks over the same period, despite the fact that its contribution to global GDP is only 2%, and its population constitutes just 0.7% of the total.
In this challenging environment, the FS Group has been committed to ensuring high levels of internal security. This has been made possible by **adopting cutting-edge technologies and continuously updating security policies**, which have improved the ability to detect and neutralise cyber threats. In addition, **the integration of advanced technology solutions, coupled with strict adherence** to international cybersecurity standards, has helped consolidate the security of the Group's digital environment, while also improving vulnerability management. As a result of this proactive strategy, the impact of global challenges on business operations has been significantly reduced, mitigating the perception of risk in an environment of increasing cyber pitfalls.
The Group responds to this type of need through an **integrated model of security direction and governance** capable of converging physical and cyber security strategy into a single point of direction and control, thus ensuring the adoption of general principles and uniform operational intervention approaches. This is with the aim of identifying in the most timely and reliable manner the sources of threat regardless of how they manifest themselves, whether through a physical, cyber or hybrid attack, and intervene as quickly as possible according to an approach that involves the companies of the Group and structured in the Security Governance Model.
The above is, moreover, necessary to ensure a unified interface with the Institutions in charge of security, as well as with the corresponding departments of railway companies in other countries. To this end, the Group has adopted a **Security Governance Model** that identifies the Security & Risk department (and the "Security" professional category) as the Cyber & Information Security function with the objective of directing the implementation of the cybersecurity model. Also in accordance with the new governance model, a Business Unit called Cyber Security Solutions & Operations was established at FS Technology with the aim of giving implementation to "Solutions" and "Operations" with respect to the lines of direction that remained the prerogative of the Parent Company.
The establishment of the new Business Unit therefore included the **creation of the new Cyber Defense Center**, a center of excellence where the most advanced human and technological resources converge to

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

identify, prevent, detect and counter cyber attacks, and of which the C-SOC (Cyber Security Operations Centre) is an integral part that carries out H24 activities. The Cyber Defense Center ensures the protection of the Group's tens of thousands of fixed and mobile workstations distributed throughout the territory, and of the information systems supporting business processes and circulation services, through the most innovative technologies on the market and capable of exploiting the potential of Big Data analysis and artificial intelligence to recognise and counter cyber attacks.
During 2023, the team of security incident analysts detected, countered and neutralised more than 5,200 cyber attacks.
Of great importance in this context is the preventive role of the **threat intelligence service**, a complex preventive activity in which expert analysts continuously research and identify new threats and specific attack paths. The analysts have technologies capable of automating the acquisition of information from certified channels, mainly institutional, and, through synchronous links with the Group's security equipment, updating defense systems.
The threat intelligence service is also supported by an in-house malware analysis team, composed of specialists capable of breaking down malware code and analysing its behaviour with the aim of identifying unknown threats and internally producing bulletins containing Indicators of Compromise (IoCs), i.e., attack vectors that could affect all sectors, and sharing them with Institutions and other Essential Services Operators.
The Cyber organisation at FS Technology is then completed by the areas responsible for the definition of architectures and engineering of security systems (Cyber Security Architectures & Engineering), as well as the management of projects, contracts and structure reporting (Project and Program Management).
Finally, with a view to developing schemes for collaboration and sharing information with the other Italian Critical Infrastructures, a Trusted Introducer accreditation process of the FS CERT has been concluded, which is already active and ready to manage security incidents according to the reference regulatory framework and industry best practices.
In 2023 work also commenced on two sets of major projects aimed at profoundly changing (and improving) the security of e-mail and web browsing.

Privacy – Data Protection Officer

The General Data Protection Regulation ("GDPR") and Legislative Decree no. 196/2003, as amended by Legislative Decree no. 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 new **Data Protection Framework**, which was adopted on 1 August 2023, 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 departments and units involved in its creation and those involved in the processing of personal data, as well as the data subjects.
Specifically, in order to oversee the data protection processes:

- Data controller managers were appointed as heads of organisational units reporting directly to the Data Controller, with the task of supervising processing activities, the performance of training activities provided for Data managers and Persons in charge of processing;
- the Data Protection Department of FS Italiane was established, which is a function reporting directly to the Head of Legal Affairs, through which the latter ensures the connection between the DPO of FS Italiane and the business organization, and performs the role of general strategic direction and implementation coordination of the Group in the field of data protection, overseeing the areas of data protection governance, data protection law & legal standards, and data protection operations.

Finally, the Group is further implementing the IT management system to support processes pertaining to the protection of personal data.

(3-3)

INCLUSION, ENHANCEMENT AND DEVELOPMENT OF PEOPLE

The Group considers its people to be a fundamental part of the company, places them at the center of its strategy, and makes daily efforts to ensure their well-being and growth through its communication, training, development, and caring activities at all organisational levels. The selection of new talent, performance appraisal, training, development and career advancement are based on equity and merit.
In 2023, the Group further focused its commitment and energies toward the evolution of the Governance Model in alignment with the 10-year Business Plan.
The People Strategy was geared to support the new organisation based on the four Business Units: Infrastructure, Passenger, Logistics and Urban.
In the context of people development, a highly innovative contribution was the issuance, cascading and implementation of the new Policy regarding the Group's Talent Management System. In addition, work continued to accelerate the evolution of its mission through the construction of the Managerial Pipeline, in order to ensure leadership of key positions, as well as the dissemination of development skills and practices outside the HR professional category, through the network of coaches, mentors and buddies.
In the area of recruiting and employer branding, the Group's new Employee Value Proposition was defined through the launch of the Employer Branding campaign aimed at improving the attractiveness of candidates and FS's positioning in the job market. The recruiting and selection strategy was enhanced through the creation of ad hoc events aimed at orienting, attracting and engaging the target audience. A new relationship model was designed with training and research institutions in line with business needs, focused on building communities, strategic pipelines and cross-cutting networks.
With regard to training, work continued on the path to innovation of methodologies and technologies supporting training actions in order to strengthen and develop both technical and managerial skills in line with the evolution of roles and competencies. A special focus was made on strengthening managerial culture, raising awareness in the areas of environment and sustainability, creating professional family Academies as strategic levers capable of ensuring the availability of the skills needed to achieve business objectives, and international leadership development activities. To this must be added the ongoing research and implementation of technological tools and environments to support the development of a digital mindset, which is also aimed at promoting the design of increasingly customised and individual training programmes, with a view to life-long learning.
With regard to safety in the workplace, the FS Group confirmed its commitment to ensuring the highest level of health and safety in every activity involving risks for employees, in order to achieve a constant reduction in accident events and aspire to the goal of zero accidents in the medium to long term.
Activities in the area of Group social policies have continued to develop along two main lines of action: that of purely solidarity and social support for people in a state of fragility (National Observatory of Solidarity in Stations - ONDS; the network of Help Centers and reception centers, the Solidarity Train project, fundraising campaign), and that of the enhancement of FS real estate assets not functional to railway operations, to be used for social purposes and for the benefit of local areas and citizens (unmanned stations, disused lines).

The Group's welfare has seen great development, including through the actions shared with trade unions within the framework of the Mobility/Railway Activities Area National Collective Labour Agreement, and the FS Group Corporate Contract of 22 March 2022. In addition to the increase in company contributions to supplementary health care and supplementary pension plans, in 2023 the Group provided additional economic contributions for family, prevention, leisure and sustainable mobility, and developed new agreements providing subsidised rates and advantageous conditions dedicated to employees. Finally, the first listening initiative dedicated to welfare was disseminated, with the aim of learning employees' opinions on welfare measures and services offered, as well as developing new initiatives.
In terms of people caring, the offer of live and on-demand digital seminars dedicated to the entire Group population on issues of well-being, parenting, caregiving and work-life balance was strengthening with about 51,000 registrations during 2023. Caring expanded its offerings to people by promoting free prevention campaigns dedicated to the Group's female colleagues in southern Italian cities, and an initial pilot of a free psychological support service open to all Group people.
In line with an increasingly person-centered approach and the strengthening of the network that supports them, FS social commitment was strengthened through projects for the social reintegration of people in a state of fragil-

ity, and the launch of the first study to survey the social impact generated by the Group's Help Center network. The FS Group employed **92,446 people** at 31 December 2023, with an increase of 7,085 units[116] compared to 2022.

92,446 people
+ 7,085 on 2022

79% men

21% women

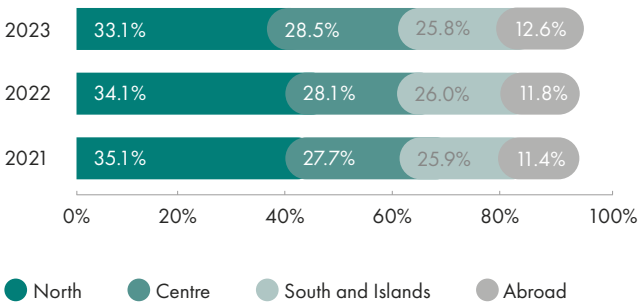
+ 0.8 p.p. on 2022

The **percentage of women** in the workforce **has increased constantly**, reaching about 21% of total employees in 2023 (+0.8 percentage points), reflecting the Group's objectives and actions to close the gender gap.

BREAKDOWN OF GROUP WORKFORCE	Measurement unit	2023	2022	2021
Executives	**no.**	**1,162**	**1,070**	**998**
women	*no.*	*320*	*271*	*237*
men	*no.*	*842*	*799*	*761*
Middle managers	**no.**	**13,871**	**12,936**	**12,285**
women	*no.*	*3,475*	*3,091*	*2,743*
men	*no.*	*10,396*	*9,845*	*9,542*
White-collar workers	**no.**	**45,420**	**41,692**	**39,934**
women	*no.*	*12,687*	*11,141*	*10,386*
men	*no.*	*32,733*	*30,551*	*29,548*
Blue collars	**no.**	**31,993**	**29,663**	**28,689**
women	*no.*	*2,688*	*2,528*	*2,261*
men	*no.*	*29,305*	*27,135*	*26,428*
Total number of employees at 31 December	**no.**	**92,446**	**85,361**	**81,906**
Of women	*%*	*21%*	*20%*	*19%*
Of men	*%*	*79%*	*80%*	*81%*
Average number of the year	**no.**	**89,398**	**82,998**	**81,365**

Approximately 13% of employees work in companies based abroad.

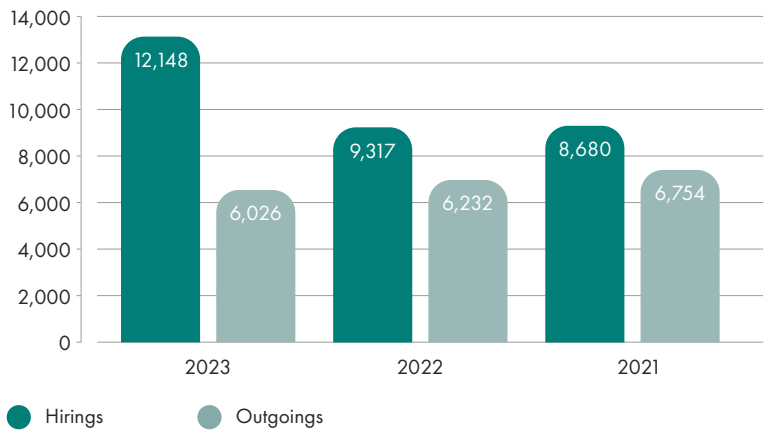
Personnel by geographical area



116. The balance takes account of 963 units due to the change in the corporate perimeter of ODEG, part of the Netinera Group following the acquisition of ODEG.

In 2023, the generational turnover continued, with 12,148 new hires against 6,026 outgoing employees.

New hired and outgoing employees



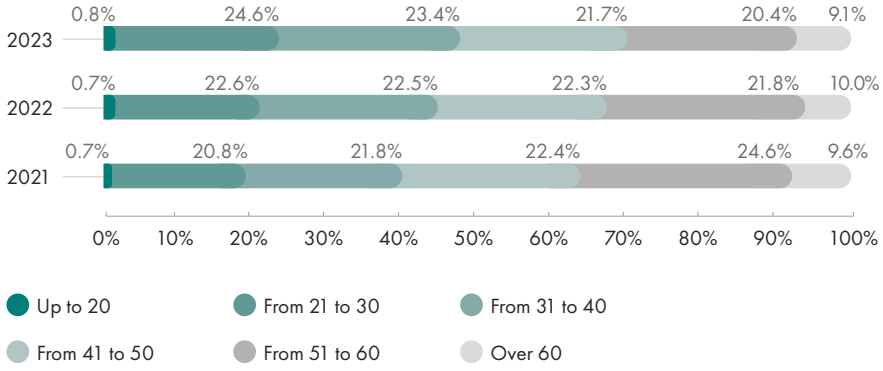
12,148
Hires from labour market

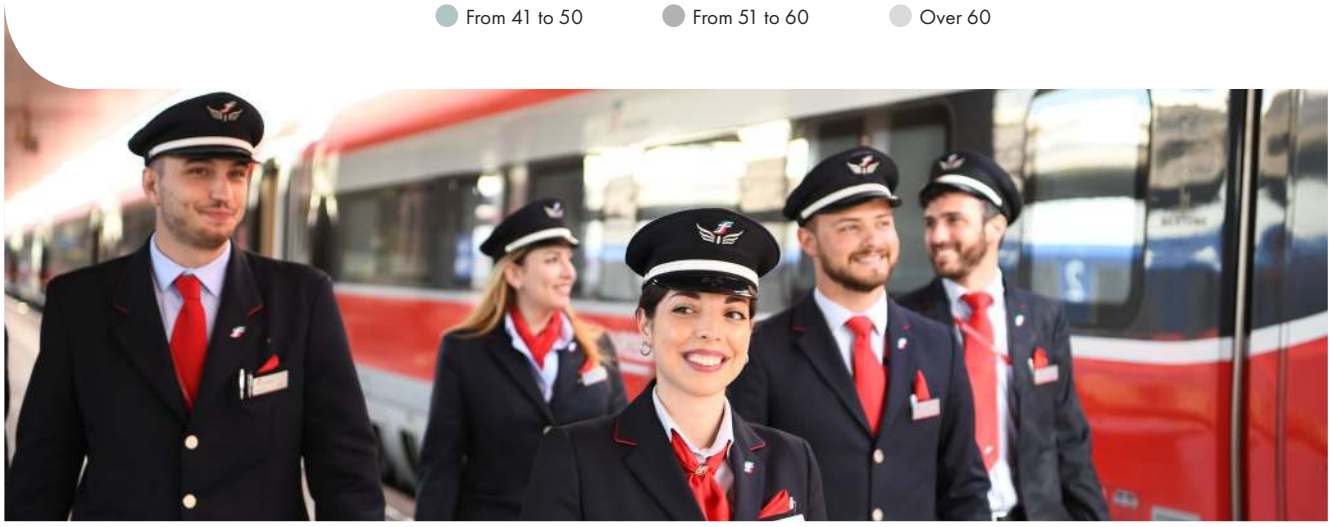
Types of employment

- **48.3%** Permanent
- **33.3%** Apprenticeship
- **18.3%** Fixed term
- **0.1%** Other contracts

41 years average age
- 1 year on 2022

Personnel by age





In 2023, the **turnover** stood at 20.3%, compared to 18.7% the year before. The figure, in line with the trend in the last years, recorded a slight increase (+1.6 p.p.), against the overall growth of the group's workforce.

The Group's commitment to investing in young people continued in 2023, as can be seen from the average age[117] of its workforce of roughly 41 years old, 1 year younger than 2022 and 2 years below 2021.

117. The scope of analysis includes the following companies: FS SpA, RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani, Mercitalia Logistics, Mercitalia Rail, Mercitalia Intermodal, Busitalia Sita-Nord, Busitalia Veneto, Busitalia Rail Service, Busitalia Campania, Grandi Stazioni Rail, Grandi Stazioni Immobiliare, Terminali Italia, Italcertifer, FSTechnology, FS Security, Cremonesi Workshop, FS International and Ferrovie del Sud-Est. The total number in the scope of analysis is equal to 70,626, about 76.4% of total workforce.

(2-7, 2-19, 2-20, 2-30, 201-3, 401-1, 401-2, 404-2, 405-1, 405-2)

RECRUITMENT AND HR MANAGEMENT

Recruitment

2023 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, 466 Job Posting campaigns were activated.
In 2023, too, the recruitment process on the external market entailed digitalisation and the search and testing of innovative solutions. A total of 2,418 recruitment processes were carried out on the various targets at Group level. Specifically, with regard to the Group's new graduates, 28 recruiting days were planned and carried out (22 held remotely, and 6 held in person), in which 1,175 candidates were evaluated, 69% of whom were graduated in STEM subjects.
FS' database has more than 501,000 CVs; after pre-screening over 131,000 candidates, in total for the whole Group, approximately 36,000 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.
Within the framework of these collaborations, over 72 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 (56 internships, and collaboration agreements for dissertations, and 7 Ph.D. programmes).
The digital professional opportunity channels were managed to consolidate talent attraction and recruitment for all target roles: the career website "fsitaliane.it/work with us", which migrated in November to the Group's institutional page with the new naming "Careers," with an average of 319,500 visits/month; and the Facebook pages "FS Careers" and LinkedIn "FS Group" with, respectively, 20,776 and 487,337 followers.
In order to redefine the Group's positioning as employer, the Employer Branding Campaign "Discover your path" was launched, the first entirely social media campaign designed for a specific target audience of young high school and college graduates.
In 2023, the FS Group remained among the leaders, in the ranking compiled by **Potential Park**, a Swedish talent communication company, ranking second overall for the best online job search experience and achieving first place in two of the four research topics: Career website ranking and Applying Online Ranking.
These results were made possible by ongoing investment in promoting and implementing Employer Branding and employee attraction initiatives, partly through relationships with Universities, including:

- Strategic partnership between FS Group and La Sapienza University on topics such as: recruitment, guidance and employability;
- Protocol for scientific and technological collaboration between European Interdepartmental Research Center for Advanced Studies on Digital Innovation - Department of Law - University of Rome 3 and the FS Group;
- Master's Degree in Engineering of Infrastructure and Railway Systems with la Sapienza University of Rome;
- Master's degree in Transport Management with Luiss Guido Carli in Rome;
- 13 career days and job meetings: opportunities for listening, job guidance and recruitment;
- 15 conferences, advisory and company presentations in academic settings.

Remuneration and pensions[118]

The FS Group uses the following types of contracts: open-ended contracts (part-time[119], full-time and apprenticeships), and fixed-term contracts (part-time and full-time). Approximately 96.8% of FS Group employees have open-ended contracts[120], taking into account the apprenticeship contract (considered to be permanent).
100% of the FS Group company employees are covered by collective agreements; in nearly all cases[121], the

118. The scope of analysis refers to the companies, already mentioned in the note at the beginning of the chapter, which account for more than 76% of the Group's total workforce.
119. Approximately 1% of open-ended contracts are part-time.
120. The figure refers to the Group's consolidated scope, about 11% of them work under apprenticeship contracts.
121. The other national labour agreements applied are: the railway, tram and shipping workers (Mobility-LPT) contract for Busitalia companies - Busitalia Campania, Busitalia Rail Service, Busitalia Veneto and Ferrovie del Sud Est; the Logistics, Freight Transport and Shipping agreement for Mercitalia Intermodal, and the national labour agreement for the Tertiary sector, applied by GS Rail and GS Immobiliare.

National Collective Labour Agreement for the Mobility/ Railway sector is the agreement used for the Group's non-management personnel, supplemented by the FS Group's Company Agreement of 22 March 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 Collective 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, payable only once a year. The monthly salary of newly hired employees is above the contractual minimum.
In 2023, depending also on the level, contractual minimums represent between 77% and 93% of the minimum salary in the table above.
As provided for by the National Collective Labour Agreement, the Group offers its employees supplementary healthcare plans 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 also extended the insurance it took out for its employees to cover hospitalisation with Covid-19 in 2023.
Within the scope of 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 February 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.
In 2022, the *Guidelines and procedure for Remote Working management in the FS Group* were updated 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.
In 2023, the **remote working** agreement was updated to include the fixed-term contract type, thus covering all contractual cases, and adding an additional element of flexibility. Specifically, upon the occurrence of specific cases identified by the agreement of both a subjective and objective nature, the new rules allow for exceptions to the minimum and maximum limits of remote working days that can be carried out in the month, making access to agile work more flexible and making it more closely tailored to the needs of the company and the worker.
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.
The FS Group, in the belief that corporate welfare represents a tool capable of improving the well-being and motivation of workers, promotes an ongoing commitment to the care of its people, paying particular attention to their daily needs also with the aim of facilitating the balancing and integration of work-life time. Therefore, for the employees of the Group Companies that apply the aforementioned National Collective Labour Agreement, an ever-expanding Welfare Plan has been envisaged, which includes a set of services, initiatives and tools in the areas of work-life balance, health promotion and Eurofer[122] (see Welfare and Diversity&Inclusion section).
On 31 July 2023, in implementation of the provisions of the agreement of 14 July 2022, an agreement was signed to set out the indicators and related target values to be achieved for the payment of the 2023 Performance Bonus to the employees of the companies that apply the Mobility/Railway Sector National Collective Labour Agreement and the FS Group Company Agreement. With this agreement, the parties also intended to incentivise the development of corporate welfare by providing, through a contribution to be paid by the company, an increase in the amounts allocated to welfare by employee choice. In addition, on 1 August 2023, an agreement was signed on increasing the value of the ticket, as a tool to support the purchasing power of employees and their families for employees of the Companies that apply the Mobility/Railway Sector National Collective Labour Agreement and the FS Group Company Agreement.
The remuneration system for FS Group managers implements that set forth by the relevant National Collective 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 schemes.
The method to evaluate positions and compare their

122. Defined-contribution negotiation fund.

remuneration with similar positions within the group and on the market was developed by a leading international group in the rewards sector which conducts remuneration surveys and benchmark analyses, both at national and international level, having at its disposal one of the largest compensation and remuneration databases worldwide.
The remuneration system for management personnel aims to foster the creation of value for the Group through the use of levers designed to adequately enhance the level of professionalism. Remuneration policies are defined in order to ensure the consistency of the internal remuneration level (internal equity) with respect to the different organisational roles, and to be in line with the remuneration offer of the external labour market.
Specifically, 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 (Management By Objectives, MBO) plan, in which the variable component of remuneration is linked to the achievement of specific performance targets 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 set out in the Group's annual plan. 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. In 2023, the MBO process also involved additional specific professionals of particular relevance to the achievement of business objectives as well as difficult to find on the external market. Each recipient involved is assigned mainly economic and/or project objectives related to the company and the position held. Safety at work and especially environmental and social sustainability are confirmed as fundamental values and objectives toward which to increase the culture and sensitivity of the entire FS Group population.
The indicators used as objectives of the system are identified taking into account the following characteristics:

- be aligned with the priorities defined in the budget;
- be marked by a transparent and direct approach that makes it possible to appreciate - objectively and without the need for special methodologies and tools - performance that can be measured and certified by the company's accounting and control and reporting systems;
- be aligned with the practices in use by leading Italian companies;
- be focused on environmental, social and economic sustainability.

In continuity with the previous year, and taking into account the key role of the FS Group as the subject implementing the investments intended for the purpose of developing and upgrading the national and regional railway network (Mission 3 "Infrastructure for Sustainable Mobility"), as part of the National Recovery and Resilience Plan (NRRP), the focus in 2023 was on financial and NRRP goals, since these indicators represent the anchor for the performance expressed by management, as well as the motivational element capable of increasing engagement and driving collective efforts, confirming sustainability as a fundamental principle of Group strategies.

The objectives 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_2e emissions (CO_2 equivalent) avoided[123];
- *position-based* indicators, related to assigned responsibilities and aimed at rewarding individual contributions towards achieving company targets.

IN THE 2023 MBO PROCESS

Assigned: the objective on the **indicator of avoided emissions** valued as the additional volume of emissions that would occur if the same amount of traffic was recorded on private road transport rather than on FS Group trains and buses.
Confirmed: the focus on the **issue of occupational safety**, a fundamental value with respect to which to constantly increase the culture and sensitivity of employees.

123. Climate-altering emissions avoided by FS Group customers due to FS Group passenger and freight modal share, relative to the performance of services offered.

The 2023 system, while confirming the incentive to the achievement of economic and financial results, paid special attention to objectives related to e**nvironmental and social sustainability.**
In fact, all Group employees involved in the incentive system were assigned a target related to **emissions avoided** thanks to the services offered by the FS Group. The indicator was constructed to promote the Group's commitment to combating climate change, which is measured through the proxy of CO_2e emissions potentially avoided thanks to the collective and shared passenger transport modes and rail freight transport promoted by the FS Group.
As part of the 2023 incentive system and in continuity with what has been done in recent years, there is provision for the assignment of **dedicated objectives to be applied to specific professional categories**, starting with sustainability issues. This process makes it possible to have a coordinated and shared approach to issues specific to certain business areas.
Special attention has been paid to the issue of valuing diversity, which is considered a strategic lever of primary importance for the FS Group. The Group's goal is to incorporate diversity management policies within its business development approach, given the relevance of gender equality objectives as essential reputational requirements in some cases even with the financial markets. Specifically, in 2023, the focus was on **improving the gender mix within the Group's managerial population, specifically ensuring adequate gender representation within the new management appointments made during the year**. This objective was assigned to all resources involved in the incentive system with direct responsibility for the processes involved.
The focus on the issue of **occupational safety** is also confirmed as a fundamental principle and value with respect to which to increase the culture and sensitivity of all employees.
Finally, the various professional families pertaining to the issues of sustainability disclosures were involved in an objective to strengthen the technical accounting oversight of the reporting of economic activities that contribute to climate change mitigation and adaptation goals.
Total remuneration to managers is integrated with a series of benefits and facilities, mainly consisting of: mobile phone, 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 supplementary healthcare insurance added to FASI (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.
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.
In the 2023 system, the adoption of formal contractual claw-back mechanisms was confirmed against the CEO of Ferrovie dello Stato Italiane SpA and managers with strategic responsibility. By virtue of this clause, it will be possible to proceed with recovering the amounts paid out in the case of wilful or grossly negligent behaviour or errors in the preparation of financial statements that resulted in their restatement.
Remuneration policies for the variable part of the CEO of Ferrovie dello Stato Italiane (indicators, measurement and evaluation criteria, level of achievement of assigned objectives) are drawn up by the Human Resources and Administration, Finance & Control departments and proposed by the Governance, Appointments and Remuneration Committee to the BoD. The Governance, Appointments and Remuneration Committee also evaluates the design of the incentive system for Group executives.
The emoluments of the members of the governing bodies of Group companies are defined according to an approach of fairness and internal consistency, taking into account the complexity and strategic nature of the company's business, having as a reference what is defined for the members of the board of FS.

Severance indemnity of Executives

In the current economic, social and environmental scenario, the revision of production and organisational processes functional to the achievement of the objectives of the Industrial Plan assumes particular relevance. Overcoming situations of passivity or rearguard action, a new spirit capable of carefully assessing risks and benefits in a dynamic medium-to-long-term perspective is required, including recovering and developing specific professional skills.
FS SpA and the Trade Unions have prepared some tools to provide a response to the critical management issues related to the current phase.
The agreements signed provide for the possibility of relocation within the same sector of belonging, at the same location, that is, with geographical mobility.
These instruments are accompanied by termination of employment by mutual agreement and with benefits modulated in relation to the years remaining until retirement eligibility accrues, for a maximum period of five years. In addition, provision is made for the payment of amounts equal to the cost of voluntary contributions to be borne by the executive (with a six-month deductible).
In any case, allowances are also provided for those

affected by the early retirement process. In such circumstances, allowances related to length of service in the Group are established.

For the remaining personnel (white and blue-collar workers), the pay system refers to the provisions of the National Collective Labour Agreement. Also for white and blue-collar workers, salary increase interventions and recognition of bonuses (one-offs) of an extraordinary nature may be envisaged, normally payable only once a year.

There are no gender-related wage differences. Any average wage differences between women and men, as shown in the table below, are attributable solely to the different professional positions held in the Company, the different performance modes and the responsibility associated with them. It should be considered, for example, that women are less present in the operating sectors and, as a result, average wages represented are affected by this factor (less ancillary skills for shifts, holiday work, night work, etc.).

EMPLOYEE REMUNERATION – PERCENTAGE DIFFERENCE IN WOMEN'S ANNUAL PAY COMPARED TO MEN'S ANNUAL PAY		2023	2022	2021
Executives	GAR*	-12.6	-12.0	-10.1
	TAR**	-16.4	-11.2	-11.3
Middle managers	GAR	-1.0	-0.4	+1.5
	TAR	-8.0	-3.3	-2.8
White-collar workers	GAR	-2.5	-2.8	-3.3
	TAR	-13.8	-15.4	-14.5
Blue-collar workers	GAR	-1.4	+0.9	+1.6
	TAR	-6.3	-5.4	-3.2

*GAR: Gross Annual Remuneration
**TAR: Total Annual Remuneration

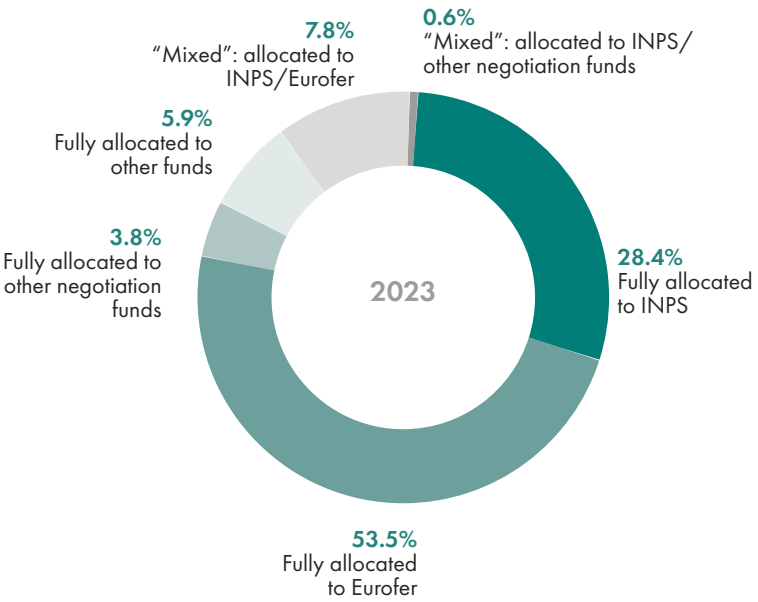
Employees' pensions are financed through specific mandatory contributions shared by employees and employers. Employees pay contributions equal to 9.19% of their remuneration base. This rate increases by one percentage point for monthly amounts subject to pension contributions exceeding €4,349[124]. On 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 (only for operating staff), social employment insurance (NASpI[125]) 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 early retirement schemes[126]. With regard to the supplementary pension fund, FS Group employees participate in negotiation funds or certain open-end funds in accordance with the financing scheme established by law.

The Group's main form of supplementary pension plan is Eurofer, a fund of contractual origin with defined contributions, provided for in the Mobility Contract - Railway Activities Contractual Area, to which the employer and employee contribute. The employee contributes 1% of monthly salary[127], while the employer contributes a rate of 2%. Employees may increase their contributions on a voluntary basis, without any obligation for the employer to increase its share of the contributions. Furthermore, as from the renewal of the National Collective Labour Agreement, which took place on 16 December 2016, there was the provision for additional increases in contributions to the Eurofer fund (both those already registered with Eurofer, and those not registered), including an annual contribution of €100 each for all employees and another €100 per employee per year, for those who did not receive work/life balance benefits.

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.

124. Additional contribution stipulated in INPS Circular no. 11 dated 1 February 2023.
125. New Social Labour Insurance.
126. With respect to personnel who have reached the retirement requirement, or close to it, and who declare that they are ready to access the retirement treatment before the retirement age, the FS Group has provided specific Guidelines on "Early retirement" in order to facilitate their early exit from the work cycle.
127. According to article 22 of the FS Group's employment contract.

The chart illustrates employees' selection of where to allocate their post-employment benefits.

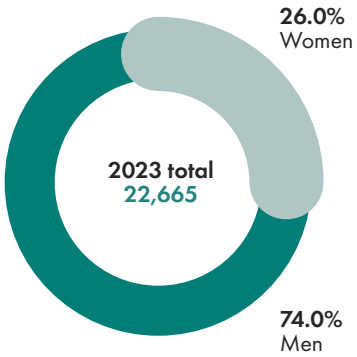


(404-1, 404-2, 404-3)

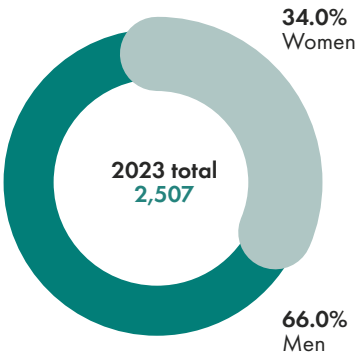
ENCOURAGING, TRAINING AND UPGRADING SKILLS

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.
Annual performance appraisal, carried out by resource managers through the SIV (Integrated Appraisal System) platform, involved 22,665[128] people (+31% compared to 2022), about 34% of the annual average amount[129]. For resources that are not part of the SIV evaluation process, monitoring of annual performance is entrusted to the relevant managers through informal mechanisms (e.g., return of feedback on strengths and areas for improvement).
With respect to the assessment of Potential, in 2023 the Group's efforts were particularly focused on the cross-sector development of People according to a planning and preparatory approach for the challenges of the future. Volumes grew by 4% overall, showing a 14% increase on the employed cluster. Work has also been done to optimise the timing of feedback and the construction of subsequent development plans, with a view to enhancing the potential profile tool as a service available to people and managers to build daily actions for growth, professionalisation and improvement.

Performance assessment



Potential assessment



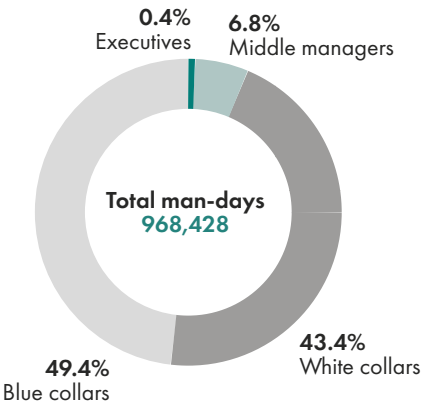
During the year, work was also done on upskilling the Community of in-company assessors and on building guidelines that make the best use of their professionalism and constantly feed their skills.
The team of internal Assessors, but also those of Coaches, Mentors and Buddies, have been significantly strengthened, through specific and renewed certification and qualification programmes to accommodate both colleagues from the HR professional family and business departments.
Succession Planning, the process through which Succession tables are defined annually for the entire managerial population of the FS Group, was enhanced in 2023 through the collection of succession proposals, including self-nominations, and succession tables were drawn up for 1,530 senior and middle manager positions at the

128. Of which 4% executives, 43% middle managers, 52% white-collar workers, and 1% blue-collar workers.
129. The percentage is calculated on the average size of the reference perimeter (FS, RFI, Trenitalia, Ferservizi, Italferr, Mercitalia Logistics, Mercitalia Rail, FS Sistemi Urbani, Busitalia - Sita Nord, Ferrovie del Sud Est, FS International, FS Security and FSTechnology).

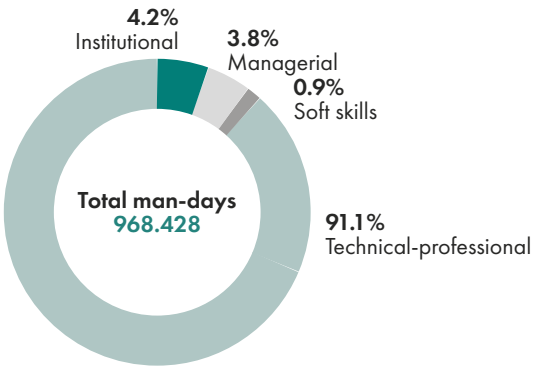
intercompany level (more than 300 more than in 2022). Finally, the Policy governing the New Talent Management System of the Ferrovie dello Stato Italiane Group was published on 3 November 2023. The System was designed and implemented to generate value both for the company, enabling the continuous evolution of know-how and managerial skills, and for the people, to whom it constantly offers opportunities for learning and enhancing their characteristics and capacities.
In 2023 there was an increase in Group training volumes in terms of man-days equal to 19% more than 2022. In fact, 968,428[130] training man/days were provided by the main Group companies in order to:

- **retain and refresh specialised technical skills** in all jobs and professional roles comprising the Group's ability to achieve results;
- **ensure the acquisition of national and international certifications** and the maintenance of professional registrations for the core staff members of Group companies;
- **support the evolution of the culture and managerial skills** of the Group's people through training programmes aimed at increasing engagement and providing innovative tools to deal with increasing complexities;
- **ensure the integration of new employees** into the production system through induction programmes that are ever more engaging and customised according to people's needs;
- **continuously increase the safety culture** across the Group's different businesses;
- **raise awareness of issues related to the environment and sustainability**, develop common competencies necessary to carry out the roles of professional families, and share Group strategic guidelines with management.

Man-days of attendance by professional level



% man-days of attendance by learning area



In 2023, a blended mode of delivery of training activities was confirmed, with a preference for attendance with specific reference to training courses for the attainment of qualifications and staff upgrading. Work continued on innovation in terms of methodologies and technologies to support training actions in order to strengthen and develop both technical and managerial skills in line with the evolution of roles and competencies. In addition, significant investment continued on the evolution of digital learning to support the development of know-how in different skill domains. Digital learning has seen a strong surge in terms of usage: 180,622[131] hours of training (more than 24 thousand man-days) were delivered on e-learning platforms in 2023, an increase of about 224% compared to 2022, on even more heterogeneous topics and content thanks to the introduction of new e-learning platforms.
In terms of innovation, digital skills increased during the year, leading not only to the already well-established self-production of multimedia products, but also to the creation of tools to support the training process, including the development of applications, such as the app

130. The scope of analysis involved different corporate targets for classroom (in-person or online) and digital media. For classroom training, the companies involved were: FS, RFI, Trenitalia, Busitalia - Sita Nord, Ferservizi, Italferr, FS Sistemi Urbani, Mercitalia Logistics, Mercitalia Rail, FSTechnology, FS international and FS Security. For Digital media Training, in addition to the above companies, the following were also involved: Anas, Blu Jet, Busitalia Campania, Busitalia Rail Service, Busitalia Veneto, Cremonesi Workshop, Fercredit, Ferrovie Sud Est and Sa, Grandi Stazioni Rail, Infrarail, Italcertifer, Mercitalia Intermodal, Mercitalia Shunt&Terminal, FS Park and Terminali Italia.
131. Digital media training hours account for about 2.5% of total training man-days.

for mapping core competencies of professional families, for gathering needs, a training chatbot and automation systems.
In 2023, 104.81 man-days of **human rights** training were provided. Training was mainly delivered digitally and touched on the topics: disability and inclusion, age and inclusion, combating sexual harassment in the workplace, Trust Advisor and FS for Social.
In addition, October 2023 saw the start of the Group's participation in the OIIDU (Italian Business and Human Rights Observatory) inter-company programme, which consists of 10 training meetings, workshops and hands-on laboratories with the aim of raising the level of attention on the issue, encouraging the dissemination of good practices and facilitating dialogue with national and European institutions and civil society. The course will end in April 2024 and will produce an annual research on the evolution of the state of the art, thus contributing to the creation of a wealth of information available to our country's business community.
The Holding Company's training activities, delivered across the Group companies through pilot and consolidation projects, have mainly focused on:

- **Leadership** programmes for the development of the Group's managerial team to strengthen a management culture for the purpose of conducting new business challenges;
- the **Young Talent** programme for the Group's graduates to foster knowledge of the FS Group and ensure the development of the skills provided by the leadership model;
- the launching of the "**L.E.A.D.**" project, Leadership Empowerment And Development, the new programme for the dissemination of the leadership model, which involved HR Officers and managers from all FS Group foreign companies present in Spain, England, France, Holland, Germany and Greece. The four priority competencies of Lead and Develop People, Integration & Team working, Flexibility and Change Orientation, and Open Communication were identified and will be disseminated through the development of new projects within the Group;
- **engagement and communication activities targeting the management working on the Business Plan**, which entailed, on the one hand, the implementation of **HR Breakfast** to increase and consolidate corporate networking and strengthen the relationship and exchange with industry experts and institutional representatives; training meetings focusing on the change management process in order to spread a common culture on the new leadership; training courses on **Public Speaking** in order to strengthen effective communication techniques;
- distribution of the **Company catalogue** offered by the Holding 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 embark on a path to developing, promoting and launching new business ideas and test new technologies;
- joining for the first time the **New Skills Fund**, co-financed by the European Social Fund and the interprofessional Fondimpresa Fund. In line with the Group's strategic objectives, the project on Digital Skills is part of the process of digital innovation for the Group's internal/external connectivity and enhancement of the professional skills working in the Group. The course pursued the objective of developing skills useful for the acquisition of a digital mindset, providing the necessary tools for processing and sharing data and know-how in different formats and through multiple channels, as well as ensuring the management and protection of information thus projecting participants into the future of social collaboration;
- **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;
- increase in **digital media training** offerings with the launch of two new e-learning platforms, which enrich the content on soft skills and managerial skills, and at the same time enable the development of a digital mindset by fostering self-training to build an individual training scheme (from top-down to bottom-up);
- **technological upgrade of digital training tools**, with the closing of the tender to identify the supplier for the Group's new Learning Management System (LMS), which will see implementation during 2024 and will bring about significant change in terms of innovation, culture and training processes;
- **initiating the design of a company Corporate University**, a physical and virtual training hub, as a driver of change within the Group, with the aim of anticipating the needs for future professions, enhancing and empowering people's know-how, fostering continuous learning and increasing competitive value, and increasing collaboration and relations with key stakeholders in the ecosystem;
- the **Sustainability Induction Programme**, a training program on sustainability issues aimed at members of the Board of Directors and the managerial class of FS Group companies with the aim of creating a common language on sustainability issues and sharing the Group's strategic objectives pertaining to the same field.

Furthermore, the training provided directly by the individual companies mainly focused on:

- **development, updating and maintenance of technical and behavioural skills** on Occupational Safety issues to increase and support the related culture. There were many initiatives aimed at specific roles - train drivers, train conductors, personnel qualified to drive company vehicles -, which focused on the human factor and behavioural variables, with the aim of activating virtuous behaviour and encouraging safe and responsible styles. For the purpose of making the training experience more effective, some projects used particularly engaging methodologies, such as interactive theatre and virtual environments with the use of 3D viewers;
- **support to change processes** through reskilling and upskilling schemes aimed at personnel affected by changes in work methods or business applications;
- **development of customer centricity skills** and focus on the market;
- **environment- and sustainability-related issues**, with meetings aimed at sharing new company procedures and best practices, and the development of Sustainable Supply Chain Management methodology;
- **training projects in the technical-professional field** aimed at acquiring and maintaining the technical skills and qualifications/certifications necessary for operational roles. For projects aimed at acquiring the hard skills needed to fill the role, some companies made use of in-house expertise, through the use of senior resources as mentors for new hires;
- **on-boarding and induction programmes for new hires**, with the aim of increasing engagement, fostering understanding of the context and initiating/enhancing the development of soft skill;
- **development and consolidation of skills supporting internationalisation processes** through language training and activities geared toward the development of interpersonal skills needed to work in multinational and multicultural environments;
- **dissemination of the culture of feedback**, which is particularly crucial to the role played by operational staff instructors, with the aim of learning more about the characteristics and techniques of returning positive and negative feedback;
- **innovation and digitalisation**, including training on advanced tools for surveys and design, and on BIM (Building Information Modeling) and enabling platforms;
- **D&I issues**, with meetings on the generation gap aimed at fostering inclusion and enhance plurality, and courses aimed at accompanying staff to develop skills with a view to the inclusion of disabled and reduced mobility passengers on board trains.

Furthermore, around 30,344 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 €10.2 million, up 25.7% on 2022 due to the increase in training provided. Funding for training generated revenue of approximately €4.5 million.

(405-1)

WELFARE AND DIVERSITY&INCLUSION

«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, the Group considers Diversity&Inclusion to be a distinctive personal and professional competence to be disseminated across all levels and to all roles in the organisation, useful in ensuring a psychologically safe working environment for its people and an inclusive customer experience for customers.
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. In 2023, FS participated in the **Target Gender Equality** "accelerator" program, organised by the UN Global Compact, focused on accompanying businesses in setting and achieving ambitious corporate goals aimed at promoting gender equality, and in the **Office's D&I Observatory** by contributing to the drafting of a guideline for drawing up company Diversity, Equality & Inclusion Policies. Also through the UN Global Compact, the Group signed the "**Businesses for People and Society**" Manifesto, pledging to strengthen the role of the social dimension of sustainability in corporate strategies and generate value in supply chains.
The activities and projects for the Group employees are supported by both the National and Local Equal Opportunities Committees[132] and directly by dedicated company departments.

Corporate initiatives

Diversity&Inclusion

- **Improved integration of work-life balance and personal wellbeing**: webinars were held which were open to all Group employees covering a variety of topics;
- ***Wecare* –online space dedicated to the Group's people**: over 20,000 people signed up for the more than 60 webinars on a variety of emerging caring topics (e.g. parenting, physical and psychological well-being, care giving, inclusion of disabilities, mindfulness, kindness, authenticity, stress management, etc.) with over 100 experts from a wide range of universities, hospitals, and research and training centres. The Italian sign language (LIS) interpreting service is always ensured to foster accessibility of the contents by people with disabilities;
- **psychological support**: work commenced on the first online psychotherapy desk, free and anonymous, available to all people in the Group. 1,618 interviews were carried out, and 122 psychotherapeutic courses were completed, with a 97.2% approval rating;
- **Confidential Female Counsellor**: disseminating this role provided for in the Code against sexual harassment in the Group workplace through empowerment training for the more than 1,000 managers of the Group companies involved, and the creation, publication and promotion of video training pills on sexual harassment and the support that the Counsellor can give to all Group people;
- **Women in Motion training** (WIM): return to the classroom, in-person, for the high social impact campaign for inclusive employer branding, which brings the message of gender-neutral talent to middle schools, high schools and universities throughout Italy. 12 in-person and three online appointments with more than 1,500 students met in eight different regions;
- **training on intercultural competences** (Busitalia): in order to provide support to new driver colleagues

132. A bilateral and joint corporate body set up pursuant to Article 1.3.C) of the National Collective Labour Agreement for the Mobility/Railway sector, and Article 3 of the Ferrovie dello Stato Italiane Group's Company Contract of 16 December 2016. It consists of one national committee, and 15 local committees.

in joining Busitalia Veneto, which were selected among political asylum seekers as part of virtuous collaborations with the third sector, a training course dedicated to about 30 colleagues and managers was held on the topic of intercultural competences to provide enabling tools for daily relationships with new colleagues;

- **focus groups on relations with gender transitioning passengers**: three focus groups were established, in collaboration with Trenitalia, to identify the main critical issues in relations and management of gender transitioning passengers, and to facilitate knowledge and awareness of front line operational staff on board train, at ticket offices and stations. Train conductors, customer advisors, instructors, trainers and quality line managers were involved;
- **internships and school-to-work alternation for neurodivergent and cognitively impaired students**: temporary placement of three high school students with specific needs related to cognitive disabilities and autism, within the facilities of Group companies;
- **onboarding support desk for people with disabilities**: a new support service was put in place, which was aimed at HR professionals, managers and teams of all FS Group companies for competent and effective management of the onboarding phase for people with specific needs related to disability. Two courses were launched in 2023;
- ***campaign against public sexual harassment***: a massive and enabling social campaign against sexual harassment in public places was designed and disseminated on the occasion of the International Day for the Elimination of Violence against Women 2023 under the Patronage of the Ministry of the Interior, based on the behavioural model of the "5Ds" - Distract, Delegate, Document, Delay, and Direct, through images, infographics and video-training broadcast in stations and on trains, buses, and service stations throughout Italy.

THE FS GROUP IN THE TOP 10 OF DIVERSITY BRAND INDEX

The Group is in the Top 10 most inclusive companies in Italy according to the Diversity association, obtaining the most important Italian recognition in the D&I field, the Diversity Brand Award.
The recognition was achieved thanks to the 5D campaign launched on November 25 on the occasion of the International Day for the Elimination of Violence against Women. This recognition is the result of a building path that has seen for the first time all the assets of our Group jointly involved to spread the same message: trains, buses, Anas service stations, large and small stations, together with the main squares of Rome, Milan and Turin, have become a bridge between us and our customers.

Health promotion and awareness

- Work was completed on the **secondary prevention campaign dedicated to FS Group female colleagues** in the cities of Bari, Cagliari, Naples, Palermo, Reggio Calabria, and Salerno. In eight days free mammography checkups were offered to promote early diagnosis of breast cancer. The remaining five stages were carried out over seven days in 2023: 462 mammography and ultrasound services provided;
- **17 seminar webinars were held by nutritionists, nutrition psychologists and psychotherapists** dedicated to promoting proper eating styles, prevention of eating disorders, healthy sleep-related habits and addiction prevention (smoking, technologies, toxic relationships). The appointments totalled 6,154 persons who registered from all Group companies.

Employee satisfaction monitoring

- The first listening initiative dedicated to FS Group people was launched with the aim of finding out their opinion on the main dimensions of change, innovation and job satisfaction. 52% of the involved population participated in this initiative, managing to reach even line staff. The results of the survey were shared at all organisational levels - from top management to personnel - and put in place various Action Plans - across the entire organisation and at the corporate level - to intervene in the areas of greatest concern that emerged through the engagement survey.

Welfare

- **Welfare platform:** a single, integrated tool for finding all the welfare services offered by the group

and using the ever expanding selection of goods 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 for all available measures, 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%) was doubled from 1 January 2023;
- **additional welfare contribution**: in implementation of the above-mentioned contract renewal, the company contribution for supplementary healthcare was increased to €300 per employee per year as from 1 January 2023;
- **performance bonus 2023**: an agreement was signed for the allocation of the Performance Bonus 2023, providing for the possibility for employees to allocate all or part of the amount of the individual Performance Bonus to welfare measures provided by the Group, resulting in a 10% increase in the converted value, through a contribution to be charged;
- **unilateral contributions**: in 2023, the Group provided for the disbursement of four contributions: preventive packages, i.e., preventive medical examinations at Local Health Units of the RFI Health Directorate; family contribution, intended for employees for expenses incurred for their children in baby-sitting, nursery schools, study vacations, campuses and playrooms, and care services for elderly and dependent family members; the purchase of specific leisure welfare services such as holidays, gyms, training courses, etc., available on the welfare platform; mobility contribution, earmarked for local public transport season ticket reimbursement;
- **subsidy for disabled children**: subsidy schemes were activated again in favour of employees with disabled children;
- **welfare questionnaire**: the first listening initiative dedicated to welfare was delivered, with the aim of knowing the opinion of employees on welfare measures and services offered, as well as developing new initiatives;
- **agreements**: they were developed to ensure subsidised rates and advantageous conditions dedicated to FS Group employees.

Equal Opportunities Committee (EOC) initiatives

- **Gender-based violence:**
  - publication on the company intranet, on the occasion of 25 November, of an informative text and infographic on its "Model of offense" with guidance on how to notice violent contexts;
  - holding a seminar to understand the structure of violence, with dissemination of information content through the corporate intranet;
  - installation of the Red Bench at Naples Garibaldi station on the occasion of 25 November, in remembrance of the victims of feminicides, to draw attention to a systemic problem in everyday places;
  - publication of posters raising awareness of the issue of gender-based violence on the occasion of 25 November at facilities in Turin, Verona, Florence, and Bologna.

- **Work conditions:**
  - "pink" parking space in Rimini for female workers of railway companies on night shifts in collaboration with the Equal Opportunities Committee in Emilia-Romagna;
  - work commenced on monitoring female presence on night shifts for the purpose of extending pink parking spaces.

- **Prevention of sexual harassment and sexism:**
  - analysis of the 2022 Annual Report of the Confidential Female Counsellor (appointed as part of the Code of Conduct for cases of sexual harassment at the Group's workplaces) with regard to the cases and geographical areas involved;
  - proposal of actions to the relevant Group departments to promote the emergence of the phenomenon and prevention;
  - collection of data on accesses on the intranet to the Code of Conduct on sexual harassment and the page on the Confidential Female Counsellor, to verify the degree of information dissemination;
  - participation in the roundtable discussion, organised by ATM and MIDA, on diversity and inclusion issues with a focus on ILO Convention 190/2021, and the "person of trust" as a new position within labour organisations.

- **Communication and awareness:**
  - engagement of Local EOCs on gender issues, and the role of EOCs through: in-person meetings in local areas between the National EOC/Local EOCs, and in-team meetings with the Chairs of Local EOCs and the National EOC;
  - meeting with EOC Enac and National EOC President on gender equity issues.

- **Gender data:**
  - Analysis of the data of the Biennial Report with a focus on the gender pay gap.

GENDER EQUALITY, FS GROUP RECEIVES THE "MINERVA ROME COMPANY OF EXCELLENCE" AWARD

The FS Group has won, for the second year in a row, the Minerva Rome Company of Excellence 2023 Award, promoted by Unindustria Lazio and Federmanager Rome, in the category of Large Enterprises, for the great work done in terms of women's empowerment and gender equality.
A success achieved thanks to the many initiatives put in place in recent years: from the Women in Motion social innovation campaign, through which we bring our mentors to schools to enhance women's careers in STEM areas, to the Gender Equality Plan; from the many awareness-raising campaigns carried out over the years to mark the International Day for the Elimination of Violence against Women on 25 November to the numbers of women within the FS Group, which have been steadily growing in recent years.

RELATIONSHIPS WITH TRADE UNIONS

(401-3, 402-1)[133]

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 Collective Labour Agreement[134]. Organisational changes are also disclosed to the Trade Unions.
The National Labour Agreement itself 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 2023 Annual Report (Directors' report, "Commitment to sustainable development - Human capital" section).
The percentage of Group employees who were members of Trade Unions was 62.2% in 2023, in line with the previous year (62.5% 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 for a maximum of 11 months between both parents. Changes introduced in Budget Law 2023 have been incorporated.

Under current law, they are compensated by INPS:
- at 30% "non-transferable" three months each for the mother and father, and an additional period of three months alternatively between the parents (each parent, therefore, continues to be entitled to 6 months compensated);
- for one of the three non-transferable months, the allowance is raised to 80% by the sixth year of the child's life.

The best economic conditions provided for in the FS Group Company Contract of 22 March 2022 (supplement of 100% in the first month and 80% in the second month) continued to be applied, harmonising it with the changes in the law.
Even in the case of a child's illness, the FS Group Company Contract of 22 March 2022 provides for the best economic conditions of 30 days of paid leave per year up to three years of age.

The number of employees who took at least one day of parental leave in 2023 is detailed below:

PARENTAL LEAVE	number	days
women	1,568	37,100.5
men	5,395	69,126.5
Total	6,963	106,227.0

133. The scope of analysis refers to the companies, already mentioned in the note at the beginning of the chapter, which account for more than 76% of the Group's total workforce. Unionisation and absenteeism rates, as well as parental leave, are calculated net of managerial staff.
134. There are no risks to freedom of association and bargaining in the FS Group.

(3-3)

NET ZERO DIRECTION

Strategies for decarbonising the transport sector

The transport sector has a significant impact on climate change, contributing about a quarter of global greenhouse gas emissions. Despite this, it is one of the most backward sectors in the fight against climate change, and poses a crucial challenge to achieving green transition. In general, sustainable mobility is the key to reducing the sector's environmental impact and requires an integrated approach involving public policy, the transport industry and the active participation of civil society.
Resilient infrastructure and efficient transport systems are the success factors for driving social, economic and environmental development. Therefore, they assume a major role in achieving the 17 Sustainable Development Goals (SDGs) of the UN 2030 Agenda. For example, the driving role of infrastructure and new technologies in the transport sector promote innovation (SDG No. 9), foster sustainable mobility, and development in urban areas (SDG No. 11), and promote responsible consumption and production patterns (SDG No. 12), with a view to combating climate change (SDG No. 13).
The most effective action to reduce the sector's impact relates to increasing the share of environmentally high-performing modes of travel, such as rail, collective road transport and shared systems, to be accompanied by initiatives to improve their energy efficiency and increase the use of low-emission energy. These measures can be summarised by the shift & improve strategies to which the rail sector is strongly committed. Among the widespread transport systems, rail transport is the most sustainable for long-distance travel to date, particularly on the issue of decarbonisation, given its low environmental externalities in with respect to other modes of transport.
The Business Plan offers a vision capable of directing people, skills, innovation and investment, for the creation of shared value for new generations. The Plan aims to foster synergies between the various souls present within the FS Italiane Group, thanks to the new reclassification into Business Units and Segments. Energy and ecological transition play a key role in the Plan: in fact, the Group has set its long-term Net Zero goal, which is to achieve zero net emissions by 2040, thus anticipating EU decarbonisation ambitions by a decade. To achieve this ambition, the Group has developed a program of initiatives and set medium-term targets to 2030, which consist, with reference to the 2019 baseline, of halving scope 1 and scope 2 emissions, and reducing scope 3 emissions by 30%. In 2022, FS Italiane signed the commitment letter to certify these targets with SBTi (Science Based Target initiative), which validated them in early 2024. SBTi is one of the leading international reference bodies for validating environmental sustainability targets aligned with the Paris Agreement.

25 67.6 116.3

kg of CO_2 per passenger on the Rome - Milan section
(source ecopassenger.org)

FS GROUP'S DECARBONISATION TARGETS AND SBTI (SCIENCE BASED TARGET INITIATIVE).

In September 2022, Ferrovie dello Stato Italiane declared its commitment on curbing global warming by signing a Commitment Letter attesting to the Group's ambition to certify its targets according to the SBTi standard, through verification of the alignment of the FS Group's decarbonisation targets to 2040 and 2030 with the science-based target scenarios.
Ferrovie dello Stato Italiane has therefore submitted its GHG emissions inventory, methodology, targets and the decarbonisation programme undertaken for verification by SBTi.
The long-term ambition is the achievement of the so-called Net Zero by 2040, that is, the reduction of emissions by 90% compared to those in 2019, with a commitment to neutralise residual emissions. To give concreteness to its path in the medium term, both a target of -50% reduction in Scope 1 and 2 emissions, and a target of -30% reduction in Scope 3 emissions, compared to the 2019 baseline year, have also been set for 2030.
In February 2024, SBTi publicly acknowledged Ferrovie dello Stato Italiane's validation of the targets, both in the long term and in the medium term. This validation reinforces the ambition, credibility and robustness of the FS Group's decarbonisation strategies.

The Group is one of the major energy consumers in Italy, with a share of approximately 2% of the national requirement. Any effort to reduce, and improve efficiency and the quality of consumption can contribute to improving the environmental balance of the company and, if carried out on a large scale, the country as well.
Accordingly, the initiative included in the Plan is especially significant, as it entails installing 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, when fully operational.

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 CONSUMPTION

(302-1, 302-3, 302-4)

TOTAL FS GROUP ENERGY CONSUMPTION	Measurement unit	2023	2022[b]	2021[b]	%Δ 23/22
Electricity for railway traction	GJ	17,709,270	16,130,505	14,946,463	9.8%
Electricity for other uses	GJ	2,543,515	2,589,171	2,505,268	-1.8%
Electricity for road network lighting	GJ	1,277,500	1,265,328	1,245,243	1.0%
Diesel	GJ	5,753,678	5,688,367	6,144,431	1.1%
Natural gas	GJ	955,922	1,124,417	1,396,493	-15.0%
Biodiesel	GJ	164,614	240,391	228,813	-31.5%
Other a	GJ	105,944	101,270	87,179	4.6%
TOTAL	**GJ**	**28,510,443**	**27,139,449**	**26,553,890**	**5.1%**

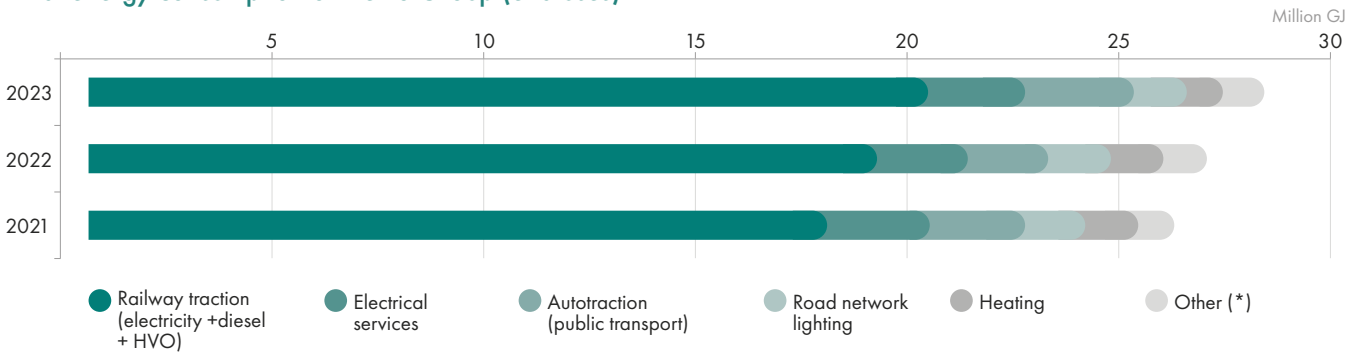
a) Heat, petrol, LPG, fuel oil, solar thermal energy, pellet and hydrogen

b) The data "electricity for railway traction," "diesel," "natural gas," and "other" were adjusted during 2023 following a refinement of the data collection process and calculation methodology.

Energy consumption is a crucial item in the FS Group's environmental balance sheet and is monitored in terms of sources and end use. Over the entire three-year period 2021-2023, there was a gradual increase in the FS Italiane Group's energy requirements, equal to 2.2% between 2022 and 2021, and 5.1% between 2023 and 2022, bringing total energy consumption to 28.5 million GJ in 2023, due, in part, to the entry of new companies into the Group's scope of consolidation.

The consumption of electricity for rail traction is the most significant energy aspect, and in the three-year period its trend steadily increased due to the increase in rail traffic on electrified lines. It is followed in significance by the use of diesel fuel, the use of which is almost entirely for transportation to power trains, rubber-tired vehicles and company ships, and to a residual extent for winter air conditioning.

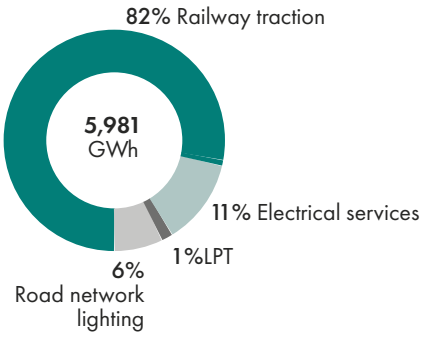
Final energy consumption of the FS Group (end uses)



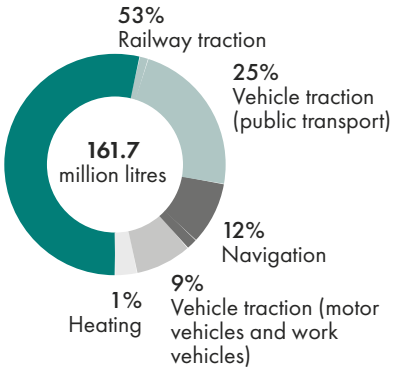
(*) Navigation, automotive (motor vehicles and work vehicles), industrial activities

Rail traction on electrified and non-electrified networks, the latter fuelled by diesel and HVO, is confirmed as the primary mode of energy use, increasing by 8.4% compared to the previous year; however, a 15.6% reduction was observed (down by approximately 176 thousand GJ) in consumption destined for heating, thanks to energy efficiency measures by Group companies, as well as to milder winters in recent years.
The higher overall energy use can be seen in the changes in consumption of the main energy sources related to transport activities, in particular electricity for rail traction (+9.8%), which is closely related to higher haul of passenger trains.
Electricity was the largest share and highest percentage of total consumption considering electricity for railway traction, road network lighting and other uses (roughly 75.5%). Of 5,981 GWh of electricity consumed, rail traction accounts for 82% of the total, a value consistent with the rail transport activities that characterise the company's core business. This item within the energy balance

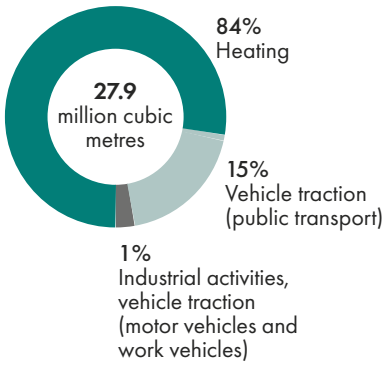
ELECTRICITY



DIESEL FUEL



NATURAL GAS

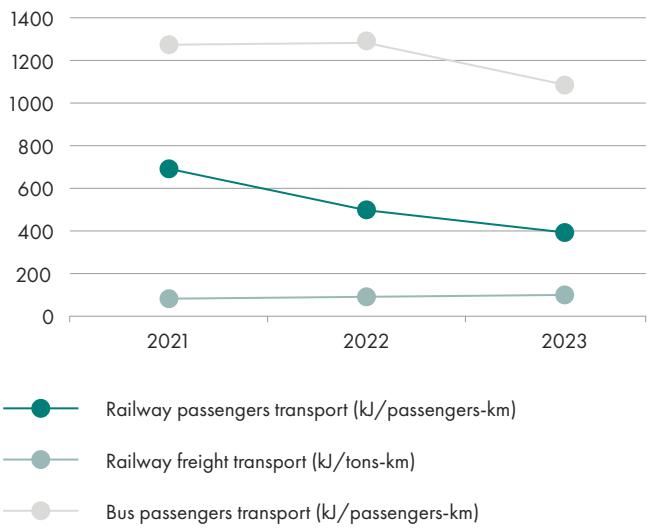


represents one of the most closely watched parameters, as the electrification of the networks, which now stands at more than 70% of the rail infrastructure, in addition to the growing supply from renewable sources, is one of the FS Group's primary challenges.

As for the consumption of other energy sources, diesel fuel emerges as the most widely used fuel. Combustion of 161.7 million litres in 2023, up slightly from the previous year (+1.2%), was almost entirely used for transport (53% by rail, 34% by road for local public transport, motor vehicles and work vehicles, 12% by ship), while the share used for winter air conditioning is a minority (1%).

Natural gas is mainly used for heating premises (84%) and only residually for transport, mostly to power part of the public transport road fleet (15%), as well as for industrial activities and self-powering of work vehicles (1%).

FS Group final specific consumption



Aware of the relevance that the impact of climate change is enacting and with the aim of offering a service with low environmental impact, the FS Group is investing in electrification, the use of renewable energy sources and, where technologically complex, in innovative solutions to address the energy transition by making optimal use of available technologies such as experimenting with powering trains with pure HVO and hydrogen on buses. Renewable energy sources currently used include not only solar photovoltaic (36,592 GJ) and thermal (79 GJ) energy, but also biodiesel (164,614 GJ), used for rail and road passenger transport, hydrogen (18,494 GJ) used for local public road transport, and a share of pellets (1,360 GJ) dedicated to heating.
In order to quantify performance of the services, specific end consumption is monitored, which is calculated as the ratio of energy used for railway activities on electric and diesel trains, and buses to the traffic units used to measure passenger and freight railway transport (passenger- and tonnes per kilometre, respectively). This performance indicator, which is affected by a variety of factors (e.g., speed, altitude, vehicles, load factor, transported weight, atmospheric conditions, etc.), showed a decrease for all types of transport analysed between the year 2021 and 2022 while the decreasing trend in specific consumption did not affect freight transport: in 2023 there was a slight increase (+2.9%) in consumption per ton-kilometre (107 kJ/ton-km) due to a reduction in the load factor of freight trains.

GREENHOUSE GAS EMISSIONS

(305-1, 305-2, 305-4)

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.
Among the initiatives to witness transparency, commitment and engagement with stakeholders on climate change issues, FS Italiane is committed to reporting its performance through the Climate Change section of the Carbon Disclosure Project (CDP) questionnaire. CDP is an international reference on corporate management of climate change-related issues. In 2023, the Group confirmed its rating in the highest range: score A- in the Leadership bracket.

THE FS GROUP AND THE CARBON DISCLOSURE PROJECT (CDP) ENVIRONMENTAL RATING

In 2023, FS confirmed its achievement in the CDP's Leadership bracket, earning an "A-" score related to Climate Change scoring. CDP is a no-profit organisation that operates one of the leading internationally recognised environmental reporting platforms that stimulates companies and governments to reduce their greenhouse gas emissions, safeguard water resources, and protect forests. The reporting platform has counted more than 23,000 companies that have disclosed environmental data through CDP.
FS's score, which is higher than the European, global and industry average, recognises the company for adopting best practices in reporting on energy consumption, emissions, initiatives introduced to reduce its environmental impact, and for adequately managing climate-related governance, strategic planning and risk management with reference to the entire value chain. In the previous assessment, the score was also A-, placing the Group in the Leadership bracket. This confirmation demonstrates the Group's commitment to complying with the requirements to give substance to commitments to combating climate change.

In the area of climate disclosure, since 2020 the FS Italiane Group GHG Report has been the document published annually and addressed to all stakeholders who want to learn more about strategies, governance, results and initiatives against climate change aimed at achieving the Group's objectives.
The robustness of the company's carbon footprint calculation was proven by obtaining certification according to the international standard UNI EN ISO 14064:2018-1, achieved in July 2023 with which the values of carbon dioxide equivalent emissions for the year 2022 and 2019 (baseline) were validated by a third-party entity.

ISO 14064 CERTIFICATION ACHIEVED

In July 2023, the FS Group obtained certification attesting to the quality of its GHG emissions inventory and calculation methodology, in accordance with ISO 14064-1:2018. Emission quantity values for 2022 and 2019 were certified, the latter serving as the baseline year for evaluating emission reduction targets. Both values were considered according to both location-based and market-based approaches, with a level of assurance for the emissions inventory defined as reasonable.
This means that FS, projected to achieve Zero net emissions by 2040, is proceeding in a fair, accurate and transparent manner in data collection, calculation and reporting of GHG emissions.
The result achieved reaffirms the robustness of the decarbonisation process undertaken by the Group, giving it greater confidence in managing and monitoring the targets. It also demonstrates how the great attention paid to sustainability issues is accompanied by utmost transparency, to the benefit of all stakeholders.
The certificate, issued by the independent body SGS Italia accredited with Accredia (the National Accreditation Body designated by the Italian government), was achieved following audits carried out on the Parent Company with specific audits at FS Group operating sites.

In 2023 emissions were released for 2.24 million tons of CO_2 equivalent, representing the first discontinuity in the downward trend of the corporate climate footprint compared to Scope 1 and Scope 2 emissions, showing an 11.4% increase compared to 2022. In the complexity of countering climate warming, the first increase in climate-altering emissions presents itself as a moment of reflection to grasp the threats and opportunities associated with this global challenge. In order to understand the reasons for this increase, internal and external factors that actively contribute to the tracking of the emission profile must be therefore distinguished. The former are related to strategic interventions, such as an organic growth in mobility supply resulting in increased traffic, and the inclusion of new companies in the consolidated environmental data perimeter; the latter are those that cannot be directly governed by the organisation such as the composition of the national energy mix, which has worsened slightly in recent years due to climate and geopolitical instability. In addition, the introduction of additional emission sources such as fugitive emissions of climate-altering gases, and the land use change emissions, contributed to the increase in emissions as from 2023.

DIRECT AND INDIRECT CO_2e EMISSIONS (location based)	Measurement unit	2023	2022[d]	2021[d]	%Δ 23/22
Electricity for railway traction	tCO_2e	1,348,198	1,202,657	1,209,347	12.1%
Electricity for other uses	tCO_2e	179,596	176,103	184,429	2.0%
Electricity for road network lighting	tCO_2e	95,665	91,979	96,739	4.0%
Other[a]	tCO_2e	15,487	18,911	19,940	-18.1%
TOTAL Scope 2[c] (location-based)	**tCO_2e**	**1,638,946**	**1,489,650**	**1,510,455**	**10.0%**
Diesel	tCO_2e	450,352	444,549	480,331	1.3%
Natural gas	tCO_2e	56,257	65,501	80,950	-14.1%
Other[b]	tCO_2e	89,906	3,917	2,523	2,195.2%
TOTAL Scope 1[c]	**tCO_2e**	**596,515**	**513,967**	**563,804**	**16.1%**
TOTALE Scope 1 + 2 (location based)	**tCO_2e**	**2.235.461**	**2.003.617**	**2.074.259**	**11,6%**

a) Electricity for LPT and company vehicles, district heating, district cooling

b) Petrol, LPG, fuel oil, HVO, pellet, fugitive emissions and emissions from change in the intended use of land

c) Scope 1. Emissions from the direct combustion of fossil fuels purchased for heating, to generate electricity and thermal energy and to fuel transport vehicles, fugitive emissions of climate-altering gases, and use and change of land and forests.
Scope 2. Emissions from the production of energy purchased and consumed by the organisation for electrical equipment, heating and lighting within the buildings; the organisation is indirectly responsible for emissions generated by the supplier for the production of the required energy.

d) Data for "indirect GHG emissions from energy consumption (Scope 2)" and "other indirect emissions (scope 3)" were adjusted during 2023 following a refinement of the data collection process and calculation methodology.

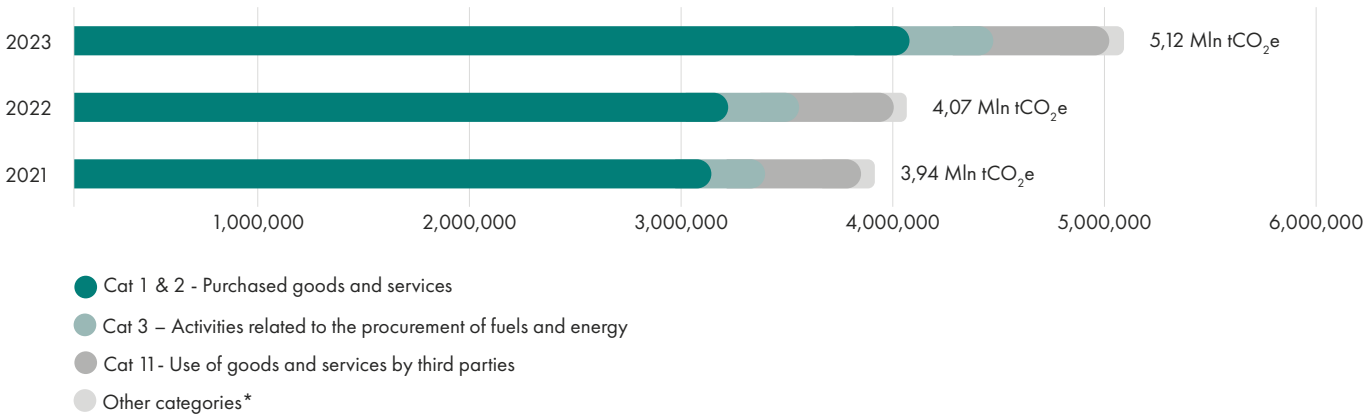
Based on the Greenhouse Gas Protocol (GHG Protocol), the amounts in the table were calculated using the location-based method which calculates emissions applying average domestic emissions for the various countries where the electricity is purchased.
The attached Performance indicators tables containing 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.
The ongoing continuous improvement process has resulted in an expansion of the operational scope of the climate-altering gas inventory. Following the principles of relevance and completeness defined by the relevant regulatory framework, new emission sources have been added to the 2023 emissions quota:

- fugitive emissions of climate-altering gases (e.g., leaks or accidental releases from stationary and mobile refrigeration equipment)
- emissions from land-use change (e.g., the occupation of a green area for the construction of infrastructure).

This expansion of the scope adds about 86.5 thousand tons of CO_2 equivalent to direct emissions (Scope 1): in the absence of these contributions, direct emissions in 2023 would have been the slight decline from 2022 and 2021 values, confirming the Group's commitment to reducing its climate footprint. In past years, fugitive emissions were estimated and found to be insignificant compared to overall emissions; for land use change emissions, there was no availability of the information functional to their calculation.
With regard to other indirect Scope 3 emissions that occur upstream and downstream of the value chain, improvements have also been made in the methodological framework with the understanding that the cooperation of all stakeholders will be crucial in the Group's decarbonisation process from which the entire community will benefit. Since 2022, the Parent Company has updated and refined the analysis of the Group's value-chain carbon emissions, in accordance with the GHG Protocol guidelines, by strengthening the reporting of impacts with reference to Scope 3 emissions. From this analysis, four relevant categories of emissions related to: goods and services purchased and capitalised with reference to the supply chain, third-party railway companies that run on the RFI network, and emissions related to upstream processes of energy procurement have been identified. These emissions account for approximately 98.5% of the Group's estimated total Scope 3 emissions. The attached Performance Indicator Tables show the values of all emission categories, in line with the categories defined by the GHG Protocol.
In looking at the impact of Scope 3 over the three-year period, it can be seen that close to the last year the value of these indirect emissions showed an increase (+25%) compared to 2022 while the values of the first two years were almost stable. The main causes that led to the emission of 5.12 million tons of CO_2 equivalent, net of the entry of four new companies into the organisational scope (Busitalia Rail Service, FS Park, ILSA, Mercitalia Intermodal, ODEG from the Netinera

Group), can be attributed to the purchase of goods and services (Category 1), and capital goods (Category 2); in particular, the opening of new rail yards required extensive use of carbon-intensive materials such as steel, concrete, iron, copper and aluminium.
The increased indirect impact was also due to an increase in the Group's energy requirements, reflected in an emission of about 130 thousand tons of CO_2 equivalent in Category 3 compared with the previous year, and an increase in passenger traffic on the electrified network on the part of other railway companies, which is responsible for the increased emission of about 47 thousand tons of CO_2 equivalent in Category 11 compared with the previous year.

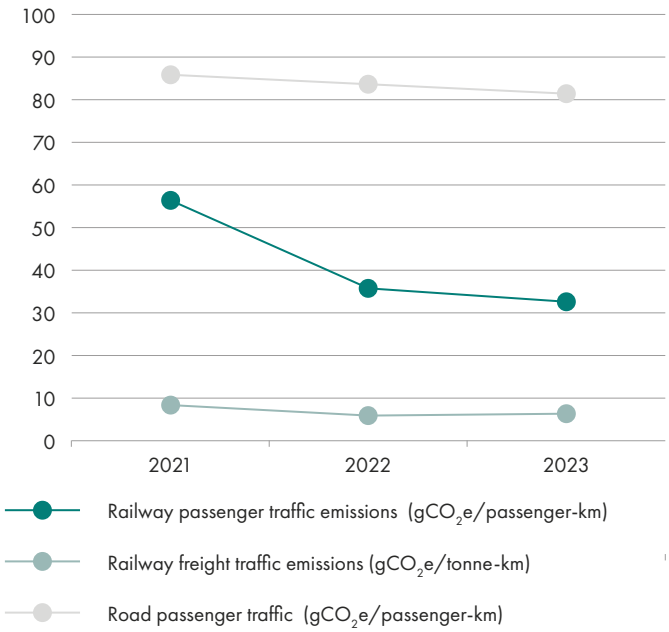
Scope 3 emissions



** Other categories: waste generated in activities (Category 5), business trips (Category 6), employee home-to-work travel (Category 7), and leased assets used by third parties (Category 13).*

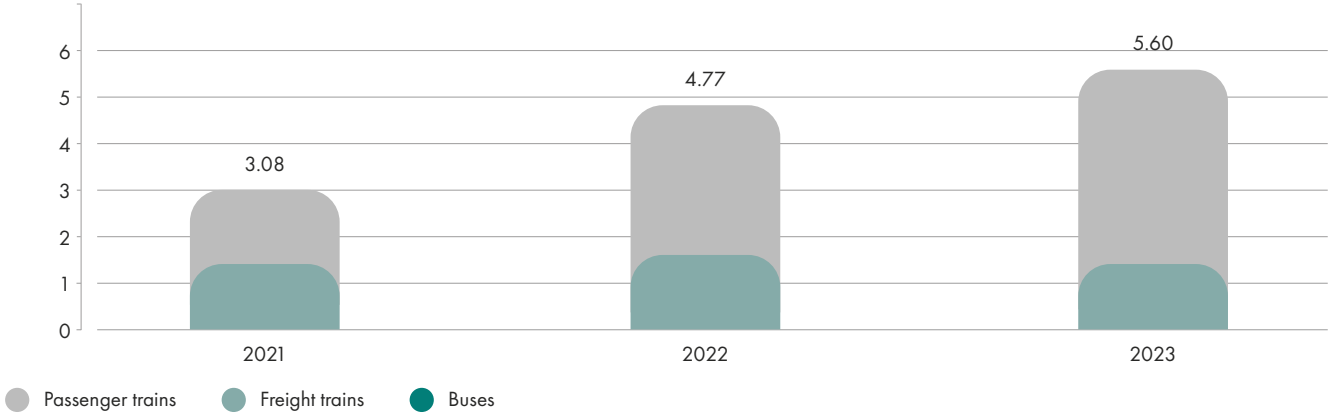
The performance of direct (Scope 1) and indirect (Scope 2) specific emissions of rail transport is similar to that of specific consumption: emissions by traffic units transported amount to roughly 31.5 gCO_2e/passenger-km for rail passenger traffic (-11% from 2022), and 70.7 gCO_2e/passenger-km for road passenger traffic (-15% from 2022). In the same manner as specific consumption, the emission of rail freight transport per unit of mass and kilometre travelled also showed an increase by 9% from 8.7 gCO_2e/tonne-km (2022) to 9.5 gCO_2e/tonne-km (2023). The difference estimated by calculating the emissions from the use of FS Group's collective transport vehicles, as a whole, for rail and road passenger transport and for rail freight transport, compared with the emissions estimated by simulating the use of private cars and heavy commercial vehicles, amounts to about 5.7 million tons of CO_2 equivalent avoided. The trend is upward over the three-year period and is due to two factors: the increase in demand for passenger transport on both buses and trains, and the gradual reduction of specific emissions for domestic and foreign passenger transport through the FS Group's collective transport services.

FS Group final specific emissions



Emissions avoided- Emission difference between FS Group Transport vs Road Transport

[millions of tCO_2e]



(302-5, 305-5)

FIGHT AGAINST CLIMATE CHANGE

The FS Group continues its commitment to combating climate change through the definition of a set of objectives, one of the most important of which concerns the self-production of energy from renewable sources. The goal of the Industrial Plan is bringing the first results with the identification of the first four sites for the design and subsequent installation and connection to the grid of photovoltaic parks, for a total of 21 MW of installed capacity, to be realised by 2024. This initiative, together with other initiatives to improve environmental performance, detailed in the attached *Company Highlights*, will allow the company to continue on the path to improvement in line with the SDGs defined by the United Nations.
At the same time, the use of energy produced from renewable source plants for electricity for uses other than rail traction, certified by Guarantees of Origin (GO), continues, despite the difficulties related to the international context and rising purchase costs. Nevertheless, in 2023, FS Group companies purchased GOs covering more than 66% of electricity needs for uses other than rail traction, with a gradual increase over the years. Self-generation of electricity for other uses continued in 2023 and increased by about 14%, thanks to more than 11 MW of installed photovoltaic capacity.
With regard to the Infrastructure Business Unit, there is an electrified share of over 70% of the entire railway infrastructure; an increase of about 1,850 km is expected over the term of the Plan to reduce diesel vehicles in operation to the minimum.
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, but also wind and biomass. In addition, highly innovative engineering plant solutions are being adopted for tunnel lighting, and the installation of charging devices for electric vehicles/vehicles on the user/customer infrastructure continues.

72.5% of the rail network is electrified

About **1,850 km** of further electrification is expected in the next 10 years

~84% of energy used on the road network is from renewable sources (GO)

32,538 km of network, **1,074 km** of tunnels lit

The Passengers Business Unit of the FS Group aims to provide solutions that increasingly combine impeccable service quality with excellent environmental performance. Started in 2019, the entry into service of the new regional Pop, Rock and Blues trains continued in 2023 with the entry of a total of 108 units, with fuel consumption reduced by up to 30% compared to previous generation trains, possessing, for example, systems for intelligent management of air conditioning system consumption, green drive and smart parking features (for Pop & Rock), and optimisation of diesel consumption (for Blues). In addition, the first trains powered by HVO (Hydrotreated Vegetable Oil) biodiesel were tested on the Italian rail network (see box for more details). In order to increasingly strengthen intermodal choices, thus contributing to reducing the sector's carbon footprint, in addition, the FS Group continues to propose facilitations for the adoption of efficient and sustainable transport solutions to get to the station or to continue the journey (e.g. FrecciaLink, train + bike, car sharing, micromobility).
On the road transport front, the goal of upgrading buses to lower environmental classes (Euro 2, 3, 4) with services capable of offering the best environmental standards continues, including investing in vehicles with hybrid, hydrogen, and electric engines and making use of biofuels such as HVO. In 2023, energy consumption for low-emission LPT accounted for about 70.5% of the Group's road vehicle fleet, gradually increasing from previous years.

94.1% Passenger traffic

99.6% Freight traffic

On the electrified railway network

70.5% Energy consumption by low emissions road vehicles *in LPT

*Electric, Diesel Euro 6, HVO, GTL, H_2 vehicles

TOWARDS THE PHASE-OUT OF FOSSIL FUELS: THE HVO TRIAL

The decarbonisation goals of the Italian FS Group are passing through experimentation with alternative fuels to traditional fossil solutions. In this context, HVO (Hydrotreated Vegetable Oil) presents itself as a transitional solution that can be employed to reduce the climate impact of non-electrified mobility thanks to a non-fossil and circular fuel as it is produced from waste and renewable raw materials such as used cooking and vegetable oils, and agro-food industry residues, etc. The type of materials used in its production makes this fuel low-impact because the carbon dioxide emissions emitted during its combustion are biogenic, that is, equivalent to the amount of CO_2 sequestered by biomass in its life cycle.
Tests carried out with HVO have shown positive performance from both an environmental and efficiency point of view; in addition to these benefits, the possibility of using it in machines and plants without the need for significant modifications make it a candidate as an optimal bridging solution for replacing fossil diesel.
The results of Eni Sustainable Mobility's biofuel trial resulted in the journey of Trenitalia's first Blues train powered exclusively by pure HVO, which took place in July 2023 to cover the round trip route between Sibari and Reggio Calabria. In the following months, experiments related to the use of HVO continued on specific rail routes confirming the interest in the technological solution by the Ferrovie dello Stato Italiane Group, with an estimated reduction of about 875 tons CO_2e (well-to-wheel approach) compared to the use of traditional diesel fuel for traction, of which about 770 tons CO_2e for the tank-to-wheel share.
The versatility of the biofuel determines the interest in its application also in road transport: the experimentation of HVO on Busitalia's diesel fleet and buses is in fact underway while part of the bus fleet of the Dutch subsidiary Qbuzz and used for the provision of local public transport service, is already powered by HVO.

(3-3)

ENVIRONMENTAL PROTECTION AND CIRCULAR ECONOMY

For years, the FS Italiane Group has adopted a Sustainability Policy and a specific Environmental Policy that promote the adoption of sustainable practices within the activities and services managed, and the reduction of negative impacts on the environment and biodiversity. The commitments outlined in the Policy aim to encourage the spread of an economic model that reduces waste and the use of non-renewable resources, enables the reuse of materials, and promotes environmental sustainability.
Commitment to environmental protection is also ensured by the Parent Company and its main subsidiaries through the adoption of certified environmental management systems[135] in accordance with ISO 14001:2015. These systems enable the identification, monitoring and management of environmental impacts related to its activities and services provided. In addition, the implementation of the aforementioned models allows, through active involvement and identification of key roles and responsibilities, to increase the awareness, skills and motivation of employees in order to contribute to the improvement of corporate and Group environmental performance and the mitigation of environmental risks.

(303-1, 303-2303-3, 303-4)

WATER RESOURCE MANAGEMENT

FS Group companies, particularly those that use the resource primarily for technological processes and the provision of services to customers, play a key role in managing water resources. There are a number of crucial activities to strive for optimal management of the resource, including making efficient use and ensuring that wastewater is treated before it is returned to the environment. When possible, companies are also adopting systems capable of recycling and reusing purified wastewater for other processes.
In addition, the Group is increasingly committed to safeguarding the quality of the water supplied, through regular quality checks and monitoring on the water network and at supply points, thus ensuring access to drinkable water for employees, workers and customers, and sustainable management of water resources.

16.1 million
cubic metres in 2023
Water withdrawn
reduced compared to 2022

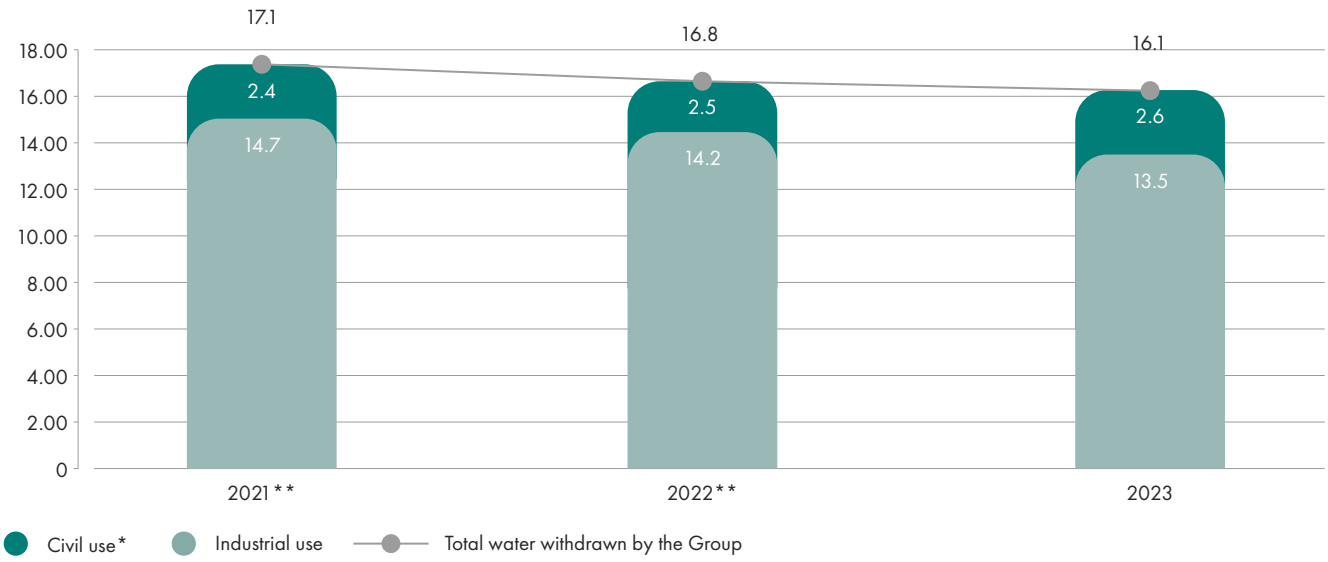
equivalent to the annual water consumption of an urban agglomeration with about **185,000** residents

The FS Group considers it essential to manage the water resource in the best possible way in order to address in advance the challenges associated with climate change, as these will also affect the availability of water and its quality. The fact of anticipating such scenarios can help prevent or mitigate future water crises, which could have major consequences on operations, process quality, and the economic sustainability of the services provided by the Group (e.g., reduction of purification capacity of waterways with tightening of discharge limits at production sites, unavailability of water to ensure the use of services and sanitisation procedures, increased cost of water, etc.).
The total volumes of water withdrawn by the Group during 2023 were just over 16 million cubic meters, comparable to the average annual consumption of a city with the size of an Italian provincial capital with about 185,000 inhabitants. Specifically, the water supply

135. For more information on the Management System certifications held by Group companies, please refer to the specific paragraph of the Sustainability Report "Certified Management Systems" and to the "Company Highlights", attached to the Report.

sources used consist of **aqueduct, groundwater** (aquifers and springs), **and surface water** (rivers, lakes, wetlands and seas, swamps and lagoons, including brackish ones, including accumulated or collected rainwater).
At present, efforts are directed mainly at reducing consumption and improving the efficiency of water networks, adopting initiatives to increase the reuse of the water resource, and ensuring the effective collection and treatment of wastewater, with particular reference to industrial uses. The attention paid to the issue also concerns the activities carried out by contractors, and for this reason the technical specifications of tenders, whose activities involve the water resource in a significant way (e.g. sanitisation of transport vehicles and working environments), contemplate the development of innovative proposals of a technological and managerial nature aimed at ensuring the minimisation of water consumption as well as energy consumption. Frequent campaigns are organised by Group companies to raise awareness among suppliers, workers and travellers about responsible use of the resource.
However, with regard to the healthiness and 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.
In order to monitor the effectiveness of the initiatives put in place and achieve the objectives set, during 2023 the FS Group introduced new performance indicators on water in order to support the path to improvement the companies have embarked on. The result is a picture that shows an increase in the quality analysis of water delivered through the internal water network to nearly 10,000 runs in one year, and an improvement in the level of attention to water consumption thanks to the launch of campaigns to test new technological systems, which have enabled the reuse and recycling of 3% of total water withdrawal. This saving is set to grow further as a result of the initiatives that Group companies have launched to achieve the set goal of reducing consumption. At the end of the experiments carried out, if successful, in some pilot sites by the companies of the Infrastructure and Passengers Business Units, the new water recycling systems will be progressively implemented in the other industrial entities.

Water withdrawn to be used (millions of cubic meters)



** Includes water withdrawn for civil use in the stations*
*** Data for water withdrawn "for civil use" and for "industrial use" in 2022 and 2021 have been adjusted following a refinement of the data collection process and calculation methodology*

Data for the year 2023 confirm an overall downward trend (-6.2% between 2021 and 2023), mainly characterised by the reduction in consumption of water for civil use on the part of the Business Units. In particular, groundwater withdrawals were reduced: in 2023, volumes saw a decrease of almost 17% less than in 2022, mainly attributable to the companies in the Infrastructure Business Unit, such as Anas, RFI and Grandi Stazioni Rail. The reduction in volumes taken shows that the path embarked on by the Group, in accordance with the defined key guidelines, is the correct one. As anticipated, the improvement is related to a more accurate management of the resource and networks that allow, among other things, the identification of unforeseen deviations, the implementation of water efficiency technological solutions, and the growing awareness acquired by users and operators.
During the past year, the Infrastructure Business Unit used, as a whole, more than 81% of the total volume of water withdrawn by the Group to carry out its activities, followed by the Passengers Business Unit with about 18% of total withdrawals.
In line with major environmental standards and based on guidance provided by the World Resources Institute (WRI), the Group has introduced, as early as 2022, monitoring of water volumes withdrawn and discharged by the Group in **water-stressed areas**. These are defined by WRI as those areas where water demand significantly exceeds the availability of water resources and are characterised by a critical imbalance between water supply and demand. Specifically, it should be noted that slightly more than 70% of the total withdrawal required to meet the Group's needs occurs in water-stressed areas, mainly attributable to the activities and services carried out by the Companies in the Passengers and Infrastructure Business Units.

TRENITALIA REGIONALE CONFIRMS ITS ROLE AS AN OFFICIAL GREEN CARRIER IN THE "105 SAVE THE SEA" PROJECT

In July, Trenitalia supported the "105 Save the Sea" project as an official green carrier in order to engage passengers on the issue of protecting Italy's seas and beaches. Coordinated by the no-profit organisation Plastic Free, the initiative includes more than 50 events along national coastlines, aiming to inform and engage the public on a plastic-free future.
The campaign involved more than 3,000 volunteers who collected about 10 tons of waste through beach cleanups, who were able to join by signing up directly online for the cleanups.

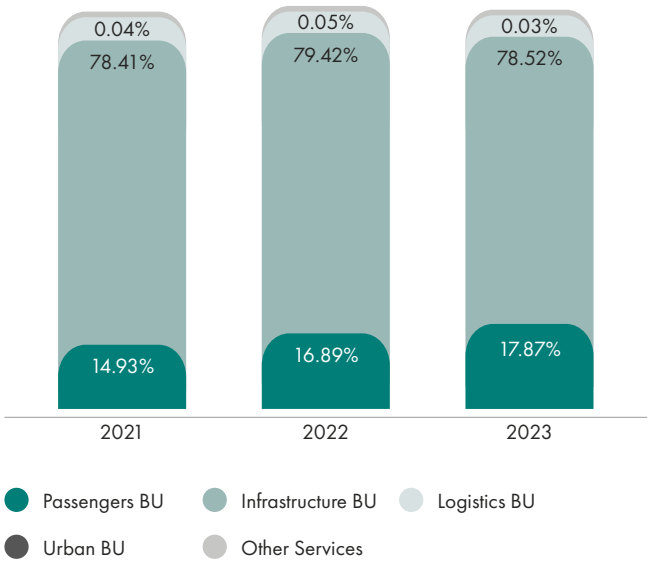
WASTE MANAGEMENT

(306-1, 306-2, 306-4)

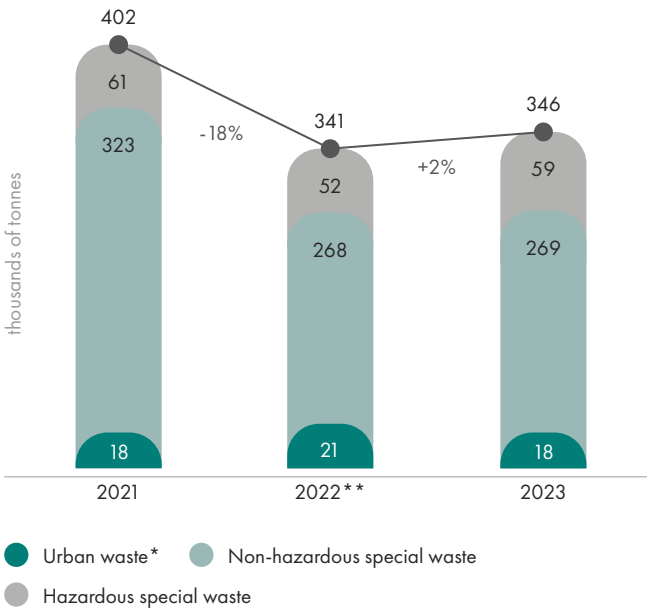
One of the Group's strategic objectives for reducing the pressure of its activities on the environment is to achieve optimal management of the materials procured and the waste generated by the conduct of its business. This can be achieved both by careful upstream selection of supplies and materials needed, opting for those with the lowest environmental impact, and by directing and supporting the implementation of sustainable practices and policies along the downstream value chain. This is also why FS Italiane actively participates in the Alliance for the Circular Economy, a network that brings together many Italian industrial entities, aimed at promoting a transformative economy that preserves natural capital and combines competitiveness and sustainability.
The adoption of a business model based on circular economy allows the FS Group to reduce waste and prevent waste production while maximising reuse, recycling and resource recovery.
The attention paid at the procurement stage to the selection of goods with environmental labels and, where possible, composed of a proportion of recycled material, in addition to the recycling and recovery of the waste produced, contribute to reducing greenhouse gas emissions associated with the processes of extraction, production and transport of raw materials necessary for the production of new materials. Sustainable procurement management and continuous improvement of waste cycle management are key issues for the FS Group, which has outlined specific goals in its Business Plan.
On the issue of waste, initiatives are taken on an ongoing basis to raise awareness among workers, customers and contractors in order to increase, on the one hand, the collection of waste made up of valorisable commodity fractions and, on the other hand, to reduce the quantities of unsorted waste.
In term of quantities, the waste generated by the companies in the Infrastructure and Passengers Business Units account for approximately 96% of the total waste generated by the FS Group in 2023, mainly made up of special waste generated from construction and maintenance of network infrastructure, and of the equipment and systems that use this infrastructure.

More than 96%
of **special waste sent for recovery**

Waste produced (%)



Waste produced by type



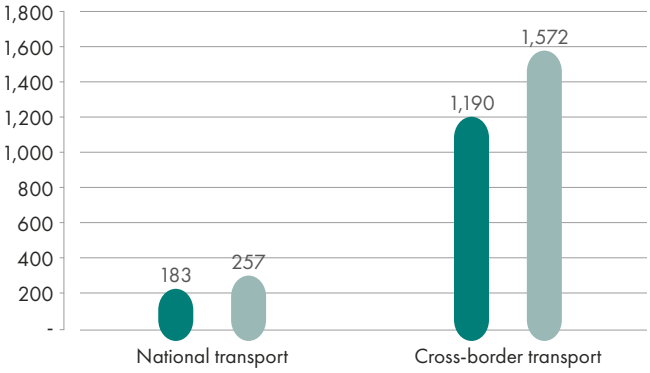
**Includes urban waste in public areas at stations.*
*** Data relating to "non-hazardous special waste" in 2022 have been adjusted following a refinement of the data collection process and calculation methodology*

SAVING 460 TONS OF CO_2 THANKS TO NEW R-PET BOTTLES INTRODUCED BY TRENITALIA

Trenitalia, the parent company in the Passengers Business Unit, has demonstrated its strong commitment to sustainability by introducing a renewed on-board train catering system. In this context, circular economy plays a priority role, thanks to the use of recyclable materials such as r-PET bottles, and food-boxes made of 100% recycled FSC-certified paper.
In order to best represent the environmental benefit of the activity, a study was conducted together with the Sant'Anna School of Pisa. One of the results shows that by replacing traditional bricks with r-PET bottles on its trains, almost 460 tons of CO_2, was reduced: this corresponds to the emissions absorbed by more than 60,000 trees in one year.

Group companies generate waste that differs according to the service provided or the activity carried out (passenger and freight transport service, ship, rail and road vehicle maintenance, infrastructure construction and maintenance, station services, etc.). In terms of quantity, special waste produced far exceeds municipal waste. The latter accounts for only 5% by weight of the total, and consists of waste generated in company appurtenances or areas open to the public. Special waste classified as non-hazardous items originate overwhelmingly (82%) from construction and demolition materials, soil and rocks, iron and steel, and mixed metals. Compared with the previous year, the figure that indicates an improvement in Group performance, also in line with the key guidelines of the Plan, is for the percentage of special waste sent for recovery, which is currently equal to 96%.
The production of special waste in 2023 showed an overall increase of about 2% compared to the previous year. The prevalent increase in special hazardous waste is related to the demolition campaigns started for fleet renewal and modernisation of a railway depot in the Passengers Business Unit while the increase in special non-hazardous waste is more attributable to the maintenance activities in the Infrastructure Business Unit, and the demolition campaigns started for the renewal of the freight fleet.
With regard, on the other hand, to the waste transported by the Logistics Business Unit, during 2023 there was an increase in the quantities handled compared to the previous year: 1,571,805 tons of waste were handled in cross-border transport, and 257,428 tons in domestic transport. The increase in tons of waste transported by rail allows for several environmental benefits related to, for example, a reduction in air pollution due to the use of a more sustainable mode of transport, and reduced road traffic by relieving congestion and helping to ensure smoother circulation. Generally speaking, the increase in the amount of waste transported by rail in 2023 contributed to avoiding about 18,000[136] heavy road vehicle trips for freight transport on the long-distance route.

Waste transported
(thousands of tonnes)



136. The estimate was made by assuming an average load of 25 tons per vehicle for road transport.

MANAGEMENT OF ATMOSPHERIC EMISSIONS AND FROM PHYSICAL AGENTS (305-7)

Management of emissions of major air pollutants

The main types of atmospheric emissions involving the Group's operating companies are mainly related to the provision of passenger and freight transportation service, by road, rail and in sea transport. In particular, these emissions contain pollutants such as particulate matter, sulphur dioxides and nitrogen oxides. Still present, though to a lesser extent than those mentioned above, are atmospheric emissions released by stationary thermal plants, designed to heat and provide hot water for sanitary use in workplaces and environments open to the public, and emissions – either diffuse or channelled - related to the operation of technological facilities or specific activities carried out at storage and maintenance sites, construction sites, railroad parks and stations. Direct pollutant emissions related to rail transport can be considered relatively less significant, given the widespread use of electrified trains, compared to emissions from the road and ship transport services the Group offers. However, all types are carefully managed by the respective companies, which have implemented various containment measures, such as:

- adoption of sustainable driving practices;
- management measures aimed at reducing fuel consumption, and atmospheric and noise emissions (e.g. smart parking functions that optimise vehicle performance before and after service start-up);
- campaigns to renew existing fleets (e.g. Euro 6 engines, hybrid diesel/battery and diesel/electric technologies, etc.).

The commitment to environmental protection is also evident from the values shown in the table below: in the face of a significant recovery in passenger traffic, these emissions remain low, comparable to the levels of the previous two years.

OTHER ATMOSPHERIC EMISSIONS	Measurement unit	2023	2022	2021	% Δ 23/22
NO_X	ton	5,840	5,848	6,128	-0.1%
SO_2	ton	149	155	179	-3.3%
PM_{10}	ton	153	154	163	-0.7%

It is emphasised that, even by virtue of stringent regulations on atmospheric emissions, all plants that release emissions into the atmosphere are equipped with appropriate technologies and adopt measures to abate pollutants. These emissions are in any case managed, and abatement plants maintained in efficiency, including with the help of the control, monitoring and emergency management procedures adopted as part of the Environmental Management Systems implemented by the companies.

UMBRIA, 71 NEW BUSES FOR PUBLIC TRANSPORT FROM BUSITALIA

Umbria, 71 new buses for public transport from Busitalia
Seventy-one new buses are scheduled to arrive on the roads of Umbria. Busitalia Sita Nord, a company belonging to the Passenger Unit of the FS Group, has prepared them for urban and suburban public transport in the region. The 71 buses complete the existing fleet, bringing the number of buses with Euro 6 engine to 53%. In addition to the superior engine that reduces the impact of pollutants, the new buses have other features: the new bus fleet includes five different types that, in addition to their low environmental impact, are equipped with high standards in terms of safety, comfort and accessibility. Urban services will be supported in particular by 26 buses capable of accommodating up to 82 passengers. These are hybrid electric-diesel buses that accumulate energy while running and release it in combination with the endothermic engine. The result is a 12% reduction in CO_2 emissions compared to the corresponding Euro 6 diesel models. All other buses are of the new generation Euro 6 class with reduced pollutant emissions.

Management of noise emissions

The commitment of the Group's companies, mainly belonging to the Infrastructure and Passengers Business Units, is constantly oriented towards noise prevention and reduction, in order to reduce the impact on both urban living environments and natural habitats.
The operation of road and rail infrastructure generates, in fact, noise emissions that can disturb the environment crossed by rail and road tracks.
Attention to this issue is managed in all phases of infrastructure operation. In the design phases of new infrastructure, or the expansion of existing ones, predictive models of acoustic impact and the consequent identification of mitigation measures are used. Equal attention is paid to the infrastructure and vehicle management phases, planning and executing specific interventions, such as:

- adoption of new traffic technologies;
- electrification of the railway line;
- grinding of rails and train wheels;
- installation of devices on rails to reduce squeaking:
- regeneration of stations, adoption of noise-reducing asphalt, speed limitation, installation of barriers, and use of vehicle parking mode, etc.).

In both the railway and road sectors, in line with the orientation that favours mitigation actions directly on the source, the vehicle fleets in the Passengers and Logistics Business Units vehicle fleets are undergoing significant renewal and efficiency improvements, which consist in the decommissioning of the oldest vehicles by replacing them with new railway or rubber-tyred vehicles, which comply with and are homologated to the most recent technical specifications on acoustics, or in the revamping of existing vehicles (e.g. modification of the braking system of freight wagons, etc.).
In addition to the above, railway vehicles are also maintained on an ongoing basis in order to ensure compliance with the prescribed noise emission values. In some cases, on vehicles already in operation, modifications have been implemented to ensure the reduction of noise emissions, even during parking.
In order to contain noise emissions from existing infrastructure, measures are planned and implemented to mitigate noise directly along the propagation path, between the linear source (the infrastructure) and the final receptor (e.g. sensitive receptor), such as, for example, the installation of sound-absorbing barriers, dunes and embankments, plant barriers or artificial tunnels.

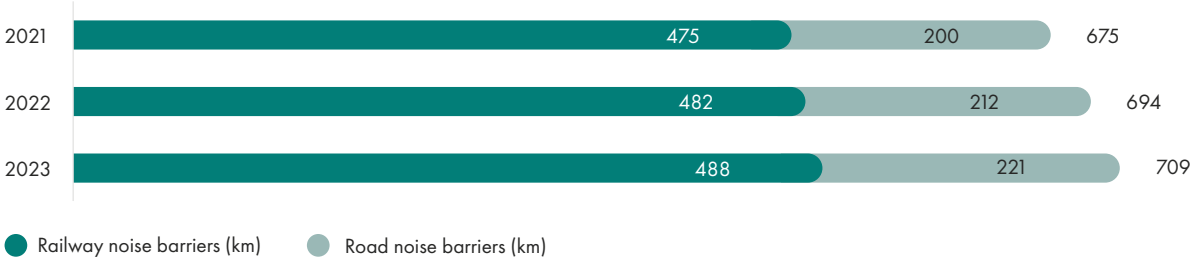
709 km
Noise barriers installed in Italy

488 km
near railway lines

221 km
near road infrastructure

In the road sector, the Group acts to identify solutions aimed at noise mitigation along noise propagation paths, in full compliance with environmental and landscape constraints, evaluating the adoption of increasingly innovative approaches, such as multifunctional integrated barriers (photovoltaic, safety, green, catalytic). With reference to both newly-built rail and road infrastructures, as well as any infrastructure already in operation and the mitigation measures carried out, to date, along the propagation path, the Group's commitment has produced significant results, shown in the chart below:

Installed noise barriers in km



Management of light emissions

The Group's commitment to mitigating the impacts generated by its business also includes reducing and preventing light pollution.
Group companies strive to ensure that the irradiation of artificial light is not oversized and is limited to investing surfaces (e.g. of infrastructures, facades of civil buildings and stations, industrial sites, railway parks, yards, etc.) without dispersing light rays, directly or indirectly, towards the sky, dissipating, among other things, energy. This commitment, in addition to the adoption of specifications and standards in line with the reference regulations, has taken the form and is still taking shape in the realisation of works to adapt and improve the energy efficiency of the existing external lighting systems of workshops, stations, offices, car parks, shelters, roads and yards, such as:

- installation of automatic systems for switching lighting systems on and off;
- changes to the orientation of optics;
- replacement or shielding of optics;
- evaluation of new lighting installations at the design stage.

The attention paid to this environmental issue is not only aimed at improving the visibility of the night sky, and containing the phenomenon of intrusive light, but also at protecting wildlife by reducing interference with the natural light/dark cycles that artificial light can generate on plants and animals (e.g. phenomena of disorientation of animals in their habitat, or along their migratory routes and phototropism in plants, increased predation on insects by nocturnal animals due to the phenomenon known as "attractive light").

FS ITALIANE AT *M'ILLUMINO DI MENO*

The FS Group joins *M'illumino di meno*, the National Day for Energy Saving and Sustainable Lifestyles organised by Rai Radio2 with Caterpillar to spread the culture of environmental sustainability, and, specifically, the prevention of light pollution and resource saving.
For the occasion, the Ferrovie dello Stato Italiane luminous sign at Villa Patrizi, Rome headquarters, will be switched off from 6pm to midnight. A symbolic gesture that testifies to the Group's daily commitment to optimising energy consumption, and raising the awareness of citizens and employees to the problems related to light pollution in order to limit the phenomenon.
A gesture that is in addition to the many activities introduced by the FS Group as part of its energy programme: from PV panels on the roofs of stations and workshops, to energy efficiency works on trains and buildings, and the creation of zero-emission sustainable mobility plans.

(306-3)

SOIL AND SUBSOIL MANAGEMENT AND PROTECTION

Soil and subsoil management and protection are of fundamental importance both to prevent pollution and to ensure environmental and habitat protection and human health.
The principle of soil protection is also applied, in a life cycle perspective, to new company assets taking into consideration the types of activities that will be carried out there, starting from the design and construction phases where safety measures are planned and adopted to minimise the risk of accidental release of pollutants.
During the operation of plants, yards, stations, or the performance of those activities that may be detrimental to the environment, periodic inspections are ensured, and best practices are adopted to ensure compliance with environmental regulations and the protection of the host environment, with the help, most often, of the potential offered by the adoption of Environmental Management Systems.
In the process of end-of-life management of sites or complexes, before any activity that may involve dismantling, disposal, sale, reconversion or redevelopment, an in-depth analysis of the environmental state of the site is carried out and, if the need is identified, an environmental remediation activity.
Common practices implemented by Group companies to protect the environment, natural habitats, and landscape assets located near operating sites and the various environmental matrices at operating sites include:

- historical analysis of the activities carried out at the site and preparation of the Environmental Site Analysis;
- identification of the presence of priority substances or priority hazardous substances in products and raw materials used in technological and maintenance processes with a view to their replacement where alternative products are available;
- selection of products and consumables that are less hazardous to health and the environment in the procurement stages;
- identification and mapping of any possible sources of contamination and preferential contamination pathways, especially if the site is located near protected areas, water bodies, aquifers used for drinking water supply, etc.;
- assessment of the level of environmental risk linked to the presence and use of these substances and the activities carried out on the site;
- provision of periodic monitoring and control activities related to the identified environmental risk;
- adoption of technological systems, prevention measures and good practices for risk mitigation;
- simulation of emergency scenarios for the preparation and response to environmental emergencies;
- involvement of employees in the adoption of environmentally friendly practices and in training campaigns;
- upon the occurrence of events that are potentially capable of contaminating the soil and subsoil, after adopting the appropriate mitigation and safety measures, carrying out environmental investigations to assess whether there is any possible contamination;
- adoption, when necessary, of soil remediation techniques to remove or treat contaminants present in compliance with current legislation.

At present, remediation procedures have been initiated on a total of 50% of the 135 sites surveyed to date as contaminated or undergoing analytical investigations in compliance with the provisions of the law to assess whether a state of soil, subsoil or groundwater contamination exists. These are mainly historical contaminations that have come to light in the course of works or periodic monitoring activities and concern sites that have been used for industrial and commercial purposes in the past.
In addition, during 2023, eight incidents of spills of hazardous substances were reported, which were not directly attributable to Group companies (such as, for example, spills of fuel or hazardous liquids by road transport vehicles or rail vehicles using road or rail infrastructure), and which were promptly resolved without any damage to the environment.

(3-3)

SUSTAINABILITY IN THE SUPPLY CHAIN

(2-6, 2-23, 204-1)

OUR SUPPLIERS

The negotiation activities of the FS Group companies are inspired by the principles laid down in the EU Treaty to protect competition, and are governed by the *Regulation for Negotiations of Ferrovie dello Stato Italiane Group companies*[137].

The Group's relationships with suppliers (including third-party contractors, consultants, intermediaries, sub - contractors, sub-suppliers and, in general, all parties in the supply chain) and business partners are based on **complying with 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 re liable, 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;
- **ensure** 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 company 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. 36/2023), suppliers are selected 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 selection 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 environmental and social issues applicable to the main categories of goods, for example:

- possession of environmental, social, health and safety and quality certifications (e.g. ISO 14001, ISO 9001, ISO 45001, 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;
- the enhancement of diversity and inclusion (e.g. % of women in project teams).

137. Available online on the purchasing portals of the Group companies.

Over €26.5 billion of the economic value of contracts awarded by the Group in 2023 (with environmental and social criteria included in over 88% of bids for tender). **In 2023, the Group companies paid suppliers over €20.4 billion**, roughly 69% 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.

26,5 billion
Economic value of contracts awarded

Over €20.4 billion in payments made in 2023

SUSTAINABLE PROCUREMENT

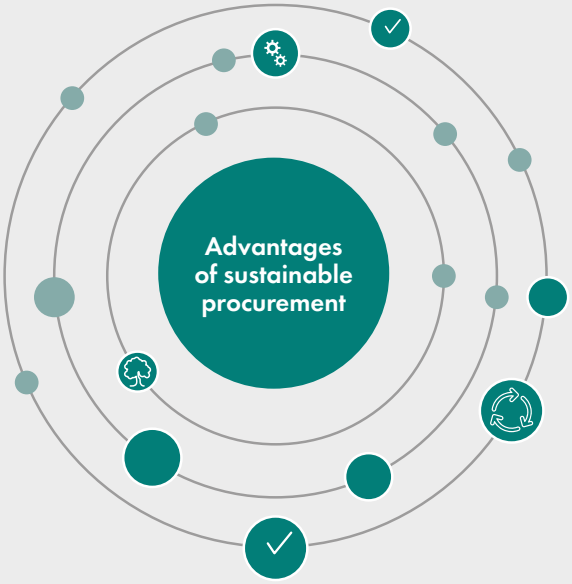
(2-28, 308-1, 308-2, 414-1, 414-2)

The Group recognises the importance of integrating and consolidating sustainability considerations in the management of its supply chain, as a fundamental condition for improving economic, environmental and social performance.
The sustainable management of the Group's supply chain starts from the inclusion, in contracts, of standard rules on labour, social security, safety and hygiene at work, as well as compliance with the rules laid down in the **Group's Code of Ethics**. The Group's Code of Ethics promotes respect for human rights and environmental protection among suppliers, as well as the discouragement in every way of any practice of corruption or inducement to corruption. This approach continues through the Management Systems implemented by Group companies, aiming to improve the environmental and social performance of suppliers.
FS Italiane also issued **Group guidelines for sustainable procurement** in line with the business processes at the various operating companies, **with the aim 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 the guidelines involved the main FS Group companies and several corporate functions (responsible for procurement, sustainability, technical and legal functions).

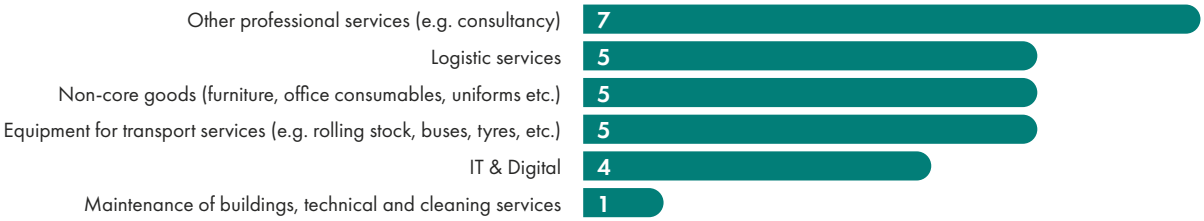
The process is divided into 6 stages, from the identification of the product categories to which the Sustainable Procurement criteria are to be applied, to the review of the process itself, the results of which will be the input for the actions **to be taken in order to ensure continuous improvement and achieve the advantages offered**.



- Listen to stakeholders
- Investors' confidence
- Mitigate reputational risk
- Encourage research
- Employee satisfaction with suppliers
- Improve relations with suppliers
- Manage risk of interruptions to supply
- Competitive edge
- Improve the group's conduct
- LCCA and cost optimisation

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.
In 2023, work continued to monitor the environmental and social impacts of the supply chain through the **administration of an online survey** to the strategic suppliers of the Group companies, and the launch of the first ESG assessment activities carried out on the **new ESGeo IT platform** - implemented as part of the Sustainable Procurement and Supply Chain Management Project - which from 2024 will be the FS Group's only tool for assessing, monitoring and responsibly managing its supply chain.
The **online survey**, consisting of around 100 questions divided into 6 sections (general information, human rights, environment, society, occupational health and safety, and continuous improvement), involved all economic operators and suppliers of the Group's companies, with the exception of the construction product sector involved in the pilot project to test the ESGeo IT system.
In 2023, 27 strategic suppliers[138] of major companies from the following product sectors responded:

Product sectors



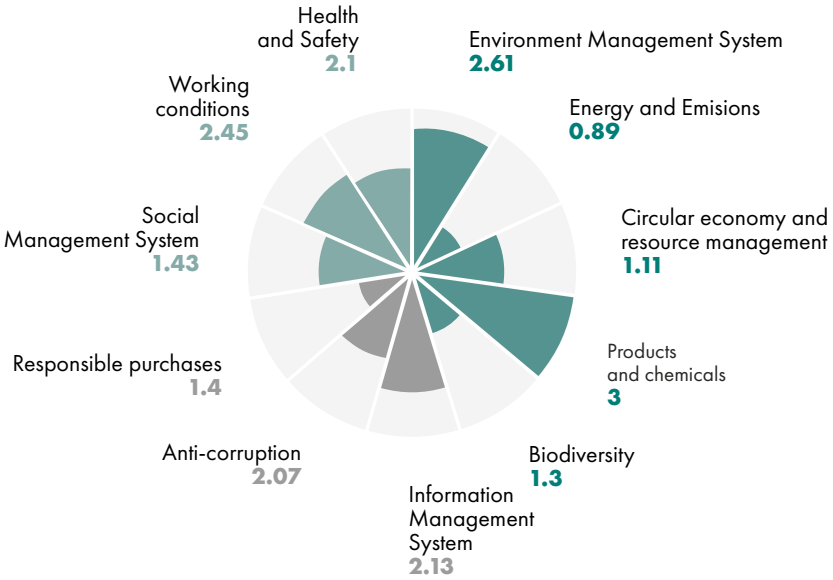
Based on the replies received, each section is **scored and used to calculate an overall rating**, from 0 to 3 (translated in an alphabetical scale), regarding **the supplier's environmental, social and governance performance**.

PUNTEGGIO VALORE ASSOLUTO	RATING ESG
0 ≤ score ≤ 0,90	E
0,90 < score ≤ 1,50	D
1,50 < score ≤ 2,10	C
2,10 < score ≤ 2,70	B
2,70 < score ≤ 3	A

The **average scores of the assessed suppliers was 1.85 (ESG Rating "C")**, with 7 suppliers obtaining an ESG Rating "B", 8 suppliers within the average (ESG Rating "C"), and the remaining 10 which recorded a performance between "D" and "E".

138. 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.

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 and ensure, in coming years, a **significant overall improvement in how these issues are managed by its suppliers**, for example by including new criteria in negotiation procedures to improve the carbon footprint and assure greater control over the whole supply chain (second-tier suppliers and further).



Environment Social Governance

The IT platform (ESGeo) was used to test a specific questionnaire template, related to the construction sector, divided into four areas of analysis (General Information, Environment, Governance, Social), which are in turn divided into sections within which there are questions to be answered in order to generate the ESG score/rating. The system assigns, through the definition of an **internal Group calculation algorithm**, an ESG (Environmental, Social and Governance) rating. The overall score, from zero to three, is translated into an alphabetical scale based on the percentage weights attributed to the different areas. The score for each area is determined by the sum of the section scores, with the corresponding percentage weights. Each question in the questionnaire receives a score and a weight from zero to three, the product of which generates the score attributed to each answer. The sum of the scores divided by the sum of the attributed weights feeds the section score.
In 2023, eight key suppliers in the Construction sector responded to the ESG assessment pilot via a proprietary platform, achieving **an average score of 2.28 (ESG rating B+)**.
From 2024, when the platform is fully operational, **seven different templates based on the Group's main product categories** will be implemented, with different questions and weights based on the associated potential level of ESG risk. In addition, the Group will implement **a dedicated workflow to manage verification activities, with audit desk and on-site audits**.
Completion of the questionnaire assigns an uncertified ESG rating, following which an **audit desk team** will analyse the uploaded documentary evidence and check its consistency with the questions administered. In the

AREAS OF ANALYSIS
1. General information
- General data
- Relations with the Group
2. Environment
- Environmental management system
- Energy and emissions
- Circular economy and resource management
3. Governance
- Information management system
- Anti - corruption
- Responsible purchases
4. Social
- Social management system
- Working conditions
- Health and Safety

event of deficiencies, economic operators/suppliers will have to upload corrected documentary evidence or modify their answers. At the end of the verification process, operators will receive a **certified ESG rating** from the FS Group.
In addition, on a sampling basis and/or upon specific requests, a dedicated team shall carry out **on-site audits** to verify the ESG performance of suppliers in local areas, following which **audit reports** shall be prepared and **remediation plans** prepared by suppliers shall be monitored to close any findings emerging during the audit phase. The ESG rating defined by the FS Group therefore represents **the first step in this process of improving the Group's performance and will make it possible to assess the level of maturity, with respect to the management of the dimensions of sustainability (environmental, social and governance) of the economic operators**, who intend to enrol in the Qualification Systems and participate in the tenders issued by the Group's companies.
RFI SpA has also assessed 762[139] suppliers (of which 6.6%, or 50, are new suppliers assessed in 2023), using the environmental and social criteria provided by the EcoVadis monitoring platform.

The Business Plan envisages that, from 2026, all economic operators intending to work for the FS Group will undergo an ESG assessment through the IT platform implemented by FS.

As part of Railsponsible, an initiative that brings together leading companies in the rail sector with the aim of promoting sustainable procurement, work continued on the development of actions in 2 areas:

- supply chain due diligence, for the definition and development of common minimum requirements in the rail sector;
- decarbonisation of the supply chain, for the evaluation of methodologies and tools for calculating GHG emissions (scope 3).

139. Number of suppliers submitting an active evaluation on the EcoVadis platform for 2023.

(301-1, 301-2, 403-9)

WORK SITE MANAGEMENT AND OVERSIGHT

When infrastructures are built, the FS Group plays the role of principal via the companies in the Infrastructure Business 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[140] used by third-party firms in construction of the Group's railway infrastructure is set out below.

tonnes

Raw materials used by weight (sites)	2023	2022	2021
Non-renewable materials [a]	**11,546,107**	**7,793,118**	**6,909,546**
Soil - procurement	79,104	51,937	205,401
Concrete	5,725,598	4,679,316	4,473,439
Aggregates	5,484,010	2,875,035	1,973,892
Steel for railway superstructure	2,387	115	2,216
Steel for railway technology systems	5,703	5,786	2,792
CAP sleepers	12,880	1,821	37,550
Iron	235,880	178,879	213,875
Aluminium	75	29	73
Copper	470	200	308
Renewable materials [b]	**11,359,176**	**9,933,588**	**8,088,261**
Soil – reuse in the infrastructure	6,408,985	4,720,860	2,400,368
Soil – use in other production cycles or environmental improvements	4.950.191	5.212.728	5.687.893

a) Pursuant to the GRI Standards, non-renewable materials refer to resources that do not renew in short time periods (e.g.: minerals, metals, oil, gas or coal, etc.).
b) Pursuant to the GRI standards, renewable materials refer to materials that are derived from plentiful resources that are quickly replenished by ecological cycles, or agricultural processes, so that the services they provide and other correlated resources are not endangered and remain available for the next generation.

Recycled raw materials (sites)	2023	2022	2021
Materials used that are recycled input materials	49.6%	56.0%	53.9%
Soil reused	99.3%	99.5%	97.5%

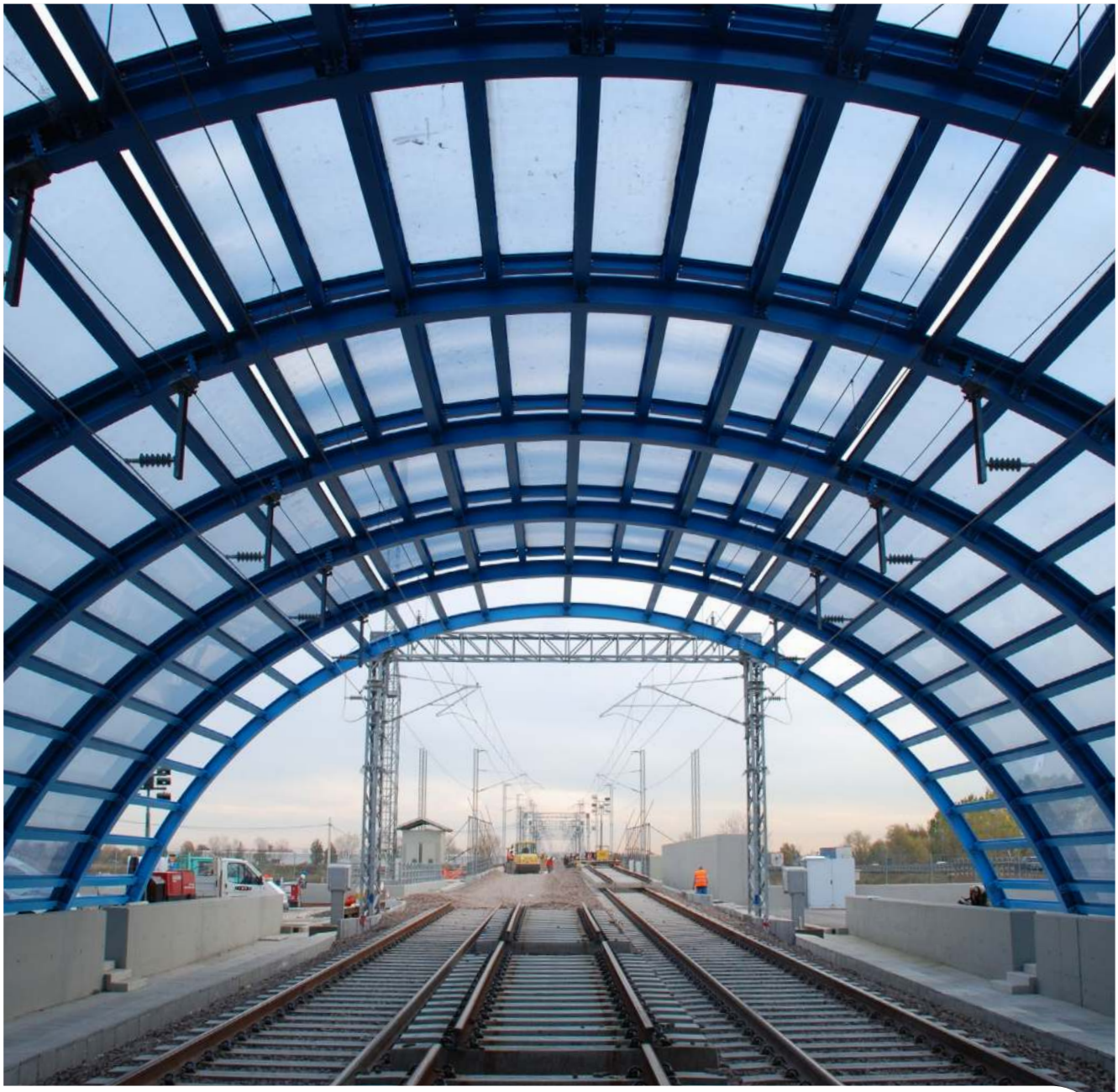
Environmental control at sites includes inspections and periodic supervisory audits conducted by a team of experts and environmental monitoring activities to check whether the construction work has caused any changes to the environment. Environmental status monitoring makes it possible to:

- 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.

140. 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.

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 Business 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.



(3-3)

SUPPORT TO COMMUNITIES AND LOCAL DEVELOPMENT

Commitment to social cohesion
The FS Group's commitment to social cohesion is embodied in actions characterised by measurability, effectiveness and relevance to its core business. In fact, the Group's Social Policies are inspired by the principles of co-design and co-management of social interventions with Third Sector Entities (ETS) and proximity Institutions, and take concrete form in projects with positive socio-economic impacts that could be assessed from a qualitative-quantitative, short and long-term perspective.
In particular, through partnerships with ETSs and institutions, the Group:

- grants spaces for the reception and **inclusion of disadvantaged persons**, contributing to the structuring of remedies and tools for the prevention of social gaps that persist in the various local areas and that historically find a point of concentration in railway areas;
- carries out actions to stimulate the emergence of **tourist and cultural routes**, collaborating in the identification of cultural and tourist factors to be enhanced;
- structures **awareness and fund-raising campaigns and special projects**, engaging its employees and users in social cohesion issues.

Concession of spaces for the reception and inclusion of disadvantaged people: Help Centres and Reception Centres
Railway areas have always been centres of attraction in the area for many forms of hardship linked to social marginalisation and extreme poverty. In order to respond to this discomfort and, at the same time, guarantee decorum and safety in the areas where the railway service is carried out, the Group has, for about twenty years, been granting Third Sector entities and Institutions spaces for the reception and inclusion of disadvantaged people.
The activities carried out within the spaces granted belong to two different types: Help Centres and Reception Centres. Both initiatives are structured in networks capable of connecting the different locations and are characterised by the Group's ability to select the players in accordance with the characteristics of the territory, granting them full autonomy but requiring monitoring and effective restitution in terms of inclusion of the subjects treated.
The **Help Centres**, in particular, find convergence in the National Observatory of Solidarity in Italian Stations, which is a project of the Social Policies Sector of Ferrovie dello Stato Italiano implemented in partnership with ANCI (National Association of Italian Municipalities) and the Social Cooperative Europe Consulting. The action of the Help Centres, which differs on the basis of the socio-economic characteristics of the local environments, the availability of space, the presence and composition of the partnership cooperation networks, and the legal nature of the managing bodies, refers to five macro-areas: primary needs such as food and medical care, night shelter, day shelter, social secretariat and taking charge.
There are currently 20 active Help Centres, distributed throughout the country, in the stations of Rome, Milan, Florence, Genoa, Naples, Catania, Foggia, Chivasso, Pescara, Bari, Turin, Messina, Bologna, Reggio Calabria, Brescia, Cagliari, Pisa, Grosseto, Viareggio and Rovereto, the last three recently opened. The areas granted amount to 4,639 square metres and the operating expenses allocated by the Group for the 18 centres on FS-owned premises is € 125,000 per year.
The centres, located in areas and municipalities of different surfaces - from metropolitan cities to small municipalities - are heterogeneous in terms of governance (social cooperatives, associations, public and ecclesiastical bodies) and economic size (public, private and mixed budgets vary from less than €50,000 to total revenues of over €100,000 in more structured entities, up to two large cities of Rome and Milan, which manage €700,000 per year).

Of the 19,185 persons taken on in 2023, 60.7% were new users who were not present the year before; this figure testifies to the increase in turnover over the previous year of about 12 points, certifying the improvement, over time, of the interventions aimed at the social inclusion of the subjects treated. The 208,510 admissions recorded led to 617,653 interventions, of which approximately 559,300 were low-threshold and 58,300 social orientation.
Of the persons intercepted, 21.9 % belonged to the female gender, 77.7 % to the male gender and 0.4 % were Trans people. Italians who approached the centres accounted for 20.9 % of users, 8.6 % were EU citizens and 70.5 % non-EU citizens. The most represented age group is 18-29 years old with 25.8%, followed by the 30-39 age group with 24.9%.

Social secretariat activities, in particular, involved more than 29,000 people, 76.56% of whom benefited from

information services and socio-welfare guidance, 11.86% from support in carrying out paperwork, 7.64% from accompaniment to local services, 2.95% from fictitious registered residence and 0.99% from postal domiciliation. The year 2023 was also characterised by the introduction of an experimental path, devised in collaboration with the start-up Ridaje, of socio-occupational reintegration: 12 people in a state of fragility have been identified among the guests of the Help Centre of Rome Termini in order to train them as green care operators for the care of the areas of Piazza Ragusa and Porta Maggiore for a period of 12 months; at least two of these operators will be hired by Cooperatives that take care of the city green areas.

From reception, therefore, to inclusion, orientation and guidance, start-up and reintegration into work, the centres generate a direct concrete impact on the lives of the beneficiaries and induced impacts also on other stakeholders and indirect beneficiaries:

- public administration - integration of the public offer of services and interventions and savings generated by improving the health of beneficiaries and reducing other safety-related risks;
- persons employed - a total of 131 workers with different contracts and roles were involved in Help Centre activities by ETS and Public Administrations, to which must be added those in apprenticeships, school-work alternation or in national civil service;
- Third Sector organisations - the generation of supply chain and integrated processes involves the sharing of data on the origin and characteristics of the subjects treated and allows the different skills of ETSs to emerge.

The impacts of local social policies on local social and economic players in local areas and the community as a whole have also been measured by the European Research Institute on Cooperative and Social Enterprises (EURICSE) in terms of the "multiplier effect" of resources. The EURICSE study presented in 2023, commissioned by ONDS and funded by FS, offers an economic and financial reading of the work of Help Centres in terms of savings generated for the community, knowledge sharing, data interoperability and employment generated, adopting the Impact Value Chain methodology.
This methodology is based on the theoretical framework underlying the so-called Theory of Change, used at the corporate level for the strategic planning and redesign of interventions, and also suggested by the National Guidelines on the Social Impact Assessment of Third-Sector Entities (Legislative Decree of 23 July 2019).
The method takes into consideration the relationship between resources (human and economic, as productive inputs) used by the Help Centres, the processes (or actions) activated for the organisation and management of resources and for the achievement of social goals, the direct and short-term results achieved (as services provided and beneficiaries reached, considered outputs of the Help Centres) and the medium-long term effects on beneficiaries and the community (classified as outcomes and impacts).

Help Center-Reception Center Network

ONDS Network

Help center *Housing*

The questionnaires and interviews, with beneficiaries and key informants, and the focus groups conducted with managing bodies and partners testify to the crucial role of FS also for the functioning of the centres that do not stand on areas owned by the Group.

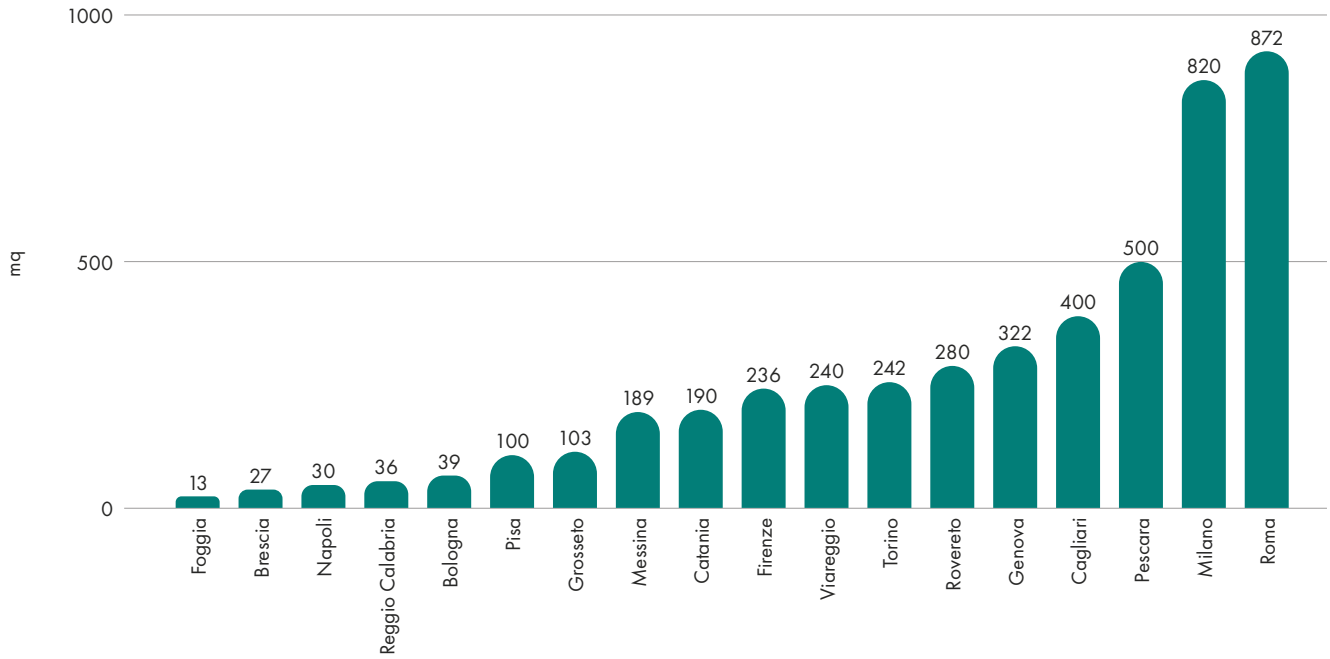
Besides the Help Centres, there are several Reception Centres inside railway premises, which are operated by large social associations, particularly in Rome and Milan:

- the Don Luigi Di Liegro Caritas Hostel in Rome;
- the Caritas Shelter Centre in Milan;
- the Binario 95 Day Care Centre in Rome;
- the Arca onlus Project in Milan;
- the Pedro Arrupe Centre in Rome, for asylum seekers and political refugees operated by the Centro Astalli Association. This centre, active since 2002, is located in the premises of the former Ferrotel in Roma Smistamento.

It is a multi-purpose facility for the general public that carries out cultural, educational, recreational, sports and occupational therapy activities, aimed at social integration.

The total surface area granted on a free loan for social activities carried out in the reception centres corresponds to almost 8,000 m². The total surface area granted on free loan for social activities (Help Centres and reception centres) in 2023 corresponds to 12,603 m².

Sq.m. granted by the FS Group by center



Activities to stimulate the emergence of tourist and cultural routes

The world of culture also appears to be inextricably linked to the development of rail transport: thanks to the development of transport, distances have been shortened between territories that are dense with history and rich in evidence of the past and that today are the protagonists of a pop and contemporary culture, made up of concerts, exhibitions and events.

By encouraging the circulation of talents, thoughts and artistic and cultural initiatives, the Group does not limit itself to acting with a patronage approach, but nurtures cultural and territorial cohesion and Italians' recourse to its service.

Always at the side of the country's best energies, engaged in the world of knowledge, art and music, the FS Group takes part in the support of culture, in all its forms and through the numerous partnerships activated this year with the art world: the exhibitions of Frida Kahlo in Padua and Utamaro, Ukusai and Hiroshige in Turin, the exhibition of Benito Jacovitti at the Maxxi and Helmut Newton at the Ara Pacis in Rome. Moreover, after the great success in Milan, with 75,000 visitors, Richard Avedon's exhibition reached Sicily, to leave the big metropolis. In line with the claim *"the FS Group makes culture travel"*, the exhibition has in fact moved from Milan to Palermo thanks to the will and contribution of FS Italiane, together with the collaboration of the Fondazione Civita[141]. For the occasion, an Intercity train was customised with the most iconic images of the great American photographer, and multimedia content accessible by means of a QRcode was offered inside the train.

The main agreements with important events, institutions and internationally renowned museums in which the Group has participated include: Bergamo Brescia Capital of Culture, of which the FS Group was a partner in the thematic area dedicated to the "Nature City"; the Rome Film Festival with the establishment of the FS Prize for Cinema; the 2023 Film Impresa Prize, an event dedicated to business cinema in Italy; the 2023 exhibitions at Palazzo Strozzi in Florence, Palazzo Ducale in Genoa and the Scuderie del Quirinale in Rome; cultural events in large and small cities such as the Turin Book Fair, where FS promoted a literary competition entitled "A/R Andata e Racconto" dedicated to travel tales, and the Communication Festival in Camogli.

Once again this year, FS has been at the side of the Ministry of the Interior's Religious Buildings Fund with the "*Travelling with Bernini*" project to promote the historical, artistic, religious and cultural heritage of our country, in a journey to discover the works of the great Italian master housed on board trains and in the Freccialounge of Italian stations. The historic association with the Accademia Nazionale di S. Cecilia, of which FS Italiane is a founding member, has also been confirmed and consolidated.

Finally, the Group, again through its collaboration with the Civita Foundation, is experimenting with financing local socio-cultural initiatives called "riGenerazione Futuro".

In particular, the Group has allocated € 36,000.00 for the co-financing of cultural initiatives capable of raising at least a quarter of the budget through local crowdfunding activities. Third-Sector organisations interested in financing their projects entered their proposals on a crowdfunding platform called 'Produzioni dal Basso' and a jury selected 6 projects, 3 for the Calabria Region and 3 for the Sicily Region. The selected projects, 40% of which are financed by donations and the remaining 60% by the Ferrovie dello Stato Group, are carried out in areas where the FS Group's significant investments are concentrated and are aimed at enhancing the artistic and cultural heritage, also for tourism purposes, favouring social inclusion, the cultural participation of disadvantaged people and the accessibility to the cultural heritage also of fragile people, with disabilities or reduced mobility.

The Fondazione Civita will also carry out, one year after the implementation of the projects, an assessment of the socio-economic impact generated.

The selected projects, with an economic target of € 10,000, are

- for the Calabria Region
  - "Guardians of Memory: Silent Stories of a Forgotten Calabria" by the Cultural Association Mistery Hunters of Cosenza, to make documentaries that preserve memory and stimulate knowledge of hidden heritage;
  - "Art for all in 3D – SUPPORT TOUCH ME!" by the Wake Up ETS Association, to make the MUDIAC museum's urban works of art accessible also to people with visual disabilities and reduced mobility, through their reproduction in 3D;
  - "#trameascuola | Let's build a future free from mafias!" by the Trame ETS Foundation, which offers a cycle of educational and cultural activities, including workshops in schools, meetings with authors, read aloud, to raise awareness among young people of the principles of legality and the fight against mafias, promoting the values of civil

141. The Fondazione Civita has been structuring, for more than 40 years, opportunities for co-designing initiatives with a high social, cultural and economic impact between the business world and cultural entities.

responsibility and justice.

- for the Sicily Region,
  - "Your TRIP in MY Shoes | Travelling beyond the limits of prejudice" by the Cooperativa Sociale Al Revès, a project for the empowerment and social and cultural inclusion of people with physical disabilities or in situations of social difficulty, through narrative and artistic workshops ;
  - "CraftEolie - Cultivating Traditions, Shaping the Future" by the Amaneï Association, to rediscover and enhance traditional arts and crafts of the Aeolian Islands in a modern key;
  - "Young Putia - Sicily and Sicilians 3.0" by the MostraMed Cultural Association, aimed at creating an artistic community workshop to promote young Sicilian excellence and valorise local traditions.

2023 awareness and fundraising campaigns and special projects

In 2023, the Ferrovie dello Stato Italiane Group was a partner in important events dedicated to social sustainability, such as the Festival of Sustainable Development organised by ASVIS, and the CSR and Social Innovation Fair organised by Koinetica. In addition, FS has promoted, together with important institutions and sector foundations, initiatives to safeguard health and Diversity&Inclusion. Below are the main projects in which the Group has participated:

- Frecciarosa - prevention travels by train. An initiative promoted in collaboration with the Incontradonna Foundation, now in its thirteenth year, with the aim of promoting the culture of oncological prevention through visits and consultations on the entire fleet of Trenitalia trains, with a priority focus on breast health and raising awareness of the importance of screening and correct lifestyles. The project received the patronage of the Ministry of Health, the Presidency of the Council of Ministers and was awarded the Medal of the President of the Republic for the first time in 2023;
- Race for the Cure - the partnership has consolidated FS Italiane's commitment to the largest event for the fight against breast cancer in Italy and worldwide. It takes place under the High Patronage of the President of the Republic, in Rome, and in five other Italian cities: Bari, Bologna, Brescia, Naples and Matera. With the help of its Mobile Units, Komen Italia offers free breast and gynaecological screening and other pathologies prevalent in women in the Health Village. In addition, free workshops on fitness, sport, healthy eating and psychological wellbeing to promote a healthy lifestyle. FS Italiane also supported the Komen Italia Centre for Integrated Treatments in Oncology;
- Coppa Italia Women's Football Cup and Ocean Race - through supporting these two sporting events with a large audience, the Group has reaffirmed its commitment to gender equality, with concrete actions to make people aware of the fact that, in sport and in companies, talent has no gender, passion and professionalism count. With these initiatives, FS has succeeded in bringing this message to an increasing number of people and in being an inspiration to those who, like the FS Group, want to break down gender stereotype.

The FS Group has dedicated its annual fundraising campaign to supporting AISM, the Italian Multiple Sclerosis Association. AISM has been dedicated to multiple sclerosis for 55 years, promoting and funding scientific research, raising awareness of the different facets and complexities of the disease, protecting the rights of people with multiple sclerosis (MS), and promoting social and welfare services throughout the country to improve the quality of life of people with MS and related diseases and their families. MS is a major health and social emergency, affecting around 140,000 people in Italy, with a new diagnosis every three hours.

Fundraising is active through self-service ticket machines (until June 2024) at railway stations and on board trains (from 20 December 2023 to 14 January 2024 and from 29 March to 5 April 2024).

ADHESION TO THE INITIATIVE OF THE PENITENTIARY ADMINISTRATION DEPARTMENT (DAP) "I REDEEM MYSELF FOR THE FUTURE".

The FS Group has signed a protocol with the DAP aimed at studying and developing projects for prisoners aimed at fostering training and long-term job placement, possible employment in public utility programmes and/or intramural work, and vocational guidance projects intended as enablers of reintegration into the social fabric. The protocol provides for the establishment of a working table between DAP and FS to structure training courses for job placement on the basis of specific implementation agreements with individual penitentiary institutions. The first agreement was stipulated with the Opera prison and provided for a selection process of three people for fixed-term employment at RFI - a Blue Room attendant for persons with reduced mobility, a support to the station contact person and an attendant as a support to a Local Operations Department, and two at Trenitalia SpA - technical plant secretary. The fixed-term employment relationships, with a duration of six months, may be renewed only once. At the end of the relationship, a final report will be drawn up listing the activities and training carried out and the skills acquired.

PROTECTION AND ENHANCEMENT OF THE TERRITORY

The regeneration of our assets

The FS Group, in particular the company FS Sistemi Urbani, creates the conditions for the realisation of regeneration scenarios and the use, even temporary, of disused railway areas, areas destined to become new urban districts. For this reason, an increasingly close dialogue is constantly being established with local administrations in order to provide answers to cities and urban communities. The railway all too often represents a fracture in the centre of cities, an urban void to be filled and returned to citizenship with new meeting spaces and green areas.

One example is the urban regeneration project of the seven Milanese railways yards that will transform the face of the city, making it greener, more social and open to innovation. In fact, greenery is a central element of the project and its usefulness manifests itself not only as a space for sociality and wellbeing but also as a climatic device capable of purifying the air and regulating temperatures, thus promoting energy saving. The Programme Agreement signed in 2017 by the FS Group, the Lombardy Region and the Municipality of Milan stipulates that most of the square metres involved in the transformation are to be used for green spaces, with a minimum percentage of over 65%. Central to the various development projects is the social dimension, for the creation of places of aggregation and culture. For this reason, public consultation with those who live in the city on a daily basis is a fundamental element of the regeneration process.

URBAN AND FUNCTIONAL REDEVELOPMENT TERMINI HUB AND PIAZZA DEI CINQUECENTO

The project envisages a significant use of Nature-Based Solutions with the primary purposes of adaptation to counter heat waves, mitigation with renewable sources and recycling of materials. Particular attention in the design is paid to water resources both as adaptation to climate change and **water reuse to avoid flooding phenomena or problems due to rainfall shortages**. To this end, **low-impact techniques** and techniques that **optimise capture and reuse** (e.g. for irrigation) will be used to reduce the demand for supply to the water network as much as possible, aiming for a closed water cycle that consumes what it captures and reuses. The project also envisages a tree-lined space, with the arboretum shading the square, and consists of more than 300 trees capable of responding to seasonal needs: in summer, canopies to protect against the heat island effect of the city, and in winter, a light forest on the ground. The arboretum, with a prevalence of deciduous trees, is functional in the management of starlings, with some soil fragments completely grassed over to generate natural areas, and complete rainwater retention, which will provide protection from the city's summer heat. The arboretum and the use of paving with a high Solar Reflection Index (SRI) value, such as travertine, combined with the installation of a pool of water, constitute a controlled microclimate. The materials used will be recycled and reused for the square itself (as in the case of porphyry). The production of energy from renewable sources will be used for the planting of the public areas and for the new LED public lighting system.

In recent years FS Sistemi Urbani, as part of the Reinventing Cities project, has put forward proposals for the sustainable transformation of underused sites in several Italian cities (Milan, Rome, Bologna, etc.). RFI promotes the valorisation for tourism purposes of disused railway lines with great landscape, historical-archaeological and urbanistic value.
The FS Foundation's *"Timeless tracks"* project also aims to breathe new life into the railway lines that criss-cross the Italian provinces, creating an innovative rail tourism formula[142]. In particular, the aim is to create **railway routes for historical-tourist trains**, preserving the railway operation and local role of secondary lines, which are now in low demand for commercial transport. Thanks to the 2017 law on historic railways, stimulated also by the work of the FS Foundation, today these lines are protected and respond to the new purpose of revaluing the territories they pass through, creating a diffuse museum - a mobile museum, if you will - of Italy's small villages and landscape jewels.

"Stations of the territory" Project

The FS Group project is aimed at Municipalities with a population of less than 10,000 inhabitants and envisages a pilot phase, in collaboration with the Extraordinary Commissioner for the 2016 earthquake reconstruction, involving 5 Municipalities in the earthquake crater. Subsequently, during the three-year period 2024-2026, the project will be extended to another 15 Municipalities distributed throughout the country. Work on the first multi-service HUBs will end on 28 February 2024.
The project aims at transforming stations from simple transit points into service hubs for the community and local areas. The project has a strong social value, as it aims to revitalise small villages to make them attractive to new generations, improving the quality of life for all residents.
Among the services offered, the main focus will be health, in particular the strengthening of proximity health services, in line with Mission 6 of the NRRP and in collaboration with the Ministry of Health. In fact, the pandemic emergency has highlighted the need to strengthen local health services, especially for the growing elderly and chronically ill population. For example, the "Community homes" project, which aims to coordinate all the services offered, especially for the chronically ill, by providing a single point of access to healthcare services. These facilities will host a multidisciplinary team to ensure that the community is taken care of.
In our stations we will bring fundamental and innovative services for the protection of the health and well-being of citizens, such as community houses, the implementation of telemedicine, and the development of service pharmacies. But that's not all, the HUB will offer all-round services such as spaces for co-working and training, pick-up points for e-commerce systems, the installation of electric vehicle charging stations, and the development of photovoltaic systems. All this to make stations true centres of attraction and service for citizens. A new model of station as the heart of the social fabric, flexible and adaptable to the needs of citizens. With this project, the FS Group positions itself as a player for the development of the territory, putting itself totally at the service of the needs of communities, even the smallest ones whose interests are often put in the background.

"Stations of the territory" project objectives

1) Station as the heart of the Territory	Enhance the centrality of stations within the local social fabric by taking advantage of their widespread presence throughout the country, especially in less densely populated areas.
2) Station as an urban attraction hub	The station is no longer just a pivotal point of collective mobility but opens up to the surrounding city and territory, becoming a true hub, an urban attraction, a center of multi-purpose services and functions dedicated to all inhabitants.
3) Station as an instrument of social value	The project has a strong social value in that it is aimed at ensuring that small villages can continue to live and become attractive again for new generations, the elderly and those who live there.
4) Station as a diffuse hub	The hub will consist of the station, which is its center of attraction, and all the real estate assets located nearby that will house the other services.

142. For more information, please refer to the paragraph on Fondazione FS Italiane.

Reuse of real estate assets for social purposes

In addition to the assets functional to its core business, the FS Group owns real estate assets that include areas that cannot be used for commercial purposes: these are portions of unmanned stations, former station houses and other disused buildings and railway lines. In agreement with Public Authorities and other entities, they are converted to create social spaces, greenways and other initiatives in favour of local communities.

In 464 stations - in agreement with institutions, local authorities and associations - these spaces have been earmarked for social, cultural and environmental activities, in particular to enhance the territory and for services in favour of citizenship[143]. A total of approximately 188,353[144] sq. m. of space has been allocated for these purposes. The institutions, local authorities and non-profit organisations involved undertake to maintain the spaces allocated to them and, at the same time, to provide services to the community, thus contributing to making the unmanned stations and the Group's other real estate covered by the agreements safer and more lively.

The FS Italian Group's commitment to achieving the right balance between sustainability and transport through the rehabilitation of the built environment is also realised through the introduction of greenways. The latter are railway lines that are no longer functional and have been decommissioned from operation, which are upgraded in order to implement the existing network of cycling and walking networks, connecting several communities and reducing pollution at the same time. There are approximately 1,177[145] kilometres of disused railway lines that could potentially be used for social and soft mobility purposes. **Currently, about 546 kilometres of disused lines have been converted into tourist lines, cycle routes and greenways.**

RFI has published the *Atlas of greenways on FS lines: from disuse to reuse*, which presents data on the projects spread throughout Italy, places of interest in the vicinity and future prospects, with the aim of actively contributing to increasing slow mobility and tourist flows.

You can download the complete atlas at: https://www.rfi.it/it/news-e-media/pubblicazioni.html.

FS SISTEMI URBANI FOR THE TYRRHENIAN CYCLE ROUTE

On 16 October 2023, the preliminary sale agreement was signed, whereby FS Sistemi Urbani sells to the Municipality of Imperia, disused areas no longer functional to railway operation and five former warehouses owned by RFI, as well as a former railway tollgate owned by the FS Group. The sale of the areas is linked to the realisation by the Municipality, through Bandi Periferie funding, of a cycle-pedestrian path in the section falling within Imperia's territory. Overall, the project involves the construction of a cycle-pedestrian path in five Municipalities of western Liguria: Imperia, Diano Marina, San Bartolomeo al Mare, Cervo and Andora. One of the most important cycle and pedestrian paths in Italy, which will reach a total length of about 20 kilometres and will be added to the 24 kilometres already completed up to San Lorenzo al Mare.

Archeolog and the valorisation of archaeological finds

Archeolog is a no-profit association, which has been registered as a Third Sector Entity since 2023. Founded by Anas SpA and Quadrilatero Marche Umbria SpA in 2015, it also includes RFI SpA and Italferr SpA; its purpose is to enhance the most significant archaeological finds discovered during the construction of new road and rail routes. For the FS Group, this association plays a fundamental role because it is able to transform archaeological data, from an element of risk for public works, into a real opportunity for the development of the area affected by the finds, making the inclusion of an infrastructure in the territory not an obstacle but an added value. Archeolog's objective is therefore the redevelopment and enhancement of archaeological finds, since they represent a fundamental contribution to the promotion of Italian culture and history, without underestimating the enormous impact on tourism that some finds can promote.

Archeolog's activities are governed by a memorandum

143. The number refers to stations covered by at least one free loan agreement.
144. The number refers to buildings granted on gratuitous loan for use inside and outside the station; with regard to station forecourts and/or land, approximately 3,941,565 sq. m. was granted by the Group.
145. The figure for disused lines does not include disused lines intended for reactivation as tourist railway lines (185 km).

of understanding with the Ministry of Culture, signed in 2018 and renewed in December 2023, which defines the forms of collaboration to identify enhancement initiatives aimed at the best use of the archaeological heritage found during the design and construction of large network infrastructures.
The FS Group, through Archeolog and in agreement with the Ministry, undertakes to carry out fund-raising activities for the restoration, conservation and exploitation of the sites and artefacts found, in addition to those already agreed upon with the Superintendencies within the framework of the project and implementation activities already undertaken by each company.

ARCHAEOLOGICAL SITES ALONG THE ROME-NAPLES HIGH-SPEED LINE

225 archaeological sites were found along the Rome-Naples high-speed line, an average of one site every 500 metres of track. In the presence of particularly important sites, such as those found on the Rome-Naples line, special interventions were necessary such as making variations to the initial project, excavations outside the expropriation zone, consolidation or partial or total restoration of the facilities brought to light and valorisation of the finds through museum displays or publications. Precisely in the case of the Rome-Naples high-speed line, it was calculated that archaeology accounted for 5% of the total cost of the work. The Milan-Bologna line is also particularly rich in finds, where 100 sites have been discovered.

Right from the initial design phases, in compliance with current legislation, the FS Group's specialist departments carry out a detailed study to identify areas of archaeological potential. The areas, based on the indications of the Superintendency, are subjected to direct or indirect investigations and, in the case of discoveries, also to extensive excavations. The finds made in these phases can be exploited directly by the individual Group companies or through the activities of Archeolog in the case of particularly prestigious contexts that require major organisational efforts. To this end, Archeolog has its own Scientific Committee that oversees the historical and scientific aspects of the initiatives implemented.

Archeolog has set up a Working Group composed of archaeologists from RFI, Italferr, Anas and Quadrilatero Marche and Umbria, in order to realise a publishing project that enhances the most significant archaeological discoveries made in recent years as a result of road and railway works. The Volume is intended to be usable also by non-experts in order to make readers aware of archaeological issues and to enhance the archaeological activities of the FS Group companies. The Volume will survey the finds through cards, accompanied by descriptive texts, images and indications for visiting the archaeological sites or the museums created.

Fondazione FS Italiane

Fondazione FS Italiane, established in 2013, aims to preserve and make usable the historical and cultural heritage represented by historical trains, documentary material (books, documents and maps, audiovisual material) that bear witness to the history of the railway sector and Italian society since the early 1900s.

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 about 2,000 books

1 Trecento Treni model (18x2m)

1 model of the Rhaetian railway Tirano-Saint Moritz (56m)

1 plastic model of the Battipaglia station (4x1.8m)

1 De Marchi model (4.5x1.5m)

12,000 plans and blueprints of the network and stations

7,000 architectural drawings of railway stations and buildings

7,000 rolls of technical drawings of historic engines and rolling stock

10,000 photographs of rolling stock, 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

The promoters of the FS Foundation are Ferrovie dello Stato Italiane, Rete Ferroviaria Italiana and Trenitalia.

The main activities carried out by the Foundation are

- organising trips on historic trains[146];
- promoting railway tourism;
- maintaining and rolling out historic vehicles;
- operating the Pietrarsa Museum;
- 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/upgrading of historic 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 Sulmona and Paratico hubs
- redeveloping historic lines to open to the public:
  - opening scenic overlooks to appreciate the landscape
  - redeveloping stations to create tourist hubs.

146. 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).

JOURNEYS ON HISTORIC TRAINS

416 individual journeys with historic trains for a total of **75,110** passengers

185 journeys with historic trains on Timeless Rails* for a total of **43,283** passengers

70,357 kilometres travelled

€4,270,000 in revenue

NATIONAL RAILWAY MUSEUM OF PIETRARSA

265,012 visitors

2,223 historic train visitors

65 major events

€2,904,996 in revenue

ARCHIVES, LIBRARY, AND DIGITAL PRODUCTS

200 users in person

420 requests for document delivery/ dissemination of the heritage

5,000 archival documents digitised and published online

7 exhibitions/events in collaboration

* railway lines, between nature and art, dedicated solely to historic-tourist trains, outside the main rail hubs and lines with intense traffic

During the year, the www.fondazionefs.it website was optimised to ensure greater usability and a better user experience, with the creation of a dedicated section on the ten years of the FS Foundation, which contains numerous unpublished images, all the initiatives scheduled during the year, and the story of the Foundation's history, from 2013 to the present day.
The website, which includes the section dedicated to the Pietrarsa National Railway Museum and the historical archive portal, has been further enhanced with interactive podcasts to support the "A beautiful Italian history" exhibition organised by the Archives, Publishing and Digital Products Service.
The website as a whole was visited by more than 580,000 users, with particular focus on the 10-year anniversary projects, initiatives at the Pietrarsa Museum and historic train journeys, for a total of more than 1,600,000 page views.
The FS Foundation's main social communication channel is Facebook, in which it has invested in order to strengthen its Corporate Identity. With the strategic interventions made on the social media, the FS Foundation's Facebook page exceeded 206,000 followers (+3% compared to 2022), reaching over 2.6 million accounts during the year, thanks to the numerous contents that generated over 240,000 interactions. Excellent results were also achieved on the FS Foundation's official Instagram profile. The channel surpassed 30,000 subscribers, reaching the current threshold of 30,714, which marks an increase of +16%. More than 27,000 accounts were reached via this social channel, with an interaction rate of 3.47%.
During the year, Fondazione FS's Pinterest page recorded 130,000 users reached, 6,290 users involved and over 11,000 interactions on the content promoted in the channel.
There was also wide growth for the LinkedIn profile opened in 2021, a channel already widely used by the Group, which enables it to reach companies specialising in the tourism sector and local entities rooted in the territories. The social network registered the interest of users, leading to more than 7,000 users following the page and 5,550 reactions on the content promoted during the year.
The official Tik Tok profile of the FS Foundation, opened in collaboration with the FS Social Team in the summer of 2021, obtained the verified badge from the platform and, thanks to its activity, obtained over 4,700 followers and 18,400 user interactions. 2023 also saw exponential growth of the FS Foundation's official channel on the YouTube platform, which collects high-quality video material. Videos on the channel reached over 168,800 views in the current year with 7,600 total viewing hours, 1,700,000 impressions with a click-through rate of 5.7% and reached over 6,800 subscribers.
Communication activities included the campaign to promote the FS Foundation's online shop, with the production of specific products to promote the 10-year anniversary, such as the limited edition commemorative medal, the limited edition Perseo pocket watch, and the custom-made 'Caimano' backpack.
Through its activities (mainly revenues from the rental of historic trains, revenues from space rental and from ticket sales at the Pietrarsa Museum), the Foundation invests in the creation of social and cultural value for the country and the areas in which it operates. In particular, the maintenance and commissioning of historic trains, and the operation and museumisation of heritage (rolling stock, audiovisual material, drawings) contribute to preserving and enhancing the country's historical, social and cultural heritage.

TRIESTE CAMPO MARZIO MUSEUM STATION PROJECT

In December 2023 the Special Superintendency for the NRRP authorised the project of the FS Foundation for the recovery and enhancement of the entire station complex financed with funds from the National Complementary Plan to the PNRR.
Trieste Campo Marzio station, originally named TriestStaatsbahnhof, was built in 1901 by the Austrian architect Robert Seelig and inaugurated in 1906 by Franz Ferdinand. Originally the terminus of the State Railways, in 1923 under FS management it took on its current name of "Campo Marzio Station".
After being decommissioned in 1959, it was only in 1975 that it was partially reused as the site of a Railway Museum, which was opened thanks to the "Transport Enthusiast Group". The building is declared to be of particularly important interest pursuant to Decree Law no. 490/99 Consolidated Act on legislative provisions governing cultural and environmental assets, according to Article 1 of Law no. 352 of 8 October 1997, and is therefore subject to all the protective provisions of the same law.
Since 2018, redevelopment and conservative restoration work has begun. The main intervention, which has already been partly completed, concerns the restoration of the external shell in order to stop the deterioration and restore the station's native appearance with particular attention to the original decorations. The ongoing investment, worth approximately € 22 million, aims to give the building a new life with new functions, aimed at enhancing the asset itself. To this end, the organisation of a memory trail with the musealisation of high documentary value is envisaged. In addition, a series of works are planned for the re-functioning of the entire building in order to ensure adequate accessibility to the building and to transform it into a contemporary space with flexible and multifunctional areas.
The project includes the rebirth of the railway museum, a collective space in the station forecourt, the restoration of the roof, an overhead walkway, the transformation of part of the building into a hotel, and the raising of two floors on the Riva Traiana side. The interventions, approved by the superintendence, aim to preserve, enhance and give new functions to the historical heritage of Campo Marzio Station.

An estimate of the social and cultural impacts[147] generated by the Foundation's activities is shown below.

CONTRIBUTIONS FROM MEMBERS[1]
139 million

VALUE OF ASSETS3[3]
10,6 million

REVENUE FROM ACTIVITIES[2]
35 million

VALUE FOR LOCAL COMMUNITIES[4]
59,7 million

Passengers on the historic train 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 2014-2023 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 2014-2023 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.

147. 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.

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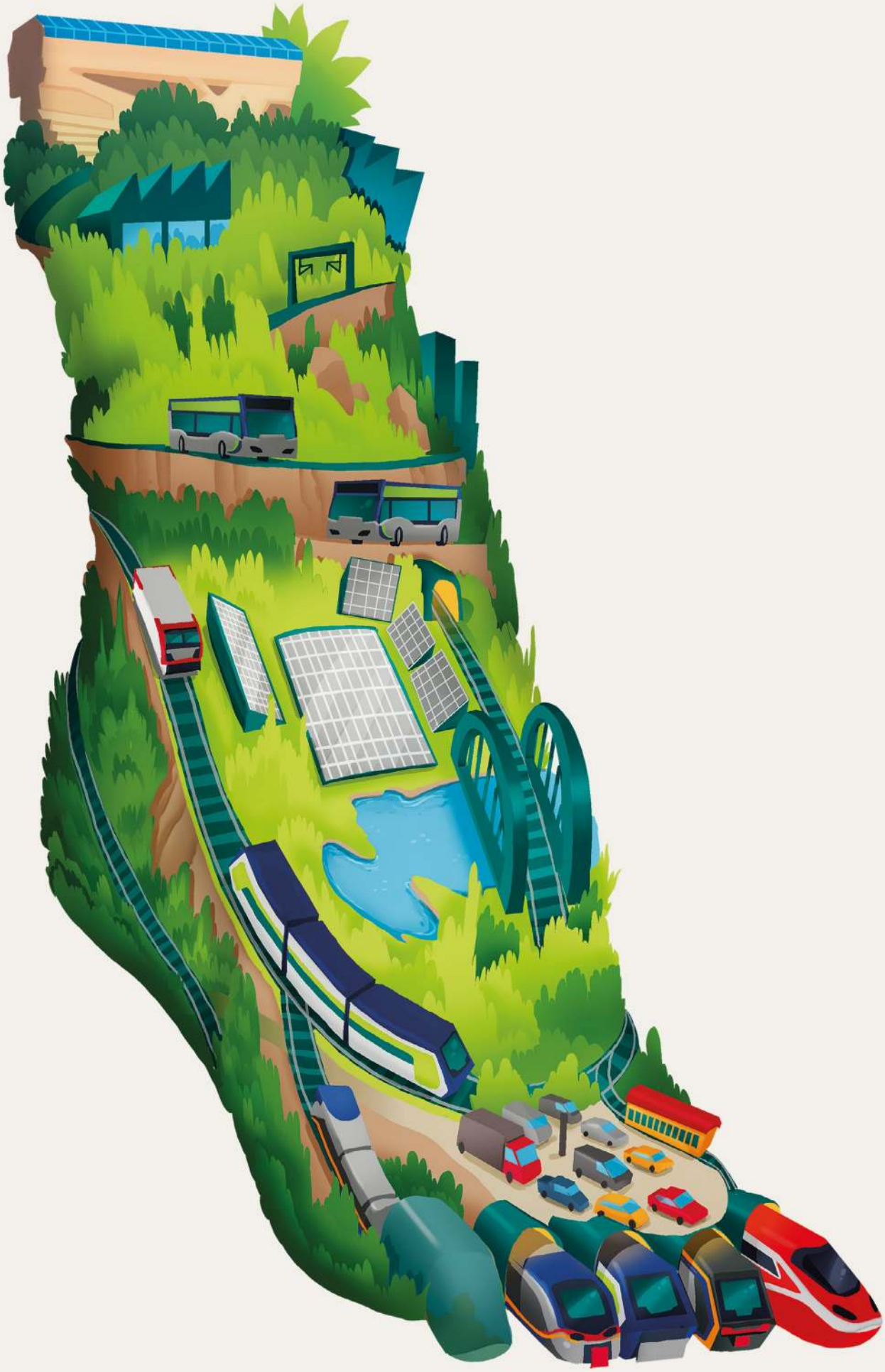


Annex

METHODOLOGICAL NOTE

The information contained in the Sustainability Report 2023 is compared with that for the two previous financial years[148]. Any differences in the reporting methodology compared to the previous Sustainability Reports are due to the refinement of the reporting methods adopted.
The sustainability information is increasingly taking on a central role in communicating the company's medium- to long-term performance and ability to create value by the company, especially in a context characterised by strong social and environmental changes such as the current one, where the interest of stakeholders' interest is increasingly focused on understanding a company's response to these changes and how it governs them.
The push towards a transparent representation of sustainability performance also comes from recent changes in the European and non-European regulatory frameworks, such as Directive (EU) 2022/2464 (the so-called "CSRD - Corporate Sustainability Reporting Directive" amending and supplementing Directive (EU) 2014/95 on non-financial disclosure) and Regulation (EU) 2020/852 on the European Taxonomy.
In order to ensure that sustainability information is accurate, complete, consistent and timely for stakeholders, the Group has established an internal control model involving the stakeholders and companies involved in the reporting process.
This Report is prepared in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Standards 2021.
The Sustainability Reporting & Control process involves the Parent Company, for cross-cutting issues, and the companies included in the consolidation perimeter (consistently with the Group's Annual Financial Report), for issues and indicators specific to the various business sectors. Any changes or limitations to the reporting boundary and/or specific indicators are indicated in the published documents. To the extent necessary to ensure the understanding of the activities of the company, its performance, its results and the impact produced by it, this document covers the environmental, social, personnel, human rights, active and passive corruption issues that are relevant to the FS Group, taking into account the activities and characteristics of the company, according to the process described below (see paragraph *Materiality process - impacts generated*).

The data and information reported were provided directly by the responsible functions, through a dedicated IT platform, or were taken from other official sources[149].
The environmental data reported in the chapters 'Net Zero Destination and 'Environmental Protection and Circular Economy' refer to the Parent Company and the following companies included in the line-by-line consolidation scope: Anas, Bluferries, Blujet, Busitalia Campania, Busitalia Rail Service, Busitalia Sita Nord, Busitalia Veneto, Ferrovie Sud-Est, Ferservizi, FS Park, FS Sistemi Urbani, Grandi Stazioni Rail, Hellenic Train, Ilsa, Italferr, Mercitalia Intermodal, Mercitalia Logistics, Mercitalia Rail, Mercitalia Shunting & Terminal, Netinera, Qbuzz, RFI, Terminali Italia, Trenitalia, Trenitalia c2c, Trenitalia France, Tx Logistik. The remaining companies included in the line-by-line consolidation perimeter are excluded, because they are considered negligible for the purposes of the analysis (for Scope 1 and Scope 2 - location-based GHG emissions, these companies, for example, contribute a total of less than 1%).
The calculation of "Avoided Emissions - Emission Difference FS Group Transport vs. Road Transport" is based on an estimate derived from a comparative assessment:

- between rail and road public transport emissions calculated with reference to FS Group passenger traffic, compared to the corresponding emissions that would have occurred in an alternative scenario with private car use;
- rail freight emissions calculated with reference to the FS Group's freight transport, compared to the corresponding emissions that would have occurred in an alternative scenario with the use of heavy commercial vehicles.

In particular, the FS Group's rail and road public transport emissions have been determined considering the kilometres actually travelled in the reporting period and the related Scope 1 and Scope 2 location-based emissions calculated from actual energy consumption (for further details on the specific emissions used for the above calculation, please refer to the paragraph on "Greenhouse gas emissions").
The emissions of the two alternative scenarios (passenger and freight) were estimated on the basis of the same number of kilometres and considering certain assumptions and hypotheses, when varying them, the

148. The publication is annual. The previous edition of the Sustainability Report, covering the financial year 2022, was published in April 2023.
149. For further details, please refer to the Group's Annual Financial Report as at 31 December 2023.

estimate could have varied even significantly. In particular, the emission factors set, taken from the EIB Project Carbon Footprint Methodologies 2023 (so-called Tank To Wheel, relating to the use phase of vehicles), and corresponding to a load factor equal to 1.4 passengers/car (emission factor - Car Average) for private cars and 7.8 tonnes of load for heavy goods vehicles on road (emission factor - HGV Average). In addition, for the purposes of estimation, only the private car is taken into account as an 'alternative' to passenger transport by rail and road, while with regard to freight transport, only heavy goods vehicles are taken into account; in both cases, any further solutions such as, for example, aircraft for passenger transport or ships for freight transport are excluded.

The Sustainability function, which is part of the Corporate Affairs Department of FS SpA, is responsible for the consolidation of information, as well as the coordination of the entire sustainability reporting & control process.

The Group reports its sustainability performance in three main documents

- the Consolidated Non-Financial Statement (NFS), reported in the directors' report, prepared annually pursuant to Legislative Decree No. 254/16 which implemented Directive (EU) 2014/95. This document, included in the consolidated financial report, reports the information required by the directive as defined by the GRI standards. The NFS also reports the information required by Regulation (EU) 2020/852 (so-called European Taxonomy), which provides, for entities falling within the scope of Directive (EU) 2014/95, the obligation to report revenues, costs and investments on a consolidated basis considered "eco-sustainable" in accordance with the criteria defined by the same regulation and related delegated regulations;
- the Sustainability Report, which, as described above, reports on sustainability performance, integrating and deepening the information reported in the NFS. The document also contains a summary of the information required by the aforementioned Regulation (EU) 2020/852 (see section on EU Taxonomy);
- the GHG report[150], which delves into the way in which energy and climate-changing gas emissions are managed, illustrating the approach, strategies, actions and performance that have characterised the Group's activities.

The 2023 Sustainability Report was approved, together with the Annual Financial Report (also the "AFR") and, therefore, with the Group NFS, by the Board of Directors of Ferrovie dello Stato Italiane SpA in its meeting of 10 April 2024.

The 2023 Sustainability Report is subject to limited assurance engagement by PricewaterhouseCoopers SpA, in accordance with ISAE 3000 (Revised).

The Sustainability Report reports on the economic, social and environmental activities deemed most material to stakeholders and the Group; further details are provided in the appendix and appendices:

- *Tables of performance indicators* where the Group's main sustainability indicators are shown;
- *Company highlights*, fact sheets with a focus on the environmental performance and main sustainability projects and initiatives of the companies included in the reporting scope.

All attachments are also available online, in the Sustainability section of the fsitaliane.it website.

150. The document will be published in 2024.

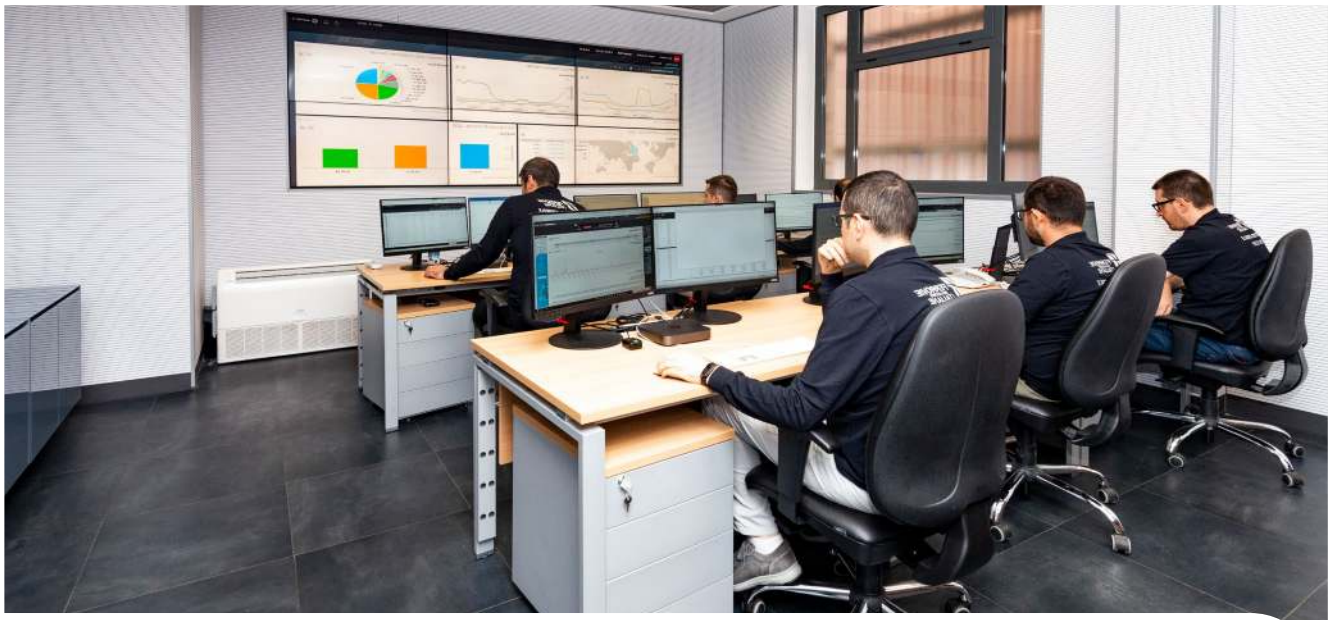
MATERIALITY PROCESS – IMPACTS GENERATED

In 2023, the materiality analysis included 12 companies[151], covering the Group's Business Units, involving the following steps:

1. **Update of impacts[152] to be assessed,** in connection with the Group's activities and value chain. It takes into account the business strategies and developments in the external context, as well as the involvement of company experts who oversee business activities;
2. **Assessment of impacts by the Group and stakeholders**, through the involvement of:
   - Holding company functions[153], in relation to the impacts inherent in their area of expertise/operations;
   - operating companies that contribute to the process and hold a comprehensive view of actual and/or potential impacts in the context in which they operate;
   - third-party experts, belonging to the main stakeholder categories[154], through ad hoc interviews and an online questionnaire.

All impacts have been assessed according to their degree of significance ("severity") represented by the factors of: scale (magnitude), scope (extent, considering the entire value chain), irreparable nature of damage (valid only for negative impacts) and likelihood, in case of potential impacts;

3. **Processing of results obtained from stakeholder engagement activities** at the Group level, through the identification of the most significant positive and negative impacts generated (both actual and/or potential), according to their highest degree of significance[155] for each material topic. In addition, each positive impact was analyzed according to the Group's direct and indirect contribution to the achievement of the Sustainable Development Goals (SDGs) of the UN Agenda 2030.



151. The companies that contributed to the materiality process were: Trenitalia SpA, RFI SpA, Anas SpA, Polo Mercitalia, Busitalia Sita Nord SpA, Sistemi Urbani Srl, Italferr SpA, Ferrovie del Sud Est e Servizi automobilistici Srl, Ferservizi SpA and FS SpA.
152. The identified impacts, about 70 (including positive, negative, actual and potential impacts), are related to the relevant issues, which are also subject to update (for more information, please refer to the "Stakeholder Engagement" section).
153. Compliance; Anti-corruption; Climate Risk & Resilience; Security Cooperation & Crisis Management; Occupational Safety; Development & Performance Management and People Care.
154. The main categories of stakeholders from which the experts interviewed were selected belong to the categories of "Civil society organisations", "Scientific community," and "Bodies and institutions".
155. It is defined according to a scale, consisting of four gradients, from "low to "high." The average significance of positive and negative impacts is reported for each topic.

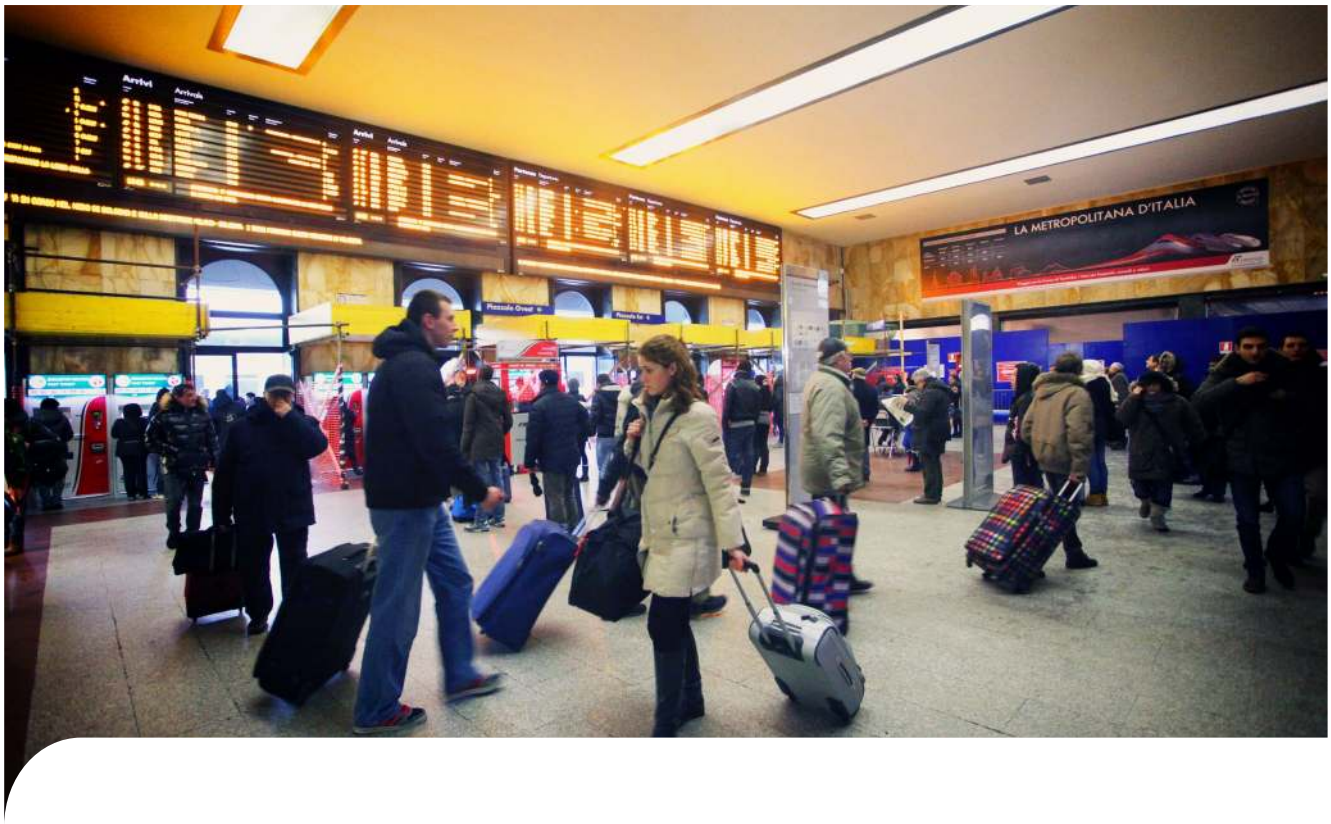
The table below shows the results of the analysis for each topic:

MATERIAL TOPIC	Impact description	Impact Score
Ethical and responsible business	Effects on internal culture on compliance and legality Effects on market ESG performance Effects on the degree of stakeholder awareness on ethics and integrity issues Effects on company culture on compliance and legality and observations of the provisions of the internal control system Effects on the level of company culture on ESG values and aspects Effects on the social and economic environment of the territories in which the Group operates Effects on the level of corruption in the context of the institutions and other stakeholders with which FS operates	
Circular economy	Pollution from waste generated Effects on the level of availability of raw materials	
Inclusion, enhancement and development of people	Effects on the mental and physical well-being of employees Effects on employee satisfaction Effects on the inclusiveness at work Effects on professional development Effects on employee performance Work-life balance of employees Incidents of discrimination	
Sustainable, resilient and integrated infrastructure	Effects on service continuity Effects on the connection between territories and their accessibility Effects on territorial continuity Economic activities of allied industries in the areas where the Group operates Effects on relations with reference communities in the territories targeted at infrastructure development Effects on social welfare in the areas where the Group operates Effects on the attractiveness of the territory Effects on landscape protection	
Mitigation of climate change	Direct effects on climate change Indirect effects on climate change Effects on climate change related to the Group's services	
Data protection and cybersecurity	Effects on awareness and competence in handling sensitive data Effects on user and customer data protection Effects on supplier and business partner data protection Effects on employee data protection Effects on commodity data protection	

MATERIAL TOPIC	Impact description	Impact Score
Occupational health and safety	Effects on employee health Health effects on employees of contractor/partner firms Accidents and injuries of employees Accidents and injuries of employees of contractor/partner firms	
Transport, infrastructure and other assets safety	Effects on the integrity of infrastructure and other assets Effects on the safety of travellers Accidents occurring to users Accidents occurring to passengers Accidents occurring to people living in and passing through the areas where rail and road infrastructure is located Accidents occurring to third parties due to non-compliance with traffic/road system rules (e.g. trespassing) Accidents occurring to people Damage to goods and property related to infrastructure safety and reliability Damage to goods and property related to safety and reliability of means of transport Accidents occurring to goods and property	
Sustainable, resilient and integrated transport systems	Effects on modal shift Effects on traffic level on road infrastructure and accident frequency for travellers Effects on traffic level on road infrastructure and accident frequency for freight Degree of accessibility of stations (or other mobility systems versus to rail) for passengers Effects on reliability and continuity of service Degree of accessibility of stations (or other mobility systems versus rail) for freight	
Supply chain sustainability	Effects on ESG performance of current and potential suppliers/providers Effects on the quality of services offered to users Effects on the competitiveness in the markets in which the Group is present Effects on the degree of suppliers' awareness of the importance of ESG issues Effects on the level of environmental and social safety of services offered by the Group	
Support for communities and responsible use of territories	Effects on the historical, social and cultural heritage of the Group Effects on the welfare of communities with a view to creating new services Effects on the degree of social cohesion in target communities Effects on the social, cultural and artistic development of the community	

MATERIAL TOPIC	Impact description	Impact Score
Environmental protection	Effects related to land restitution, reuse and change in intended use Land consumption Air pollution (particulate matter, nitrogen oxides, odours, etc.) Vibration generated Effects on water resource availability Noise pollution Water pollution Soil pollution Effects on biodiversity (conservation/loss of biodiversity) Effects on artificial brightness in the night-time environment in large areas	
Value for customers	Accessibility to transport services Effects on transport solutions for customers Effects on travel experience Effects on customer satisfaction Effects on the ability to manage road traffic and the flow of passengers and goods at stations Usability of transport services Effects on the degree of customer awareness of the importance of ESG issues Effects on customer reports and complaints	

The most significant generated impact was found to be related to the topic of "Sustainable, resilient and integrated transport systems". This witnesses to the contribution that the FS Group's activities can generate about the effects on modal shift, traffic level on road infrastructure, and accident frequency for travellers and freight. Likewise, any impacts related to "Climate change mitigation", such as any effects related to the Group's services about energy consumption and greenhouse gas emissions, maintain a high impact significance, in line with the results that emerged from the assessment of previous reporting.



CONTENT INDEX

For the period 01/01/2023 - 31/12/2023, the Parent Company Ferrovie dello Stato Italiane prepared the Sustainability Report in accordance with GRI Standards. Below is the table linking the identified material aspects, the corresponding GRI topic and the related reporting boundary. For each topic of the GRI standard related to the material issues identified, the relevant impacts, current or potential, internal and external to the Group's perimeter were considered.

MATERIAL ASPECTS FOR THE FS ITALIANE GROUP	INTERNAL SCOPE	EXTERNAL SCOPE	GRI STANDARDS AND DISCLOSURES		NOTES
Environmental protection **Circular economy**	*FS Italiane Group*	*Supply chain*	Materials Water and water drainage Biodiversity Emissions Waste Environmental compliance	GRI 301 GRI 303 GRI 304 GRI 305 GRI 306 GRI 2-27	The impact assessment for the external scope includes work site * operations and supplier assessments
Climate change mitigation	*FS Italiane Group*	*Supply chain* *Customers* *Country system*	Energy Emissions	GRI 302 GRI 305	The impact assessment for the external scope includes work site * operations and supplier assessments activities and complies with the GHG protocol guidelines (see "The Corporate Value Chain (Scope 3) Accounting and Reporting Standard"), based on the volume of invoices issued by the suppliers to FS Italiane Group companies during the year. The share of invoices issued was netted from the economic value of the rolling stock purchased during the year, for the quantification of cradle-to-gate emissions using the reference EPDs (Environmental Product Declarations). Avoided emissions were instead estimated considering the difference in emissions between scenarios with passenger transport on rail and road and freight transport on rail, carried out with FS Group vehicles, and scenarios in which the same activities are carried out with private cars (passengers) and trucks (freight) on road.
Ethical and responsible business **Data protection and cybersecurity**	*Gruppo FS Italiane*	*Supply chain* *Customers* *Country system*	Economic performance Anti-corruption Anti-competitive behaviour Taxes Security practices Customer privacy Public policy Socio-economic compliance	GRI 2 GRI 201 GRI 205 GRI 206 GRI 207 GRI 410 GRI 418 GRI 415	
Supply chain sustainability	*Gruppo FS Italiane*	*Supply chain*	Procurement practices Supplier environmental assessment Non-discrimination Freedom of association and collective bargaining Child labour Forced or compulsory labour Human rights assessment Supplier social assessment	GRI 204 GRI 308 GRI 406 GRI 407 GRI 408 GRI 409 GRI 412 GRI 414	

MATERIAL ASPECTS FOR THE FS ITALIANE GROUP	INTERNAL SCOPE	EXTERNAL SCOPE	GRI STANDARDS AND DISCLOSURES		NOTES
Value to the customer **Support for communities and responsible use of land**	*Gruppo FS Italiane*	*Customers* *Country system*	Local communities	GRI 413	
			Approach to stakeholder engagement	GRI 2	
Occupational health and safety **Transport, infrastructure and other assets safety**	*Gruppo FS Italiane* *Employees*	*Supply chain* *Customers*	Occupational health and safety Customer health and safety	GRI 403 GRI 416	The impact assessment for the supply chain includes work site * operations and supplier assessment activities For customers, events refer to the national infrastructure operated by RFI.
Inclusion, enhancement and development people	*Gruppo FS Italiane* *Employees*		Employment Labour/management relations Training and education Diversity and equal opportunity Non-discrimination	GRI 401 GRI 402 GRI 404 GRI 405 GRI 406	
Sustainable, resilient and integrated infrastructure **Sustainable, resilient and integrated transport systems**	*Gruppo FS Italiane*	*Supply chain* *Customers* *Country system*			

*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. The data also refer to general contracts in which Italferr provides oversight for both works management and safety.

GRI Content Index

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures			
The organization and its reporting practices			
2-1	Organisation details	• Annex – Methodology for reporting non-financial information • The group's business model - Units and geographical areas • Sustainable, resilient and integrated infrastructure and transport - Travel • Sustainable, resilient and integrated infrastructure and transport - Integrated logistics • Transparency and responsibility - Corporate governance • Transparency and responsibility - Business integrity	The Parent Company Ferrovie dello Stato Italiane has its registered office in Rome, Piazza della Croce Rossa, 1. The parent company Ferrovie dello Stato Italiane is a joint-stock company; the company's share capital as at 31 December 2023 is wholly owned by the sole shareholder Ministry of Economy and Finance.
2-2	Entities included in the consolidated financial statements	• Annex – Methodology for reporting non-financial information • 2023 Annual Financial Report - Annexes - Scope of consolidation and the group's equity investments	
2-3	Reporting period, frequency and point of contact		The reporting period is 2023. Sustainability reports are annual. Email: rapportosostenibilita@fsitaliane.it Fax: 06 644102077
2-4	Restatements of information	• Annex – Methodology for reporting non-financial information	Any restatements/reclassifications are individually indicated in this document.
2-5	External assurance	• Annex – Methodology for reporting non-financial information	As auditors of Ferrovie dello Stato Italiane group's consolidated financial statements, PwC SpA, carried out a limited assurance engagement in accordance with the criteria indicated by ISAE 3000 (revised) on the 2023 Sustainability Report.
Business and workers			
2-6	Activities, value chain and other business relations	• Sustainability in numbers • The group's business model - Units and geographical areas • Sustainable, resilient and integrated infrastructure and transport - Travel - Integrated logistics • Supply chain sustainability - Our suppliers • 2023 Annual Financial Reports - Economic and financial performance of the segments	There were no significant changes to the organisation or supply chain in 2023.
2-7	Employees	• Sustainability in numbers • Inclusion, enhancement and development of people - Recruitment and HR management • Annex - Tables of performance indicators	Employees carry out the group's significant activities. There were no significant changes in the workforce in 2023. Some information required by the standard does not include all Group Companies due to lack of necessary data. The following are the companies included in the scope: FS SpA, RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani, Mercitalia Logistics, Mercitalia Rail, Mercitalia Intermodal, Busitalia Sita-Nord, Busitalia Veneto, Busitalia Rail Service, Busitalia Campania, Grandi Stazioni Rail, Grandi Stazioni Immobiliare, Terminali Italia, Italcertifer, FSTechnology, FS Security, Cremonesi Workshop, FS International and FSE. The total number of employees in this scope of analysis is 70,626, approximately 76.4% of the group's total workforce. An in-depth analysis is underway to structure a data collection process for next year.
2-8	Workers who are not employees	• Inclusion, enhancement and development of people - Recruitment and HR management • Annex - Tables of performance indicators	

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures			
Governance			
2-9	Governance structure and composition	• Transparency and responsibility - Corporate governance • 2023 Annual Financial Report - Report on corporate governance and ownership structure	The members of the Board of Directors of FS SpA did not hold any positions in other companies of the Group during 2023. The total number of other corporate offices and other commitments held by the members of the Board of Directors of FS SpA outside the Group during 2023 was 57, of which 17 were in the nature of a corporate relationship in joint-stock companies and the remainder mainly related to appointments/commitments in universities, academic bodies, professional firms, trade associations, non-profit organisations, public administration and local authorities. There is no presence of minority shareholders or groups of shareholders.
2-10	Nominating and selecting the highest governance body	• Transparency and responsibility - Corporate governance • 2023 Annual Financial Report - Report on corporate governance and ownership structure - Board of directors of FS SpA	
2-11	Chair of the highest governance body	• 2023 Annual Financial Report - Report on corporate governance and ownership structure - Board of directors of FS SpA	
2-12	Role of the highest governing body in overseeing impact management	• Materiality and stakeholder management • Transparency and responsibility - Corporate governance	The Control, Risk and Sustainability Committee supports the board's assessments and decisions regarding: • its approval of periodic financial and non-financial reports; • the internal control and risk management system; • the sustainability profile of the group's operations and its interaction with all stakeholders. With respect to the internal control and risk management system, the board of directors is responsible for, inter alia, the following duties, which it carries out subject to the Control, Risk and Sustainability Committee's approval: • based on the proposals of the chairperson and the CEO, examining and defining the guidelines for the internal control and risk management system so that the main risks related to the company are properly identified and adequately measured, managed and monitored; determining the degree to which these risks are compatible with business management in line with the strategic goals and setting the company's financial risk appetite; • approval, at least once a year, of the Company's Audit Plan prepared by the Head of the Internal Audit Function, after consulting the Board of Auditors. Specifically with reference to the internal control and risk management system, in supporting the board of directors, the Control, Risk and Sustainability Committee, specifically: a. expresses opinions and/or makes proposals on the internal control and risk management system, consisting of the set of rules, procedures and organisational structures aimed at the effective and efficient identification, measurement, management and monitoring of the main risks, in order to contribute to the sustainable success of the Company;

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures			
Governance			
			b. expresses opinions on specific aspects relating to the identification of the main corporate risks and supports the assessments and decisions of the Board of Directors relating to the management of risks arising from prejudicial events of which the latter has become aware; c. expresses prior opinions on i) the appointment and dismissal of the Internal audit manager, ii) setting their remuneration, in line with company policies (including assigning annual performance targets and relevant checks for any variable component of remuneration), iii) checking that the Internal audit manager is equipped with adequate resources for carrying out their duties; d. expresses a prior opinion on the approval, at least once a year, of the audit plan drafted by the Internal audit manager; e. examines the periodic reports and particularly significant reports prepared by the Internal Audit Department; f. monitors the autonomy, adequacy, effectiveness and efficiency of the Internal Audit Department, in agreement with the chairperson of the board of directors (who acts as liaison between such department and the board, to which the department reports); g. can entrust the Internal Audit Department with performing checks on specific business areas, reporting thereon to the chairperson of the board of statutory auditors; h. expresses an opinion on decisions to allocate supervisory duties as per article 6.1.b) of Legislative decree no. 231/2001 and holds periodic meetings with the chairperson of the Supervisory Body on compliance with Legislative decree no. 231/2001; i. presents proposals on the possible adoption of measures to ensure the effectiveness and impartiality of judgement of the other company departments involved in oversight activities (such as the risk management and legal and non-compliance risk protection departments), checking that they are equipped with adequate resources and professional expertise, j. expresses a prior opinion on significant amendments to the rules, procedures and organisational structures that comprise the internal control and risk management system; k. makes proposals on the coordination and information flows between the various parties involved in the internal control and risk management system, in order to maximise the efficiency of the system, reduce duplication of tasks and ensure controls are performed effectively; l. monitors, with the support of the relevant company units, the integration of new legislation into the company's internal procedures; m. monitors, with the support of the relevant company units, the subsidiaries' prompt adoption of procedures issued by the parent.
2-13	Delegation of responsibility for impact management	• Transparency and responsibility - Corporate governance	
2-14	Highest governance body's role in sustainability reporting		The board of directors approved the Sustainability Report.

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures			
Governance			
2-15	Conflicts of interest	• Transparency and responsibility - Corporate governance	Directors' interests are subject to the provisions of article 2391 and article 2390 of the Italian Civil code and the rules set out in the board regulation approved at its meeting of 6 October 2021. The latter provides that: • as per article 2391 of the Italian Civil Code, directors who have an interest of their own or on behalf of third parties in a transaction submitted for the board's approval shall promptly and comprehensively inform the board of such interest and the relevant circumstances. These directors shall abstain from the relevant resolution, and also from participating in the discussion, in case of particular requirements left to the assessment and decision of the parties involved. • upon accepting their candidature and appointment and subsequently on a yearly basis, the directors issue a statement on the non-competition clause for directors, also as per article 2390 of the Italian Civil Code. In addition to the operations of Ferrovie dello Stato SpA, such legislation also applies to the operations of the group of which Ferrovie dello Stato SpA is the holding company in the rail and road transport sectors. In addition, the members of the Corporate Bodies of all Group companies are required to be inspired by the values and contents of the FS Group Code of Ethics.
2-16	Communicating critical concerns		The Chief Audit Officer is responsible for reporting any critical issues to the highest governance body. Accordingly, the Chief Audit Officer periodically reports on the progress of operating activities carried out and indicates main findings requiring immediate attention. The Chief audit officer promptly informs the chairperson of FS SpA's board of directors, FS SpA's CEO, the chairperson of FS SpA's Control, Risk and Sustainability Committee, the chairperson of FS SpA's board of statutory auditors and, for issues regarding the parent, the chairperson of FS SpA's Supervisory Body, about serious faults in the system to prevent irregularities and fraudulent acts. Reporting to the highest governance body is also carried out by the Supervisory Body pursuant to Legislative decree no. 231/2001 and FS SpA's Ethics and Reporting Committees. Similar flows of information are sent by the heads of the Internal Audit Departments of the subsidiaries to their management and control and supervisory bodies, in addition to by the Supervisory Body pursuant to Legislative decree no 231/2001 and the Ethics and Reporting Committees to the highest governance body of the respective companies. Furthermore, the Internal Audit Departments liaise continuously with the main company structures involved in internal control and risk management systems (ICRMS) [1], in compliance with the internal regulatory framework and to support the assessments of each unit. Senior Management of the first-tier subsidiaries is required to inform the Chairperson and the CEO of FS SpA[2] of the results of the checks carried out by the Internal Audit functions from which acts, facts, omissions, or other serious circumstances have emerged that may constitute a breach of a rule or regulation by apical persons of the same companies or their subsidiaries (members of the Administrative Body; of the Control Body and of the Supervisory Board).

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures			
Governance			
			note 1) Such as the Human resources and organisation manager, the Risk manager, the Manager in charge of financial reporting and the legal advisor. note 2) Providing information to the Internal audit manager and the Audit Committee, where present, of the subsidiary. In performing the 2023 audit activities, the Internal Audit Department discovered 46 critical concerns, following which the respective management defined corrective action plans, indicated the employee(s)/manager(s) responsible for the execution thereof and the timeframe for their completion. The critical concerns identified and the implementation status of the action plans are included in the periodic reports of the Internal Audit Department of FS SpA written for the highest governance body. The internal audit findings show the effective status of the design and operation of the internal control and risk management system (ICRMS)[1], in relation to the real or potential effects and are classified in relation to the materiality of the impact on the internal control and risk management system. Roughly 82% of the corrective actions identified for the critical concerns had been completed by 31 December 2023. In its periodic reports to the highest governance body, the Supervisory Body reported on the results of the checks it performed on the processes exposed to the risk of crime as per Legislative decree no. 231/2001 with the operational support of the Internal Audit Department. note1) SCIGR is the set of tools, organisational structures, standards and corporate rules aimed at enabling the sound, correct and consistent management of the company in accordance with the corporate objectives defined by the Board of Directors, through an adequate process of identification, measurement, management and monitoring of the main risks, as well as through the structuring of adequate information flows aimed at ensuring the circulation of information.
2-17	Collective knowledge of highest governance body	• Transparency and responsibility - Corporate governance • 2023 Annual Financial Report - Report on corporate governance and ownership structure - Board of directors of FS SpA	
2-18	Evaluating the highest governance body's performance	• Transparency and responsibility - Corporate governance	
2-19	Remuneration policies	• Inclusion, enhancement and development of people - Recruitment and HR management • 2023 Annual Financial Report - Report on corporate governance and ownership structure - Board of directors of FS SpA- Directors' remuneration	The fees of the directors of group companies are set in an equal and consistent manner, taking into consideration the complexity and strategic nature of the company business, using as reference the fees set for the board of directors of FS SpA.
2-20	Process to determine remuneration	• Inclusion, enhancement and development of people - Recruitment and HR management • 2023 Annual Financial Report - Report on corporate governance and ownership structure - Board of directors of FS SpA- Directors' remuneration	To date, no stakeholder involvement mechanism is in place with respect to remuneration policies.

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures			
Governance			
2-21	Ratio of annual remuneration paid	• Transparency and responsibility - Corporate governance	The ratio of the annual compensation of the highest-paid individual compared to the average annual compensation of all employees is 19.17. There is no increase in the salary of the highest paid individual compared to the previous year.
Strategies, policies and practices			
2-22	Statement from senior decision-maker	• Letter to the Stakeholders • The FS Group for sustainable mobility - The business plan • Transparency and responsibility - Corporate governance - Materiality and stakeholder management - Sustainable, resilient and integrated infrastructure and transport - Travel - Focus on people - Integrated logistics	
2-23	Policies and commitments	• Sustainable, resilient and integrated infrastructure and transport - Sustainable infrastructure • Transparency and responsibility - Corporate governance - Business integrity • Supply chain sustainability - Our suppliers	The group applies the precautionary principle in the assessment and management of economic, environmental and social risks. https://www.fsitaliane.it/content/fsitaliane/it/il-gruppo-fs/governance/il-codice-etico-.html
2-24	Implementation of policies and commitments	• Transparency and responsibility - Corporate governance - Sustainability governance - Business integrity • Sustainable, resilient and integrated infrastructure and transport • Inclusion, enhancement and development of people • Support for communities and responsible use of territories • Supply chain sustainability • Sustainable infrastructure	
2-25	Processes to remedy negative impacts	• The FS group for sustainable mobility • Transparency and responsibility • Sustainable, resilient and integrated infrastructure and transport • Inclusion, enhancement and development of people • Support for communities and responsible use of territories • Net Zero destination • Supply chain sustainability • Sustainable infrastructure • Environmental protection and circular economy • Annex - Company highlights	

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures			
Strategies, policies and practices			
2-26	Mechanisms for seeking advice and raising concerns	• Transparency and responsibility - Business integrity	Under the Group's Code of Ethics, which was updated in February 2018, employees may report information about incidents that they, in good faith, believe are potentially illegal, irregular or, in any case, in violation of the Code of Ethics to their company's Ethics Committee. The confidentiality and probity of the whistleblower and the reported parties are guaranteed. Furthermore, the Group has a zero-tolerance policy for any retaliation against whistleblowers. FS SpA adopted the *Procedure for the Handling of Reports*, updated in 2023 in accordance with legislative Decree no. 24 of 10 March 2023, implementing Directive (EU) 2019/1937. This procedure governs, at Group level, the receipt, analysis and handling of reports sent (also anonymously) by people from inside or outside the FS Group on events that could involve: i) breach of the Code of Ethics and/or Model 231 and the procedures that implement the model and/or the Anti-Corruption Policy and Anti-Corruption Management Model and/or company rules in any case, that could cause damage or jeopardise the FS Group; ii) administrative, accounting, civil or criminal offences; iii) unlawful conduct pursuant to Legislative Decree no. 231/01; iv) violations of European Union law and further unlawful conduct pursuant to Legislative Decree no. 24/2023. Reports may be sent, even anonymously, to FS SpA's Ethics and Reporting Committee and/or its Supervisory Body pursuant to Legislative Decree no. 231/2001 by: i) the IT platform, considered the preferential channel as it immediately ensures the confidentiality of whistleblowers and adequate security measures for the information; ii) post; iii) e-mail; iv) verbally, via a statement made by the whistleblower at a specific hearing before FS SpA's Ethics and Reporting Committee and/or its Supervisory Body reported in the minutes of the meeting and signed by the whistleblower. The whistleblowing channels, including access to the IT platform, are published on the "Ethics, compliance and integrity" page of the company website and in the specific "Whistleblowing" section of the company intranet. The procedure for the management of whistleblower reports envisages the following forms of protection of the whistleblower, specifically: (i) guarantees the confidentially of the whistleblowers as soon as the report is received; (ii) forbids (and sanctions to the extent of its powers and capacities) any type of direct or indirect disciplinary measures, retaliation or discrimination against whistleblowers following the report, including by omission, even attempted or threatened, as well as any such measures against third parties connected to the whistleblower, such as relatives, co-workers, legal entities that the whistleblower owns or works for, that operate in a working environment linked to the FS Group. This protection is guaranteed for the whistleblower even if the claims prove to be unfounded, except in the case of a report made with malice or gross negligence, as well as personnel who were involved in checking the reported facts.

GRI INDICATORS	REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures		
Strategies, policies and practices		
		To ensure that there is no retaliation against the whistleblower over time, for FS Italiane Group personnel, the Ethics and Reporting Committee and/or Supervisory Body monitors their work situation for two years after the report. The Company protects the rights of the persons concerned, first of all by ensuring, in order to guarantee appropriate confidentiality, that any communication concerning their identity strictly follows the 'need to know' criterion. When a report is received via the specific channels, the Ethics and Reporting Committee and/or the Supervisory Body conduct a preliminary check and, where the conditions have been met, begin the initial process with the support of the Audit Department. Whistleblower reports regarding one or more Group companies are sent to the relevant bodies of the company concerned for their assessments. In 2023 **the FS SpA's Ethics and Reporting Committee received and managed 43 reports**, all relating to subsidiaries, 28 of which are closed/archived. Furthermore, in the same period, the Ethics and Reporting Committee closed/filed 24 reports received in periods prior to 2023, also related to subsidiaries. In 2023, **the FS SpA's Supervisory Body received and managed 18 reports**, one of which concerned FS SpA and the remaining 17 reported relating to subsidiaries, which are closed/archived. Furthermore, in the same period, the Supervisory Body closed n. 1 report received in periods prior to 2023 concerning FS SpA. In 2023, the subsidiaries received 480 reports; 240 of which were closed/archived in 2023. Furthermore, in 2023, the subsidiaries closed/archived 295 reports received in periods prior to 2023.

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 2: General disclosures			
Strategies, policies and practices			
2-27	Compliance with laws and regulations	• Annex - Tables of performance indicators • 2023 Annual Financial Report - Regulatory activities of the Transport Regulatory Authority (ART) - Other information	In 2023, no significant administrative sanctions or fines were imposed for violation of environmental regulations or laws. In 2023, the main Group companies' most significant disputes in terms of potential economic costs related to: • requests for placement in higher positions; • requests for acknowledgement of employment relationships submitted to companies alleging breach of current regulations prohibiting sham contracting; • joint obligation; • recruitment contracts in the maritime sector: conversion of fixed-term and/or voyage employment contracts into permanent employment contracts; • asbestos; • remuneration of weekdays. • apprenticeship contracts; • rest periods pursuant to Regulation (EC) 561/2006; • Damages Litigation.
2-28	Membership of associations	• Materiality and stakeholder management • Supply chain sustainability - Sustainable procurement	
Stakeholder engagement			
2-29	Approach to stakeholder engagement	• Materiality and stakeholder management - Sustainable, resilient and integrated infrastructure and transport - Travel - Focus on people - Integrated logistics	
2-30	Collective bargaining agreements	• Inclusion, enhancement and development of people - Recruitment and HR management	
GRI 3: Material topics			
3-1	Process of determining material topics	• Annex – Methodology for reporting non-financial information	
3-2	List of material topics	• Annex – Methodology for reporting non-financial information	Any restatements/reclassifications are individually indicated in this document.
3-3	Management of material topics	• Annex – Methodology for reporting non-financial information • The FS Group for sustainable mobility • Transparency and responsibility • Sustainable, resilient and integrated infrastructure and transport • Travellers and people's safety • Inclusion, enhancement and development of people • Net Zero destination • Environmental protection and circular economy • Supply chain sustainability • Support for communities and responsible use of territories • Annex - GRI content index • Annex - Company highlights	The Group applies the precautionary principle in the assessment and management of economic, environmental and social risks.

GRI INDICATOR		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 200: Economical			
GRI 201: Economic performance			
201-1	Directly generated and distributed economic value	• Materiality and stakeholder management • Annex - Tables of performance indicators	
201-2	Financial implications and other risks and opportunities due to climate change	• Integrated management of risks and opportunities • 2023 Annual Financial Report - Risk factors	
201-3	Defined benefit plan obligations and other retirement plans	• Inclusion, enhancement and development of people - Recruitment and HR management • 2023 Annual Financial Report - Notes to the consolidated financial statements - Post-employment benefits and other employee benefits	
201-4	Financial assistance received from government	• Annex - Tables of performance indicators	
GRI 203: Indirect economic impacts			
203-1	Infrastructure investments and services supported	• The FS Group for sustainable mobility - The NRRP and developing transport for Italy • Sustainable infrastructure • Annex - Tables of performance indicators	
203-2	Significant indirect economic impacts	• The FS Group for sustainable mobility - The NRRP and developing transport for Italy • Sustainable infrastructure	
GRI 204: Procurement practices			
204-1	Proportion of spending on local suppliers	• Supply chain sustainability - Our suppliers • Annex - Tables of performance indicators	
GRI 205: Anti-corruption			
205-1	Operations assessed for risks related to corruption	• Transparency and responsibility - Business integrity	
205-2	Communication and training about anti-corruption policies and procedures	• Transparency and responsibility - Business integrity • Annex - Tables of performance indicators	
205-3	Confirmed incidents of corruption and actions taken	• Transparency and responsibility - Business integrity • Annex - Tables of performance indicators	

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 200: Economical			
GRI 206: Anti-competitive behaviour			
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	• 2023 Annual Financial Report - Regulatory activities of the Transport Regulatory Authority (ART) - Other information	In the performance of their work, all employees and directors of the Group companies scrupulously follow the restrictions of anti-trust legislation and carefully comply with the Anti-trust Compliance Manual and the Anti-trust Code of Conduct, an operating handbook that summarises, for quick and timely consultation needs, the main rules of conduct to be followed in the event that one of the following circumstances arises or must be dealt with: (i) a possible initiative in violation of anti-trust legislation; (ii) inspections by an anti-trust authority; and (iii) management of a public procedure as contractor. In 2023, the legal actions relating to unfair competition and other matters involving FS SpA were as follows: 1 lawsuit for abuse of economic dependence - summons served on 22 October 2015 - defined with a favourable ruling at first instance; 1 Appeal before the Council of State served by Arriva, Ferrotramviaria and CO.TRA.P, for the annulment of the Lazio Regional Administrative Court's ruling no. 6417 of 31 May 2017, which confirmed the legitimacy of the transfer to FS of the MIT's shareholding in FSE. Following the pronouncement of the EU Court of Justice on the preliminary questions in its judgment of 19 December 2019, the appeal proceedings, which were suspended pending the aforementioned ruling, were resumed and are currently pending; and no.1 Appeal for the annulment of AGCM order no. 27878 of 31 July 2019 rendered at the outcome of proceeding A/519 - Direct entrusting of the LPT rail service in the Veneto region in respect of abuse of dominant position. Judgment in favour of FS by the Regional Administrative Court and appeal to the Council of State by AGCM.
GRI 207: Tax			
207-1	Approach to tax	• Transparency and responsibility - Business integrity	
207-2	Tax governance, control, and risk management	• Transparency and responsibility - Business integrity	
207-3	Materiality and stakeholder management and management concerns related to tax	• Transparency and responsibility - Business integrity	
207-4	Country-by-country reporting	• Annex - Tables of performance indicators	

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 300: Environmental			
GRI 301: Materials			
301-1	Materials used by weight or volume	• Supply chain sustainability - Work site management and oversight • Annex - Tables of performance indicators	
301-2	Recycled input materials used	• Supply chain sustainability - Work site management and oversight • Annex - Tables of performance indicators	
GRI 302: Energy			
302-1	Energy consumption within the organisation	• Net Zero destination - Energy consumptions • Annex - Tables of performance indicators • Annex - Company highlights	
302-2	Energy consumption outside of the organisation	• Annex - Tables of performance indicators	
302-3	Energy intensity	• Net Zero destination - Energy consumptions • Annex - Tables of performance indicators	
302-4	Reduction of energy consumption	• Net Zero destination - Energy consumptions • Annex - Company highlights	
302-5	Reductions in energy requirements of products and services	• Net Zero destination - Fight against climate change • Annex - Company highlights	
GRI 303: Water and water drainage (2018)			
303-1	Interaction with water as a shared resource	• Environmental protection and circular economy - Management of water resources • Annex - Company highlights • Annex - Tables of performance indicators	
303-2	Management of water discharge-related impacts	• Environmental protection and circular economy - Management of water resources • Annex - Tables of performance indicators	
303-3	Water withdrawal	• Environmental protection and circular economy - Management of water resources • Annex - Company highlights • Annex - Tables of performance indicators	
303-4	Water discharge	• Annex - Tables of performance indicators	
303-5	Water consumption	• Annex - Tables of performance indicators	
GRI 304: Biodiversity			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	• Sustainable, resilient and integrated infrastructure and transport - Sustainable infrastructure	
304-2	Significant impacts of activities, products, and services on biodiversity	• Sustainable, resilient and integrated infrastructure and transport - Sustainable infrastructure	
304-3	Habitats protected or restored	• Sustainable, resilient and integrated infrastructure and transport - Sustainable infrastructure	
304-4	IUCN *Red List* species and national conservation list species with habitats in areas affected by operations	• Sustainable, resilient and integrated infrastructure and transport - Sustainable infrastructure	

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 300: Environmental			
GRI 305: Emissions			
305-1	Direct (Scope 1) GHG emissions	• Net Zero destination - Emissions • Annex - Tables of performance indicators • Annex - Company highlights	
305-2	Energy indirect (Scope 2) GHG emissions	• Net Zero destination - Emissions • Annex - Tables of performance indicators • Annex - Company highlights	
305-3	Other indirect (Scope 3) GHG emissions	• Net Zero destination - Emissions • Annex - Tables of performance indicators • Annex - Company highlights	
305-4	GHG emissions intensity	• Net Zero destination - Emissions • Annex - Tables of performance indicators	
305-5	Reduction of GHG emissions	• Net Zero destination - Fight against climate change • Annex - Tables of performance indicators • Annex - Company highlights	
305-6	Emissions of ozone-depleting substances (ODS)		The FS Group does not use ozone-depleting substances as defined by the MASE - Ministry of the Environment and Energy Security.
305-7	Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	• Environmental protection and circular economy - Management of emissions into the atmosphere and physical agents • Annex - Tables of performance indicators	
GRI 306: Waste (2020)			
306-1	Waste generation and significant waste-related impacts	• Environmental protection and circular economy - Waste management • Annex - Tables of performance indicators	
306-2	Management of significant waste-related impacts	• Environmental protection and circular economy - Waste management • Annex - Tables of performance indicators	
306-3	Waste generated	• Environmental protection and circular economy - Waste management i • Annex - Tables of performance indicators • Annex - Company highlights	
306-4	Waste diverted from disposal	• Environmental protection and circular economy - Waste management • Annex - Tables of performance indicators • Annex - Company highlights	
306-5	Waste directed to disposal	• Environmental protection and circular economy - Waste management • Annex - Tables of performance indicators • Annex - Company highlights	
GRI 308: Supplier environmental assessment			
308-1	New suppliers that were screened using environmental criteria	• Supply chain sustainability - Sustainable procurement • Annex - Tables of performance indicators	
308-2	Negative environmental impacts in the supply chain and actions taken	• Supply chain sustainability - Sustainable procurement	

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 400: Social			
GRI 401: Employment			
401-1	New employee hires and employee turnover	• Inclusion, enhancement and development of people - Recruitment and HR management • Annex - Tables of performance indicators	The following formula was used to calculate employee turnover: [(incoming + outgoing)/average number of employees]x 100. To calculate employee turnover by age bracket, a more detailed disclosure than that required by the standard was used, as it is considered more meaningful. Some information required by the standard does not include all Group Companies due to lack of necessary data. The following are the companies included in the scope: FS SpA, RFI, Trenitalia, Ferservizi, Italferr, FS Sistemi Urbani, Mercitalia Logistics, Mercitalia Rail, Mercitalia Intermodal, Busitalia Sita-Nord, Busitalia Veneto, Busitalia Rail Service, Busitalia Campania, Grandi Stazioni Rail, Grandi Stazioni Immobiliare, Terminali Italia, Italcertifer, FSTechnology, FS Security, Cremonesi Workshop, FS International and FSE. The total number of employees in this scope of analysis is 70,626, approximately 76.4% of the Group's total workforce. An in-depth analysis is underway to structure a data collection process for the coming year.
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	• Inclusion, enhancement and development of people - Recruitment and HR management	The Group provides open-ended contracts to 96.8% of its workforce. Approximately 11% of open-ended contracts are apprenticeships and roughly 1% are part time. In any case, there are no differences in the benefits received by temporary, part-time or full-time employees.
401-3	Parental leave	• Inclusion, enhancement and development of people - Relationships with trade unions	All employees that took parental leave came back to work except in 46 cases in which the employees left at the end or shortly after the term of parental leave (41 voluntary terminations, 3 dismissals and 2 deaths). 98.5% of the employees who took parental leave in 2022 were still in service 12 months later.
GRI 402: Relationships with trade unions			
402-1	Minimum notice periods regarding operational changes	• Inclusion, enhancement and development of people - Relationships with trade unions	
GRI 403: Occupational health and safety (2018)			
403-1	Occupational health and safety management system	• Transparency and responsibility - Business integrity • Annex - Company highlights	
403-2	Hazard identification, risk assessment, and incident investigation	• Annex - Company highlights	The employers, identified within each Group company, are responsible for drawing up the Risk Assessment Document (DVR) pursuant to Legislative Decree 81/08; the document, which contains the assessment of all risks and the necessary measures to be put in place to minimise them, is the cornerstone of the occupational safety management systems implemented by Group companies. It is an essential part of the occupational safety management systems that the Group companies have implemented and which they use to provide workers with the tools needed to report and manage any dangerous situations and to define corrective actions following any incidents for the continuous improvement of the system. The absenteeism rate is 8.0% compared to 9.3% in 2022, the decrease was mainly due to the decrease in sick leave hours.

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 400: Social			
GRI 403: Occupational health and safety (2018)			
403-3	Occupational health services	• Inclusion, enhancement and development of people - Health and Safety • Annex - Tables of performance indicators	
403-4	Worker participation, consultation, and communication on occupational health and safety	• Annex - Tables of performance indicators	The Group has formal agreements in place with the trade unions protecting health and safety, to promote projects that foster a culture of safety and prevention among workers by constantly updating employee training and through the introduction of new equipment and new technologies.
403-5	Worker training on occupational health and safety	• Inclusion, enhancement and development of people - Health and Safety	
403-6	Promotion of worker health	• Inclusion, enhancement and development of people - Health and Safety	1) Work was concluded on the secondary breast cancer prevention campaign for the FS Group's female employees in Bari, Cagliari, Naples, Palermo, Reggio Calabria and Salerno. The eight-day campaign consists of free mammograms to promote early diagnosis. The other remaining 5 stages were carried out over 7 days in 2023: 462 mammography and ultrasound services delivered. 2) 17 seminar webinars were held by nutritionists, nutrition psychologists, and psychotherapists dedicated to promoting proper eating styles, prevention of eating disorders, healthy sleep-related habits, and addiction prevention (smoking, technologies, toxic relationships). The appointments totaled 6,154 registrants from all companies in the Group.
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	• Supply chain sustainability - Sustainable procurement - Work site management and oversight	
403-8	Workers covered by an occupational health and safety management system	• Annex - Tables of performance indicators	

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 400: Social			
GRI 403: Occupational health and safety (2018)			
403-9	Work-related injuries	• Inclusion, enhancement and development of people - Health and Safety • Annex - Tables of performance indicators • 2023 Annual Financial Report - Other information	The employers, identified within each Group company, are responsible for drawing up the Risk Assessment Document (DVR) pursuant to Legislative Decree 81/08; the document, which contains the assessment of all risks and the necessary measures to be put in place to minimise them, is the cornerstone of the occupational safety management systems implemented by Group companies. It is an essential part of the occupational safety management systems that the group companies have implemented and which they use to provide workers with the tools needed to report and manage any dangerous situations and to define corrective actions following any incidents for the continuous improvement of the system. With regard to injuries related to non-employee workers whose activities and/or workplace are under the control of the organization, the data do not include all the Group's contracting firms, but 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. The data also refer to general contracts in which Italferr provides oversight for both works management and safety. For the other information required by the standard, not currently available due to the lack of the necessary data, an in-depth analysis is currently under way to structure a data collection process in the next year.
403-10	Work-related ill health	• Inclusion, enhancement and development of people - Health and Safety	
GRI 404: Training and education			
404-1	Average hours of training per year per employee	• Inclusion, enhancement and development of people - Encouraging, training and upgrading skills • Annex - Tables of performance indicators	The data on the hours of training per year are in man-days (an average of 7.60 hours per day). Some information required by the standard does not include all Group Companies due to lack of necessary data. The following are the companies included in the scope: FS, RFI, Trenitalia, Busitalia - Sita Nord, Ferservizi, Italferr, FS Sistemi Urbani, Mercitalia Logistics, Mercitalia Rail, FSTechnology, FS international e FS Security, Anas, Blu Jet, Busitalia Campania, Busitalia Rail Service, Busitalia Veneto, Cremonesi Workshop, Fercredit, Ferrovie Sud Est e Sa, Grandi Stazioni Rail, Infrarail, Italcertifer, Mercitalia Intermodal, Mercitalia Shunt&Terminal, FS Park and Terminali Italia.
404-2	Programs for upgrading employee skills and transition assistance programs	• Inclusion, enhancement and development of people - Recruitment and HR management - Encouraging, training and upgrading skills	
404-3	Percentage of employees receiving regular performance and career development reviews	• Inclusion, enhancement and development of people - Encouraging, training and upgrading skills • Annex - Tables of performance indicators	The information required by the standard does not include all Group Companies due to lack of necessary data. The following are the companies included in the scope: FS, RFI, Trenitalia, Ferservizi, Italferr, Mercitalia Logistics, Mercitalia Rail, FS Sistemi Urbani, Busitalia - Sita Nord, Ferrovie del Sud Est, FS International, FS Security and FSTechnology.

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 400: Social			
GRI 405: Diversity and equal opportunity			
405-1	Diversity of governance bodies and employees	• Transparency and responsibility • Corporate governance • Inclusion, enhancement and development of people - Recruitment and HR management - Welfare and Diversity & Inclusion • Annex - Tables of performance indicators • 2023 Annual Financial Report - Report on corporate governance and ownership - Board of Directors of FS SpA - Composition and appointment	The Group is compliant with current regulations regarding protected groups of people. A more detailed breakdown of employees by age bracket than that required by the standard was used as it is considered more meaningful.
405-2	Ratio of basic salary and remuneration of women to men	• Inclusion, enhancement and development of people - Recruitment and HR management • Annex - Tables of performance indicators	
GRI 406: Non-discrimination			
406-1	Incidents of discrimination and corrective actions taken		There were no incidents of discrimination reported in 2023.
GRI 407: Freedom of association and bargaining			
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		There are no risks to the freedom of association and bargaining within the FS Italiane Group. The Group has established a system of relationships with the trade unions based on information and bargaining at various national and local levels with trade union representatives (national and local offices, unit representatives and company representatives). In addition, the FS Italiane Group applies all inter-confederation agreements, including those on trade union representation. All Group contracts require the full acceptance of the Code of Ethics. There are no suppliers or activities in which the right to freedom of association and collective bargaining is exposed to significant risk.
GRI 408: Child labour			
408-1	Operations and suppliers at significant risk for incidents of child labour		All Group contracts require the full acceptance of the Code of Ethics. There are no suppliers or activities with significant risk of child labour.
GRI 409: Forced labour			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour		All Group contracts require the full acceptance of the Code of Ethics. There are no suppliers or activities with significant risk of forced labour.

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 400: Social			
GRI 410: Security practices			
410-1	Security personnel trained in human rights policies or procedures		No specific training is provided in relation to human rights. Any action in this respect may be included in training on prevention promoting the health of employees and, hence, referring to occupational safety training. The Group also joined the UN's Global Compact (GC) network, undertaking to comply with the 10 human rights, labour, environmental and anti-corruption principles and include them in its business. These principles integrate and reinforce the Group principles already established in the Group's Code of Ethics (which guides the Group in relationships with stakeholders), the 231 Model, the anti-bribery and corruption management system and the *anti-corruption policy guidelines*. 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. On 16 April 2019, the FS SpA's Board of Directors approved the Group's sustainability policy based on the SDGs and the principles of the UN Global Compact.
GRI 411: Rights of indigenous peoples			
411-1	Incidents of violations involving rights of indigenous peoples		There were no violations of the rights of indigenous people. The Group also joined the UN's Global Compact (GC) network, undertaking to comply with the 10 human rights, labour, environmental and anti-corruption principles and include them in its business. These principles integrate and reinforce the Group principles already established in the Group's Code of Ethics (which guides the Group in relationships with stakeholders), the 231 Model, the anti-bribery and corruption management system and the *anti-corruption policy guidelines*. 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. On 16 April 2019, FS SpA's Board of Directors approved the Group's sustainability policy based on the SDGs and the principles of the UN Global Compact.
GRI 412: Human rights assessment			
412-1	Operations that have been subject to human rights reviews or impact assessments		To date, no human rights assessments have been conducted.

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 400: Social			
GRI 412: Human rights assessment			
412-2	Employee training on human rights policies or procedures		No specific training is provided in relation to human rights. The Group also joined the UN's Global Compact (GC) network, undertaking to comply with the 10 human rights, labour, environmental and anti-corruption principles and include them in its business. These principles integrate and reinforce the Group principles already established in the Group's Code of Ethics (which guides the Group in relationships with stakeholders), the 231 Model, the anti-bribery and corruption management system and the *anti-corruption policy guidelines*. 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. On 16 April 2019, the FS SpA's Board of Directors approved the Group's sustainability policy based on the SDGs and the principles of the UN Global Compact.
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening		The FS Italiane Group makes its purchases in accordance with EU Directives, as implemented by the Public Contracts Code, and its own *Guidelines for Negotiations with Group companies*. 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). The standard contractual clauses include requirements that the contractor must comply with: • labour and social security laws, with the application of national labour agreements; • occupational safety and hygiene obligations; • the standards in the Group's "Code of Ethics". To date, no agreements and/or contracts have been formalised with the inclusion of specific human rights clauses or that are subject to the evaluation of the effective implementation of human rights protection policies. The Group joined the UN's Global Compact (GC) network, undertaking to comply with the 10 human rights, labour environmental and anti-corruption principles and include them in its business. On 16 April 2019, the FS SpA's Board of Directors approved the Group's sustainability policy based on the SDGs and the principles of the UN Global Compact.
GRI 413: Local communities			
413-1	Operations with local community engagement, impact assessments, and development programs	• Materiality and stakeholder management • Sustainable infrastructure	

GRI INDICATORS		REFERENCE	COMMENTS/DIRECT ANSWERS
GRI 400: Social			
GRI 413: Local communities			
413-2	Operations with significant actual and potential negative impacts on local communities	• Sustainable infrastructure	
GRI 414: Supplier social assessment			
414-1	New suppliers that were screened using social criteria	• Supply chain sustainability - Sustainable procurement • Annex - Tables of performance indicators	All Group contracts require the full acceptance of the Code of Ethics.
414-2	Negative social impacts in the supply chain and actions taken	• Supply chain sustainability - Sustainable procurement	
GRI 415: Public policy			
415-1	Political contributions		The Group does not provide direct or indirect contributions, in any form, to political parties, movements, committees and political and trade unions organisations or their representatives and candidates, except for those due to specific regulations. Relationships with political parties, movements, committees and political and trade unions organisations are managed exclusively by formally designated company departments (article 5.5 of the FS Group's Code of Ethics).
GRI 416: Customer health and safety			
416-1	Assessment of the health and safety impacts of product and service categories	• 2023 Annual Financial Report - Other information • Sustainable, resilient and integrated infrastructure and transport - Promoting safety	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	• 2023 Annual Financial Report - Other information • Sustainable, resilient and integrated infrastructure and transport - Promoting safety	Incidents of non-compliance relate to the national infrastructure RFI and do not concern other services delivered by the Group. The other information required by the standard is currently not available due to the lack of the necessary data. In this respect, an in-depth analysis is underway to structure a data collection process in the next year.
GRI 418: Customer privacy			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data		In the area of privacy and consumer data loss, 9 cases were assessed as data breaches during 2023.

SASB AND WEF BRIDGING TABLES

The following tables set 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. The tables indicate the GRI standard reference covering the disclosure, where present, or, alternatively, a direct response. Specifically, the following are reported:

- the 15 main metrics required by the SASB (Sustainability Accounting Standards Board) standard in relation to the Rail transportation sector divided into accounting metrics and activity metrics;
- the 14 primary ('core') indicators defined by the World Economic Forum's International Business Council (IBC) in its report, *Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation*, which establish shared common metrics to measure, report and compare levels of sustainability, in other words the effectiveness of one's actions in pursuit of the UN's Sustainable Development Goals (SDGs), in the business model adopted to create value for stakeholders.

Bridging table with main SASB metrics related to the "Rail transportation" sector

TOPIC	CODE	METRIC	REFERENCE
Accounting Metrics			
Greenhouse gas emissions	TR-RA-110a.1	Gross global Scope 1 emissions	GRI 305-1
	TR-RA-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	GRI 2-25, 3-3
	TR-RA-110a.3	Total fuel consumed, percentage renewable	GRI 302-1
Air quality	TR-RA-120a.1	Air emissions of the following pollutants (1) NOx (excluding N2O) and (2) particulate matter (PM10)	GRI 305-7
Employee health and safety	TR-RA-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate and (3) near miss frequency rate (NMFR)	GRI 403-9
Anti-competitive behaviour	TR-RA-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behaviour regulations	GRI 2-27
Accident & safety management	TR-RA-540a.1	Number of accidents and incidents	GRI 416-1, 416-2
	TR-RA-540a.2	Number of hazardous materials' (1) accident releases and hazardous materials' (2) non accidental releases (NARs).	GRI 306-3
	TR-RA-540a.3	Number of Federal Railroad Administration (FRA) Recommended Violation Defects	Not applicable
	TR-RA-540a.4	Frequency of internal railway integrity inspections	GRI 416-1, 416-2
Activity Metrics			
Transport railway - Activity metrics	TR-RA-000.A	Number of carloads transported	Not available: the Group undertakes to report this in the medium to long term
	TR-RA-000.B	Number of intermodal units transported	Not available: the Group undertakes to report this in the medium to long term
	TR-RA-000.C	Track miles	*2023 Sustainability report - Travel*
	TR-RA-000.D	Revenue ton miles (RTM)	2023 Sustainability report - Travel
	TR-RA-000.E	Number of employees	GRI 2-7

Bridging table with metrics from the "Measuring Stakeholder Capitalism" document of the World Economic Forum

TOPIC	CORE METRIC	REFERENCE
Principles of Governance		
Governing purpose	Setting purpose	GRI 2-12
Quality of governing body	Governance body composition	GRI 2-9, 405-1
Stakeholder engagement	Material topics impacting stakeholders	GRI 2-12, 2-29, 3-2
Ethical behaviour	Anti-corruption	GRI 205-2, 205-3
	Protected ethics advice and reporting mechanisms	GRI 2-26
Risk and opportunity oversight	Integrating risk and opportunity into business process	GRI 201-2
Planet		
Climate change	Greenhouse gas (GHG) emissions	GRI 305:1-4
	TCFD implementation	As of May 2021, the Group supports the framework defined by the Task Force on Climate-related Financial Disclosures (TCFD). The Group publishes the GHG Report, inspired by the principles of the TCFD framework.
Nature loss	Land use and ecological sensitivity	GRI 304-1
Freshwater availability	Water consumption and withdrawal in water-stressed areas	GRI 303-3 For all of the Group's infrastructure projects, it defines an analysis of the environmental impact on all main environmental matrices, including, where applicable, assessing water stress.
People		
Dignity and equality	Diversity and inclusion	GRI 405-1
	Pay equality	GRI 405-2
	Wage level	GRI 2-21, 405-2 The Group applies the national labour agreement for the sector in defining the minimum wage. 2023 Annual Financial Report (par. *Report on corporate governance and ownership - Board of Directors of FS SpA - Directors' remuneration*)
	Risk for incidents of child, forced or compulsory labour	GRI 408-1, 409-1
Health and well-being	Health and Safety	GRI 403-9, 403-6
Skills for the future	Training provided	GRI 404-1 The total cost of training days solely for employees amounted to €10.2 million, up 25.7% on 2022 due to the increase in training provided. Funding for training generated revenue of approximately €4.5 million.
Prosperity		
Employment and wealth generation	Absolute number and rate of employment	GRI 401-1
	Economic contribution	GRI 201-1, 201-4
	Financial investment contribution	The parent, Ferrovie dello Stato Italiane, is a company limited by shares. At 31 December 2023, the parent's share capital is entirely held by the sole shareholder Ministry of the Economy and Finance. 2023 – Sustainability Report - *Investments* and NRRP 2023 Annual Financial Report (par. Investments)
Innovation of better products and services	Total R&D expenses	2023 – Sustainability Report - *Investments* and NRRP 2023 Annual Financial Report (par. Research, development and innovation)
Community	Total tax paid	GRI 201-1, 207-4

INDEPENDENT AUDITORS' REPORT

Independent auditor's report

Ferrovie dello Stato Italiane SpA

Sustainability Report as of 31 December 2023

pwc

Independent auditor's report on sustainability reporting

To the Board of Directors of
Ferrovie dello Stato Italiane SpA

We have undertaken a limited assurance engagement on the Sustainability Report of the Ferrovie dello Stato Italiane SpA Group and its subsidiaries (hereinafter also the "Ferrovie dello Stato Italiane Group" or the "Group") for the year ended 31 December 2023.

Responsibilities of the Directors for the Sustainability Report

The directors of Ferrovie dello Stato Italiane SpA are responsible for the preparation of the Sustainability Report in accordance with the "Global Reporting Initiative Sustainability Reporting Standards" issued by GRI - Global Reporting Initiative (the "GRI Standards"), as illustrated in the "Methodology for reporting non-financial information" 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.

The directors are also responsible for defining the sustainability performance targets of the Ferrovie dello Stato Italiane Group, as well as for identifying its stakeholders and material topics to be reported on.

Auditor's Independence and Quality Management

We are independent in accordance with the principles of ethics and independence set out in the Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) 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 firm applies International Standard on Quality Management 1 (ISQM Italia 1), which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

PricewaterhouseCoopers SpA

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Auditor's Responsibilities

Our responsibility is to express a limited assurance conclusion, based on the procedures we have performed, regarding the compliance of the Sustainability Report with the requirements of the GRI Standards. We conducted our work in accordance with "International Standard on Assurance Engagements ISAE 3000 (Revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information" (hereinafter also "ISAE 3000 Revised") issued by the International Auditing and Assurance Standards Board (IAASB) for limited assurance engagements. That standard requires that we plan and perform procedures to obtain limited assurance about whether the Sustainability Report is free from material misstatement. Therefore, the procedures performed were less in extent than those performed in a reasonable assurance engagement conducted in accordance with ISAE 3000 Revised and, consequently, do not provide us with a sufficient level of assurance that we have become aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

The procedures performed on the Sustainability Report were based on our professional judgement and included inquiries, mainly of personnel of Ferrovie dello Stato Italiane SpA responsible for the preparation of the information presented in the Sustainability Report, inspection of documents, recalculations and other procedures designed to obtain evidence considered useful.

In detail, we performed the following procedures:

1) Analysis of the reasons for the existence of both a Non-financial Statement (required under articles 3, 4 and 7 of Legislative Decree No. 254/2016) and a Sustainability Report, and the features distinguishing the two documents;
2) Analysis of the process of definition of the material topics reported on in the Sustainability Report, with reference to the methods applied in the analysis and understanding of the Company's environment, the identification and prioritisation of the actual and potential impacts, and the internal validation of the results of the process;
3) Comparison of the financial information reported in the "Materiality and Stakeholder Management – Creation and distribution of value over time" section of the Sustainability Report with the information included in the Group's annual consolidated financial statements;
4) Understanding of the processes underlying the generation, collection and management of significant qualitative and quantitative information included in the Sustainability Report.

In detail, we held meetings and interviews with the management personnel of Ferrovie dello Stato Italiane SpA and with the personnel of Reti Ferroviarie Italiane SpA, Netinera Deutschland Gmbh, Intermodalidad de Levante SA, Anas SpA, Grandi Stazioni Rail SpA, Trenitalia SpA and we performed limited analyses of documentary evidence, to gather information about the processes and procedures for the collection, aggregation, processing and submission of non-financial information to the function responsible for the preparation of the Sustainability Report.

Moreover, for material information, considering the activities and characteristics of the Group:

- at a parent level:

  a) with reference to the qualitative information presented in the Sustainability Report, we carried out interviews and obtained supporting documentation to verify its consistency with available evidence;
  b) with reference to quantitative information, we performed both analytical procedures and limited tests to verify, on a sample basis, the accuracy of data aggregation.

- for the following entities, Ferrovie dello Stato Italiane SpA, Reti Ferroviarie Italiane SpA, Netinera Deutschland Gmbh, Intermodalidad de Levante SA, Anas SpA, Grandi Stazioni Rail SpA, Trenitalia SpA, which we selected on the basis of their activities, their contribution to performance indicators at a consolidated level and their location, we carried out onsite visits during which we met the persons in charge and obtained documentary evidence, on a sample basis, regarding the correct application of the procedures and calculation methods applied for the indicators.

Limited Assurance Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the Sustainability Report of the Ferrovie dello Stato Italiane Group for the year ended 31 December 2023 is not prepared, in all material respects, in accordance with the requirements of the GRI Standards as illustrated in the "Methodology for reporting non-financial information" section of the Sustainability Report.

Other Matters

Our conclusion above does not extend to the information set out in the paragraph titled "Innovation and Sustainable Finance – European Union Taxonomy" of the Ferrovie dello Stato Italiane Group's Sustainability Report required by article 8 of Regulation (EU) 2020/852.

The Sustainability Report for the year ended 31 December 2022, the information presented in which is used as comparative information in the Sustainability Report, was the subject of a limited assurance engagement by another auditor, who expressed an unqualified conclusion thereon dated 28 April 2023.

Rome, 24 April 2024

PricewaterhouseCoopers SpA

Signed by

Luigi Necci

(Partner)

This report has been translated into English from the Italian original solely for the convenience of international readers

Photography
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Illustrations
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Creative and Editorial Coordination
Communication - Prodotti editoriali

FERROVIE DELLO STATO ITALIANE

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June 2024 edition

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