

# 2016



# SUSTAINABILITY

REPORT

2016



# SUSTAINABILITY BULLETIN REPORT



## FERROVIE DELLO STATO ITALIANE SPA COMPANY OFFICERS

### Board of Directors

<b>Chairwoman</b>	Gioia Maria Ghezzi
<b>CEO and General Manager</b>	Renato Mazzoncini
<b>Directors</b>	Daniela Carosio Giuliano Frosini Simonetta Giordani Federico Lovadina Vanda Ternau

### Board of Statutory Auditors

	In office until 4 July 2016	Appointed on 4 July 2016 <sup>1</sup>
<b>Chairwoman</b>	Alessandra dal Verme	Carmine di Nuzzo
<b>Standing statutory auditors</b>	Roberto Ascoli <sup>2</sup> Claudia Cattani <sup>3</sup>	Susanna Masi Roberto Ascoli <sup>4</sup>
<b>Alternate statutory auditors</b>	Paolo Castaldi <sup>5</sup> Cinzia Simeone	Paolo Castaldi <sup>6</sup> Cinzia Simeone

### COURT OF AUDITORS' MAGISTRATE APPOINTED TO AUDIT FERROVIE DELLO STATO ITALIANE S.p.A.

Angelo Canale

### MANAGER IN CHARGE OF FINANCIAL REPORTING

Roberto Mannozi

### INDEPENDENT AUDITORS

KPMG SpA (2014-2022)

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

<sup>2</sup> Appointed standing statutory auditor in place of Paolo Castaldi on 11 March 2016, when the latter returned to the position of alternate statutory auditor on the same date.

<sup>3</sup> Resigned on 17 May 2016.

<sup>4</sup> Appointed standing statutory auditor on 29 July 2016 in place of Paolo Castaldi.

<sup>5</sup> Standing statutory auditor from 21 December 2015 to 11 March 2016 replacing Tiziano Onesti and from 17 May 2016 replacing Claudia Cattani.

<sup>6</sup> Standing statutory auditor until 28 July 2016 replacing Francesco Notari, who did not accept the position. Reappointed alternate statutory auditor on 29 July 2016.

# CONTENTS

Letter to stakeholders	6	Our people	130
The Group's sustainability in short	10	Highlights	132
Methodology	14	Workforce breakdown	134
The Group's profile	18	Human capital	138
Our history	20	Remuneration and pensions	141
The business model	24	People care	144
The transport segment and the reference market	26	Health and safety	148
Strategy and objectives	32	Trade unions	150
Group sustainability	34	Disputes with employees	152
Our approach to sustainability	37	Respecting and protecting the environment	154
Stakeholders	44	Our approach	157
Management systems	47	Environmental performance	158
Corporate governance	48	Additional information	184
The governance system	50	Methodology	187
The internal control and risk management system	52	Group sustainability	190
Compliance	54	Business sustainability	197
Business sustainability	56	Our role in the community	211
Results of operations	59	Our people	215
Customers	64	Content index	221
Suppliers	112	Independent auditors' report	242
Our role in the community	116	Assessment questionnaire	246
Highlights	118	Attachments: Company information	247
Solidarity initiatives	121		
Social and cultural activities	127		
Media relations	128		

## LETTER TO STAKEHOLDERS

G4-1 G4-2

2016 marked a turning point for Ferrovie dello Stato Italiane Group as the parent presented its new 2017-2026 business plan on 28 September, announcing highly innovative projects that will tangibly improve the lives of Italians (and not only those who take the train) over the next ten years. The Group is expanding its strategic horizons beyond railway transport to operate in public transport in general. The data in the 2016 Sustainability report demonstrate that it has laid

icantly to €2.3 billion (+€318 million), with a gross operating profit margin of 25.7%. The operating profit rose from €644 million in 2015 to €892 million in 2016, up €248 million (+38.5%) while the operating profit margin increased 10%. The operating profit was impacted by amortisation and depreciation, which, in line with forecasts, increased €78 million, with investments up to nearly €6 billion in 2016 (+8.2% on 2015). These results put the Group

as another 23 new trains were delivered in the year (for a total of 41 at the end of 2016), operating alongside the ETR 500 trains, adding new connections on the main line (94 *Frecciarossa* connections between Rome and Milan), on routes to and from Venice and the launch of the *Frecciarossa* service between Milan and Taranto. The high-speed/high-capacity (HS/HC) Milan-Treviglio - Brescia line that connects Milan to Brescia in just 36 minutes was opened in the

year. The HS line also boasts connections with Siena, Perugia, L'Aquila, Matera and Potenza thanks to the new integrated *Freccce+bus Freccialink* service bringing passengers to the closest HS stations.

The regional transport fleet was updated with the roll-out of 23 new *Jazz* trains, six *Swing* trains, 133 *Vivalto* carriages and three *Flirt* trains, entailing an investment of €455 million. Regional train passengers reported customer satisfaction of 81.2% in January 2017, with an improvement in all indicators (punctuality, information, cleanliness, comfort and safety) compared to the same period one year earlier, with constant customer satisfaction rates in the months that followed. In



the groundwork to become a leading integrated mobility player, both in Italy and abroad, providing a key contribution to the country's economic growth.

In 2016, the Group reported a record-breaking profit of €772 million (+66.4%) and a gross operating profit of €2.3 billion (+16.1%).

Group revenue rose by a total of €343 million to €8.93 billion (+4%) and included proceeds on the sale of assets in 2016, e.g., the transfer of a portion of the non-core commercial space management business through the sale of Grandi Stazioni Retail.

The Group's gross operating profit grew signif-

icantly above European railway companies in the ranking by profitability, with higher gross operating profit margin and operating profit margin than France's SNCF (gross operating profit margin of 12.8%; operating profit margin of 6.6%) and Germany's Deutsche Bahn (gross operating profit margin of 10.3%; operating profit margin of 3.4%).

Revenue from transport services rose to €6.38 billion (with total growth in industrial margins - broken down by the various business segments: short and long haul up €29 million on 2015). Operating costs are in line with 2015 (+0.4%). *Frecciarossa* 1000 routes expanded in 2016,



December 2016, customer satisfaction was up 3.5% year-on-year.

The profit for the year of the Group's transport segment came to €164 million. The leading company in this business segment is Trenitalia, with the Group companies Mercitalia and Busitalia operating in the cargo and road transport businesses, respectively, and Netinera Deutschland operating in the German transport segment.

The infrastructure segment also performed exceedingly well (profit for the year of €174 million). Rete Ferroviaria Italiana ("RFI") is the Group's top company in this segment, followed by Italferr for engineering. Revenue from sales

and services grew in the year (+5% approximately) as RFI saw a spike in demand for track volumes from railway companies (operating train km +2.7%, with a 12.8% increase in the HS/HC network) and a rise in the average unit toll charge (due to a different mix of track sold).

Economic value distributed, i.e., the economic value generated mainly through the purchase of goods and services and the remuneration of personnel, amounted to €6.83 billion (equal to 76% of the economic value generated) is a significant driver for the country's economic development.

The total number of employees went from 69,002 to 70,180, partly due to new hires and corporate acquisitions, with the acquisition of Ferrovie Sud Est bringing in 1,200 new employees.

With investments of €5.95 billion, FS Italiane remains the country's largest industrial investor. It shows a constant growth curve (+8.2%) despite the already significant investment volumes of 2015 (€5.5 billion). Investments are in line with the ambitious objectives of the 2017-2026 business plan and focus on new business opportunities on the market at home and abroad.

Together, the 2016 targets are aimed at increasing business performance, not only in terms of results, but also with respect to train traffic safety and customer satisfaction, in a macroeconomic context focused on confirming positive domestic growth trends.

The results of the customer satisfaction surveys show a general consolidation of the percentages registered in 2015, with satisfaction ranging from 89% to 99%.

Satisfaction with modal integration rose considerably, with the satisfaction rate with connections to stations with public urban/suburban transit reaching 89.9% (+1.2 percentage points on 2015). At the same, train traffic safety trends showed an ongoing improvement in the rate of accidents (86 accidents in 2016 compared to 98 in 2015 and 109 in 2014) and some of the best performances since 2006, underscoring the Group's commitment to ensuring the highest level of safety for its customers, employees and the entire community.

In 2016, FS Italiane established a Sustainability Committee, an advisory board made up of senior

managers from the main Group companies, formed to integrate social and environmental aspects into economic-financial strategies, promote the values and principles of sustainable development and meet stakeholders' needs and expectations.

The Group has matured further with respect to sustainability: in 2016, it began a new process that will transform the current corporate governance model applied to environmental management systems (EMS) into a business model that balances the economic, social and environmental aspects of the Group's activities.

In partnership with Legambiente, the Group held the 28th annual edition of the Green Train event. The four main themes of 2016 were smart cities, eco-neighbourhoods, new mobility and sustainable lifestyles. The event attracted over 35,000 visitors, including students and residents.

In terms of social sustainability, in 2016 additional Help Centers were opened in Brescia - inaugurated in 2016 - and in Trieste - with the definitive opening in the year after the trial phase began in December 2015.

There are currently Help Centers located in 17 railway stations, extending from northern to southern Italy.

The total surface area granted under free loan agreements for social activities in 2016 measures 23,821 m<sup>2</sup>, with a total estimated value of €35,731,500.

A solidarity campaign named "#aBracciaAperite" was organised in 2016, with 130 volunteers from Ferrovie dello Stato Italiane Group and the collaboration of Save the Children to support day shelters for migrant minors who arrive in Italy without an adult caregiver and who are particularly vulnerable and often exposed to the risk of abuse, violence, child labour or sexual exploitation.

In 2016, together with leading associations in the field, the Group developed initiatives to support current social issues like protecting children's health, tackling the risk of school drop-outs and promoting and protecting women's health.

The 2016 Sustainability Report is evidence of how all Ferrovie dello Stato Italiane Group companies have come together in one, joint effort

to give the country a solid industrial company capable of offering Italians increasingly efficient, safe and sustainable services while, at the same

time, proudly transforming the challenges of international markets into opportunities.

*The Chairwoman*

Gioia Maria Ghezzi

*The CEO*

Renato Mazzoncini



# THE GROUP'S SUSTAINABILITY IN SHORT

G4-2 G4-9

## Business sustainability

### RESULTS OF OPERATIONS

Profit for the year	€ million	772
Gross operating profit/revenue		25.7%
ROS (operating profit/revenue)		10.0%
Investments	€ million	5,950

### PASSENGER AND CARGO TRAFFIC

<b>Rail traffic - passengers</b>		
passenger-km	billion	43.9
train-km	million	291.4
<b>Rail traffic - cargo</b>		
Tonne-km	billion	22.5
train-km	million	44.1
<b>Road traffic - passengers</b>		
passengers-km	billion	2.1
bus-km	million	102.6

### OUR CUSTOMERS

#### Service quality - Punctuality

Long haul transport	0-15 minutes	93.7%
<i>Frecce</i>	0-15 minutes	94.2%

#### Customer satisfaction

Railway transport (time on board the train)		
National and international transport	Satisfaction rate	91.9%
Regional transport	Satisfaction rate	80.0%

#### Road transport (overall satisfaction rate)

<b>Veneto</b>		
- Suburban transport	Satisfaction rate	86.3%
- Urban transport	Satisfaction rate	85.7%

#### Tuscany

- Suburban transport	Satisfaction rate	85.6%
- Urban transport	Satisfaction rate	84.2%

#### Umbria

- Suburban transport	Satisfaction rate	89.4%
- Urban transport	Satisfaction rate	95.0%

#### Cargo transport (overall satisfaction rate)

Cargo transport (overall satisfaction rate)	Satisfaction rate	61.4%
---	-------------------	-------

#### Comfort during time at stations

Comfort during time at stations	Satisfaction rate	95.7%
---------------------------------	-------------------	-------

#### Travel safety - Investments in maintenance

Routine	€ million	891
Non-routine	€ million	1,097

### OUR SUPPLIERS

Economic value of core supplies	€ billion	3.5
---------------------------------	-----------	-----

## Environmental respect and protection

### ENVIRONMENTAL PERFORMANCE

Energy - Total primary energy consumption	GJ million	40.4
Emissions - Total greenhouse gas emissions	tCO <sub>2</sub> million	2.22
Companies ISO14001-certified	No.	13

## Group sustainability

### STAKEHOLDERS

Proposals approved by the Stakeholder Panel (since 2013)	No.	85
Implemented proposals	No.	42
Rejected proposals	No.	9
Proposals under evaluation/implementation	No.	34



## Our people

### WORKFORCE

Total personnel	No.	70,180
% women	%	14.6
% men	%	85.4
Training	man/days	355,322

## Our role in the community

### RE-USE OF ASSETS

Total surface area under free loan for use	square metres	115,415
Average market value	€ million	127

### FONDAZIONE FS

Museo Nazionale Ferroviario di Pietrarsa	No. of visitors	66,000
Organised leisure journeys on heritage trains	No. of passengers	60,000

## METHODOLOGY

G4-2 G4-3 G4-13 G4-18 G4-19 G4-20 G4-21 G4-22 G4-23 G4-29 G4-32 G4-33

The information in the 2016 Sustainability Report is compared with the previous two years<sup>1</sup>. Any differences with respect to the information published in previous Sustainability Reports are due to the fine-tuning of the reporting methods<sup>2</sup>. Since 2011, an IT solution (SuPM – Sustainability Performance Management) has been adopted for the data collection process. At present, it comprises 17 Group operating companies.

The Group companies, whose activities are covered in this report, were identified on the basis of the following criteria:

- / materiality: relevance of the mutual impacts (economic, social and environmental) between each company and its main stakeholders;
- / control: the Group's ability to influence activities.

The scope of analysis resulting from the application of the materiality and control criteria are defined on the basis of the scope considered, as follows:

- / Company identity and compliance: Ferrovie dello Stato Italiane and the subsidiaries, as per the consolidated financial statements;
- / Governance: Ferrovie dello Stato Italiane;
- / Economic figures: Ferrovie dello Stato Italiane and the subsidiaries, as per the consolidated financial statements;
- / Customer and safety figures: Ferrovie dello Stato Italiane, RFI, Trenitalia, Busitalia-Sita Nord and subsidiaries;
- / Workforce figures<sup>3</sup>: Ferrovie dello Stato Itali-

ane and the subsidiaries, as per the consolidated financial statements; the information about the breakdowns required by the G4 (e.g., turnover, personnel allocation, remuneration, training, etc.) generally refers to a scope that accounts for approximately 86% of the Group's total workforce<sup>4</sup>;

- / Environmental figures: Ferrovie dello Stato Italiane, Ferservizi, RFI, Terminali Italia, Blufferries, Italferr<sup>5</sup>, Trenitalia, Serfer, TX Logistik, Grandi Stazioni Rail, Centostazioni, FS Sistemi Urbani, Netinera Group, FS Logistica, Busitalia-Sita Nord, Ataf Gestioni<sup>6</sup> and Busitalia Veneto; this scope includes the parent, the companies under its direct control (excluding those that perform financial activities and railway transport certification/inspection activities) and the companies that the parent controls indirectly through its subsidiaries and that have more than 100 employees.

This report has been prepared in accordance with the "G4 Sustainability Reporting Guidance" guidelines issued by the Global Reporting Initiative (GRI)<sup>7</sup> in 2013, using the comprehensive reporting option in order to reflect the most recent developments in sustainability reporting. The main purpose of the report is to inform stakeholders about the progress made in terms of economic, environmental and social sustainability using a triple bottom line format. The department heads have provided the data and information published herein except where they have been

<sup>1</sup> The Sustainability Report is published annually. The 2015 report was published in August 2016.

<sup>2</sup> 2015 data on energy consumption and the related atmospheric emissions have slightly changed with respect to the data published in the 2015 report, mainly due to the fine-tuning of the Netinera Group companies' monitoring process for environmental aspects.

<sup>3</sup> The figures in the chapter on "Our people" refer to the reporting scope in the reporting year.

<sup>4</sup> The scope includes Ferrovie dello Stato Italiane, RFI, Trenitalia, Ferservizi, Italferr, FS Logistica, FS Jit, FS Sistemi Urbani, Terminali Italia and CEMAT. Where specific information refers to a slightly different scope, this is noted in the relevant paragraph.

<sup>5</sup> In the reporting, the environmental impacts of Italferr's sites were separated from the environmental impacts of other Group activities: this choice was made on the basis of an analysis of environmental data for sites which showed how the trends are immaterial for the purposes of assessing the environmental efficiency of sites. Indeed, the trends reflect the environmental performance of the sites, which, given their nature, do not present continuous or regular volumes.

<sup>6</sup> In this report, parent means Ferrovie dello Stato Italiane (FS S.p.A.).

<sup>7</sup> Global Reporting Initiative (GRI): an independent institution that develops and promotes guidelines for the preparation of sustainability reports. The guidelines are followed on a voluntary basis.



taken from other official sources<sup>8</sup>. The Board of Directors of Ferrovie dello Stato Italiane S.p.A. examined the 2016 Sustainability Report during its meeting on 26 June 2017.

The report covers the economic, social and environmental activities deemed to be the most significant for the Group and its stakeholders, as described in the following paragraph. Further details are provided in the *Additional information* section attached to this report and in the "Content index". Furthermore, the key environmental information for each company included in the reporting scope is provided in an attachment.

<sup>8</sup> For additional details, in certain cases, reference should be made to the Group's 2016 Annual Report.

The Group is committed to helping achieve the Sustainable Development Goals (SDGs) presented by the United Nations Organisations on 25 September 2015. The symbols of the goals we intend to achieve are shown at the beginning of each chapter.

The information provided in the general disclosure section<sup>9</sup> is not subject to the materiality analysis and is reported in full.

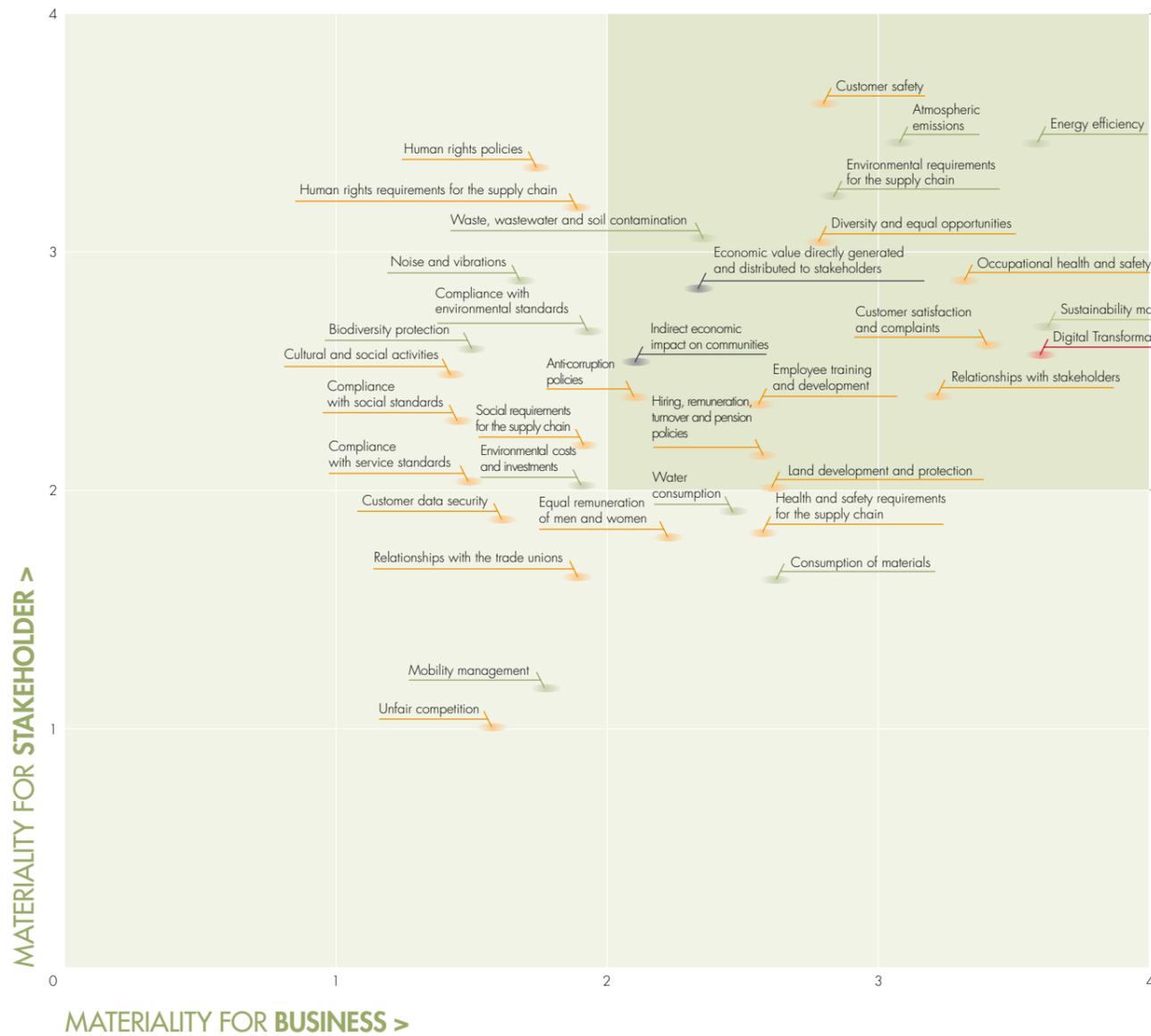
See the *Additional information* section for more details.

<sup>9</sup> Section of the GRI-G4 which includes: The Group's profile, Corporate Governance, Strategy and analysis and Stakeholder engagement.

### Materiality matrix

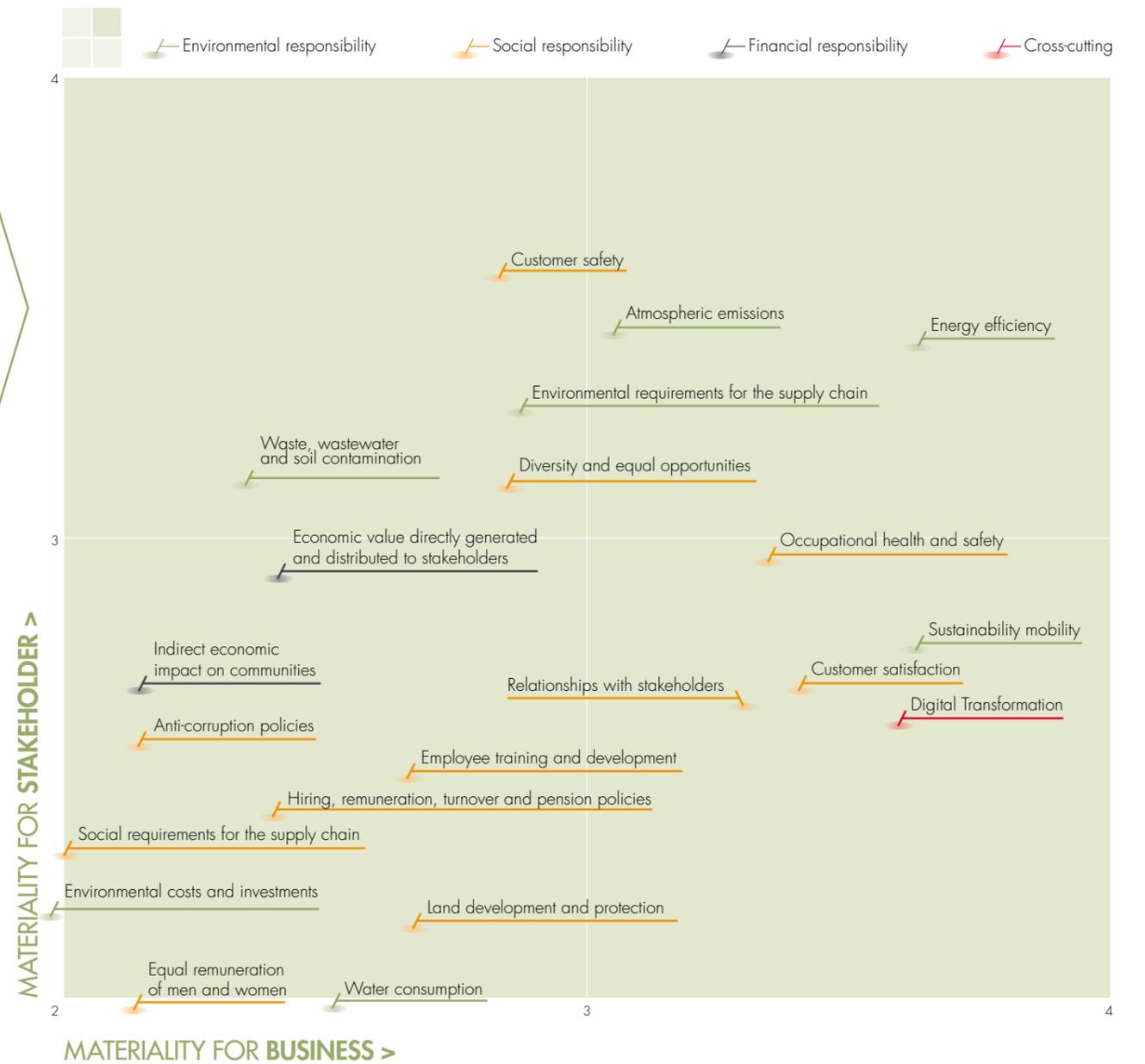
In order to comply with the materiality principle of the GRI-G4 guidelines, the most significant issues for the Group and its stakeholders were identified, i.e., those aspects that could have significant economic, social and environmental impacts on the Group and those that are deemed

particularly important for the stakeholders as they could influence their expectations and decisions. This is reflected in the matrix below where the horizontal axis shows the importance that the Group attaches to the aspects analysed in terms of business success and the vertical axis indicates the importance placed by stakeholders on the selected aspects.



The upper right corner shows the most significant aspects covered by this report (key information is also provided for the other aspects which are however deemed important for the Group).

The aspects covered by this report are shown below. See the *Additional information* section for more details.



# 01

## THE GROUP'S PROFILE



A look back at the past,  
the present and the future  
of FS Italiane Group



1905

ESTABLISHMENT

Azienda Unitaria delle Ferrovie dello Stato is established on 1 July 1905, based on the unification of stations and a consistent style of carriages. The railway system is designed and built in accordance with one, unified national criterion.



1927

THE FIRST DIRECT LINE

Together with the Naples Mergellina station, the Rome-Naples express line is inaugurated. It is the first line of its kind, designed for high speed trains.



1936

THE FIRST ITALIAN ELECTRIC TRAIN

The first Italian electric train is built: the ETR 200, paving the way for high speed transport.



1953

THE LEGENDARY SETTEBELLO

The ETR 300 arrives on the Rome-Milan line, and is immediately renamed the Settebello, after its seven carriages. Its innovative shape is emblematic of the Reconstruction period and Italian design.



1976

BIRTH OF PENDOLINO

The first electric tilting train is built: the ETR 401, more commonly known as the Pendolino. Designed by Ferrovie dello Stato and Fiat Ferroviaria to reach speeds of up to 250 km/h, the Pendolino is a milestone in the path towards Italy's HS rails.



1989

THE FIRST RECORD

On the Rome-Florence express line, the ETR X 500 reaches 317 km/h, setting Ferrovie dello Stato's first official record. The ETR Y 500 breaks the record soon after when it hits 321 km/h.



1992

LEADING PLAYER IN THE WORLD OF FINANCE

Ferrovie dello Stato becomes a company limited by shares.



OUR HISTORY



NEW BUSINESS SEGMENTS

The company is divided into business segments, which will lead to the creation of Ferrovie dello Stato Group in the new millennium.

1999



HS WORLD REFERENCE

The new HS Rome-Naples line is completed and is the first to adopt the innovative ERTMS/ETCS. Engineers arrive from around the world, including Japan, the US, Russia and China, to study the Italian system, which boasts safe, quiet railway transport at 300 km/h.

2005



THE BRIDGE OVER THE PO RIVER

Ferrovie dello Stato Group opens the HS line connecting Milan and Bologna. The works include an extraordinary suspension bridge over the Po River. Trains running on the new line set another record for Italian speed: 362 km/h.

2008



COMPLETION OF THE HS LINE

The Bologna-Florence line, almost entirely in tunnels, and the Novara-Milan line are opened. The HS line from Turin to Salerno is completed. These lines add 1,000 km of HS rail to the country, changing Italians' way of life and how they get around.

2009



ON THE PODIUM ALSO IN GERMANY

FS Italiane acquires Arriva Deutschland Group, now known as Netinera, the third largest passenger transport service provider in Germany.

2011



A NEW HIGH SPEED RECORD

Frecciarossa 1000 sets a new high speed record: 390.7 km/h.

2015



PILLARS OF THE FUTURE

Ferrovie dello Stato Italiane S.p.A.'s board of directors approves FS Italiane Group's 2017-2026 business plan featuring five strategic pillars to make the Group a major international integrated mobility player.

2016

## Fondazione FS Italiane

The Fondazione FS Italiane was established in March 2013 to enhance and preserve the historical and technical heritage, a symbol of the industrial development process which contributed to reinforcing and developing Italy. It is supported by Ferrovie dello Stato Italiane, Rete Ferroviaria Italiana ("RFI") and Trenitalia. Since December 2015, the Ministry of Cultural Heritage and Activities and Tourism ("MiBACT") has been an institutional member of Fondazione FS. It is mainly active in the following fields:

- / railway tourism: management and enhancement of historic trains and related sites;
- / National Railway Museum and convention centre in Napoli Pietrarsa: management of the museum and library;
- / Archives, audio-visual centre and library: library, archive and audio-visual management.

For additional information, reference should be made to the website <http://www.fondazionefs.it>.

A summary of Fondazione FS's highlights in figures is given below.



### HISTORIC TRAINS

**343** historic trains, of which 288 are still operating and another 65 are leased from Trenitalia



### JOURNEYS ON HISTORIC TRAINS ORGANISED IN 2016

**230** events on over 520 trains  
**60,000** passengers (+34% on 2015)  
**7** lines were reopened for tourism as part of the "Binari senza tempo" (timeless rails) project, with 264 journeys and more than 33,000 passengers



### LIBRARY

**50,000** volumes



### ARCHIVES

**12,000** plans and blueprints of the network and the stations  
**7,000** architectural drawings of stations and railway buildings  
**7,000** rolls of technical drawings of historic locomotives and rolling stock  
**10,000** photographs of trains, traction vehicles, carriages and wagons



### AUDIO-VISUAL MATERIAL

**500,000** black and white and colour film and digital photographs  
**5,000** video cassettes  
**3,000** films



### DEPOTS FOR ROLLING STOCK AND RELATED ASSOCIATIONS

**11** hubs throughout Italy  
**13** related associations



### NATIONAL RAILWAY MUSEUM OF PIETRARSA

**36,000** m<sup>2</sup> (14,000 m<sup>2</sup> of which indoors)  
**55** historic trains on display  
**66,000** visitors (+3.5% on 2015)  
**4,000** seats (in all museum facilities), including 1,000 indoor seats in the great hall of steam locomotives for events and conventions, making it the Campania region's largest convention centre  
**11** major events, including a conference on sustainable tourism organised by MiBACT, the "Pietrarsa Express" on a historic train from Naples to the museum, Open House, the Trenitalia convention, the débutantes' ball and Hera Wedding fashion shows  
**1** Trecentotreni model (18x2m)

# THE BUSINESS MODEL

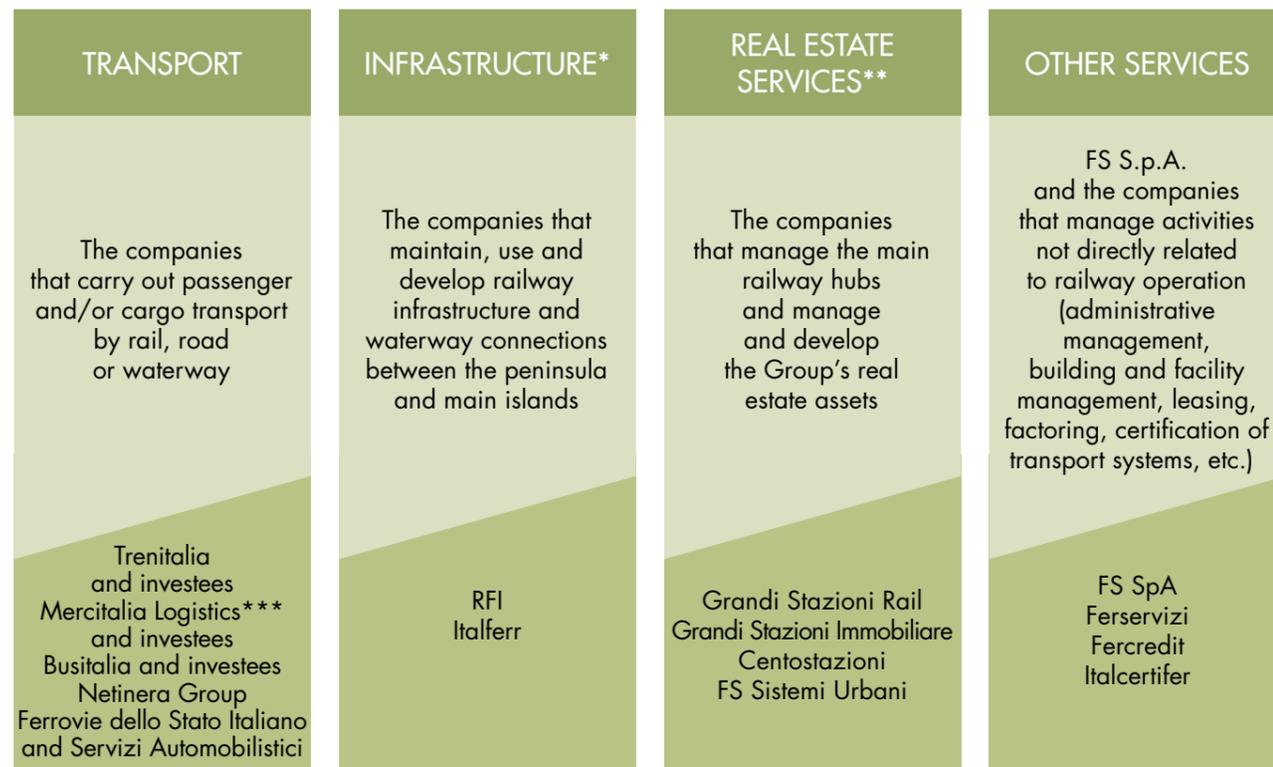
G4-4 G4-7 G4-9 G4-13 G4-17 G4-20 G4-21

The Group's current organisational structure derives from a spin-off process (launched in 2000) which led to the current multi-company structure headed by a parent, FS S.p.A., whose business purpose is to:

- build and manage railway transport infrastructures;
- carry out cargo and passenger transport activities, mainly by rail, including the promotion, implementation and management of initiatives and services in the transport sector;
- directly or indirectly carry out any other activity that is instrumental, complementary or connect-

ed to the above, expressly including customer services and activities aimed at enhancing the value of its assets used in the performance of the activities covered by its by-laws.

As expressly required by the by-laws, activities are mainly, though not exclusively, carried out through subsidiaries and associates. Ferrovie dello Stato Italiane Group is organised into four operating segments: Transport, Infrastructure, Real Estate Services and Other Services. The companies operating in the segments report to the parent.



(\*) The Infrastructure segment includes Brenner Basis Tunnel (BBT), Tunnel Ferroviario del Brennero (TFB) and Tunnel Euralpin Lyon Turin (TELT), whose core business is the construction of tunnels linking Italy-Austria and Italy-France, in addition to Ferrovie del Sud Est and Servizi Automobilistici S.r.l.  
 (\*\*\*) On 13 December 2016, the shareholders of FS Logistica S.p.A., SGT S.p.A. and FS JIT S.p.A. resolved to change their names to Mercitalia Logistics S.p.A., Mercitalia Terminal S.p.A. and Mercitalia Transport & Services S.r.l., respectively as part of the Mercitalia Hub project and effective from 1 January 2017.

The parent heads the operating companies in the various operating segments along the chain and other companies that provide services and support for the Group's operations. The companies have their own corporate characteristics and independently manage operations to achieve business targets.



(\*) The cargo business unit was merged into the Mercitalia Hub in January 2017.

In 2016, there were no significant changes in FS S.p.A.'s size, structure or ownership structure (the latter consisting of ownership of FS S.p.A. shares and the amount of subscribed capital). Non-recurring transactions involving the Group's main companies are described in the Group's 2016 Annual Report (Ferrovie dello Stato Italiane Group's consolidated financial statements at 31 December 2016, Notes to the consolidated financial statements).

<sup>1</sup> Ferrovie dello Stato Italiane' shareholders map as of June 2017. Ferrovie del Sud Est and Servizi Automobilistici company become part of the FS Italiane Group at the end of 2016.

# THE TRANSPORT SEGMENT AND THE REFERENCE MARKET

G4-4 G4-6 G4-8 G4-17

Ferrovie dello Stato Italiane Group carries out and manages works and services in passenger and cargo railway transport and road transport for its customers. It is mainly active in Italy, although its presence in foreign markets has increased over the past few years.

The new 2017-2026 business plan covers a ten-year period, sufficiently long to consider the large infrastructural projects that have been planned and the Group's development, as it stands to become an increasingly important driver for integrated, global mobility.

FS Italiane acts as the gateway to the mobility ecosystem, with a view to integration and competition, bringing together all the transport players and modes. This is, moreover, a necessary transformation, made possible by the railway system's centrality and the Group's long-standing experience and unique know-how.

## Domestic market

RFI is the national railway infrastructure operator<sup>1</sup>. Specifically, it ensures the construction, management and maintenance of the railway infrastructure (lines, plants and stations), including the safe operation of traffic, control-command and signalling.

RFI operates with an open approach to the domestic and foreign markets and upholds the principles of free competition, ensuring fair network access conditions. Furthermore, it leases advertising spaces at stations and in the immediately adjacent areas, along the railway lines and bridges. Grandi Stazioni and Centostazioni handle commercial real estate management for the

14 largest and busiest network stations and 103 large and medium/large city stations.<sup>2</sup> RFI's main activities include:

- / maintenance and operation of the infrastructure;
- / offering the railway companies' trains access to the network;
- / technological and infrastructural upgrades to the network and high speed/high capacity investments;
- / development and application of technologies and systems for infrastructure growth.

## THE NETWORK IN FIGURES\*

<b>Operational railway lines</b>	<b>16,788 km</b>
<b>Types</b>	
Double-track lines	7,647 km
Single-track lines	9,141 km
<b>Power</b>	
Electrical lines	12,023 km
Non-electrical lines	4,765 km
<b>Total track length</b>	<b>24,435 km</b>
Traditional line	23,085 km
HS line	1,350 km
<b>Railway plant</b>	
Stations with active/potential passenger service	2,195
Ferrying facilities	3
<b>Total production volumes in 2016</b>	<b>350 million (train-km)</b>

(\* ) Data updated to 31 December 2016.  
 (\*\* ) Referring to sections equipped with ERTMS (European Rail Traffic Management System) and the related connections to other service locations.

<sup>1</sup> In accordance with the responsibilities assigned to RFI by railway sector regulations, starting from the Concession act (see Ministerial decree no. 138T of 31 October 2000 and legislative decree no. 112 of 15 July 2015, implementing directive 2012/34/EU of the European Parliament and Council of 21 November 2012 in Italy - known as the "re-cast directive").

<sup>2</sup> In July 2016, commercial space management and media & advertising activities were transferred to Grandi Stazioni Retail through a demerger and Grandi Stazioni Retail was sold to a third party.



## GRANDI STAZIONI NETWORK



**Trenitalia**, the main Italian company managing passenger and cargo railway transport, operates through the following divisions:

- / **Long Haul Passenger Division**, offering long haul railway transport services for passengers, including on sections of corridors forming the European network;
- / **Regional Passenger Division**, which provides metropolitan, regional and inter-regional railway mobility services under the service contracts that it agreed with the regions and the autonomous provinces;
- / **Cargo Division**, which designs, produces, manages, sells and develops railway transport services for cargo (the cargo business unit was transferred to the Mercitalia Hub in January 2016).

**Mercitalia Hub** is the Group's new cargo and logistics hub. Set up in 2016, the hub began

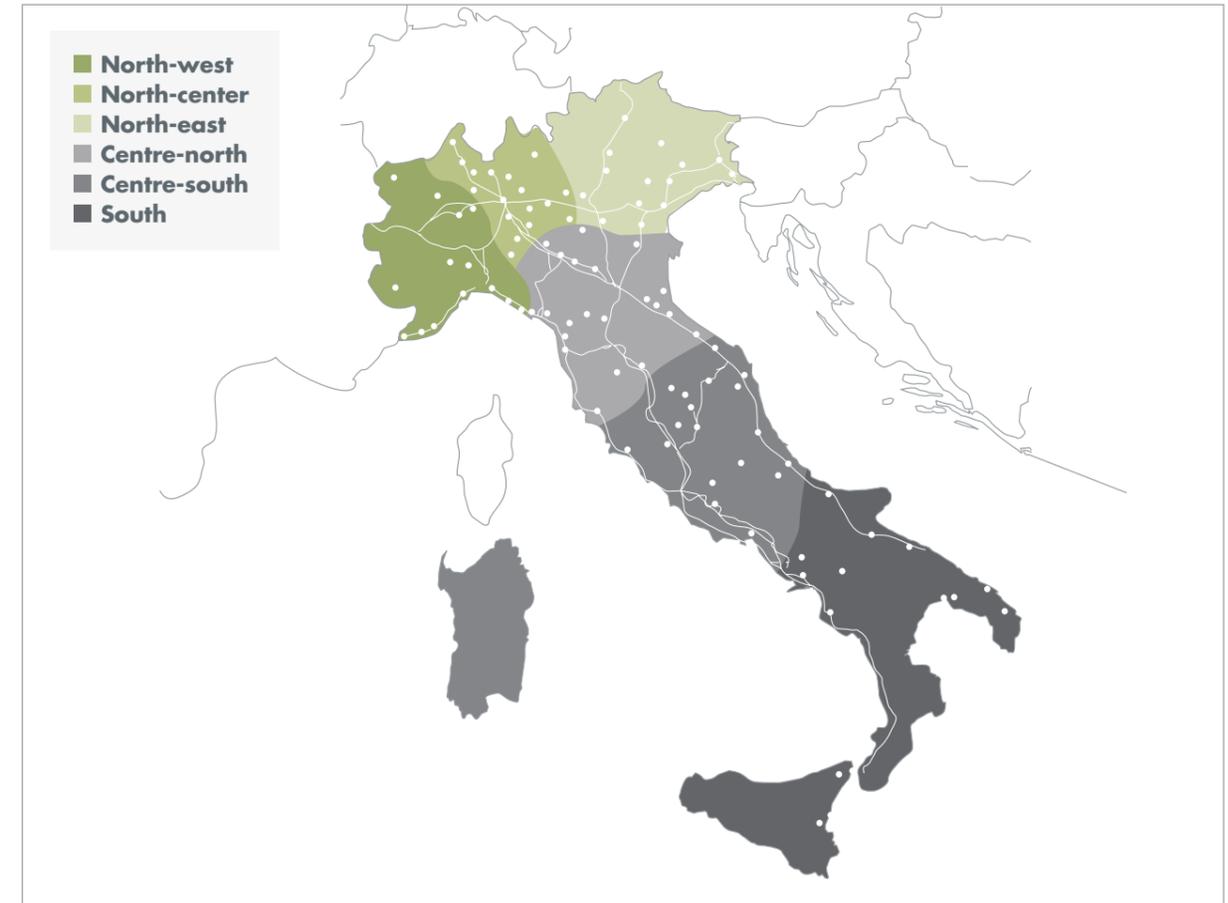
operating in January 2017 and is managed by Mercitalia Logistics (formerly FS Logistica), which also operates via Mercitalia Rail, the company established through the demerger of Trenitalia's Cargo Division<sup>3</sup>. The aim is to streamline all the Group's cargo activities and the hub oversees the design, production, management, sales and development of cargo transport services in a highly deregulated market in which many different railway transport companies compete. The hub's goals are to boost intermodality, expand in high added-value segments and become a one-stop source for customers.

**Busitalia - Sita Nord** is the Group's local public road transport company. In this segment, either directly or through its subsidiaries, it offers urban and suburban connections in Veneto (through Busitalia Veneto), Tuscany (including through Ataf Gestioni) and Umbria. Furthermore, through

transport and/or logistics segments, including TX Logistik AG and Trenitalia Logistics France.

<sup>3</sup> The demerged business unit includes the equity investments that Trenitalia already held in companies operating in cargo

## CENTOSTAZIONI NETWORK



its subsidiary, Busitalia Rail Service, it provides railway line replacement services throughout Italy on Trenitalia's behalf.

**FS Sistemi Urbani** is responsible for developing the Group's assets which are not functional to railway operations and for providing integrated urban services with a business-oriented approach, as well as streamlining and improving the functioning and service offered to the public. Specifically, it studies, promotes, implements and manages projects to develop and enhance real estate assets and develops projects that strengthen services that are important in terms of their economic and social impact. The subsidiary Metropark provides park-and-ride solutions through the management of 75 car parks near major railway stations.

## International market

Ferrovie dello Stato Italiane Group is increasing-

ly committed to expanding its transport business abroad. The main services offered abroad are engineering, passenger transport and cargo logistics.

**RFI's** commitment on foreign markets, in partnership with infrastructure managers in other countries in activities sponsored by the European Union, mainly consists in the development of a European integrated railway area, strengthening its network along the main traffic corridors included in TEN-T (Trans European Stations-Transport) networks connecting to Italy's and Europe's air, port and interport hubs. Specifically, in Italy, it promotes railway investments and works to ensure the upgrading, efficiency, extension and interoperability of the four core corridors of the TEN-T related to Italy<sup>4</sup>. Moreover, in collaboration with the infrastructure managers of neighbouring

<sup>4</sup> Corridors: Baltic – Adriatic, Scandinavian – Mediterranean, Rhine – Alps and Mediterranean.

countries, it carries out projects and works for the cross-border sections of the Mediterranean corridor and the Scandinavian-Mediterranean corridor<sup>5</sup> and participates in the governance and management and operational activities of the four rail cargo corridors related to Italy<sup>6</sup>.

RFI actively collaborates with other infrastructure operators internationally as a member of the both the International Union of Railways (UIC)'s Infrastructure Forum and RailNetEurope (RNE). It also participates in European studies and projects funded by framework programmes for research and development.

In the field of passenger transport, **Trenitalia** connects major Italian cities to Austria, France, Germany and Switzerland with its international *Eurocity* and *Euronight* trains. Specifically, in France, it expanded its range of connections with several destinations of the French Riviera through the subsidiary Thello<sup>7</sup>.

The **Netinera Group** operates in rail and road transport on the German local public service market, and also offers a few transborder services between Germany and the Czech Republic and Poland, in addition to cargo services.

In 2016, in the cargo transport and logistics sector, Trenitalia operated in all major European countries, mainly through TX Logistik<sup>8</sup>, a subsidiary and key partner in the North-South traffic

route, which provides transport services in Austria, Denmark, Germany, Norway, the Netherlands, Sweden, Switzerland and Italy. Furthermore, Trenitalia recently obtained the safety certification in France and Austria necessary to offer its services directly or in partnership with other companies. Specifically, in Austria, the aim is to increase its presence in the Eastern route to operate in a crucial hub on the way to Poland, Russia and South-Eastern European countries such as Hungary, Romania, Bulgaria and Turkey. Trenitalia also entered the UK market in the first few months of 2017 when it acquired NXET through its subsidiary Trenitalia UK Limited<sup>9</sup>.

Until June 2016, **Grandi Stazioni**<sup>10</sup> managed contracts to redevelop and manage two railway stations in the Czech Republic (Praga Centrale and Mariánské Lázně) through Grandi Stazioni Česká Republika s.r.o. (Czech company, 51% owned by Grandi Stazioni).

**Italferr** handles the design, management and oversight of works, tenders and project management for large infrastructural investments in several countries around the world (Europe, Middle East, Africa, Turkey, Iran, Asia, India and the Americas). For additional information about the projects carried out, please visit <http://www.italferr.it/ifer/Progetti-e-Studi#>.

<sup>5</sup> The Turin-Lyon section between Italy and France, the Brenner Tunnel between Fortezza and Innsbruck and the Trieste-Divaca between Italy and Slovenia.

<sup>6</sup> Similar to TEN-T corridors, cargo corridors are defined, together with the measures ensuring interoperability and commercial development, by European regulation 913/2010.

<sup>7</sup> In September 2016, Trenitalia acquired full ownership of Thello SAS.

<sup>8</sup> In 2017, it was transferred to Mercitalia Logistics as part of the Mercitalia Hub project.

<sup>9</sup> Trenitalia UK Limited was set up in October 2016 and is wholly owned by Trenitalia.

<sup>10</sup> Since July 2016, when the Grandi Stazioni demerger took place, the equity investment in the Czech company was sold to third parties, along with Grandi Stazioni Retail.



# STRATEGY AND OBJECTIVES

G4-1 G4-2

The 2017-2026 business plan lays down the strategic objectives that will accompany FS Italiane Group in its transformation from a prevalent railway operator to an integrated mobility operator, radically updating logistics activities and taking the necessary leap forward by strengthening and integrating all transport infrastructures. This transformation is based on, *inter alia*, the strong drive towards digitalisation, which will be a determinant factor in speeding up the pace of our march into the future.

The new business plan is developed on the basis of five strategic pillars.

## Integrated passenger mobility

FS Italiane aims to meet the many different mobility needs with a single, tangible, simple response, offering a one-stop mass transport solution. Its goal is to accompany passengers from their front door to their final destination. In the current mobility market, 80% of people get around in their own vehicles, 15% use other public and shared modes of transport (LPT companies in large cities, in particular) and only 5.2% use railway services. FS Italiane will play a key role in restoring the modal balance with mass transport solutions that integrate road and rail, acting as a leading driver in this modal shift as its market share expands from 6% in 2015 to 25% in 2026. To this end, the Group plans to recondition 450 regional railway service trains and purchase 3,000 buses, with a significant improvement in quality, a crucial factor in driving this change.

## Digital & customer centricity

The Group's 2017-2026 plan includes a strong push towards digitalisation. Customers will be asked to embrace a new travel philosophy, and they will be given convenient tools for their entire journey, including journey planners, which helpfully combine travel solutions when custom-

ers make their initial plans and remain with them until the journey is complete. The journey planner is a flexible solution that passengers can update in real time, modifying their plans as needed. It is a true, effective and reliable companion that knows and advises customers.

The Group will strive to create an extended customer experience that becomes a part of people's daily lives and it plans to achieve this goal through big data analysis using sophisticated tools associated with the appropriate digital platforms.

## Integrated logistics

As in passenger transport, road transport is the prevalent model of transport for integrated logistics as well (road transport accounts for roughly 82% of land-based cargo transport). The Group's objective is to contribute to a modal balance through the following three main actions:

- / a turnaround for the Mercitalia Hub with a specific focus on customer centrality, service quality and utmost efficiency;
- / reinforcement of intermodality;
- / expansion in high added value service segments (such as cargo forwarding).

Investments in cargo transport are planned to update rolling stock and for terminals, logistics and the ICT that supports them.

## Integrated infrastructure

In this area, the Group has budgeted investments for the traditional network as well as for the HS/HC network and European TEN-T corridors to continue equipping the country with sound infrastructure for an increasingly modern and systemic mobility for passengers and cargo: the Giovi third railway crossing, the Brenner base tunnel and the Turin-Lyon line meet the need to complete the Italian side of the four TEN-T corridors crossing the country and connecting it to the European regions that are the most densely populated

and most important for industry and production; infrastructural and technological improvements in urban hubs in major cities to increase traffic capacity; in the south, the opening of sites for the HS/HC Naples – Bari line and, in Sicily, the Palermo – Catania – Messina line. Speeds were ramped up on the Adriatic coast and Salerno – Reggio Calabria lines following technological upgrades and improvements in the railway route. Transport optimisation will also see the expansion of RFI's domestic network as it integrates over 2,500 km of track, out of a total of 3,500 km contributed by former railway companies. Having RFI act as one single network operator will improve efficiency and safety.

The integration of infrastructure also includes the ANAS transaction that will put Italy at the avant-garde in mobility infrastructure. Specifically, ANAS will join the Group, making it possible to pursue an integrated infrastructural investment policy, generate significant industrial synergies and manage long-term technological development as an integrated player, in a context in which road infrastructure is increasingly benefiting from the technologies already used in the railway network (e.g., electrified highway). Stations complete the framework, as they are the nerve centres between infrastructures and transport services, destined to become genuine mobility hubs with car parks, car rentals, car sharing, and electric car recharging stations, as well as spaces offering a wide range of services that make the stations places where people run their day-to-day errands, like picking up a parcel or paying a utility bill. In this respect, the 2017-2026 business plan provides for the creation of a network of over 600 smart stations to be man-

aged as one network and poised to become the beating heart of a system of infrastructures and integrated mobility services.

## International development

The 2017-2026 business plan places great importance on international growth. Today, business abroad makes up 13% of total revenue and the goal is for it to grow to 23% by 2026, with a four-fold increase in the Group's current international turnover, reaching €4.2 billion by 2026 and positioning FS Italiane among Europe's major railway players.

It will pursue this growth in three main areas:

1. general contractor activities, with the capacity to build railway works, especially in countries lagging behind in terms of infrastructure.
2. market railway services abroad, considering the fact that Trenitalia can export the extremely high quality of travel that it already offers with the *Frecce* trains to other countries. Not only will it strengthen the transborder relationships already in place, but it will focus on the most attractive European routes, possible in the wake of the deregulation of the European railways slated to begin in 2020 under the Fourth Railway Package;
3. PT (Local Public Transport) services abroad, by seeking road/rail modal integration opportunities for passenger transport in large metropolitan areas or cities served by the Group's infrastructures.

# 02

## GROUP SUSTAINABILITY



The values we embrace  
define our responsibility  
towards stakeholders





## OUR APPROACH TO SUSTAINABILITY



G4-1 G4-2 G4-56 G4-15 G4-EC2 G4-EC7

### The Group's vision

FS Italiane Group has translated its long-term vision into the new 2017-2026 business plan, with which it has renewed and intensified its ambition of creating transport works and services that create long-lasting value for the community by redefining the business through intermodal transport.

It has made three separate, yet interconnected, commitments to achieve this general vision: one commitment for each aspect of sustainability (economic, social and environmental).

This expression of intent constitutes the shared foundation of values and beliefs that guide FS Italiane Group's decisions and operations.

BE A BUSINESS THAT IS PART OF THE ECONOMIC COMMUNITY TO PROVIDE **INTEGRATED AND SUSTAINABLE** MOBILITY AND LOGISTICS SERVICES, USING TRANSPORT INFRASTRUCTURES SYNERGICALLY AND CREATING VALUE IN ITALY AND ABROAD.



**ECONOMIC COMMITMENT**

**Be a leader in the mobility sector** by promoting the quality and efficiency of transport and infrastructure services



**SOCIAL COMMITMENT**

**Be at the forefront of an integrated mobility project** that, through a virtuous business model, encourages fair business practices and active engagement



**ENVIRONMENTAL COMMITMENT**

**Be pioneers** in the development and implementation of large-scale integrated mobility solutions that help regenerate **natural capital**

## Our commitment

FS Italiane Group's code of conduct establishes the rights and responsibilities of corporate officers, managers, employees, freelancers, business partners, suppliers and all other parties involved in transactions with FS Italiane Group. With the code of conduct, FS Italiane Group transparently takes on its responsibilities and commitments to internal and external stakeholders.

FS Italiane Group is also a member of the UIC, which promotes the railway sector around the world as a solution to the challenges of mobility and sustainable development. The Group signed the "UIC declaration on Sustainable Mobility and Transport", formalising its commitment to responsible practices in terms of human rights, labour conditions, the environment and anti-corruption, in line with the ten principles of the UN Global Compact. FS Italiane Group also aims to help achieve the 17 sustainable development goals - in the context of the 2030 Agenda, the United Nations' strategic framework for common, solid development - and the following, in particular:



## Sustainability policies and governance

The Group's approach to sustainability is reflected in its commitments to all Group stakeholders, which are explicitly stated in company policies and the code of conduct.



Since 2010, the parent has formalised its active role in promoting, directing and coordinating consistent management of environmental issues by maintaining a governance model for the Group companies' environmental management systems. The level of maturity that this model has reached has led to further progress, and in 2016, a process began that will result

in the transformation of the current environmental management system governance model into a business model that balances the economic, social and environmental components of Group operations.

	The environmental management system governance model	The sustainability governance model	Business Model
<b>Objective</b>	Provide support - including operational support - to ensure the coordinated and harmonised development of the operating companies' environmental management systems	Define a governance model for the integrated management of the three sustainability aspects	Ensure the integration of sustainability in the Group's decision-making processes
<b>Characteristics</b>	<ul style="list-style-type: none"> <li>- Focalizzato sulle tematiche ambientali</li> <li>- Orientato alla conformità normativa</li> <li>- Funzionale allo sviluppo degli SGA di società</li> </ul>	<ul style="list-style-type: none"> <li>- Geared towards the environmental, social and economic aspects</li> <li>- Integrated in existing processes</li> <li>- Built on a governance system based on the delegation of duties</li> <li>- In view of the subsequent development of a business model</li> </ul>	<ul style="list-style-type: none"> <li>- Integrated in the Group's business, vision and strategies</li> <li>- Based on a decision-making process centred around sustainability criteria (e.g., externalities, SROI)</li> </ul>
<b>Time period</b>	Today	Short to medium term	Medium to long term
<b>Organisational pervasiveness</b>			

In 2016, FS S.p.A. established a Sustainability Committee<sup>1</sup>, an advisory board made up of senior managers from the main Group companies, formed to integrate social and environmental aspects into economic-financial strategies, promote the values and principles of sustainable development and meet stakeholders' needs and expectations.

In view of integrating strategies with sustainability aspects, using the corporate shared value approach, the Group is kicking off pilot projects

to create a methodology that incorporates multi-dimensional assessments of activities. Furthermore, in 2016, Ferrovie dello Stato Italiane, together with the companies in the "Sustainability" work Group of the "Network of Chairwomen", explored a series of particularly crucial issues for promoting sustainability in companies, with the aim of drafting a document that would, by sharing ideas and best practices, analyse how to integrate sustainability in the business, spread awareness about sustainability and monitoring and reporting methods.

<sup>1</sup> Established with the Group measure of 1 July 2016.

<sup>2</sup> The Network of Chairwomen involved the chairwomen of 10 organisations and companies - Acea, Ania, Amarelli,

AIDDA, Eni, Enel, Ferrovie dello Stato Italiane, Fondazione Marisa Bellisario, Poste Italiane and Terna - and formed two work groups: "Diversity & Inclusion" and "Sustainability".

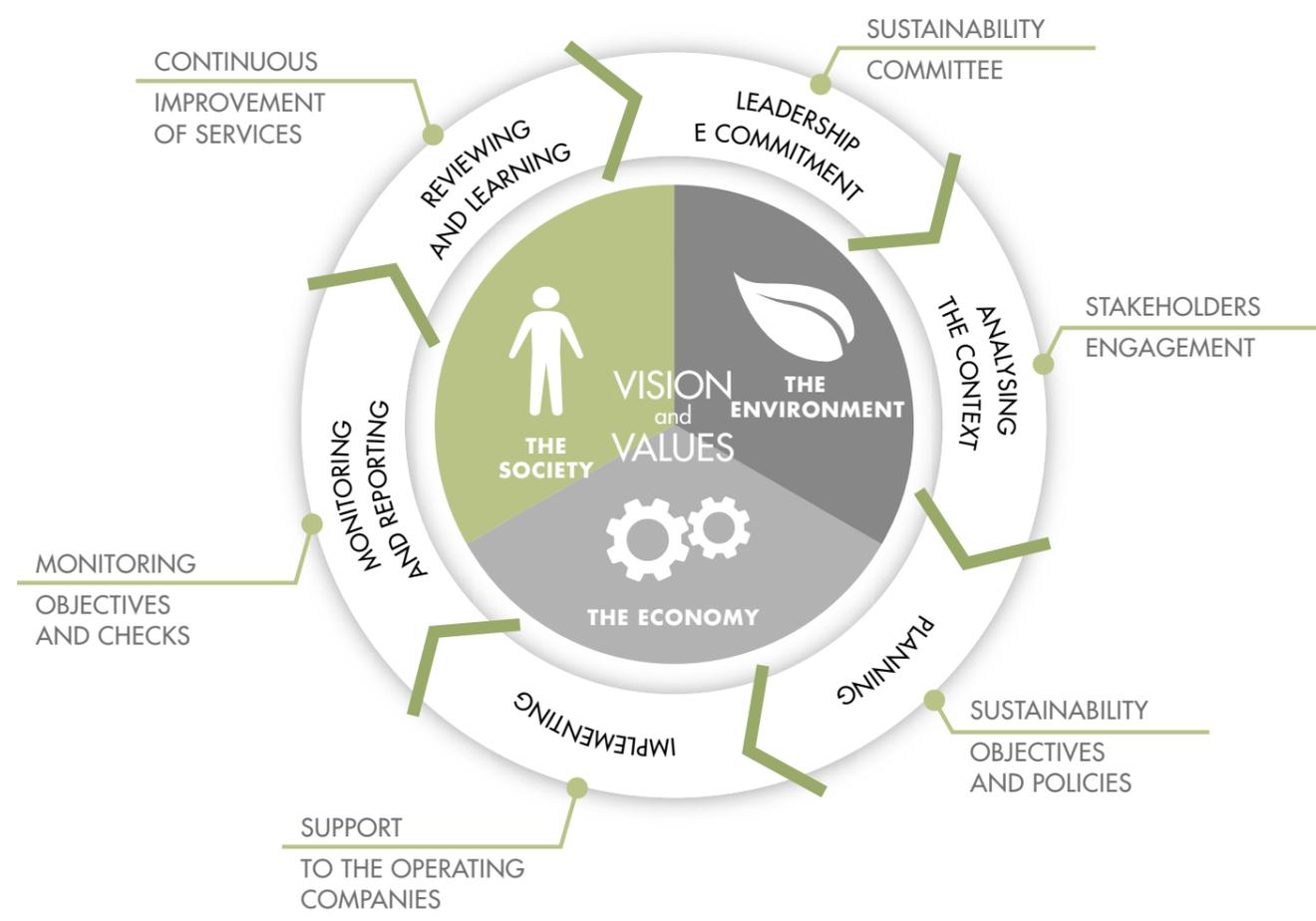


# SUSTAINABILITY COMMITTEE

The Committee was established in July 2016. Its members are appointed by the CEO and are the following:



The Committee will be expanded in 2017 to include Busitalia - Sita Nord's CEO and FS S.p.A.'s Chief Risk Officer (CRO)



# STAKEHOLDERS

G4-16 G4-24 G4-25 G4-26 G4-27 G4-SO1 G4-PR7

Ferrovie dello Stato Italiane Group continuously dialogues with its stakeholders, as it firmly believes that understanding their expectations and identifying medium and long-term objectives with them guarantees the effective creation of value. With this in mind, FS Italiane Group has several ways of interacting with its stakeholders. For example, it organises a panel in which stakeholders propose improvements for the company.

The Group undertakes to respond to all of their requests and, where appropriate, tangibly implement them.

Over 100 stakeholders from the different stakeholder categories participated in the panels held from 2013 to 2015, actively discussing various issues. A total of 65 proposals were gathered and, of these, 42 were implemented, 16 are being implemented and seven are not feasible.

MAP OF FERROVIE DELLO STATO ITALIANE GROUP'S STAKEHOLDERS



## The stakeholder panel

In 2016, ten issues were discussed in relation to five strategic areas. The invited stakeholders submitted 20 proposals for improvement.

PANEL	ISSUE
 CARGO SERVICES/ MOBILITY	<ul style="list-style-type: none"> <li>Supporting railway transport</li> <li>Development of integrated solutions for cargo customers</li> </ul>
 LPT	<ul style="list-style-type: none"> <li>Customer experience</li> <li>Anti-fare evasion and avoidance</li> </ul>
 SERVICE QUALITY	<ul style="list-style-type: none"> <li>Assistance for people with reduced mobility and the disabled</li> <li>Potential intermodal partnerships</li> </ul>
 OCCUPATIONAL HEALTH AND SAFETY	<ul style="list-style-type: none"> <li>Safety and suppliers</li> <li>Performance of occupational safety management systems</li> </ul>
 CUSTOMER SERVICE TRAINING AND IMPROVEMENT	<ul style="list-style-type: none"> <li>Ensure an effective response tailored to customers</li> <li>Design innovative training methods to support the business strategies</li> </ul>

After the critical aspects that arose during the 2016 panel were analysed and the Group prepared responses to meet the stakeholders' needs, FS Italiane Group committed to implementing certain projects and initiatives. The Group will offer cargo mobility customers transport tracking systems and assistance services via call centres or emails to check the status of flows and handle any irregularities. In the local public transport segment, the Group will continue its campaign against fare evasion and avoidance, which it has designed with a view to facilitating tick-

et controls (e.g., electronic tickets, awareness processes, etc.). In line with the business plan revolving around intermodality, the systems used to access information about the different modes of transport available at the Group companies' hubs will be improved, including by both physical communication and the launch of an app that meets the needs of different types of travellers (commuters, tourists, the young and old, etc). In terms of service quality, the focus has been on people with reduced mobility and disabilities. It has entailed mapping users' requirements in col-

laboration with institutional operators and creating a mobile app to bridge the current gap in information for people with reduced mobility and disabilities. The commitment to all customer categories will also be covered in the employee training process which will not only focus on customer centricity, but will be organised considering the need to monitor its effectiveness through a results measurement system.

## Other forms of dialogue

There are other forms of dialogue between the Group and stakeholders, including institutionalised feedback collection (e.g., customer satisfaction surveys), relationships with the consumer and environmental associations and the trade unions. Each year, the Group promotes a number of initiatives to inform, advise, discuss and partner with the various stakeholders.

In 2016, Ferrovie dello Stato Italiane Group took part in activities with the following associations: Confindustria and its local branches, Agens/Federtrasporto, Federturismo, Anie, Assonime and Accredia.

In addition, it met with the Conference of Regions and Autonomous Provinces, the Unified Government and Regions Conference, the relevant Ministries and, in particular, the Ministry of Infrastructure and Transport with respect to inspections.

In Europe, Ferrovie dello Stato Italiane Group has:

- / taken part in activities relating to its business with EU institutions (Parliament, the EU Commission and Council);
- / collaborated with the CER (Community of European Railway and Infrastructure Companies) association;
- / participated in work groups organised by the UIC (International Union of Railways)<sup>1</sup>;
- / participated in work groups organised by the European Railway Agency;
- / defended its positions with Confindustria (the Italian association of industrialists) in Brussels;
- / collaborated with the ENVI (Environment, Public Health and Food Safety) Committee and the Parliament's TRAN (Transport and Tourism) Committee.

<sup>1</sup> Since 1 December 2016, Ferrovie dello Stato Italiane's CEO is UIC's chairman.

As part of the UIC, Ferrovie dello Stato Italiane participates in the Conference of the Parties (COP) on Climate Change negotiations in Copenhagen, Cancun, Durban, Brazil, Qatar, Paris and Marrakech. In 2016, with the UIC, FS Italiane Group took part in major events, such as the UN Framework Convention on Climate Change, the High-Level Advisory Group on Sustainable Transport and the UN Global Sustainable Transport Conference.

On 28 October 2016, during the UN Global Sustainable Transport Conference and with the contribution of Ferrovie dello Stato Italiane, among others, the United Nations Secretary-General's High-level Advisory Group on Sustainable Transport issued a ten-point plan entitled "Mobilizing Sustainable Transport for Development", providing recommendations to all governments for the reduction of their carbon footprint and the development more balanced and sustainable transport.

In 2016, as part of the CER Environmental Strategy Group, FS Italiane Group participated in the panels on sustainability and the environment, such as:

- / *The European strategy for low emission mobility*
- / *Railway noise*
- / *Sustainable vegetation management (glyphosate)*
- / *Effort sharing regulation*
- / *EU Emissions Trading System (ETS) revision*
- / *Eurovignette*

Ferrovie dello Stato Italiane Group is registered with UPA, an association that represents the interests of the most important industrial, commercial and service companies investing in advertising. As a member of UPA, the Group also automatically subscribes to the Institute of Advertising Self-Discipline. There were no non-conformities in advertising in 2015.

No form of financial assistance and no benefits are granted to the aforementioned associations other than the membership fees. The Group does not pay any direct or indirect contributions to political parties, movements, committees or organisations or trade unions.

## SYSTEMS MANAGEMENT

G4-15 G4-56 G4-PR1

FS Italiane Group and the main Group companies remain committed to implementing and certifying their environmental management systems or integrated management systems, covering all processes and all operating sites, with the goal of continuing to improve the Group's environmental services.

In 2016, the Group companies launched a transition process to adopt the new UNI EN ISO 14001:2015 standard. Unlike its previous version, the new standard encourages the entrenchment of the management system into the

business, extending its improvement strategies as part of a broader vision of environmental sustainability. In this context, the parent, which oversees environmental aspects based on the environmental management system governance model in a coordinated, consistent manner, has undertaken a process to incorporate the main sustainability principles within the business, in order to generate value for both the Group and the community.

For more information about the scope of operating Group companies' management systems, see the table in the *Additional information* section.



# 03

## CORPORATE GOVERNANCE

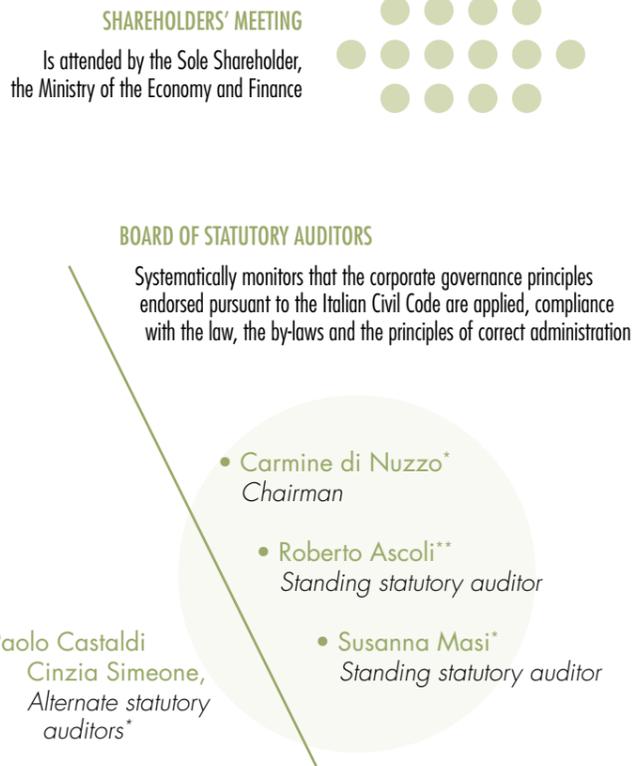
A system of rules that drives  
the Group in the right direction



# THE GOVERNANCE SYSTEM

G4-7 G4-34 G4-35 G4-37 G4-38 G4-40 G4-41 G4-44 G4-45 G4-56 G4-LA12

The corporate governance<sup>1</sup> structure of FS S.p.A. and its main subsidiaries is organised according to the traditional system: the shareholder appoints 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 statutory auditors and two alternate statutory auditors). The shareholder also appoints the independent auditors, responsible for performing the legally-required audit. Pursuant to article 12 of Law no. 259/1958, the Court of Auditors' Magistrate appointed to audit FS S.p.A. attends the meetings of the Board of Directors and the board of statutory auditors, integrating the corporate governance system. In accordance with the by-laws, the Board of Directors: (i) appoints a CEO; (ii) may assign proxies to the Chairman, with the shareholder's approval, with respect to issues that may be delegated by law; (iii) sets up committees, where necessary, to provide consultation and make proposals; (iv) appoints the Manager in charge of financial reporting; (v) appoints the general manager. The following chart represents FS S.p.A.'s corporate governance structure. Additional information is given in the Group's 2016 Annual Report (Directors' report, Report on corporate governance and ownership structure).




**CENTRAL DIVISIONS\*\*\*\*\***

- / Institutional and Regulatory Affairs
- / Administration, Financial Statements and Tax
- / Audit
- / Brand Strategy and Communication
- / Finance, Controlling and Equity
- / Innovation and Information Systems
- / International Markets
- / Company Security
- / Human Resources and Organisation
- / Strategies, Planning and Sustainability
- / General Counsel, Corporate Business and Compliance
- / Risk Management/CRO

<sup>1</sup> KPMG S.p.A. was engaged to perform the legally-required audit for both the parent and the subsidiaries beginning from 2014. Based on the applicable special provisions provided for by legislative decree no. 39/10 (article 16 and subsequent articles), after FS S.p.A. became an "entity of public interest" by issuing the listed bond in 2013, the engagement lasts for nine years (2014-2022).

## BOARD OF DIRECTORS

Appointed by the shareholder on 27 November 2015, it consists of seven directors and has exclusive powers for the Group's economic and strategic issues and the appointment of the main subsidiaries' boards of directors and statutory auditors



## INDEPENDENT AUDITORS

• KPMG SpA



## COURT OF AUDITORS' MAGISTRATE

• Angelo Canale



## SUPERVISORY BODY PURSUANT TO LEG. DECREE NO. 231

• Carlo Piergallini  
Chairman

- Gianfranco Cariola\*\*\*
- Gustavo Oliviero\*\*\*\*



## MANAGER IN CHARGE OF FINANCIAL REPORTING

• Roberto Mannozi

### Audit, Risk Control and Corporate Governance Committee

Supports the BoD's internal control and risk management assessments, corporate governance and social responsibility, by presenting proposals and acting as advisor

### Ethics Committee

Responsible for advising and setting guidelines within the framework of the principles and rules of FS Italiane Group's Code of Ethics; facilitates the integration of ethical criteria into decision-making processes, verifies that actions and conduct are consistent with the code of conduct and reviews company procedures in the light of the Code of Ethics

### Sustainability Committee

Ensures the integration of social and environmental aspects into the Group's economic/financial strategies and the promotion of sustainable development principles and values, in accordance with stakeholders' requirements and expectations

### Investment Committee

Provides guidelines on investments and divestments, directing FS Italiane Group's planning process, expressing fairness opinions on the investment and divestment plan and monitors the performance of the investment plan, recommending any corrective action to be taken

### Remuneration and Appointment Committee

Responsible for advising and presenting proposals to the BoD with respect to, *inter alia*, the CEO's and the Chairwoman's remuneration and any "co-optations" and periodically checks that the Directors of FS S.p.A. are eligible for office

### Anti-trust Committee

Supports FS S.p.A.'s CEO to promote widespread knowledge about regulations ensuring fair competition and monitors that they are complied with

### International Initiatives Committee

Ensures strategic oversight of international development initiatives of interest to the Group

### Equal Opportunities Committee

Promotes initiatives and positive actions to offer women workers more favourable work organisational and distribution conditions, in order to achieve, *inter alia*, a better life/work balance

### Board committees\*\*\*\*\*

### Other committees\*\*\*\*\*

### Group IT System and Information Security Committee

Steers FS Italiane Group's IT security strategies, presents proposals to the Group companies for critical business processes, assesses and approves proposals for the regulation of IT system and information security assessments and certification

### Credit Committee

Monitors the performance of Group receivables, reporting any critical issues and driving the necessary corrective action; assesses consolidated exposure by debtor and any potential offsetting against payables

### SoD (Segregation of Duties) Committee

Acts as an advisor and provides guidance on the segregation of duties; defines, approves and oversees the Group's SoD matrix; analyses and monitors the implementation of measures to manage/resolve SoD risks that transversally affect several staff processes of the Group companies

(\*) Appointed by the shareholder on 4 July 2016 to replace the Sustainability Committee whose term of office expired with the shareholder's meeting called to approve the 2015 financial statements (Chairwoman of the Sustainability Committee: Alessandra dal Verme; Standing statutory auditors: Roberto Ascoli and Paolo Castaldi; Alternate statutory auditor: Cinzia Simeone). During the same shareholder's meeting, the shareholder also appointed Francesco Notari as standing statutory auditor, who on 13 July 2016, announced that he could not accept the position and, accordingly, the alternate statutory auditor Paolo Castaldi took the position until the shareholder's meeting called to appoint the new standing statutory auditor (29 July 2016)

(\*\*) Appointed by the shareholder on 29 July 2016

(\*\*\*) Appointed on 5 September 2016 to replace Stefano Crociata

(\*\*\*\*) Appointed on 20 July 2016 to replace Claudia Cattani (in office from 11 March 2016 to 17 May 2016)

(\*\*\*\*\*) FS S.p.A.'s organisational structure was updated in March 2017

(\*\*\*\*\*\*) Set up to advise or make proposals to the BoD

(\*\*\*\*\*\*) These are the committees that provide guidance and support to FS S.p.A.'s BoD

## THE INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM

G4-34 G4-38 G4-41 G4-42 G4-45 G4-46 G4-SO3 G4-SO4 G4-SO5

The internal control and risk management system is a series of rules, procedures and organisational structures that, through an adequate process for the identification, measurement, management and monitoring of main risks, ensures sound and proper business management in line with the established objectives.

taking a systematic, professional approach that generates value added as it is aimed at assessing and improving control, risk management and corporate governance processes; / The Group's risk management model was first formalised with Group measure no. 169/AD of 21 January 2014 and defines the steps,



In particular, the system consists of the following active parts:

/ the internal audit departments reporting to the Chairperson of their company's BoD. The parent's central internal audit department handles internal auditing for companies that do not yet have their own independent internal audit department on the basis of specific service agreements. If an Internal Audit Committee has been set up, the internal audit department reports to it, as provided for by the relevant company's internal regulations. Throughout the Group, internal auditing is independent and objective for assurance and advisory purposes in order to improve the organisation's efficiency and effectiveness. It contributes to the pursuit of the organisation's objectives by

methods and roles in the assessment and management of company risks. The risk management process entails: mapping processes and their objectives, identifying and assessing risks and their controls, proposing any improvement action to contain risks. The Group has adopted the control risk self assessment (CRSA) method for risk management, which is characterised by the active participation of the respective Process Owners. The relevant manager and Risk Officer<sup>1</sup> support the Process Owner's activities. With organisational measure no. 116/AD of 22 January 2015,

<sup>1</sup> With Group measure no. 178/AD of 6 October 2014, the model provided for the creation of the position of Risk Officer with each main Group company directly reporting to the CEO.

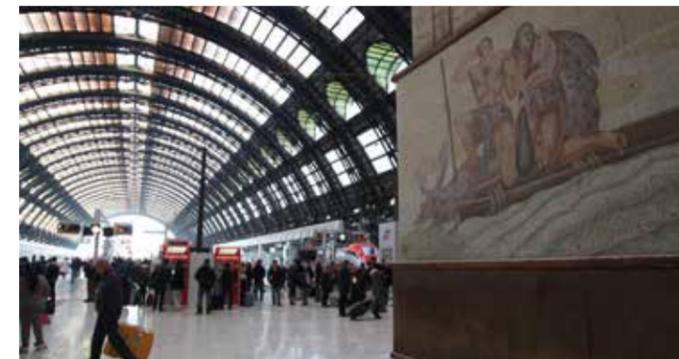
the Group model was strengthened with the creation of the risk management structure, reporting directly to the CEO of FS S.p.A.; / supervisory bodies and the organisational, management and control models pursuant to Legislative decree no. 231/2001. Group measure no. 209/P of 9 June 2016, which replaced the previous measures issued since 2002, requires that FS Italiane Group companies adopt organisational, management and control models that adequately prevent the illegal conduct covered by Legislative decree no. 231/2001 and set up supervisory bodies responsible for monitoring that the models function and are complied with and for proposing updates to the models. The supervisory bodies are normally set up as boards<sup>2</sup> with a chairman from outside the company with extensive,

specific expertise in this respect, an internal audit manager and a legal expert from outside the Group or, alternatively, a member of the board of statutory auditors; / the Manager in charge of financial reporting of FS S.p.A., first appointed in 2007 upon the specific request of the shareholder, the Ministry of the Economy and Finance, in order to increasingly align the parent's corporate governance system with those adopted by companies listed on financial markets, and now legally required following the issue of the bond (July 2013) which changed FS S.p.A.'s status to an issuer of listed financial instruments and therefore an entity of public interest (pursuant to article 16 of Legislative decree no. 39/2010) and caused it to fall completely within the scope of application of article 154-bis of the Consolidated Finance Act. Considering FS Italiane Group's organisational and operational complexity and to strengthen and improve the efficiency of the application of this legislation, since the beginning, FS S.p.A.'s BoD has encouraged the appointment of managers in charge of financial reporting within its main subsidiaries as well; / the planning and management control system supports the Group's long-term planning process, the operational implementation of strategies (budgeting process), the calculation of actual results and the analysis of such results.

In 2016, around 220 man/days were dedicated to training/raising the awareness of the anti-corruption policies and procedures implemented at Group level.

The Group companies' internal audit functions completed a total of 104 internal audits in 2016, 89 of which led to an assessment of the internal control system. Of these, 14 covered occupational safety and environmental protection. Eight of the activities performed were carried out upon the request of the supervisory bodies pursuant to Legislative decree no. 231/2001.

Additional information on the internal control and risk management system is given in the Group's 2016 Annual Report (*Directors' report, Report on corporate governance and ownership structure*).



<sup>2</sup> Group measure no. 209/P of 9 June 2016 provides that "small" Group companies whose organisations are less complex and/or smaller may set up a body with only one

member from outside the Group with extensive and specific expertise in this respect.

## COMPLIANCE

G4-EN29 G4-PR9 G4-SO5 G4-SO7 G4-SO8

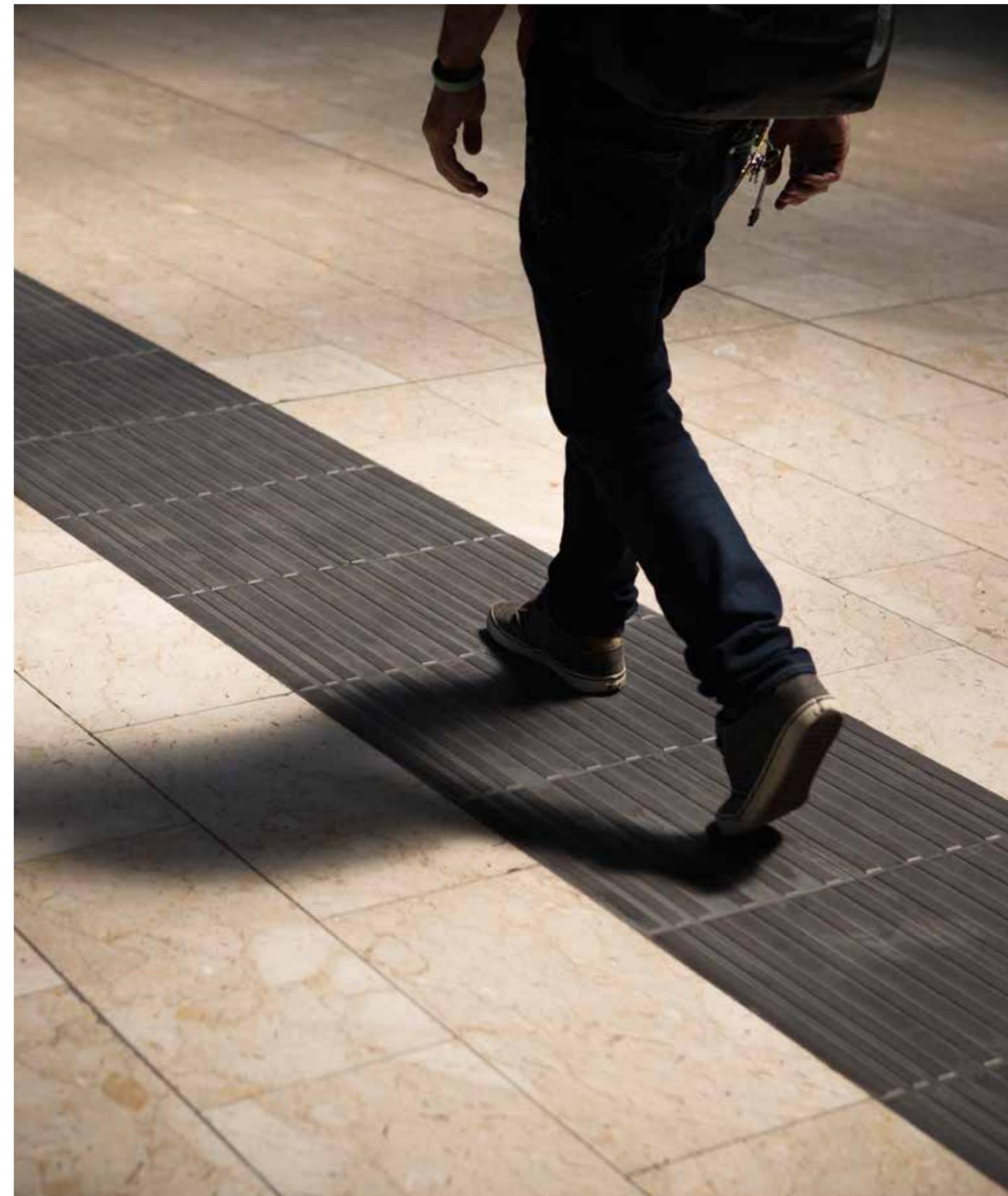
### Investigations and legal proceedings

Legal proceedings relating to unfair competition, antitrust violations and monopoly practices include the following:

- / Antitrust Authority proceedings A/495 (LPT tender in Padua) for Busitalia - Sita Nord's and Busitalia Veneto's alleged abuse of dominant position;
- / Antitrust Authority proceedings PS/10578 for allegations that Trenitalia's sales systems violate Consumers' Rights Code regulations protecting against unfair business practices.

No significant administrative or legal fines were imposed for violation of regulations or laws and no legal actions were commenced for corruption nor were violations of local residents' rights committed.

For additional information on investigations and legal proceedings, refer to the Group's 2016 Annual Report (*Directors' report, Litigation and disputes*).



# 04

## BUSINESS SUSTAINABILITY



The outcome of the link between  
economic value creation  
and corporate responsibility





## RESULTS OF OPERATIONS



### Highlights

G4-2

#### WHAT WE HAVE ACCOMPLISHED >

**€772 million**

**PROFIT FOR THE YEAR**

€365 million gain on the sale of Grandi Stazioni Retail



**Approximately €7 billion**

**ECONOMIC VALUE DISTRIBUTED TO STAKEHOLDERS**

equal to approximately 76% of the economic value generated



**Approximately €6 billion**

**INVESTMENTS IN MOBILITY**

trend in line with 2015 (+8%)



**€46 billion**

**INVESTMENTS IN RESEARCH AND DEVELOPMENT**

for traffic safety



#### WHAT WE AIM TO DO >

**FURTHER IMPROVE core business PROFIT MARGINS**

through organic growth and additional acquisitions



**INVESTING TO SUPPORT integrated mobility**

confirming prior year volumes



## Economic highlights

### G4-EC1

2016 ended with a profit for the year of €772 million, compared to €464 million in 2015, showing growth of more than 66%. Results were positively influenced by the €365 million gain on the sale to third parties of part of the business related to the management of non-core commercial spaces, via the sale of Grandi Stazioni Retail S.p.A.. This transaction was part of the enhancement of assets that will make the Group a leading integrated mobility player over the course of the 2017-2026 business plan.

The gross operating profit is extremely positive (€2,293 million), up €318 million (+16.1%) on 2015, due to the effect of growth in revenue (+€343 million), which was more than proportionate to the growth in costs (+€25 million).

Operating profit amounts to €892 million, up by €248 million or 38.5% on the €644 million of the previous year. The increase is mainly due to that described above in respect of revenue and operating costs, as well as greater amortisation/depreciation and impairment losses (+€78 million and +€15 million, respectively), offset by smaller provisions (-€23 million).

Revenue of €8,928 million increased by €343 million on 2015 due to the growth in revenue from sales and services (+€27 million) and other income (+€316 million).

The rise in revenue from sales and services was substantially due to greater revenue from transport services (+€2 million; +0.03%) and greater revenue from infrastructure services (+€26 million; +2.07%). Other income increased mainly due to the aforementioned gains (€365 million in 2016, compared to €18 million in 2015), whereas there were decreases in revenue from leases, recharges of condominium expenses and the sale of advertising spaces (-€28 million, following the sale of the retail business unit) and revenue from sales of land and buildings held for trading during the year (-€11 million).

Operating costs increased by €25 million

(+0.4%) on 2015. Both personnel expenses (+€17 million; +0.4%) and other costs (+€8 million; +0.3%) rose.

The table below is based on a reclassification of the income statement in the consolidated financial statements.

In particular:

- 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 all 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.

### FERROVIE DELLO STATO ITALIANE GROUP CONSOLIDATED FINANCIAL STATEMENTS FIGURES

	2016	2015	2014
Revenue	8,928	8,585	8,390
Operating costs	6,635	6,610	6,276
Gross operating profit	2,293	1,975	2,114
Operating profit	892	644	659
Profit for the year	772	464	303

In millions of Euros

### GENERATION AND DISTRIBUTION OF ECONOMIC VALUE

	2016	2015	2014
<b>Economic value generated directly</b>	<b>9,004</b>	<b>8,709</b>	<b>8,524</b>
Revenue from sales and services	7,908	7,881	7,734
Other sundry income	1,096	828	790
<b>Economic value distributed</b>	<b>6,837</b>	<b>6,879</b>	<b>6,628</b>
Operating costs for materials and services	2,623	2,614	2,296
Personnel expense	3,951	3,934	3,918
Payments to financial backers	170	231	245
Payments to public bodies	93	100	169
<b>Economic value withheld</b>	<b>2,167</b>	<b>1,830</b>	<b>1,896</b>

In millions of Euros



Finally, the value not distributed by the Group (approximately €2.2 billion) consisted substantially of self-financed investments and accruals to reserves, to be reinvested and thereby ensure the continuity and sustainability of non-current business and, therefore, indirectly benefit the FS Group's stakeholders (such as employees and the community through, for example, improvements in service quality, including the universal service).

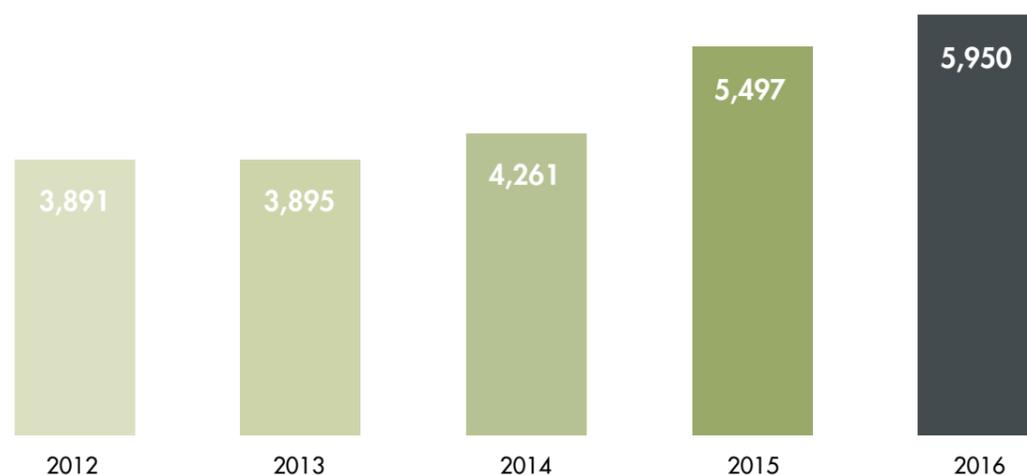
## Investments

G4-EC4 G4-EC7

Against the backdrop of an economic recovery in which investments are scarce and the market cannot guarantee the replacement of capital that becomes obsolete from one year to the next, FS Italiane Group has managed to continue the actions scheduled in its Investment Plan, remaining the largest supporter of development in the transport, infrastructure and logistics sector.

The Group's investments are aimed at expanding the country's infrastructure and keeping it efficient, with a view to integrating it with other transport systems and providing increasingly high quality mobility services.

### FS ITALIANE INVESTMENTS (IN MILLIONS OF EUROS)



FS Italiane Group's technical investments<sup>1</sup> came to €6,018<sup>2</sup> million in 2016, up 6% on the amount recognised in 2015 following new works involving the infrastructure network and the projects for the acquisition/reconditioning of rail and road vehicles.

Specifically, RFI invested €4,173 million in infrastructure (€4,007 million for the traditional/HC network and €166 million for the Turin-Milan-Naples HS/HC network), while Trenitalia invested €1,557 million in railway transport services and other Group companies invested €288 million.

<sup>1</sup> All the works, supplies and services performed or acquired to support the Group's business processes, which increase the companies' assets, even if they are leased or are obtained via SPVs. They exclude the acquisition of companies

or business units and investments (in companies or joint ventures) and any other financial investments.

<sup>2</sup> Including the investments of special purpose entities (TELT and BBT).

RFI invested as follows:

- / 63% to maintain the efficiency of infrastructure and projects throughout Italy;
- / 37% for the construction of works for large infrastructure development projects (strengthening of corridors, metropolitan areas and regional basins).

€363 million (roughly 9% of total spending) was invested in avant-garde technologies.

In 2016, **Trenitalia** invested €1,557 million, 63% of which to purchase rolling stock, approximately 5% to recondition material that was already operating, 24% for maintenance to enhance the rolling stock fleet and the residual 8% for technological upgrades to vehicles and IT systems and to maintain and develop maintenance plants.

**Other Group companies** invested a total of roughly €288 million in Italy and abroad, approximately 28% related to TELT, which is responsible for building and managing the future cargo and passenger railway line between Turin and Lyon, while roughly 23% related to Gran-

di Stazioni and Centostazioni to redevelop, relaunch and enhance the main train stations, redesigned as large urban service centres, approximately 19% related to the subsidiary Netinera Deutschland for the purchase of road and railway passenger transport vehicles and industrial plants in Germany, about 8% went to the development of the Busitalia Group companies operating in road transport in Italy and, finally, roughly 9% related to Blufferies, TX Logistik, Mercitalia Logistics (formerly FS Logistica), SGT, Terminali Italia, Terminal Alptransit, Cemate and Serfer, which operate in the cargo service sector. The remaining expenditure was mainly allocated to the enhancement/redevelopment of real estate properties and installing IT tools to support business processes.

Group spending for research and development in 2016 came to €46 million, nearly entirely incurred by RFI. Approximately 78% of R&D spending went to traffic safety technologies, while 22% was for studies and tests on new parts and systems.

### SIGNIFICANT FINANCIAL ASSISTANCE RECEIVED FROM THE PUBLIC ADMINISTRATION

	2016
<b>Grants for operations</b>	
Government Programme Contract	975.6
Other government grants	4.6
EU funds	0.6
From local public bodies	6.6
<b>Grants for investments</b>	
Governments grants	3,199.2
From local public bodies	18.8
EU funds	5.6
<b>Total</b>	<b>4,211.0</b>

In millions of Euros

## CUSTOMERS

### Highlights

G4-2

### WHAT WE HAVE ACCOMPLISHED >

#### THE NEW **Freccialink** SERVICE

begins operating, connecting Siena, Perugia, L'Aquila, Potenza and Matera to the HS network



#### THE NEW **Frecciargento** ROUTES

are launched: Bolzen-Trento-Verona-Naples, Rome-Modena-Mantua and Rome-Bergamo



#### **92** NEW ENERGY- EFFICIENT BUSES

joined the fleet



#### The Mercitalia **Hub** IS ESTABLISHED

to relaunch the Group's cargo business.



Approximately  
**70** NEW SECURITY  
SYSTEMS  
are installed at railway stations throughout Italy



Assistance provided in  
**275** STATIONS  
for people with disabilities and reduced mobility



ROLL-OUT OF  
**Frecciarossa**  
TRAINS ON THE  
PO VALLEY LINE  
connecting Turin, Milan and Venice



**€2.5 billion**  
EARMARKED  
in the new business plan for the "Easy stations" and "Smart stations" projects



### WHAT WE AIM TO DO >

The Trenitalia  
**Smart Card**  
is expanded to Veneto, Emilia Romagna, Tuscany, Umbria and Lazio



The  
**Frecciargento**  
ROME-GENOA  
VIA FLORENCE ROUTE  
IS LAUNCHED



Integration of Busitalia's and Trenitalia's  
**LPT road/rail services**  
Passenger information, integration of fares and creation of an intermodal road/rail hub in Perugia



Completion of "Easy stations" projects at  
**50 stations**  
improvement in the accessibility, functionality and appearance of areas, raising the train boarding platforms, upgrading public information systems and equipment



## Transport: mobility services

G4-8

### Passenger and cargo transport

Again in 2016, the FS Italiane Group strove to satisfy its customers by concentrating its production capacity, meeting mobility needs with increasingly efficient and high quality services. In particular, efforts were directed at integrating transport systems (train and bus) to support, on one hand, local public transport and, on the other, significantly integrate long haul services. A prime example of these efforts is Trenitalia S.p.A.'s integrated "Freccialink bus + Freccie" service connecting major cities like Siena, Perugia, L'Aquila, Potenza and Matera to the HS network, which has satisfied 24 thousand passengers since its launch.

In all, the FS Italiane Group has met demand for passenger mobility in Italy and internationally with an approximate 1.2% increase in traffic volumes measured as passenger-km and a 2.6% increase in production measured in train-km and bus-km.

In the railway sector, regional transport service grew with traffic volumes of 23.7 billion passengers-km, approximately 20% of which were generated by the Group companies abroad, confirming the success of actions taken - improvement in punctuality, increase in the frequency of journeys, integration of services at stations - for this service. The Group intensified its focus on the service contracts with the regions, setting

clear objectives in order to raise the standard of service quality and performance, which entailed substantial investments in rolling stock and technologies.

The strong performance of local public transport also included FS Italiane Group's results in the general transport of passengers by bus (domestic and international): in 2016, the Group satisfied 2.3% more demand, with a 1.1% increase in supply measured in bus-km.

On the other hand, long haul railway traffic volumes are down (-2.7% to 20.2 billion passenger-km), following the sharp drop in the universal service contribution (-6.9%) which is defined by the customer, MIT. Despite the slight contraction in market services (-1.5%) compared to the previous year - which was mainly because of the significant, non-recurring boost in traffic volumes for EXPO 2015 - Trenitalia S.p.A.'s *Frecciarossa* high speed service continues to enjoy success, also due to the fact that the *Frecciarossa* brand replaced the less prestigious brands during the year.

Total production is up (market services plus universal services), with around 84.6 million train-km produced (+5%).

FS Italiane Group's cargo transport business was affected by the weak economic context, generating domestic and international traffic volumes of 22.5 billion tonnes-km, down 3.8% on the previous year. The decrease is lower for the domestic business because of the positive contribution of traditional traffic (+2%), while the international cargo transport business was affected by the discontinuation of a service in 2016, which a

subsidiary had carried out on the foreign market until then. Total production is also down (-5.5%) to roughly 44 million train-km, mainly due to the decline in distances travelled abroad (-8.2%).

### Main types of services offered

FS Italiane Group's commercial offer may be broken down into two main types of services: market services and universal services.

#### > Market services

These are services offered without commercial restrictions and without any government grants. Railway transport market services include most of the medium and long haul connections offered by Trenitalia's Long Haul Passenger Transport Division, such as those on *Frecciarossa*, *Frecciargento*, *Frecciabianca*, *Eurocity* and *Euronight* trains. Road transport market services consist of bus rentals with drivers in Italy and abroad and services authorised by the relevant authorities for specific tourist/commercial lines<sup>1</sup> operated by Busitalia - Sita Nord.

#### > Universal services

These are 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 runs, fares, service levels and stops. Specifically, the passenger transport services include those

operated by Trenitalia's Long Haul Passenger Division, such as daytime and night *Intercity* services, along with regional services operated by Trenitalia's Regional Passenger Division in Italy and Netinera Group in Germany.

As part of the scheduled road services, Ataf Gestioni, Busitalia - Sita Nord and Busitalia Veneto operate on local networks in Tuscany, Umbria and Veneto with urban and suburban services.

### Passenger transport

#### > Medium and long haul railway transport

##### FRECCIAROSSA

The *Frecciarossa* are trains that mainly travel on the high speed network serving those areas of Italy with the densest traffic and populations. In addition, certain *Frecciarossa* connections extend the advantages of Italian high speed trains beyond the Turin-Salerno HS infrastructure reaching, for example, Brescia, Verona, Padua, Venice, Rimini, Ancona, Pescara, Foggia, Bari and Taranto.

The *Frecciarossa* trains operate on the following lines:

- / Turin-Milan-Reggio Emilia HS-Bologna-Florence-Rome-Naples-Salerno, with the route extended to/from Brescia and to/from Potenza/Taranto;
- / Venice-Padua-Bologna-Florence-Rome-Naples-Salerno;
- / Trieste/Udine-Venice-Padua-Vicenza-Verona-Brescia-Milan-Turin;
- / Milan-Reggio Emilia HS-Bologna-Rimini-Ancona/Pescara-Foggia-Bari.

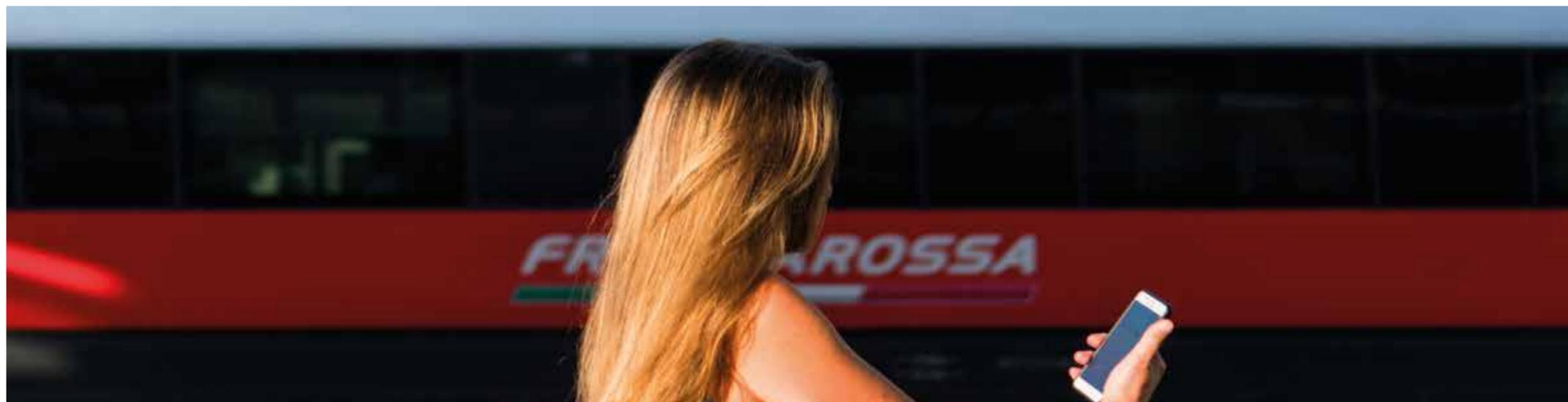
##### FRECCIARGENTO

The *Frecciargento* are 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.

In 2016, *Frecciargento* trains operated the following routes:

- / Trieste/Udine-Venice-Padua-Bologna-Florence-Rome/Fiumicino airport;

<sup>1</sup> The connection between Florence and The Mall outlet and the "Volainbus" shuttle between Florence and the A. Vespucci airport.



- / Bolzen/Brescia-Verona-Bologna-Florence-Rome/Naples;
- / Mantua-Modena-Rome;
- / Rome-Caserta-Benevento-Foggia-Barletta-Bari-Brindisi-Lecce;
- / Rome-Naples-Salerno-Paola-Lamezia Terme-Villa San Giovanni-Reggio Calabria.

### FRECCIABIANCA

The *Frecciabianca* are trains that travel on traditional network lines and mainly connect medium and large cities with the main stations on the high speed network.

In 2016, *Frecciabianca* trains operated the following routes:

- / the line that connects Venice, Udine and Trieste to Turin and Milan;
- / the line linking Turin, Milan and Venice to Ancona, Pescara, Bari, Lecce and Taranto;
- / the Northern Tyrrhenian line connecting Turin, Milan and Genoa with Pisa and Rome;
- / the line between Rome and Reggio Calabria;
- / the line between Rome and Ravenna.

### INTERCITY

Daytime *Intercity* trains travel on the traditional lines and connect large and medium cities, helping create an efficient interchange system with local transport trains and with high speed trains. *Intercity* train services connect Milan with Naples, Trieste with Rome and Rome with Salerno. In addition, they connect: Milan with Pescara, Taranto, Grosseto, La Spezia, Livorno, Lecce (periodically), Reggio Calabria (periodically), Terni and Ventimiglia; Rome with Ancona, Bari, Florence, Palermo, Siracusa, Perugia, Reggio Calabria, Taranto and Ventimiglia; Naples with Sestri; Turin with Genoa and Salerno; Bologna with Bari and Lecce; and Reggio Calabria with Taranto.

### NIGHT TRAINS

Night-time *Intercity* trains are dedicated to long hauls between Northern Italy, Central Italy and the South. They are mainly tailored to travellers who prefer to spend the night travelling and wake up in their destination the morning after they depart. These trains connect Milan with Taranto, Lecce, Siracusa and Palermo; Turin with Lecce, Reggio Calabria and Salerno; and Rome with Bolzen (periodically), Lecce (periodically), Siracusa, Palermo and Trieste.

### INTERNATIONAL SERVICES

The international *Eurocity* and *Euronight* trains

connect the main Italian cities with major cities in Austria, Germany, Switzerland and France. Daytime services connect Milan with Zurich, Basel, Bern, Lucerne and Geneva, as well as Venice with Lucerne and Geneva. The *Euronight* trains connect Rome and Milan with Munich, as well as Rome, Milan and Venice with Vienna. In addition, through the French subsidiary, Thello, the *Eurocity* trains carry passengers to Nice, Marseilles and other cities along the French Riviera from Milan, Genoa and other stations in Liguria, while night services departing from Venice and Milan carry passengers to Dijon and Paris. Beginning in 2017, Trenitalia will also offer service in the UK, as it has acquired - via its subsidiary Trenitalia UK - Nxet, a railway company operating between London and Essex.

### > Regional railway transport

Trenitalia's regional railway transport offer is defined in the service contracts that it has agreed with the government, the regions and the autonomous provinces, which plan and schedule service quantities and quality and provide for a penalty and reward mechanism.

Regional Passenger Division trains, which travel throughout a network covering the entire country, meet travellers' needs for metropolitan, regional and inter-regional railway mobility services, with trains running at all hours of the day - including more frequent trains during peak hours - and stops at small stations along the route as well.

This Division, together with the regions responsible for regional public railway transport, is implementing a transport offer that is increasingly tailored to meet new mobility requirements, with wide-spread, frequent service in cities and fast connections between major regional hubs, ensuring that the two different service levels intersect at the "gateway stations".

The fleet was modernised thanks to Trenitalia's significant investments in rolling stock, some of which were in the light of the long-term service contracts.

Investments will continue in forthcoming years as well: Trenitalia has called for bids in a major project to acquire new high and medium capacity trains for regional transport, which are slated for roll-out in 2018 on. This will lead to the renewal of 75% of the entire regional transport rolling stock fleet. In 2016, the average age of trains in the fleet was reduced to 19.7 years, compared to 20.4 years in 2015.

In addition, through Netinera Group, FS Italiane

Group offers regional transport services in Germany, which are managed commercially using similar mechanisms, i.e., service contracts with the public transport authorities (PTAs). Netinera mainly operates in Northern and Southern Germany<sup>2</sup>. Since December 2014, Vlexx, a company that is wholly owned by Die Länderbahn AG, in turn wholly owned by the holding company Netinera Deutschland, operates in the Mainz area. Netinera Group also operates in Lower Saxony through the subsidiary OHE AG, which offers a wide variety of regional railway transport services under the Metronom and Erixx brands.

### > Road passenger transport

Busitalia - Sita Nord offers, directly or via its subsidiaries, urban and suburban LPT services in Veneto, Tuscany and Umbria and market services (bus rentals with drivers for domestic and international tourist and authorised bus lines).

In particular, in Tuscany, it offers LPT services in the Florence, Arezzo, Siena, Alto Mugello, Mugello, Val di Sieve, Casentino and Valdarno areas<sup>3</sup>; in Veneto, through its subsidiary Busitalia Veneto, it provides urban and suburban LPT services in the provinces of Padua and Rovigo; in Umbria, it offers transport services to the entire region, with certain lines stretching outside the region to connect with major points of access to the region (such as Orte, Sansepolcro, Terontola and Chiusi). It completes the offer in Umbria with LPT services (road, rail and waterway), the management of alternative mobility systems, rent-

al services and a few interregional connections (e.g., Cascia-Roma and the summer connections to seaside destinations).

Ataf Gestioni provides public mass transport services for passengers in the Florence metropolitan city.<sup>4</sup>

### Cargo transport

In 2016, FS Italiane Group designed, produced, managed, sold and developed cargo transport services in Italy and abroad (through its subsidiary TX Logistik<sup>5</sup> and Netinera Group).

The offer revolves around the two following areas:

- / intermodal traffic, with railway connections to and from the main domestic and international ports and interports;
- / traditional traffic, for cargo travelling between a grid of Italian hubs and systems and the European network.

The Group covers the main cargo traffic sectors through the following commercial structures, which underwent a significant reorganisation in the year, resulting in the following areas of responsibility:

- / Industry, which was made responsible for managing the portfolio of steel, automotive and chemical customers;
- / Intermodal, which manages the intermodal market customer portfolio;
- / General Cargo, which was made responsible for managing the portfolio of customers operating on the raw materials and consumable goods market.

<sup>2</sup> The most significant Netinera brands are: Metronom and Erixx, which operate in Northern Germany, Länderbahn together with Alex, Vogtlandbahn and Vlexx, which operate in Southern Germany, and ODEG, which operates in Eastern Germany.

<sup>3</sup> The company is active in six different S.c.a.r.l. companies (Italian consortium companies limited by quotas) which man-

age LPT services in the provinces of Florence, Arezzo and Siena.

<sup>4</sup> Ataf Gestioni acts as agent for ATAF&Linea S.c.a.r.l..

<sup>5</sup> A European leader in railway cargo transport, operating mainly along Europe's North/South axis with integrated logistics services in Austria, Denmark, Germany, Norway, the Netherlands, Sweden and Switzerland.

## Infrastructure sector: mobility services

G4-8

RFI's market as national railway infrastructure operator pursuant to Legislative decree no. 112/2015 consists of railway companies and applicant entities. The latter include, in addition to the railway companies, regions and autonomous provinces, "the relevant authorities under the European Parliament and Council's regulation (EC) no. 1370/2007 and loading operators, forwarding agents and combined transport operators with a public service or commercial interest in acquiring infrastructure capacity in order to provide railway transport services (article 3.cc of Legislative decree no. 112/2015).

In the case of the former, the services are agreed on the basis of the timetables and services governed under contracts for infrastructure use for no longer than the validity period of the service schedule, while in the case of the latter, the services are based on the infrastructure capacity expressed in general terms or in total, generic volumes, to be governed under a long-term framework agreement.

At the end of 2016, 32 railway companies provided transport services on the basis of signed "Contracts for infrastructure use" while 21 operated under framework agreements/protocols of understanding.

Toll revenue rose from €1,006 million in 2015 to €1,058 million in 2016, up 5.16%. The increase in toll revenue was due to the growth in volumes + 2.68% (with growth of +12 % on the HS/HC network).

See the *Additional information* section for more details.

## Service quality

G4-15 G4-PR1 G4-PR4 G4-PR5 G4-PR8  
G4-PR9

### TRENITALIA

#### Passenger transport

Trenitalia devotes significant attention to offering passengers quality travel experiences, by monitoring three main aspects in particular:

- / the quality levels that are promised and provided (as per the medium and long haul Service Charter and the regional Service Charters<sup>6</sup>);
- / perceived quality;
- / customer complaints.

Trenitalia is committed to ensuring customers enjoy certain service standards which it expresses in measurable objectives that it seeks to improve upon where possible. It has formalised these objectives and publishes them annually in the Service Charter.

#### > Promised and provided quality: Customer Care

In 2016, Trenitalia achieved each and every one of the 12 medium and long haul passenger transport service targets it had set.

Analysing its results with respect to the established targets, train cleanliness was especially high, with *Frecce* trains exceeding the target by 4.6% and all medium and long haul trains in general outperforming it by 8.9%. The punctuality of trains operating under service contracts with the government and ticketing services also performed extremely well.

Indeed, two of the targets established in the service contract regarding the punctuality of *Frecce* trains and train cleanliness, which had not been achieved in 2015, were reached in 2016.

Customer satisfaction rates for all other aspects are substantially in line with targets.

<sup>6</sup> Trenitalia publishes the Service Charter to express its principles and commitments to improving the services it offers. The regional Service Charters are available on the website [trenitalia.com](http://trenitalia.com).

## QUALITY INDICATORS FOR ALL MEDIUM AND LONG HAUL TRAINS\*

Quality factors	Indicators	Target 2015	Target 2016	2016 Actual	2016 difference (%)	Notes
<b>Punctuality</b>	Trains arriving within 15' of the scheduled time	93.0%	93.0%	93.7%	0.7%	The delay is measured at the train's final destination station**
<b>Service regularity</b>	Regular trains, net of trains that were limited, cancelled or arrived over 120' late	99.0%	99.0%	99.7%	0.7%	All trains are considered, excluding those that were affected by external events, disruptions to the line or strikes
<b>Cleanliness</b>	Effectiveness of on board cleaning	80.0%	80.0%	88.9%	8.9%	Customer satisfaction with cleanliness during travel***
<b>Ticketing services</b>	Functioning automatic ticketing machines	95.0%	95.0%	98.0%	3.0%	Percentage out of total automatic ticketing machines
	Sales service accessibility: purchases using innovative channels (excluding ticketing offices at stations and travel agencies)	35.0%	35.0%	40.7%	5.7%	Proportion of purchases made using innovative systems out of total turnover from Trenitalia's medium and long haul services

(\*) Performance data refer to available data at 3 February 2017. The "Information hotlines" indicators has not been monitored since 2015.

(\*\*) Percentage recorded by RFI's computer system, excluding delays caused by exceptional events, strikes or other railway companies (standard B - Ministerial decree no. 146T/2000).

(\*\*\*) An independent research institute surveys Trenitalia's customer satisfaction: customers are considered as satisfied if they report a positive score of  $\geq 6$  on a scale of one to nine.

## QUALITY INDICATORS FOR THE FRECCIE TRAINS

Quality factors	Indicators	Target 2015	Target 2016	2016 Actual	2016 difference (%)	Notes
<b>Punctuality</b>	Trains arriving within 15' of the scheduled time	94.0%	94.0%	94.2%	0.2%	The delay is measured at the train's final destination station*
<b>Service regularity</b>	Regular trains, net of trains that were limited, cancelled or arrived over 120' late	99.4%	99.4%	99.9%	0.5%	All trains are considered, excluding those that were affected by external events, disruptions to the line or strikes
<b>Cleanliness</b>	Effectiveness of on board cleaning	88.00%	88.00%	92.6%	4.6%	Customer satisfaction with cleanliness during travel**

(\*) Percentage recorded by RFI's computer system, excluding delays caused by exceptional events, strikes or other railway companies (standard B - Ministerial decree no. 146T/2000).

(\*\*) An independent research institute surveys Trenitalia's customer satisfaction: customers are considered as satisfied if they report a positive score of  $\geq 6$  on a scale of one to nine.

### QUALITY TARGETS FOR TRAINS OPERATING UNDER SERVICE CONTRACTS WITH THE GOVERNMENT

Quality factors	Indicators	Target 2015	Target 2016	2016 Actual	2016 difference (%)	Notes
<b>Punctuality</b>	Punctuality within 30'	91.0%	91.0%	95.6%	4.6%	Number of trains with delays of less than 30 minutes/number of trains operated x 100 (Standard B)
	Punctuality within 60'	96.0%	96.0%	98.4%	2.4%	Number of trains with delays of less than 60 minutes/number of trains operated x 100 (Standard B)
<b>Service regularity</b>	Regular trains, net of trains that were limited, cancelled or arrived over 120' late	98.2%	98.2%	99.2%	1.0%	100% (number of cancelled trains + number of limited trains + number of trains arrived over 120 minutes late)/ number of scheduled trains x 100 (Standard B)
<b>Cleanliness</b>	Effectiveness of on board cleaning	88.0%	88.0%	88.1%	0.1%	Cleanliness (QME)* = 100% - % Non-compliance

(\*) Average quality provided.

Service quality includes an efficient and accessible sales network that allows customers to choose from among different purchase options. In 2016, Trenitalia's traditional sales network comprised approximately 320 ticketing offices, over 1,900 self-service machines, 6,500 Italian travel agencies and 1,750 international travel agencies, roughly 70,000 points of sale belonging to external distribution networks like Lottomatica's US PAGA, Punto Servizi and Sisal Pay, and 16,700 companies participating in the Corporate Travel programme<sup>7</sup>.

In addition to traditional ticketing, Trenitalia offers innovative channels like the website [trenitalia.com](http://trenitalia.com), the Trenitalia app and the website for handheld devices [mobile.trenitalia.com](http://mobile.trenitalia.com), both of which have been optimised for smartphones and tablets. Customers may pay for their tickets by credit card or PayPal.

In addition, the main stations also have customer

service desks that provide information and assistance to customers, as well as last-minute ticket changing services.

Specific attention has also been devoted to the quality of services for people with reduced mobility. To this end, the most effective solutions have been identified to ensure people with reduced mobility can access stations and trains. These include Trenitalia's PostoBlu service for passengers with disabilities and reduced mobility which entails seat assignment and booking when they request assistance at RFI's Sale Blu or call centres, allowing passengers to pay for and pick up their tickets later using the available sales channels. Additional details on services for people with reduced mobility are given in the section on RFI's services.

<sup>7</sup> The "Corporate Travel B2B" and "Corporate Travel Triangolo" are railway ticket purchase programmes for companies.

### > Perceived quality Customer Satisfaction

Customers' perceived quality throughout the various stages of a journey is measured through periodic customer satisfaction surveys.

For medium and long haul transport, these periodic surveys refer to journeys in Italy by passengers aged 14 and up. Surveys are conducted once every two months for a total of six surveys per year and entail 5,000 interviews with a sample of passengers selected using a probability-based procedure in connection with three different aspects: traffic, station and brand<sup>8</sup>.

For regional transport, the periodic surveys cover the same target (travellers aged 14 and up), but the travel range is shorter (local/regional). Again in this case, the sample is created using a probability-based procedure but in connection with the region, station and time of day. Surveys are conducted every two months for a total of six surveys per year and entail 7,666 interviews. Such a high number of interviews makes it possible to survey passengers travelling on the 35 main regional railway lines throughout all of Italy. The survey method used for both types of journeys (medium/long haul and local/regional) consists of two stages:

face-to-face interviews at the station before the

interviewees board their trains; telephone interviews using operators and CATI (Computer Assisted Telephone Interview), through call-backs to interviewees two/three days after initial contact.

The score for each variable considered in the survey is on a scale of one to nine, where nine corresponds with the highest satisfaction and one with the lowest.

In the customer satisfaction survey, passengers who report a satisfaction rate equal to or greater than 6 are considered satisfied.

### Medium and long haul transport

In general, the results of the 2016 customer satisfaction survey show fairly contained changes with respect to 2015 data.

There was a small drop in the percentage of passengers satisfied with their time on board trains, which fell from 92.7% in 2015 to 91.9% in 2016.

However, even the most significant changes were limited to a few percentage points. Satisfaction with punctuality, for example, which saw the largest decrease, went from 82.7% in 2015 to 80.9% in 2016, while cleanliness, which saw the highest increase, went from 88% in 2015 to 88.9% in 2016.

<sup>8</sup> Total interviews per year: 30,000.

### NATIONAL AND INTERNATIONAL TRANSPORT: CUSTOMER SATISFACTION

Customer satisfaction – Time on board the train	2016	2015	2014	2016 vs 2015%
Comfort	91.5%	92.2%	90.8%	= -0.7
Cleanliness	88.9%	88.0%	86.1%	= 0.9
Punctuality	80.9%	82.7%	83.5%	v -1.8
On board information	90.7%	91.7%	90.3%	v -1.0
Personnel	96.0%	96.0%	95.6%	= 0.0
<b>Overall score</b>	<b>91.9%</b>	<b>92.7%</b>	<b>92.1%</b>	<b>= -0.8</b>

## Regional transport

The improvement trend in regional transport service customer satisfaction indicators, which began in previous years, continued in 2016.

Overall, customer satisfaction with "time on board the train" improved by 3.6%, with 76.4% of passengers satisfied with this indicator in 2015 and 80% in 2016.

The aspects that improved the most were "comfort", up 3.6%, "punctuality", up 3.3% and "cleanliness", up 3.0%.

### REGIONAL TRANSPORT: CUSTOMER SATISFACTION

Customer satisfaction – Time on board the train	2016	2015	2014	2016 vs 2015%
Comfort	79.3%	75.7%	73.8%	▲ 3.6
Cleanliness	65.6%	62.6%	58.8%	▲ 3.0
Punctuality	70.0%	66.7%	63.5%	▲ 3.3
On board information	77.2%	74.4%	71.7%	▲ 2.8
Personnel	91.2%	89.4%	85.1%	▲ 1.8
<b>Overall score</b>	<b>80.0%</b>	<b>76.4%</b>	<b>74.0%</b>	<b>▲ 3.6</b>

The generally positive trend in customer satisfaction indicators among regional transport service users was particularly evident at local level in the autonomous province of Bolzen and the Friuli Venezia Giulia and Umbria regions, where about nine out of ten passengers rated their "time on board the train" positively.

An analysis of these trends shows that the main improvements on 2015 were seen in Emilia Romagna (where satisfaction with time on board the train is up 5.3%), the autonomous province of Bolzen (up 4.9%) and the regions of Piedmont and Marche (up approximately 4.5%). On the other hand, the regions where the same indicator declined on 2015 were Trento (down 0.9%), Valle d'Aosta (down 0.6%) and Sardinia (down 0.4%).

### Complaints management

The careful management of complaints is a valid tool for interaction with customers because it enables the Group to monitor and analyse inefficiencies reported by customers and improve performance.

For the systematic and efficient management of complaints, Trenitalia relies on an organisation spread throughout Italy consisting of:

- local offices that manage complaints paperwork and replies to customers;
- a network of focal points<sup>9</sup> capable of identifying the issues that customers report and taking the appropriate response measures.

Complaints are managed using an IT platform that has been integrated in the Customer Relationship Management system (Framework for the management of relationships between customers and the company), which makes it possible to handle the complaints in synergy with other customer contact channels (e.g., ticketing offices and assistance centres for customers in the station, the website, the call centre, snail mail and e-mail). Currently, the most frequently used is the website, through which most reports arrive.

See the *Additional information* section for more details.

<sup>9</sup> The focal points are in-house structures located throughout Italy responsible for managing complaints.

## > Medium and long haul transport

### COMPLAINTS AND INEFFICIENCIES - NATIONAL AND INTERNATIONAL TRANSPORT

	2016	2015	2014	2016 vs 2015
Total complaints*	33,445	41,587	33,463	▲ -19.6%
Total inefficiencies*	29,928	44,129	34,058	▲ -32.2%

(\* ) Complaints are a form of written communication (e.g., letter, fax or e-mail) whereby customers report critical issues that they have noted and can explain the specific inefficiencies. A complaint can correspond to more than one inefficiency.

In 2016, 33,445 complaints were managed in relation to medium and long haul transport services, showing a decrease of 19.6% on the previous year.

### ANALYSIS OF COMPLAINTS - % INEFFICIENCIES - NATIONAL AND INTERNATIONAL TRANSPORT

	2016	2015	2014	2016 vs 2015 %
Punctuality	20.6%	18.9%	21.7%	▲ 1.7
Regularity*	5.0%	3.8%	5.0%	▲ 1.2
Commercial legislation	7.9%	9.0%	12.5%	▼ -1.1
Comfort and cleanliness	9.4%	7.8%	7.9%	▲ 1.6
Post-sales legislation	5.9%	9.0%	6.8%	▼ -3.1
Trenitalia website	17.9%	20.5%	16.5%	▼ -2.6
Sales using traditional channels	2.7%	3.2%	4.3%	= -0.5
Timetable and fares	17.2%	15.4%	10.2%	▲ 1.8
Information	4.0%	4.9%	5.5%	= -0.9
Call centres	2.1%	2.0%	1.6%	= 0.1
Safety of people and things	1.1%	0.7%	1.0%	= 0.4
Other (on-board/ground assistance, additional services, services for the disabled, etc.)	6.1%	4.6%	7.0%	▲ 1.5

(\* ) Percentage of service regularity inefficiencies. Complaints about service regularity include reports from customers relating to cancelled trains, strikes and the type or number of carriages differing from the scheduled type or number.

The main reasons for complaints are punctuality, schedules, fares and the website, with the latter showing a downwards trend on the previous year. Additional decreases on 2015 were seen in relation to aspects such as post-sales legislation and

commercial legislation. In 99.9% of cases, customers received a reply in less than 30 days. Again in 2016, fair settlement<sup>10</sup> remained the most appropriate tool for rapidly and effectively resolving disputes with customers (663 cases were handled).

<sup>10</sup> Fair settlement is a procedure whereby a representative of one of the consumer groups that have signed a protocol and a Trenitalia representative discuss a customer's challenges

and evaluate whether a satisfactory offer can be made to the customer in order to settle the complaint amicably.

> Regional transport

In 2016, 22,722 complaints were received in relation to regional transport services, showing an increase of 15.5% on 2015.

COMPLAINTS AND INEFFICIENCIES – REGIONAL TRANSPORT

	2016	2015	2014	2016 vs 2015
Total complaints	22,722	19,670	22,711	▲ 15.5%
Total inefficiencies	23,971	21,149	24,611	▲ 13.3%

ANALYSIS OF COMPLAINTS - % INEFFICIENCIES - REGIONAL TRANSPORT

	2016	2015	2014	2016 vs 2015 %
Punctuality	16.5%	18.2%	21.9%	▼ -1.7
Regularity	10.4%	12.1%	18.4%	▼ -1.7
Commercial legislation	18.5%	13.7%	12.8%	▲ 4.8
Comfort and cleanliness	8.4%	10.4%	8.6%	▼ -2.0
Post-sales legislation	4.0%	4.7%	3.5%	▼ -0.7
Trenitalia website	3.3%	3.5%	2.6%	= -0.2
Sales using traditional channels	12.8%	12.6%	10.3%	= 0.2
Timetable and fares	6.9%	6.1%	4.0%	= 0.8
Information	5.4%	4.9%	5.3%	= 0.5
Call centres	0.2%	0.3%	0.2%	= -0.1
Safety of people and things	1.3%	1.4%	1.3%	= -0.1
Other (on-board/ground assistance, additional services, services for the disabled, etc.)	12.3%	12.3%	11.1%	= 0.0

(\*) Percentage of service regularity inefficiencies. Complaints about service regularity include reports from customers relating to cancelled trains, strikes and the type or number of carriages differing from the scheduled type or number.



A comparison of the distribution of the various types of complaints shows how the downwards trend in the number of complaints that began in previous years continued in 2016. On the other hand, complaints about commercial legislation increased, especially with respect to the rise in the number of passengers travelling without valid tickets who were made to pay their fare on board. The response time in 98.2% of the cases was less than 30 days.

Cargo transport

Cargo transport by rail requires a significant degree of customisation to meet each customer's specific needs. The importance of the service components considered and the expected service level vary depending on the product/industry, the type of transport and the customer. Furthermore, customer satisfaction levels are influenced by specific market and economic conditions and comparisons with all forms of competition, including modal alternatives (rail and waterway) and the many other railway companies that are now long-standing operators in Italy.

> Perceived quality: Customer Satisfaction

The customer satisfaction survey is based on a sample of approximately 114 corporate companies that make up most of its turnover. The survey was conducted by telephone via CATI (Computer Assisted Telephone Interviews) based on a structured questionnaire. The purpose of the survey is to obtain a score, on a scale of one to ten, of the main characteristics of the service, such as operational aspects, sales structure availability, information provided and administrative management. Suggestions for potential areas of service improvement are also gathered.

> Analysis of the customer satisfaction trend

In 2016, 61.4% of the companies interviewed said they were satisfied with the overall level of service offered by Trenitalia, with a 9.5% decrease on 2015. The most critical scores related to operational aspects of the service (with a satisfaction rate of 62.1%), while higher scores were recorded for commercial aspects and customer assistance (with a satisfaction rate of 80.5%), administrative management (with 83.1% of customers satisfied) and the completeness and timeliness of the information provided (with 71.5% of customers satisfied).

> Analysis of customers' suggestions

In 2016, the customers who were interviewed suggested that the areas needing the most improvement were communications and the information provided, as well customer assistance, although the customer satisfaction rates in these areas were fairly positive.

Management of complaints and indemnity claims

The reorganisation of the complaints management process began to more precisely channel and track all complaints received and improve customer listening capabilities. Given the characteristics of the cargo transport business and the many different players involved (the corporate customer, intermediaries and foreign railway companies), the process for managing indemnities to compensate damage to cargo during transport is more complex than that for passenger claims, as cargo indemnity claims take longer to manage. In particular, in 2016, 171 claims were received and 42 have been paid to date.

### > Analysis of the trend in complaints

The analysis of complaints received in 2016 shows a trend in line with previous years. Indeed, the number of complaints relating to "information" rose, essentially due to customers whose expectations were not met with respect to the online "Track & Trace" cargo tracking system. Certain improvement actions have already been

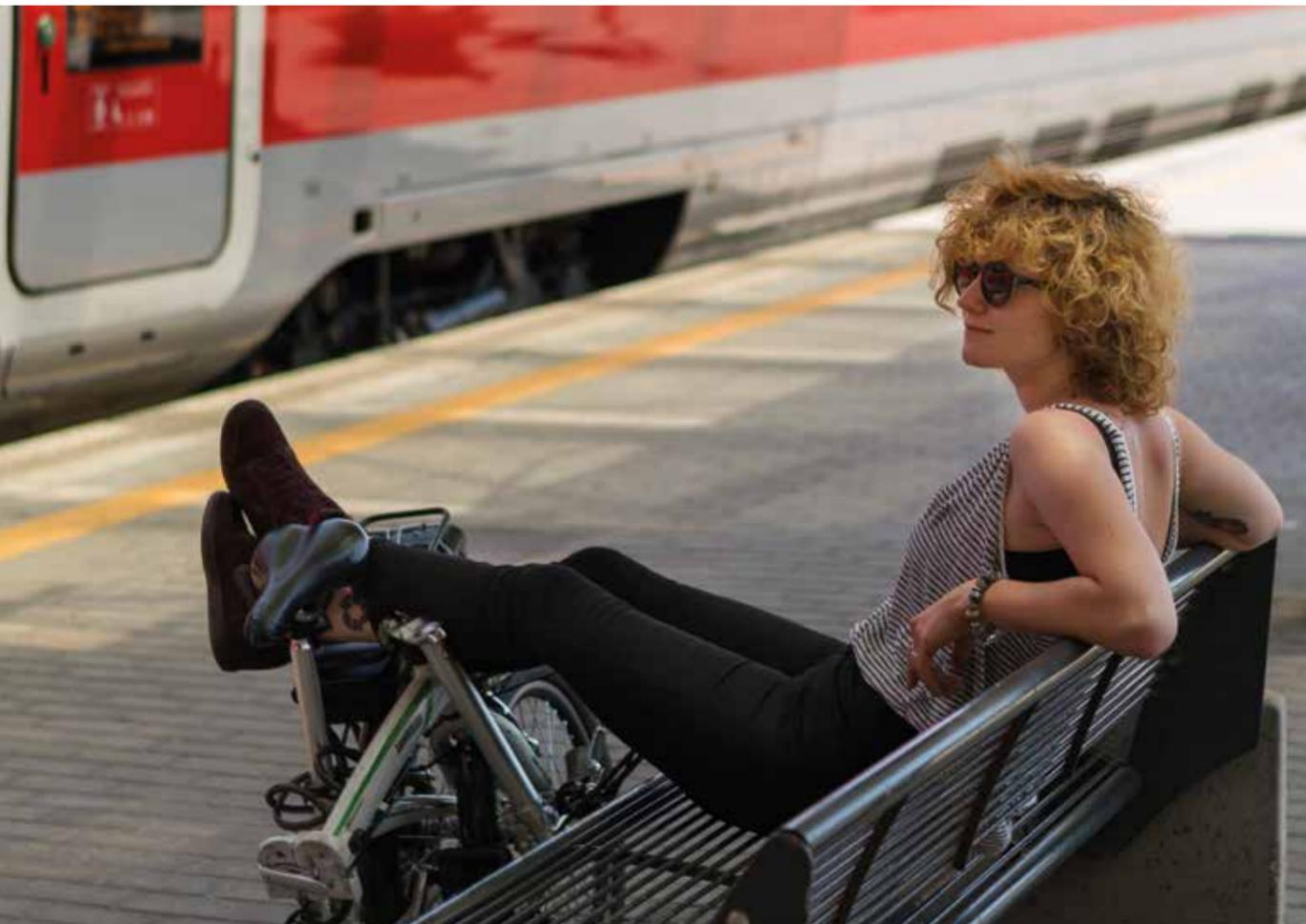
taken in this respect and others are currently being defined.

"Flexibility" (i.e., the ability to meet one-off spikes in demand) and "carriage availability" remain crucial aspects in 2016, accounting for 26% and 25% of total complaints, respectively.

Compared to the previous year, the complaints concerning all other aspects reflect a normal, physiological fluctuation.

### COMPLAINTS – CARGO TRANSPORT

	2016	2015	2014	2016 vs 2015
Total complaints	120	75	100	▲ 60%
Percentage of complaints with response times under 30 days	91%	91%	95%	= 0%



### RETE FERROVIARIA ITALIANA

#### Quality promised and delivered: the service quality targets of the 2016 Service Charter

Each year, RFI publishes its Service Charter, reporting prior year results and the targets it intends to pursue in terms of the legally mandated quality levels for public transport services<sup>11</sup>. The Service Charter is addressed to travellers at stations - the customers of the railway companies that offer their transport services on the national railway network - and to all residents in general who are in some way affected by the infrastructure operator's services and activities. For each public service area, the Service Charter presents a summary of the quality indicators that are the most indicative of all those measured each year through customer satisfaction surveys and in-house monitoring by specific company personnel and third parties.

RFI achieved all the targets in the Service Charter for the various indicators in 2016, as detailed in the tables below. In particular, the results of the customer satisfaction surveys showed a general consolidation of the prior year levels of perceived quality targets, which are linked to the percentage of customers who are satisfied with the services offered at stations, with rates ranging from 89% to 99%. These scores were due to investments and/or improvement actions in accordance with the operating and infrastructure plan, confirming the improvement trend of recent years.

#### > Customer satisfaction: survey techniques

RFI's customer satisfaction surveys investigate the quality of all station services and, in recent years, additional customer satisfaction surveys have been added for specific service scopes such as, for example, assistance at stations for people with disabilities and reduced mobility.

The detailed results are used to improve the services offered and reported to management. Via independent market research companies selected through a European call for bids, RFI's Market Observatory<sup>12</sup> has conducted customer satisfaction surveys for ten years on a sample of the 755 busiest stations in the network, covering nearly 95% of travellers. The analyses are carried out every month and monitor the trends of over 90 perceived quality indicators and the same number of delivered quality indicators via two types of surveys:

- / monitoring of the perceived quality through face-to-face interviews<sup>13</sup>;
- / monitoring of the quality offered using mystery customers<sup>14</sup>.

The specific surveys on the service quality of assistance to people with disabilities and reduced mobility, which consisted of two separate half yearly campaigns, was conducted via 2,000 telephone interviews of 2,000 passengers who used the services.

For additional information on the survey methodology refer to *Additional information*.

<sup>11</sup> Quality factors are contained in the regulation and applied based on the company's characteristics: Prime ministerial decree of 30 December 1998 "Reference framework for the preparation of the Service Charter (Mobility charter)".

<sup>12</sup> The most recent winners of the tender was RTI GN Research/Scenari S.r.l.

<sup>13</sup> Conducted using questionnaires with multiple-choice an-

swers enabling customers to score their satisfaction with various aspects of the station and services, as well as open-ended questions to gather personal feedback from interviewees regarding their dissatisfaction.

<sup>14</sup> Mystery customer inspections is a technique used by researchers who anonymously follow specific, previously established procedures based on a set of standard indicators to visit the station and evaluate its pros and cons.

### Train operation, network safety and efficiency

The quality factor relating to safety<sup>15</sup> is an essential parameter in assessing the quality of train operation by railway companies.

Quality factor	Indicator	Parameter*	2016 Target	2016 Result
SAFETY	Level of railway operation safety	Number of FWWSI** due to significant accidents/trains x km	Do not exceed the NRV assigned to Italy in respect to the "company as a whole" railway risk category	Achieved

(\*) Internal monitoring.  
 (\*\*) FWWSI (Fatalities and Weighted Serious Injuries) is ERA (European Railway Agency) terminology.

### Environmental Sustainability of services and operations

The assessment of RFI's commitment to the environment consists of monitoring the implementation of its environmental policy based on clear, specific actions/objectives to increasingly improve the protection of the environment, as a strategic corporate lever involving of the entire organisation and external stakeholders.

Quality factor	Indicator	Parameter*	2016 Target	2016 Result
FOCUS ON THE ENVIRONMENT	<b>Actions to implement "RFI's environmental policy":</b> consolidation of the environmental management system with the extension of ISO 14001:2004 certification to all RFI production units.	Commitment	Implementation	Achieved
	<b>Actions to implement "RFI's environmental policy":</b> completion of the European call for bids for the supply of over 100,000 LEDs to improve energy efficiency at stations (platforms, underpasses, light towers and passenger buildings) and offices.	Commitment	Implementation	Achieved

(\*) Internal monitoring.  
<sup>15</sup> Safety is analysed in accordance with Legislative decree no. 162/2007 and is measured based on the European common safety targets (CST), using national maximum acceptable values for the various railway risk categories (NRV - National Reference Value) set for each member country by EC decisions upon proposal of the European Railway Agency (ERA).

### Connection and exchange with other modes of transport

Customer satisfaction with modal integration improved significantly, with the percentage of customers reporting their satisfaction with connections between stations and urban/suburban public means of transport up to 89.9% (+1.2% on 2015).

Quality factor	Indicator	Parameter*	2016 Target	2016 Result	2016 vs 2015 (% difference)
MODAL INTEGRATION	Perceived quality of the station's connection to public urban/suburban means of transport	Percentage of satisfied people	85%	89.9%	1.2
	Perception of ease and convenience of arrival at the station	Percentage of satisfied people	90%	94.7%	0.0
	Authorised parking areas near the station	Percentage of stations with this service	85%	94.1%	3.8

(\*) Customer satisfaction survey.



### Conditions, usability and comfort at stations

The perceived quality of the conditions, usability and comfort at stations is substantially steady overall, with a customer satisfaction rate of 95.7% throughout the entire network, but which, when the stations are analysed by class, shows a slight drop for platinum stations (-1.4% on 2015). The opposite is true for cleanliness, with satisfaction levels substantially the same as in 2015 for the entire network (98.2%), due to the optimisation of operations, while silver stations saw their customer satisfaction rate with cleanliness rise from 96.1% in 2015 to 97.5% nearing the satisfac-

tion levels of platinum and gold stations - respectively 99.1% and 98.1%. Similarly, in all three classes of stations covered by the customer satisfaction surveys, the satisfaction rate with lighting in overpasses, underpasses and walkways rose. In particular, platinum stations increased to 98% (+1.1% on 2015), gold stations went up to 95.8% (+1.7% on 2015) and silver stations - confirming the effectiveness of the investments pursued in the scope of the 500 stations project rose to 93.5% (+2.9% on 2015). Perceived security, i.e., customers' perception of stations as safe places, also showed excellent results, with 89% of passengers satisfied.

Quality factor	Indicator	Parameter*	Station class	2016 Target*	2016 Result	2016 vs 2015 (% difference)
TRAVEL COMFORT IN STATION AREAS	Perception of overall comfort during time at stations	Percentage of satisfied people	Platinum	90.0%	97.9%	-1.4
			Gold	90.0%	96.5%	-0.1
			Silver	85%	93.4%	0.0
	Perception of lighting in underpasses, overpasses and raised walkways	Percentage of satisfied people	Platinum	90.0%	98.0%	1.1
			Gold	90.0%	95.8%	1.7
			Silver	80%	93.5%	2.9
CLEANLINESS	Perception of cleanliness of areas in the station	Percentage of satisfied people	Platinum	90.0%	99.1%	-0.1
			Gold	90.0%	98.1%	0.8
			Silver	85.0%	97.5%	1.4
ADDITIONAL GROUND SERVICES	Perception of commercial services as a whole	Percentage of satisfied people	Platinum	90.0%	99.7%	0.1
			Gold	90.0%	99.0%	0.1
			Silver	90.0%	98.6%	0.3

(\*) Customer satisfaction survey.

Quality factor	Indicator	Parameter*	2016 Target*	2016 Result	2016 vs 2015 (% difference)
SECURITY AT THE STATION	Level of security of people and things at stations	No. of thefts reported by passengers in the year*	Do not exceed the average value of the three years considered	Achieved	
	Perception of overall security at the station	percentage of satisfied people**	80%	89.0%	0.2

(\*) Polfer monitoring.

(\*\*) Customer satisfaction survey.

### Public information

Customer satisfaction with information to the public about train operation in both normal and critical conditions is up. The satisfaction rate reflecting passengers' perception of information provided in critical train operating conditions rose to 91.8% (+1.6% on 2015), increasingly narrowing the gap with information under normal operating conditions (currently at 98.3%).



Quality factor	Indicator	Parameter*	2016 Target*	2016 Result	2016 vs 2015 (% difference)
INFORMATION ON TRAIN OPERATION PROVIDED AT STATIONS	Perception of information under normal operating conditions	percentage of satisfied people	90%	98.3%	0.8
	Perception of information under critical operating conditions	percentage of satisfied people	80%	91.8%	1.6

(\*) Customer satisfaction survey.

### Services for passengers with disability and reduced mobility

Passengers with disabilities and reduced mobility continued to report exceptionally high customer satisfaction levels, with 99% satisfied with the Sala Blu assistance services, reporting an average score of 8.6 (on a scale of one to nine), significantly higher than their ratings of other customer satisfaction indicators.

### Focus on passengers with reduced mobility

In late 2010, RFI began providing assistance services with an initial circuit of roughly 250 stations. By the end of 2016, 275 stations throughout Italy offered these services. The stations are selected on the basis of accessibility, the type of trains that stop there (whether they are equipped with wheelchairs) and whether there is actual demand from station users for this type of assistance services.

RFI provides free assistance with boarding and disembarking trains to all railway company passengers with physical, sensory or motor disabili-

ties that temporarily or permanently affect their mobility.

The Sala Blu centres established in 14 main stations and open seven days a week from 6:45 in the morning to 9:30 at night are the points of reference for these services at stations in the circuit of those offering assistance to people with reduced mobility. Each Sala Blu provides passengers with information on the assistance offered by RFI at all stations in the circuit and books the services for them - which are available 24 hours a day and operated by the company that won the contract for this service (European call for bids), consisting of:

- / meeting passengers at the station at an agreed location or, for arriving passengers, at their seat on the train;
- / accompanying them on board the departing train or from the arriving train at the station or, for those who are continuing on, on board another train, with wheelchairs for use at the station to/from the train available upon request;
- / boarding and disembarking the train using a lift for passengers in wheelchairs;
- / any portage service, upon request (one piece of luggage).

In 2016, approximately 306,000 services were

provided (+4.5% on 2015), confirming the growth trend of previous years.

In addition, in the year, assistance services to people with reduced mobility were expanded with the implementation of certain improvement actions included in the targets of the 2016 Service Charter, such as:

- / extension of assistance to people with reduced mobility circuit to the Campobasso, Isernia and Scalea stations, as well as to passengers of the integrated HS train+road service to/from Siena and Perugia (Firenze SMN), L'Aquila (Roma Tiburtina), Potenza and Matera (Salerno), Cortina D'Ampezzo (Venezia Mestre); Courmayeur (Torino Porta Susa), and Madonna di Campiglio (Verona and Trento);
- / increase in the number of stations in the circuit with lifts for wheelchair-bound passengers to

board trains, now also in use at the stations in Belluno, Cagliari, Campobasso, Isernia, Sassari, Scalea and Villafranca di Verona;

- / lifts on ferries crossing the Messina Strait;
- / introduction of a new call centre using VoIP technology, which has considerably improved the efficiency of the telephone channel<sup>16</sup>, raising the percentage of customers who receive responses on their first try to 90%;
- / development of the information service called "Infoaccessibilità stazioni" (on RFI's website in the "Station accessibility" section) providing information on accessibility services and facilities at the main stations in the network<sup>17</sup>. Stage two, which began in 2016, brought the number of stations covered from just over 100 to 648.

Quality factor	Indicator	Parameter*	2016 Target*	2016 Result	2016 vs 2015 (% difference)
ASSISTANCE AT STATIONS FOR PASSENGERS WITH REDUCED MOBILITY	<b>Overall level of satisfaction with the assistance service provided by the Sale Blu network</b>	percentage of satisfied people*	90%	99.0%	0.5
	<b>Actions to improve the assistance service:</b> increase in the number of stations included in the Sale Blu network	No. of stations**	At least 5	Achieved	-
	<b>Actions to improve the assistance service:</b> increase in the number of stations included in the Sale Blu network equipped with lifts	No. of stations**	At least 5	Achieved	-
ACCESSIBILITY OF AREAS IN THE STATION	<b>Actions to improve accessibility:</b> work to improve accessibility (platforms that are 55cm high, lifts)	No. of works**	At least 60	Achieved	-
	<b>Actions to improve accessibility:</b> extension of the online information service on accessibility features at the individual stations (InfoAccessibilità)	Commitment**	At least 600	Met	-

(\*) Customer satisfaction survey.

(\*\*) Internal monitoring.

<sup>16</sup> Toll free number 800906060 from a domestic landline, with another number 023232 for landlines and mobile phones at the ordinary rates;

<sup>17</sup> The information relates to whether there are assistance services and their characteristics, whether there are accessible toi-

lets, handicapped parking spaces, sound and/or visual public information systems, accessible ticket counters and information on which platforms have raised platforms to board/deboard trains, which platforms can be reached from the station entrance without barriers (on the same floor, with a lift, with a ramp) and/or following tactile walkways.

## > Classification of stations

RFI uses different methods to commercially manage its passenger buildings based on standard criteria to more efficiently meet customer requirements. To this end, it has classified its stations in four classes (platinum, gold, silver and bronze) according to various factors, such as the number of passengers and users, the level of services offered by the railway companies, commercial potential and the size of the public areas. Stations with active passenger services at 31 December 2016 are broken down as follows:

Class	Number of stations
Platinum*	19
Gold	102
Silver	859
Bronze	1,078

(\*) Bari Centrale, Bologna Centrale and Bologna HS, Florence Santa Maria Novella, Genoa Piazza Principe and Genoa underground, Milan Centrale, Milan Porta Garibaldi and commuter rail, Naples Centrale and Porta Garibaldi, Padua, Palermo Centrale, Pisa Centrale, Rome Termini, Rome Tiburtina, Turin Porta Nuova, Venice Santa Lucia and Verona Porta Nuova.

See the *Additional information* section for more details.

## COMPLAINTS AND INEFFICIENCIES

	2016	2015	2014	2016 vs 2015
Total complaints received	4,383	3,325	3,244	▲ 31.8%
Total inefficiencies	4,913	3,611	3,597	▲ 36.1%

(\*) Each individual complaint can correspond to more than one inefficiency.

## > Complaints management

RFI considers customer complaints to be an invaluable tool in understanding customers' perception of the services it provides on the entire network and at stations, as well as an important tool in guiding company actions to improve quality and prevent or resolve any critical issues<sup>18</sup>.

In 2016, as it is easier to contact RFI directly online, reports/complaints increased by 32% (36% of inefficiencies). This increase is due to: factors relating to the organisation of the complaints process (more precise agreements signed with the railway companies for the forwarding of complaints for which the infrastructure operator is responsible and the start of the systematic management of complaints on environmental impacts, which were previously handled at local level), the construction/roll-out of new lines, users' growing awareness of their rights as passengers, consumers and residents. The analysis of the different types of inefficiencies cited in the complaints and the distribution of the various categories of complaints, shows that they are substantially the same as in previous years, and that the greatest increases in terms of absolute numbers are due to areas and services in the station with respect to comfort, architectural barriers, public information and security. The latter aspect was reported in particular with respect to the gaps at the Firenze S.M.No., Milano Centrale and Roma Termini stations.

<sup>18</sup> The complaints management process is supported by the IT system called "ITINERE-RFI", in accordance with a company procedure that defines the roles, responsibilities and methods for interaction with other Group companies or other railway companies. Since 2012 - although Regulation (EC)

1371/2007 obliges the railway companies to establish a complaints management mechanism - RFI has an online system called "RFIRisponde", which customers can access from the www.rfi.it website.

## ANALYSIS OF COMPLAINTS – % DISTRIBUTION OUT OF TOTAL INEFFICIENCIES

	2016	2015	2014	2016 vs 2015 %
Comfort at the station	20.6%	20%	20%	= 0.6
Cleanliness at the station	6.6%	8%	8%	v -1.4
Architectural barriers and services for the disabled	8.9%	9%	6%	= -0.1
Public information	31.7%	32%	33%	v -0.3
Security at the station	12.6%	13%	14%	= -0.4
Other	19.6%	18%	18%	^ 1.6

## BUSITALIA - SITA NORD

## &gt; Quality delivered: Customer Care

In the annual Service Charter, the company reiterates the fundamental principles on which its services are based (equal rights, service continuity, engagement, efficiency and effectiveness) along with the rights of its transport service users. In Tuscany, the Service Charters are published with the name and general information of the companies belonging to the limited liability consortium companies (S.c.a.r.l.) based in Tuscany, including Autolinee Chianti Valdarno S.c.a.r.l. and Autolinee Mugello Valdisieve S.c.a.r.l., which Busitalia – Sita Nord heads. The two consortium companies' Service Charters are published on the websites [www.acvbus.it](http://www.acvbus.it) and [www.amvbus.it](http://www.amvbus.it), as well as on the company website [www.fsbusitalia.it](http://www.fsbusitalia.it).

In Umbria, delivered service quality is monitored using a series of indicators that are presented in the Service Charter for the transport services (urban road, suburban road, railway, alternative mobility<sup>1</sup> and waterway).

See the *Additional information* section for more details.

## &gt; Perceived quality: Customer satisfaction

In 2016, customer satisfaction surveys<sup>2</sup> were

conducted on the areas in which Busitalia - Sita Nord operates: in Umbria (end of May – beginning of June 2016) – urban, suburban, railway, waterway and alternative mobility - and Tuscany (November 2016). The surveyed population consisted of all customers and the sampling was stratified by customer pool and line, with random extraction. Information was gathered using a structured, anonymous questionnaire that was mainly distributed on board the buses and which passengers could fill out for themselves or, as in the case of urban transport in Umbria, information was gathered through face-to-face interviews at stops.

In addition to socio-behavioural data, the survey gathered data on customers' perception of the efficiency of the service provided, using a series of indicators to be scored from one to ten.

## Suburban transport

## &gt; Socio-demographic group of customers interviewed on suburban transport

The information on the service was gathered from a sample of 1,500 customers in Umbria and 844 customers in Tuscany<sup>3</sup>.

In Umbria, the interviewed users were mainly women (57.5%) and use the suburban transport service mainly to go to school or university (57.7%) or to go to work (21.6%).

<sup>1</sup> Alternative mobility refers to a variety of services like lifts, escalators and cable railways.

<sup>2</sup> The surveys were conducted by Mediatica S.p.A., based in Milan.

<sup>3</sup> The information was mainly gathered via the website (39.3% in Umbria and 22.2% in Tuscany) and at stops (28.7% in Umbria and 39.1% in Tuscany).

## SUBURBAN TRANSPORT IN UMBRIA

Socio-demographic group	Age <= 25	Use of the service at least three days per week	Use of passes	Use of single ticket
Suburban transport in Umbria	64.0%	70.2%	69.5%*	24.4%

(\*) 39.5% of which with an annual student's pass.

In Tuscany, the interviewed customers were mainly women (62.9%) and use the transport service for school (43.1%, 28.8% of which to go to school and 14.3% to go to university) or for work (40.2%).

## SUBURBAN TRANSPORT IN TUSCANY

Socio-demographic group	Age <= 25	Use of the service at least three days per week	Use of passes	Use of single ticket
Suburban transport in Tuscany	32.4%	74.4%	64.3%*	24.5%

(\*) 28.9% of which with a monthly pass.

The various aspects of the services offered, to be rated on a scale of one to ten<sup>4</sup>, show the following satisfaction rates. They were grouped into macro-factors and calculated net of omitted responses and considering a score of 6/10 or higher as satisfied:

## SUBURBAN TRANSPORT

	Tuscany		Umbria	
	Satisfaction % Tuscany	No answer /don't know	Satisfaction % Umbria	No answer /don't know
Security	88.6%	1.7%	90.5%	2.1%
Regularity and organisation	62.4%	2.7%	76.1%	4.3%
Modal integration	73.1%	9.4%	77.7%	10.2%
Cleanliness of vehicles and structures	62.9%	2.2%	65.8%	1.6%
Comfort	72.1%	3.6%	75.2%	1.9%
Focus on the environment	76.2%	7.9%	80.8%	9.1%
Conduct of personnel	83.9%	3.1%	87.8%	0.9%
Commercial service	78.5%	1.3%	86.9%	2.1%
Passenger information	70.4%	2.3%	88.3%	2.4%
<b>Overall satisfaction</b>	<b>85.6%</b>	<b>1.1%</b>	<b>89.4%</b>	<b>1.2%</b>

<sup>4</sup> The questionnaire asked: "Please rate the following service aspects from 1 (completely dissatisfied) to 10 (completely satisfied)".

## Urban transport

With respect to urban transport services in Umbria, 2,700 customers were interviewed on the services offered in Perugia, Terni, Foligno, Spoleto, Orvieto, Assisi and Todi. Interviewees were mainly women (57.1%) under 25 years of age (35.1%) or between 26 and 45 (27.5%).

23.6% of those interviewed use the urban transport mainly to go to work, 28.3% to go to school or university and 28.6% in their free time or to go shopping.

55.4% use public transport at least three days a week. 44.8% use single tickets, while 36.5% use passes, with a preference for annual students' passes (15.4%).

The satisfaction rate for the urban transport service in Umbria was 95% in 2016.

The service aspects proposed by interviewees were scored on a scale of one to ten<sup>5</sup>, and received the following satisfaction rates, grouped into macro-factors.



### URBAN TRANSPORT

	Umbria	
	Satisfaction % Umbria	No answer/don't know
Security	94.5%	1.9%
Regularity and organisation	85.8%	10.4%
Modal integration	84.1%	23.6%
Cleanliness	80.3%	0.6%
Comfort	84.2%	1.5%
Focus on the environment	89.2%	20.1%
Conduct of personnel	93.5%	2.0%
Commercial service	91.9%	3.0%
Passenger information	94.7%	1.5%
<b>Overall satisfaction</b>	<b>95.0%</b>	<b>1.3%</b>

In Umbria, another survey was conducted on alternative mobility (satisfaction rate of 96.2%), railway transport (satisfaction rate of 76.6%) and waterway transport (satisfaction rate of 97.4%).

<sup>5</sup> The questionnaire asked: "Please rate the following service aspects from 1 (completely dissatisfied) to 10 (completely satisfied)".

## Complaints management

In 2016, 370 complaints and/or reports<sup>6</sup> were received relating to Busitalia in Tuscany, 3.9% more than in the previous year. 52.7% of the complaints were sent to the company by e-mail.

### Classification of complaints received in Tuscany<sup>7</sup>

#### CLASSIFICATION OF COMPLAINTS RECEIVED

	% distribution out of total aspects reported in 2016	% distribution out of total aspects reported in 2015	2016 vs 2015 %
Service regularity	32.6%	29.2%	3.4
Punctuality	28.8%	18.7%	10.1
Company/customer relationship	10.1%	14.5%	-4.4
Travel comfort	9.9%	15.6%	-5.7
Passenger information	8.9%	6.8%	2.1
Service gaps	4.4%	5.5%	-1.1
Tickets	2.6%	4.0%	-1.4
Security	1.2%	3.7%	-2.5
Cleanliness	1.0%	0.0%	1.0
Other	0.6%	2.0%	-1.4

The analysis of the individual aspects reported shows an increase in complaints regarding punctuality which, together with the increase in complaints about regularity, is mainly due to the many construction sites throughout Florence in connection with the construction of the new trolley bus lines on ring roads and key roads to access the city. Accordingly, complaints about information also increased as a result of the need

to inform customers about the many temporary changes to roadways, like detours and closed roads. The positive trend entailing a decrease in the number of complaints about the company/customer relationship and comfort continued in 2016.

In Umbria, 471 complaints were received in 2016<sup>8</sup>, down 6.9% on 2015.

<sup>6</sup> The total number of complaints does not include anonymous reports, which are impossible to manage by responding to the customer.

<sup>8</sup> Data refer to road, rail, waterway and alternative mobility services.

<sup>7</sup> The 2015 and 2016 data include reported inefficiencies directly relating to Busitalia-Sita Nord that were received in the year. The percentages are in proportion to total reported aspects.

### Classification of complaints received in Umbria

#### CLASSIFICATION OF COMPLAINTS RECEIVED

	% distribution out of total complaints in 2016	% distribution out of total complaints in 2015	2016 vs 2015 (%)
Service regularity	18.26%	18.97%	-0.71
Punctuality	24.63%	19.17%	5.46
Passenger information	0.42%	0.79%	-0.37
Company/customer relationship	15.29%	18.77%	-3.48
Travel comfort	7.22%	4.94%	2.28
Tickets	2.55%	0.79%	1.76
Service gaps	9.34%	16.21%	-6.87
Security	2.76%	1.38%	1.38
Cleanliness	5.73%	5.73%	0.00
Focus on the environment	0.85%	1.38%	-0.53
Other	12.95%	11.86%	1.09

Most of the complaints received relate to punctuality and service regularity. Complaints about punctuality are mainly due to two factors that arose in the year:

- / non-routine maintenance on the Perugia - A1 motorway connector, which had serious repercussions on ordinary roadways and, consequently on the LPT service;
- / introduction of railway infrastructure mitigation measures imposed by ANSF beginning in

September 2016, with a reduction in the maximum train speed to 70 km/h and mandatory stops at railroad crossings without barriers.

In particular, there was a decrease in the number of complaints received in connection with service gaps due to rescheduling/service reductions at the request of the customer body.

There was an improvement in the number of complaints received in relation to the relationship between the company and customers.



### ATAF GESTION I

#### Quality delivered: Customer Care

The Service Charter indicators refer to ATAF&LI-NEA, the consortium company that manages LPT in the Florence metropolitan area and comprises Ataf Gestioni S.r.l. and LI-NEA S.p.A.<sup>1</sup> ATAF&LI-NEA uses the following factors and related indicators to track the quality it offers to

customers and the quality that they perceive and to ensure compliance with the target standards set for the following year.

#### > 2016 Service Charter – ATAF&LI-NEA S.c.a.r.l.

The following tables show the main indicators published in the Service Charter, along with the results achieved<sup>2</sup>.

#### SAFETY

Indicator	Unit of measure	2016 Result	2016 Target	2015 Result
<b>Accident rate</b>	No. of claims / km of service provided	1 claim for every 19,305.47 km travelled	decrease	0.58*
<b>Vehicle age</b>	No. of vehicles 15+ years old / total vehicles	<b>12.0%</b>	decrease	7.4%
	No. of vehicles between 10 and 15 years old / Total vehicles	<b>37.0%</b>	decrease	45.3%
	No. of vehicles between 5 and 10 years old / Total vehicles	<b>15.0%</b>	decrease	16.3%
	No. of vehicles between 0 and 5 years old / Total vehicles	<b>36.0%</b>	increase	31.0%

(\* ) The 2015 data were calculated using a different unit of measure than in 2016 (no. of claims / km of service x 10,000)..

#### SERVICE REGULARITY AND PUNCTUALITY

Indicator	Unit of measure	2016 Result	2016 Target	2015 Result
<b>Reliability</b>	actual km / scheduled km	<b>95.9%</b>	Maintenance	95.9%
	Shunting vehicles available from 7:00 - 9:00	<b>31</b>	Maintenance	29
<b>Punctuality</b>	No. of trains that arrived between 5 and 15 minutes late / Total trains	<b>11.6%</b>	Decrease	13.0%
	No. of trains that arrived between 15 and 30 minutes late / Total trains	<b>2.9%</b>	Maintenance	3.3%
	No. of trains more than 30 minutes late / Total trains	<b>1.0%</b>	Maintenance	1.2%

<sup>1</sup> Ataf Gestioni S.r.l. owns 77.88% of the consortium company ATAF&LI-NEA and LI-NEA S.p.A. owns the remaining 22.12%.

<sup>2</sup> The Service Charter is updated each year and the complete text is published on the website [www.ataf.net](http://www.ataf.net).

COMMERCIAL AND FRONT OFFICE SERVICE LEVEL

Indicator	Unit of measure	2016 Result	2016 Target	2015 Result
Points of sale	No. of POS / towns served	139	Maintenance	132
On-board ticket sales	No. of lines with on-board ticket sales / Total lines	100%	Maintenance	100%
Response time (or complaints and requests)	Maximum response time	30 days	30 days	30 days

FOCUS ON THE ENVIRONMENT

Indicator	Unit of measure	2016 Result	2016 Target	2015 Result
Vehicles with a low environmental impact	No. of Euro 6 diesel vehicles/ Total diesel vehicles	40%	Maintenance	49%*
	No. of electric vehicles/Total vehicles	3.4%	Maintenance	2.5%

(\*) The 2015 data also considered EURO 5 and EEV vehicles.

Perceived quality: Customer satisfaction

In 2016, customer satisfaction surveys were conducted analysing a wide range of lines and consisting of face-to-face interviews at four service hubs, in order to cover the entire varied scope of ATAF. In addition to socio-behavioural data, the survey gathered data on customers' perception of the efficiency of the service provided, using a series of indicators to be scored from one to ten.

> Florence urban transport customer satisfaction results

In November 2016, 1,900 ATAF customers<sup>3</sup> who regularly take the bus, especially for work (38.4%) and school (35.7%, 25.3% of whom for university and 10.4% to go to school) were interviewed.<sup>4</sup>

SOCIO-DEMOGRAPHIC GROUPS OF THE INTERVIEWED CUSTOMERS

SOCIO-DEMOGRAPHIC GROUP	Age <= 35	Use of service more than 5 days per week	Use of annual pass	Use of monthly pass	Use of hourly ticket*
Florence urban transport	47.4%	49.8%	21.2%	36.6%	19.2%

(\*) 90-minute ticket – on-board ticket – text message ticketing.

<sup>3</sup> Survey by MediatICA S.p.A. – Milan.

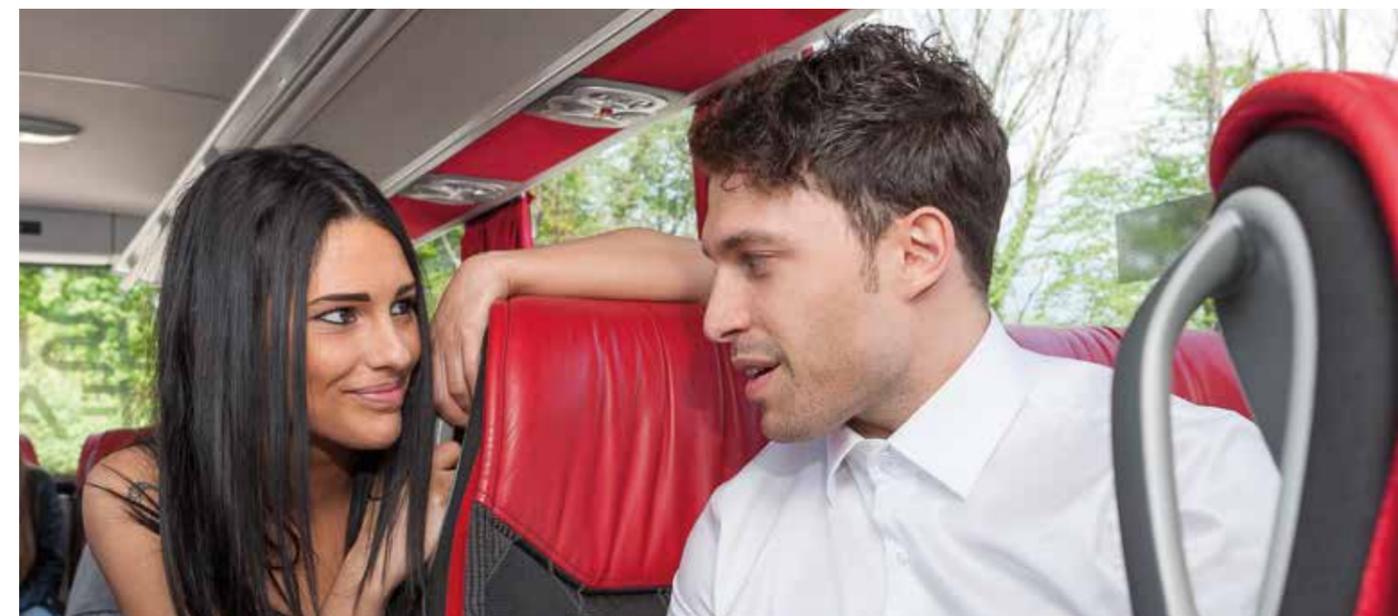
<sup>4</sup> The service information is mainly gathered at stops (46.9%), via the ATAF 2.0 app (24.7%) and through the website (21.7%).

The various aspects of the services offered, to be rated on a scale of one to ten<sup>5</sup> show the following satisfaction rates. They were grouped into macro-factors<sup>6</sup> and calculated net of omitted responses and considering a score of 6/10 or higher as satisfied. The overall rate of satisfaction was 84.2%<sup>7</sup>.

SATISFACTION RATE (%)

	2016 Result	No answer/don't know
Passenger information	87.2%	1.3%
Professionalism and courtesy of personnel	81.6%	2.7%
Level of commercial service	80.9%	0.8%
Additional services on board and on the ground	79.8%	1.8%
Security	77.0%	1.8%
Modal integration	72.1%	46.2%
Focus on the environment	71.4%	20.8%
Service regularity and organisation	67.9%	6.8%
Cleanliness of vehicles and structures	67.0%	1.6%
Travel comfort on board and along the route*	64.3%	2.6%

(\*) This also includes the accessibility of vehicles (how easy it is to board and deboard, visual/sound alerts).



<sup>5</sup> The questionnaire asked: "Please rate the following service aspects from 1 (completely dissatisfied) to 10 (completely satisfied)".

personnel" were changed from previous years.

<sup>6</sup> In 2016, the composition of sub-items in the macro-factors "Passenger information" and "Professionalism and courtesy of

<sup>7</sup> The questionnaire asked: "What is your overall opinion of the consortium's service, from 1 (completely dissatisfied) to 10 (completely satisfied)?".

## Complaints management

The management of complaints and reports from customers is a crucial tool for monitoring the trends underlying inefficiencies and identifying solutions to improve services through the participation of the structures involved. In 2016, 4,347 complaints/reports were received<sup>8</sup>.

### CLASSIFICATION OF COMPLAINTS RECEIVED\*

	% distribution of total aspects reported in 2016	% distribution of total aspects reported in 2015	2016 vs 2015 (%)
Service regularity	37.9%	42.8%	-4.9
Punctuality	7.4%	7.6%	-0.2
Passenger information	7.5%	7.6%	-0.1
Company/customer relationship	17.3%	17.9%	-0.6
Travel comfort	5.7%	5.2%	0.5
Tickets	15.4%	8.7%	6.7
Service gaps	2.5%	3.7%	-1.2
Security	2.0%	2.1%	-0.1
Cleanliness	0.2%	0.4%	-0.2
The environment	0.6%	0.3%	0.3
Other	3.7%	3.7%	0.0

(\* ) The proposed classification consists of a grouping of different aspects relating to the macro-categories used for Busitalia-Sita Nord. The percentages are in proportion to total reported aspects.

There was a dramatic decrease in the number of complaints: -21.5%. The analysis of individual macro-factors shows a large decrease in the number of complaints relating to service regularity (despite the many work sites in Florence) and, to a lesser extent, a decrease in nearly all other factors. Complaints about tickets increased as

a percentage of the total, especially due to the malfunctioning of one of the most widely used passes because of its practicality and low price (Carta Agile). However, even ticket complaints were down compared to the number of complaints received in the previous year.

<sup>8</sup> Reports from both identified and anonymous senders

## BUSITALIA VENETO

### Quality delivered: Customer Care

In the annual Service Charter, the company reiterates the fundamental principles on which its services are based (equal rights, service continuity, engagement, efficiency and effectiveness) along with the rights of its transport service users.

#### 2016 Service Charter

Veneto\*

#### Services

Suburban transport in the province of Padua  
Suburban transport in the province of Rovigo  
Urban transport in Padua  
Urban transport in Rovigo

(\* ) 2015 data refer to the services previously operated by Busitalia - Sita Nord and APS Holding and to the services operated by Busitalia Veneto.

### > 2016 Service Charter – Busitalia Veneto

Punctuality improved on 2015 in all service categories except for trolleys.

### PUNCTUALITY

	2016 Actual	2016 Target	2015 Actual	2016 vs 2015 %
<b>Padua suburban transport</b>				
% on-time journeys	95.7%	94.8%	94.7%	+1.0
% trains with delays of >15' to <=30'	3.8%	4.5%	4.5%	-0.7
% trains with delays of >30'	0.5%	0.7%	0.8%	-0.3
<b>Padua urban transport - road</b>				
% on-time journeys	97.0%	94.0%	94.0%	+3.0
% trains with delays of >5' to <=15'	2.2%	5.1%	5.1%	-2.9
% trains with delays of >15'	0.8%	0.9%	0.9%	-0.1
<b>Padua urban transport - trolley</b>				
% on-time journeys	87.8%	90.6%	90.6%	-2.8
% trains with delays of >4' to <=8'	9.5%	7.6%	7.6%	+1.9
% journeys with delays of >8'	2.8%	1.8%	1.8%	+1.0
<b>Rovigo suburban transport</b>				
% on-time journeys	97.7%	96.9%	96.9%	+0.8
% trains with delays of >5' to <=15'	1.6%	2.4%	2.4%	-0.8
% trains with delays of >15'	0.6%	0.7%	0.7%	-0.1
<b>Rovigo urban transport</b>				
% on-time journeys	99.8%	99.8%	99.8%	0.0
% trains with delays of >5' to <=10'	0.1%	0.1%	0.2%	-0.1
% journeys with delays of >10'	0.1%	0.1%	0.1%	0.0

With respect to service regularity both on the suburban lines in Padua and the urban and suburban lines in Rovigo, once again in 2016, 100% of effective runs were according to schedule (with the exception of strikes and force majeure) and the number of shunting means was in line with service recovery requirements. The urban service regularity in Padua is equal to 99.0% for both the road and trolley segments, down 0.1% and 0.5% on the pre-

vious year for the road and the trolley segments, respectively.

The variations in sales network results were slight in 2016: while Padua urban transport sales grew, Padua and Rovigo suburban transport sales decreased. Rovigo urban transport resales remained unchanged. The areas served did not change and, accordingly, the indicators for town and cities, residents and the network are substantially the same.

### EXTENSION OF THE SALES NETWORK

	2016 Actual	2016 Target	2015 Actual	2016 vs 2015 %
<b>Padua suburban transport</b>				
no. of resales	643	648	648	-5
no. of resales/network km	0.6	0.6	0.6	0.0
no. of resales/cities served	4.4	4.4	4.4	0.0
no. of resales/millions of residents	343	344	344	-1
% of trains with on-board ticket sales with surcharge	100%	100%	100%	0
<b>Padua urban transport</b>				
no. of resales	501	487	487	+14
no. of resales/network km	2.8	2.8	2.8	0.0
no. of resales/1,000 residents	1.4	1.4	1.4	0.0
% of runs with on-board ticket sales with surcharge (excluding trolleys)	100%	100%	100%	0
<b>Rovigo suburban transport</b>				
no. of resales	128	132	132	-4
no. of resales/millions of residents	175	180	180	-5
no. of resales/cities served	2.2	2.2	2.2	0.0
no. of resales/network km	0.2	0.2	0.2	0.0
% of trains with on-board ticket sales with surcharge	100%	100%	100%	0
<b>Rovigo urban transport</b>				
no. of resales	79	79	79	0
no. of resales/1,000 residents	1.5	1.5	1.5	0.0
no. of resales/network km	0.9	0.9	0.9	0.0
% of trains with on-board ticket sales with surcharge	100%	100%	100%	0

The rate of accidents for which Busitalia Veneto was at fault, consisting of accidents suffered during line operation, worsened for urban transport and improved for suburban transport.

### ACCIDENT RATE

	2016 Actual	2016 Target	2015 Actual	2016 vs 2015 %
<b>Padua suburban transport</b>				
accidents suffered/million km	2.5	4.9	4.9	-2.4
<b>Padua urban transport - road</b>				
accidents suffered/million km	19.4	17.2	17.2	+2.2
<b>Padua urban transport - trolley</b>				
accidents suffered/million km	27.2	13.9	13.9	+13.3
<b>Rovigo suburban transport</b>				
accidents suffered/million km	2.6	2.0	4.0	-1.4
<b>Rovigo urban transport</b>				
accidents suffered/million km	7.4	5.4	5.5	+1.9

The results of the company's focus on the environment improved on the previous year with the arrival of 28 new Euro 6 vehicles.

All targets were achieved and the Padua urban transport targets were exceeded by 3%.

### FOCUS ON THE ENVIRONMENT

	2016 Actual	2016 Target	2015 Actual	2016 vs 2015 %
<b>Padua suburban transport</b>				
Euro2 and higher	99%	99%	97%	+2
<b>Padua urban transport</b>				
Euro2 and higher	96%	93%	90%	+6
<b>Rovigo suburban transport</b>				
Euro2 and higher	97%	96%	92%	+5
<b>Rovigo urban transport</b>				
Euro2 and higher	97%	97%	83%	+14

### Perceived quality: Customer satisfaction

In December 2016, customer satisfaction surveys were conducted<sup>1</sup> on the user pools where Busitalia Veneto operates. The surveyed population consisted of all customers and the sampling was stratified by customer pool and line, with random extraction. Information was gathered using

a structured, anonymous questionnaire that was mainly distributed on board the buses and which passengers could fill out for themselves or, as in the case of urban transport on trolleys (Padua) and road (Padua and Rovigo), information was gathered through face-to-face interviews at stops. In addition to socio-behavioural data, the survey gathered data on customers' perception of the efficiency and effectiveness of the service provided, using a series of indicators to be scored from one to ten.

<sup>1</sup> The surveys were conducted by Mediativa S.p.A., based in Milan.

## Suburban transport

750 customers were interviewed with respect to suburban transport in Padua and Rovigo. They were mainly female (57.6%) and under the age of 18 (27.2%) or between 19 and 25 (20.0%). 39.3% of interviewees use the suburban transport service mainly to go to school (27.7%) or university (11.6%), while 32.5% use it to go to work. 74.7% use the service at least three days a week, mainly with a monthly pass (37.9%) or single tickets (33.9% of interviewees).

Information on the service is mainly gathered at stops (54.1%) and on the website (45.6%).

### > Customer satisfaction with suburban transport

The various aspects of the services offered, to be rated on a scale of one to ten<sup>2</sup>, show the following satisfaction rates. They were grouped into macro-factors and calculated net of omitted responses and considering a score of 6/10 or higher as satisfied.

#### SUBURBAN TRANSPORT

	Satisfaction %	No answer %
Passenger information	94.9%	2.5%
Security	94.5%	0.8%
Professionalism and courtesy of personnel	94.3%	11.7%
Level of commercial service	93.3%	0.5%
Focus on the environment	90.6%	15.2%
Travel comfort on board and along the route	88.0%	2.2%
Service regularity and organisation	83.6%	6.5%
Cleanliness of vehicles and structures	77.9%	0.5%
Modal integration	74.4%	14.5%

The satisfaction rate for suburban transport in Veneto was 86.3% in 2016.

<sup>2</sup> The questionnaire asked: "Please rate the following service aspects from 1 (completely dissatisfied) to 10 (completely satisfied)".

## Urban transport

1,050 customers were interviewed about urban transport in Padua<sup>3</sup> and Rovigo. They were mainly female (53.1%) and between 19 and 25 years old (26.8%), between 26 and 35 years old (19.0%) or between 36 and 45 years old (19.0%). 35.2% of interviewees use the urban transport service mainly to go to work and 35% to go to school (15.0%) and university (20%). 63.5% use the public transport service at least three days a week, mainly with a single ticket (40.2%, including the text message ticket) or monthly pass, which 27.5% of interviewees reported using.

Information on the service is mainly gathered at stops (39.2%) and via the website (32.2%).

### > Customer satisfaction with urban transport

The various aspects of the services offered, to be rated on a scale of one to ten<sup>4</sup>, show the following satisfaction rates. They were grouped into macro-factors and calculated net of omitted responses and considering a score of 6/10 or higher as satisfied.

#### URBAN TRANSPORT

	Satisfaction %	No answer %
Passenger information	93.4%	1.9%
Level of commercial service	92.9%	1.0%
Professionalism and courtesy of personnel	92.0%	2.4%
Security	85.7%	1.8%
Focus on the environment	85.1%	12.9%
Cleanliness of vehicles and structures	80.6%	0.3%
Travel comfort on board and along the route	79.7%	0.9%
Service regularity and organisation	76.7%	4.2%
Modal integration	73.0%	11.0%

The urban transport service in Veneto showed a total satisfaction rate of 85.7% in 2016.

<sup>3</sup> Both trolley and bus passengers were considered in Padua urban transport.

<sup>4</sup> The questionnaire asked: "Please rate the following service aspects from 1 (completely dissatisfied) to 10 (completely satisfied)".

## Complaints management

989 complaints and/or reports were received in 2016, 85% of which via e-mail and 15% of which using online forms. 46% of the reports referred to suburban lines, 39% to urban lines and the remaining 15% could not be attributed to any specific service.

### CLASSIFICATION OF COMPLAINTS RECEIVED

	% distribution out of total aspects reported in 2016	% distribution out of total aspects reported in 2015	2016 vs 2015 %
Service regularity	27.8%	39.8%	-12.0
Punctuality	21.4%	19.0%	2.4
Company/customer relationship	16.2%	9.4%	6.8
Travel comfort	12.8%	16.6%	-3.8
Passenger information	6.9%	6.3%	0.6
Tickets	6.4%	3.8%	2.6
Service gaps*	3.5%	1.2%	2.3
Security	2.5%	0.9%	1.6
Other	1.2%	1.6%	-0.4
Cleanliness	0.8%	0.9%	-0.1
Access to the service	0.3%	0.2%	0.1
Vehicles	0.2%	0.2%	0.0

(\*) Relating to reports of requests for changes or to expand the current service.

The most critical aspects within the various categories were the following:

Aspect	2016 result
Delays	15.2%
Missed journeys	14.4%
Conduct/courtesy	10.8%
Missed stops	9.9%
Overcrowding	7.0%

The absolute number of complaints fell 11% on 2015, with the following trends: the types of complaints that significantly decreased were those relating to comfort (overcrowding), while those that increased the most related to the company/customer relationship (conduct/courtesy of personnel).



## Travel safety

G4-15 G4-PR1 G4-PR2

### Train traffic safety

The Group companies are constantly committed to ensuring the utmost level of safety for customers, the community and employees, focusing on a culture of risk prevention and involving all players. RFI and Trenitalia each manage railway traffic safety in connection with train operation to the extent that it is concerned.

### Traffic safety: RFI

The main technologies used to guarantee train traffic safety are described below.

### INNOVATIVE TRAIN SPEED PROTECTION TECHNOLOGIES

CCS, CCS-HS, CCS-M and CTC, remote operation controls	12,625 km
TSCS (train speed control systems)	12,083 km
DSS (driving support systems)	4,014 km
ERTMS (interoperability on the HS/HC network)	704 km
GSM-R telecommunications (which can be used for emergency calls)	11,384 km

### CCS - Command and control systems

CCS - Command and control systems, as they have evolved on the high speed lines (CCS-HS), are innovative integrated remote management systems for train operation, line and station device diagnostics, fault prevention, maintenance, information to the public, video surveillance and for simplifying

governance procedures. The system makes it possible to send and receive commands between manned control rooms and unmanned peripheral units. The lines that are equipped with peripheral command units controlled using multi-station command and control devices feature the most sophisticated multi-station CCS (CCS-M).

### CTC systems - centralised traffic control systems

CTC systems, the predecessor to remote command systems, makes it possible to remotely control and supervise a large number of unmanned stations and stops from a central command unit. It is mainly used on regional and inter-regional lines.

### TSCS - train speed control systems

Train speed control systems are sophisticated systems, in line with the new European standard for interoperability between railway networks (ERTMS - European Rail Traffic Management System), which protects train speed at all times with respect to the parameters set by signals (maximum speed permitted on the line and speed permitted for the type of train), activating the emergency brakes when the limits are exceeded.

### DSS - driving support system

They are systems that control the consistency of the drivers' recognition of signals along the line and the actual status transmitted on board. The control system for fixed light signals is based on micro-wave transponder transmission. The DSS is used on low traffic density lines that use diesel for traction. The system protects the train speed by sending information between land and on-board devices, activating the emergency brakes when the train speed exceeds limits.

### Level 1 ERTMS with infill radio

Level 1 ERTMS with infill radio is the first commercial application of the level 1 ERTMS/ETCS (European Rail Traffic Management System/European Train Control System) in Italy and the first in Europe with infill-radio based on GSM-R. The system, was implemented in the Domodossola-Novara line (Corridor 1) and Swiss bordering regions, also in order to achieve interoperability between Italy and Switzerland. It requires the integration of hardware and software on the ground in the existing TSCS system.

### Level 2 ERTMS/ETCS

Due to the interoperability of European networks, the level 2 ERTMS/ETCS enables foreign trains to operate on Italian lines based on information defined by a common language and managed using interoperability components on the ground and on board. This innovative technology overcomes the limits to international operations arising from the different systems used in the various countries. ERTMS/ETCS also provides drivers

with all the information they need for optimal conduction by activating the emergency brakes if the train's speed exceeds the allowed maximum.

### Level 2 High Density (HD) ERTMS

This is the level 2 ERTMS used in high traffic density situations making it possible to reduce the distance between trains. This system, which overlaps the pre-existing distancing system, is based on short sections (level 2+ ERTMS) to improve the performance of the existing railway infrastructure, increasing its capacity and availability, in accordance with the technical specifications of European interoperability.

### Experimenting with the use of satellite systems for locating and distancing in conjunction with ERTMS

The potential of satellite systems is also being evaluated for its use in the railway sector for signalling, telecommunications, diagnostics, critical systems and related safety. As part of SATLOC, a project promoted by UIC, and the "3inSAT" project co-financed by the European Space Agency (ESA) and carried out in the railway sector (industry, Manager company infrastructure and railway companies), the feasibility of using satellites for railway operation was evaluated with a business case analysis of its application on low traffic density lines and regional lines. In collaboration with a few companies in the transport sector, RFI has developed an ERTMS system with satellite location and an integrated TLC network based on IP (ERSAT). The purpose is to consolidate the use of two standard European systems: satellite and ERTMS. In 2016, the initial results of "ERSAT over SATellite" pilot testing in Sardinia were released.

### GSM-R

GSM-R, a system developed for the integration/interoperability of European railway traffic, permits both traditional voice and data communications and the exchange of information between the most advanced technological systems for signalling and traffic control.

Since 2003, RFI has used the integrated safety management system (ISMS), a control model in which safety is handled in the scope of train traffic and railway operation, labour and the environment. The control is carried out at both a central and a local level. The central ISMS level plays a guiding and control role. The local level receives directions from the central level and follows them by effectively and efficiently following the guidance. The certificates of the various local

levels are consolidated in one single certificate made out to the company. The main scopes of current RFI certification are summarised under "Management systems" in the section on *Additional information*.

Railway accidents on the national railway infrastructure managed by RFI are monitored by inputting and analysing data in the danger database, recorded in accordance with current international criteria.

In particular, in the accident rate benchmarking at ERA (European Railway Agency) level, in order to calculate accidents, the parameters established by the Ministerial decree of 26 June 2015 - "Implementation of the European Commission's Directive 2014/88/EU of 9 July 2014, amending Directive 2004/49/EC" are used, while at

UIC level, those set forth in UIC Fiche A9 are also adopted<sup>1</sup>. Accordingly, ERA data, unlike the UIC data, include accidents that occurred on tracks where operation has been temporarily suspended for maintenance work. Furthermore, under international benchmarking criteria, the "railroad crossing" category includes both collisions with obstacles on the crossing (vehicles, etc.) and trains hitting pedestrians crossing the tracks inappropriately even when the crossing is closed.

In 2016, there were 86 significant accidents, confirming the downwards trend (98 in 2015 and 109 in 2014), with some of the best performances since 2006 (e.g., train collisions and derailments).

## RAILWAY ACCIDENT STATISTICS\*

	2016		2015		2014	
	Absolute value	Per billion train-km	Absolute value	Per billion train-km	Absolute value	Per billion train-km
Train collision with railway vehicle	0	0	1	3	1	3
Train collision with an obstacle blocking the tracks	1	3	4	14	8	26
Train derailment	1	3	3	9	4	12
Railroad crossing accident, including accidents involving pedestrians at crossings	9	26	19	57	16	48
Injury to people involving rolling stock in motion, excluding suicides and attempted suicides	70	200	67	197	74	224
Fire on board rolling stock	0	0	2	6	0	0
Other types of accidents	5	14	2	6	6	18

(\*) Railway accident statistics as of May 2017

<sup>1</sup> The two criteria adopted are consistent with respect to the definition of a "significant accident". "Significant accident" means any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded.

"Significant damage to material, tracks, other installations, or the environment", damage is considered as significant when exceeding €150,000. "Extended traffic disruption", an interruption of traffic on a section of line for more than six hours.

Analysing the causes of these accidents, out of a total of 86 events, roughly 94% were due to reasons outside the scope of the railway system, i.e., to the inappropriate conduct of people or to external events that were, in any case, exceptional (such as particularly intense atmospheric events), while the remaining 6% were due to internal reasons, i.e., accidents attributable to the railway companies or operator.

Deaths increased in 2016 (+28.3%) due to the deaths of other categories of people (other deaths), which include trains running over people on the line, in the service areas and at railroad crossings, regardless of liability. On the other hand, the number of people injured (excluding accidents classified as attempted suicides) improved on 2015, with a significant decrease in all categories.

#### CONSEQUENCES OF RAILWAY ACCIDENTS INVOLVING PEOPLE ON THE RFI NETWORK

	2016	2015	2014	Trend 2016 vs 2015
Death of employees*	0	0	3	=
Death of passengers**	0	2	1	v
Other deaths	59	44	49	^
- railroad crossing users	5	8	7	v
- other people on the pavement	0	0	0	=
- other people not on the pavement	0	0	0	=
- people crossing the tracks inappropriately	54	36	42	^
<b>Total deaths***</b>	<b>59</b>	<b>46</b>	<b>53</b>	<b>^</b>
Injured employees	0	1	3	v
Injured passengers	3	7	1	v
Other injuries	21	29	37	v
- railroad crossing users	4	7	9	v
- other people on the pavement	0	0	0	=
- other people not on the pavement	0	0	0	=
- people crossing the tracks inappropriately	17	22	28	v
<b>Total injuries****</b>	<b>24</b>	<b>37</b>	<b>41</b>	<b>v</b>

(\*) Employees: the people who work for the railway and are in service at the time of the accident. They include the train crew and personnel managing rolling stock and infrastructures (including contractors' and independent contractors' personnel).

(\*\*) Passengers: any person, other than the on-board crew, travelling on the train. Injury statistics include those involving passengers attempting to board/deboard moving trains.

(\*\*\*) Death: any person who dies immediately following or within 30 days of an accident, excluding suicides, death from natural causes or homicide.

(\*\*\*\*) Injuries (serious): any person injured in an accident and hospitalised for more than 24 hours, excluding suicide attempts.

In its internal analyses, RFI categorises accidents as "Typical", i.e., those strictly connected with railway traffic, and "Atypical", i.e., those due to inappropriate conduct by people. "Typical" accidents give a fairer picture of railway system safety, as they cover events such as collisions, derailments, fires and collisions between rolling stock in motion and road vehicles at railroad crossings.

In 2016, in accordance with the criteria established by the UIC, 10 "Typical" accidents were recorded, compared to the 17 recorded in 2015, therefore with a decrease of roughly 41%. "Atypical" accidents, which substantially refer to when trains run over people or when travellers fall from trains in motion, numbered 75 in 2016, compared to 81 in 2015. The calculation of "Atypical" accidents includes when people using train services are hit at railroad crossings.

#### ACCIDENTS

	2016	2015	2014
<b>Typical accidents</b>	<b>10</b>	17	25
<b>Atypical</b>	<b>75</b>	81	83

In 2016, the number of accidents and non-compliance with no entry signals were down on the previous year.

#### TREND IN NO ENTRY SIGNALS

	2016	2015	2014
<b>Trains continuing through no entry signals</b>	<b>14</b>	19	20

Based on the consideration that not all accidents are equal in that some are due to internal railway system weaknesses while others are the result of third party liability or "natural" occurrences that are difficult to manage, in 2016, the UIC defined a new indicator for accidents called the global safety index, which considers:

- / whether there are any victims;
- / the type of people who were injured (transgressors or passengers);
- / whether only rolling stock was involved (derailing or collision of railway vehicles or rolling stock and people, rolling stock and road vehicles at railroad crossings);
- / whether the railway system is intrinsically at fault.

RFI is well positioned according to this new indicator<sup>1</sup>, and places near the British Rail Network, recognised throughout Europe as the top network operator.

### Maintenance of the railway infrastructure

The correct design, planning and performance of maintenance ensure that the infrastructure remains in line with the established safety standards. Targets are achieved by the oversight of routine and non-routine maintenance, through timely planning and performance of work and ongoing monitoring, in order to verify that maintenance on all components that are relevant for safety purposes is correct and effective<sup>2</sup>. Supervision and monitoring are particularly important. Supervision highlights the "conditions" of systems to maintain and improve the reliability and availability of railway infrastructure, ensuring that the established safety standards are met, while monitoring, which is performed through inspections and tests of the technical, organisational and operational aspects of systems, is aimed at checking that the maintenance carried out is correct and effective, that the infrastructure is in sound condition and that work sites are operational and well organised.

In order to continuously improve service quality, network availability and safety standards, beginning on 1 March 2016, RFI revised its organisational model for the local production units in order to optimise decision-making, communication and information flows within these units, as well

as to strengthen organisational and technical oversight of maintenance processes.

The main supervisory and monitoring activities in 2016 are listed below:

- / checks that signals are visible in different light, environmental, time and season conditions;
- / periodic technical tests on central devices and automatic stopping systems;
- / checks on diverters;
- / inspections of the railway line carried out on foot, by carriage and in cabins;
- / inspections of the works;
- / checks of welded tracks;
- / surveys of the main characteristics of track devices.

Costs incurred in 2016 for routine and non-routine maintenance are reported below:

Maintenance	Cost (€ millions)
Routine	891
Non-routine	1,097

In millions of Euros

### Railroad crossings

Work continued to close railroad crossings as part of the specific plan for this purpose (36 public railroad crossings and 130 private railroad crossings were closed) and in order to strengthen/modernise infrastructures through local projects carried out in accordance with the local bodies.

Overall, at the end of 2016, the number of public and private railroad crossings was decreased to 4,620.

Meanwhile, efforts continued to increase the safety levels of existing railroad crossings through a variety of different types of measures, as follows:

- / installation of information panels providing identification data for railroad crossings and emergency telephone numbers in order to call personnel responsible for supervising traffic in

- the event of an emergency or if there are obstacles on the railway tracks;
- / checks of pre-signal signs and light/sound signals at railroad crossings, with the concurrent check of the time needed to lift/lower the crossing gates;
- / installation of rumble strips and speed bumps to make it easier to identify and see railroad crossings in urban centres;
- / activities and projects to make roadside signs more visible to prevent inappropriate actions by drivers, in some cases in collaboration with the relevant government administrations;
- / equipping of railroad crossings with electronic pedals and private railway crossings with automatic "opening on demand" systems;
- / testing with gates that pedestrians cannot get around and the transformation of railroad crossings with half-gates into crossings with full gates;
- / introduction of new integrative automatic protection devices to detect obstacles on crossings;
- / implementation of the infill system to cover the space between the railroad crossing and protection signal.

### Traffic safety: Trenitalia

The heart of Trenitalia's operational safety oversight is the operational safety management system revolving around a typical "PDCA" (Plan, Do, Check, Act) cycle, which is the basis for management systems.

In general, various activities are carried out to keep operational risk under control. These activities range from risk analysis to assessing the acceptability of risk and taking prevention and/mitigation measures. Where necessary, specific projects are defined to decrease risk and are reported within the safety plan each year. The projects may relate to one or more of the three key parts of the systems: machines (technology), people (human factor and organisation) and procedures (how processes are performed).

Trenitalia uses a specific system of indicators to track operational safety processes, enabling it to constantly monitor their performance. If the indicators show that processes are deteriorating over time, it performs a specific analysis of the causes to take the consequent corrective action. Trenitalia's system of operational safety indicators

consists of:

- / accident indicators to monitor accidents;
- / performance indicators to monitor the dangerous events;
- / process indicators to monitor support processes;
- / risk level indicators, which provide an indicator for each dangerous event that Trenitalia identifies. The indicator is calculated as the combination of the probability that the event will occur and the seriousness of its consequences.

There is a cause/effect relationship between these levels, i.e., when the primary causes occur, they can generate dangerous events and, accordingly, potential accidents.

### Rolling stock maintenance

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, Trenitalia ensures the planning, performance, control and improvement of maintenance processes through an organisation that provides for:

- / a structure that supervises and coordinates all stages of maintenance to ensure safe conditions for railway system vehicles;
- / a central maintenance engineering structure that establishes the criteria and general provisions for the maintenance of vehicles;
- / operating structures that manage taking the vehicles out of service, sending them to repair workshops and subsequently returning them to operations;
- / maintenance systems covering two organisational levels: the first level consists of the divisions' ongoing maintenance systems, in turn broken down into light and corrective maintenance scheduled as a part of the vehicle shifts, while the second level consists of cyclical maintenance workshops where work with a significant impact on the asset value of the rolling stock is carried out beyond the scope of the vehicle shifts.

Specific attention is devoted to improving maintenance processes, with the formalisation and implementation of a safety plan providing for a series of projects each year to ensure operational safety.

<sup>1</sup> The data used to calculate this index relate to 2010-2015.

<sup>2</sup> Diverters, signals, works, railroad crossings, etc..

### Safety services

For FS Italiane Group, safety is a fundamental value. For this reason, it is committed to promoting safety and protecting personnel, passengers, its assets and its know-how.

As part of the second convention with the Ministry of the Interior signed in July 2012, the collaboration with the railway police, the branch officially responsible for preventing and repressing crimes in the scope of railway transport, continued. The aim of the convention is to confirm the synergies among the parties with the common goal of improving real and perceived safety in the railway environment and ensuring the protection of passengers and the Group's assets.

### SAFETY FIGURES

	2016	2015	2014
Assaults on railway personnel	436	429	361
Thefts at the station	1,724	2,421	2,566
Thefts on board trains	2,794	3,706	4,188
Copper thefts during operation	557	1,078	1,643
Copper thefts at depots	11	52	63



In 2016, there were 1,720 passenger thefts at the station, down 29% on 2015, with a decrease of approximately 25% in the number of reported thefts on board trains. The "Be vigilant! Make a difference" campaign was relaunched in collaboration with the railway police on board trains and at stations to spread awareness among passengers of the risk of thefts and pick-pocketing.

### SIGNS AT STATIONS

Thefts at stations				
Thefts on board trains				
Scams				

Another aim of the convention is to reduce the theft of copper along the main routes on the national network. The Group has taken measures mainly to monitor the railway lines and the depots most at risk and involve the local police by reporting work sites, risky situations at plants and attempted thefts. The Group's prevention and contrast measures and the choice of law enforcement agencies to focus on the second level of criminal organisations, i.e., the receivers of stolen goods, have led to a decrease of over 48% in copper thefts along the line and a decrease of around 79% in copper thefts at depots compared to 2015, halving the weight of precious metals lost annually to theft (214,921 kg stolen in 2016 compared

to 477,787 kg stolen in 2015). The damage caused by these thefts and attempted thefts affected a total of 3,725 trains, causing a total delay of 78,049 minutes. These repeated criminal activities have created the need to increase the presence of technical staff along the most affected lines and, where possible, to replace copper with aluminium, aluminium-steel and alternative materials, less precious metals, hence in which criminals are less interested, in the areas most at risk. Sometimes, copper was isolated with concrete structures or was placed deep underground and passive defence measures were adopted (including fencing and armours as well as the implementation of alarm and video-surveillance systems).

Conversely, costs to remove graffiti from rolling stock (approximately €6 per square metre, net of the halting of materials and other indirect costs) rose 9% and mainly related to regional trains.

With respect to the arrangements between the Group and the Civil Protection Service, the conventions with the Basilicata, Marche, Valle D'Aosta and Tuscany regional authorities and the Florence city authorities were renewed in the light of the provisions of the framework agreement signed in 2008 and renewed in 2013 with the National Civil Protection Department pursuant to article 6 of Law no. 225/1992.

The collaboration covered important events (including the Giubileo della Misericordia, the Pope's visit to Assisi, the national meeting of the Alpino branch of the Italian army and the Lucca Comics event) and training activities. Furthermore, 31 drills were carried out to test and improve communications flows and the response model in the event of criticalities or emergencies. In agreement with the regions that have signed the conventions, training included "Specific railway risks" at the various local centres, with seven sessions for approximately 650 volunteers in the Molise, Marche, Friuli Venezia Giulia and Abruzzo regions.

In 2016, FS Italiane Group also contributed to the emergency in Central Italy following the earthquake by providing:

- / special discounts for residents of the areas affected by the earthquake and for Civil Protection Service volunteers;
- / sleeping cars made available for the people of the towns of Fabriano and Foligno;
- / support in structural checks that areas affected by the earthquake were safe, using specialised RFI personnel with specific expertise.

Through its Protection against Violence Committees, FS Italiane Group continued to provide legal assistance for employees who have been victims of violence while working. Again in 2016, there was a significant increase in the number of cases, also as a consequence of the access gates installed at the Roma Termini, Milano Centrale and Firenze Santa Maria Novella stations. Another training step was designed to follow up on the anti-aggression training for front line personnel, in the form of counselling, and a pilot training day was held on self-defence with around 45 staff from the Company Security team. In addition, many anti-fare evasion activities were carried out, especially on regional trains with the collaboration of Company Security in

training and, subsequently, through on-site mentoring and coordination of the activities of the National Anti-evasion Pool.

In order to update the Group's assets to safety standards, 23 new integrated security systems were installed at high-traffic stations throughout Italy. Furthermore, the Roma Termini video-surveillance system was upgraded with another 200 new HD cameras at the access gates to the railway platforms and all areas with the heaviest passenger traffic.

To protect sensitive assets along the high speed lines, security systems have been installed at six technological sites on the Rome-Naples HS line and work began to upgrade the Bologna hub's HS line to safety standards.

During the year, a plan was kicked off for the technological update of the centralised management of 143 security systems in Italy with the completion of the work on 25 railway assets.

As work continued to extend the new railway hub model, after the temporary barriers were built at the Milano Centrale and Roma Termini stations, during the year, the Company Security department collaborated on the development of the executive project to install gates at the Firenze Santa Maria Novella station and participated in preliminary meetings to formalise a project for authorisation from the Superintendence for Cultural Heritage and the Fire Brigade Chief.

Strategic assets for real estate companies consist of the fleet and plant used to park rolling stock. In 2016, projects were furthered to upgrade these assets to safety standards, entailing of the installation and/or implementation of video-surveillance devices and alarm systems. In addition, guidelines for the "Security Project" were issued to upgrade the long haul and regional transport ticketing counters to safety standards.

IT crimes constitute an extremely complex issue which FS Italiane Group has for years sought to mitigate with the awareness that although cyber risks can be managed, they can never be completely eliminated.

The Cyber Security department has adopted IT risk analysis techniques capable of continuous, real-time monitoring of threats, vulnerabilities and the controls in place to quantify and qualify the risk exposure of IT systems supporting critical FS Italiane Group processes, through the identification of specific risk scenarios.

In 2017, specifically to strengthen the prevention, identification, analysis and mitigation of threats to IT infrastructures, the Group will begin

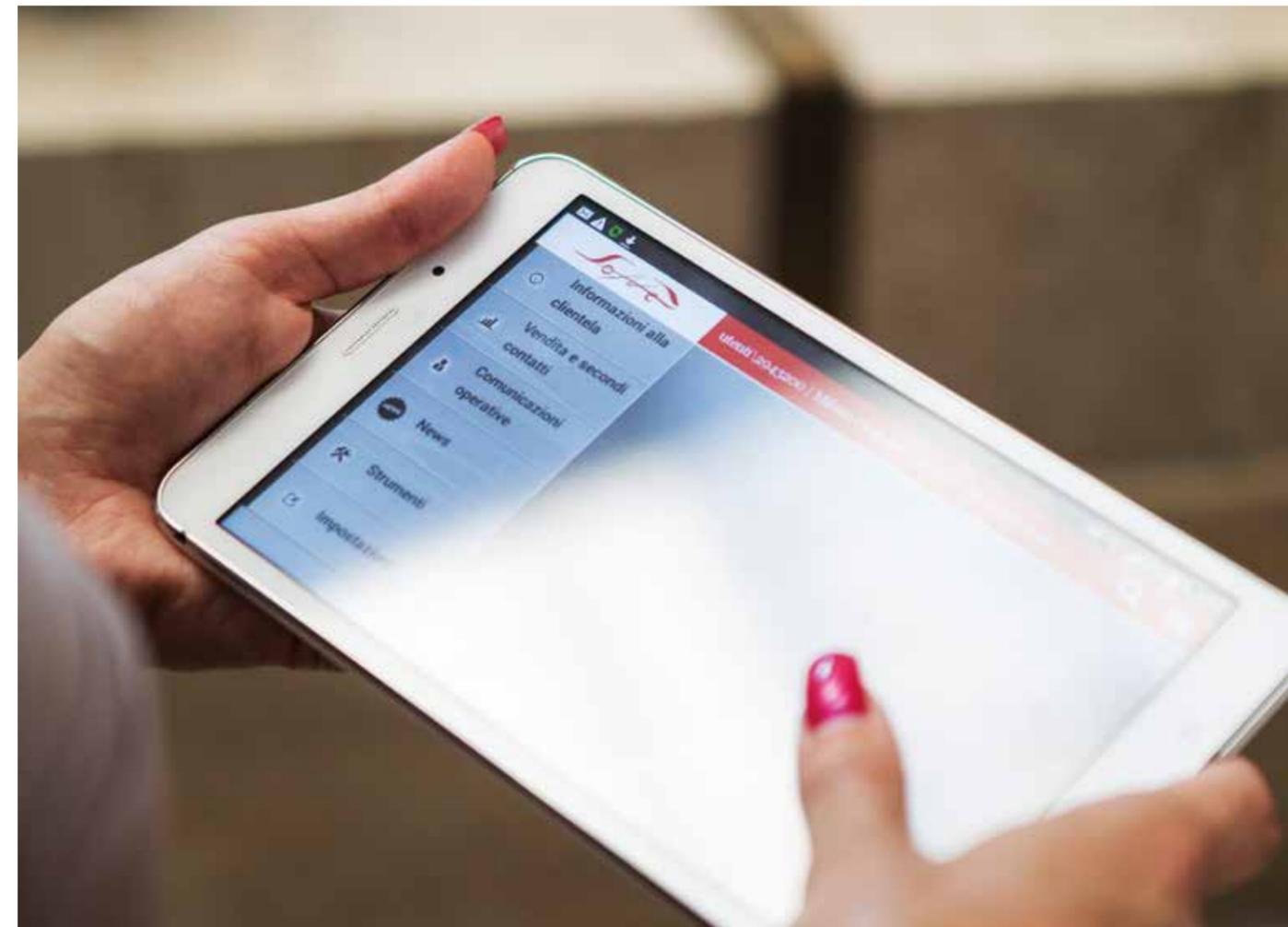
establishing a security centre and the design of a zero day laboratory to search for new IT threats that are not publicly known. Furthermore, the Group has begun collaborating with the postal police and the CNAIPIC (the national anti-IT crime centre for the protection of critical infrastructures), to provide training in 2017 for the Group's top management.

The Anti-Fraud Department constantly monitor transactions to mitigate acts of fraud perpetrated through the ticket purchases using stolen or cloned credit cards. In 2016, these activities led to a total fraud rate of 0.05% of turnover, far below the critical threshold of 1%. In 2017, the new fraud management platform will be fully op-

erative, generating substantial improvements in fraud detection and data analytics.

247 counterfeit tickets were identified in 2016, 134 of which were for international tickets. Fines were charged and official reports made in the most serious cases.

The Company Security team continued to chair the international Colpolfer Fraud and ticket forgery working group in 2016 for international collaboration on ticket forgery. In chairing the working group, the Company Security team is driving a review of priorities, improving supervision - at Italian and European level - anti-forgery controls in payment systems. Contact is ongoing with the judicial authorities to support forgery investigations.



# SUPPLIERS

## Highlights

G4-2

### WHAT WE HAVE ACCOMPLISHED >

**Over €4.6 million**  
THE ECONOMIC VALUE OF CRITERIA THAT REWARD ENVIRONMENTAL SUSTAINABILITY

environmental criteria accounted for approximately 21% of selection criteria in the Group's "non-core" tenders



**Environmental policy**  
INCLUDED IN CONTRACTS SINCE 2013

in accordance with the guidelines for the implementation of environmental management systems



**More than € 3.5 billion**  
OF CORE PURCHASES

over 82% of which attributable to suppliers with their registered office in Italy



**Self-assessment questionnaire**  
PROVIDED TO STRATEGIC SUPPLIERS

to assess the sustainability of the Group's supply chain



### WHAT WE AIM TO DO >

**DEVELOP NEW IT tools**

to ensure an effective assessment of the supply chain



**Involve OUR SUPPLIERS**

improvement of sustainability performance



## Procurement policies

G4-56

FS Italiane Group makes its purchases in accordance with EU Directives, as implemented by the Contracting Code, and its own "Regulation for Negotiations with Group companies", issued on 27 March 2012.

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 Code of Conduct".

Since 2013, the Group companies are asked to include a clause on compliance with the Group's environmental policy in new contracts, in accordance with the guidelines for the implementation of the environmental management systems.

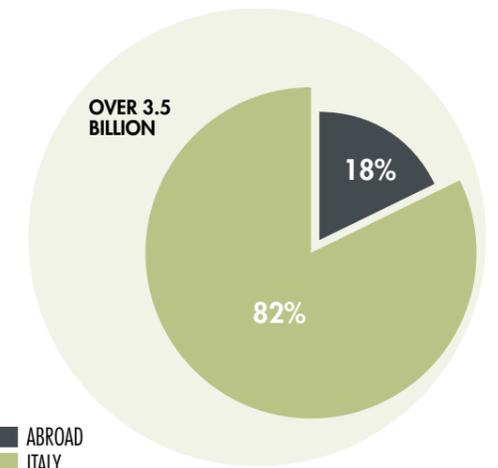
Ferservizi handles non-core purchases, i.e., those not directly related to the Group companies' core business. On the other hand, the individual companies directly manage core purchases, except in rare, cases in which Ferservizi is asked to make the purchase.

## Suppliers' profile and assessment

G4-12 | G4-13 | G4-56 | G4-EC9 | G4-EN32 | G4-EN33 | G4-LA14 | G4-LA15 | G4-SO10

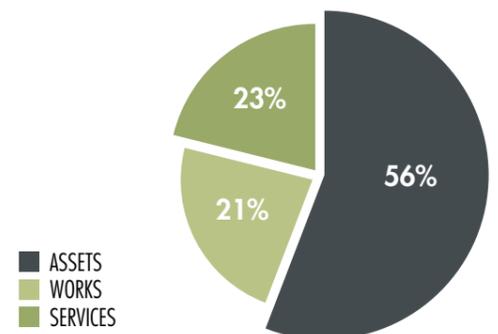
In 2016, the Group companies managed core purchases of more than €3.5 billion, over 82% of which from a pool of direct suppliers<sup>1</sup> with registered offices in Italy. This directly or indirectly generated income and jobs for the communities in which the Group operates.

<sup>1</sup> Non-group companies that supply products/provide services for the Group companies' core business, with which direct relationships are carried out.



In 2016, around 78% of turnover generated by Group purchases was managed by Trenitalia and RFI through 65 core suppliers (there were no significant structural changes in the supply chain, nor any new outsourcing, compared to 2015).

The Group's core purchases are broken down below by type:



As it is aware that supplier engagement is a key factor in improving its economic, environmental and social performance, the Group has structured a supply chain assessment process in order to better identify and manage the impacts of the supply chain.



The process that the Group began in the previous year to analyse and subsequently improve its supply chain sustainability performance continued in 2016 with the distribution of self-assessment questionnaires to the Group companies' strategic suppliers<sup>2</sup> and by beginning the first audits<sup>3</sup>.

The questionnaire, which comprised more than 40 questions grouped into four sections (human rights, environment, society and occupational health and safety), provided the basis for an initial assessment of the sustainability of the Group's supply chain.

The real or potential impacts associated with the Group's supply chain mainly refer to the environmental issues related to electricity, fuel and the cycle of raw materials and water. In 2016, there were no significant adverse events in this respect.

In order to improve the supply chain assessment process, in the second half of 2016, RFI launched a pilot project to assess suppliers using EcoVadis, a collaborative platform for monitoring the sustainability performance of companies in 150 sectors and 110 countries.

## Sustainable purchases

G4-56

The Group constantly pursues the inclusion of environmental and social issues in the procurement of goods, services and works, which is also a tool for reducing environmental impacts and improving work conditions along the supply chain.

The main criteria used in 2016 for supplier vetting activities are given below:

- / being ISO 14001, ISO 9001 and OHSAS 18001 certified for the main service and work contracts (e.g., work construction, railway superstructure, rolling stock cleaning, etc.);
- / using eco-friendly materials and product certifications (e.g., FSC® and Ecolabel);
- / reducing energy consumption (e.g., reduction in the energy consumption of electronic equipment below the reference threshold: Energy Star 5.0 certification).

See the *Additional information* section for more details about the criteria used by the various Group companies.

<sup>2</sup> Strategic suppliers were identified considering their percentage out of total purchases for 2016.

<sup>3</sup> Ferservizi conducted three audits at the corporate offices of its cleaning service/multi-service providers and plant operation/maintenance service providers.



# 05

## OUR ROLE IN THE COMMUNITY



A big industrial company  
should be a touchstone  
for the community



# OUR ROLE IN THE COMMUNITY



## Highlights

G4-2

### WHAT WE HAVE ACCOMPLISHED >

<p>Opening of the new <b>Help Center</b> IN BRESCIA</p> 	<p>Organisation of the <b>Winter emergency plan</b> in stations with major Italian non-profit associations</p> 
<p>Completion of the European <b>Train in Stations</b> promoted with the French, Bulgarian and Luxembourg railways</p> 	<p>Strengthening of the Rome <b>Help Center</b></p> 
<p>Christmas <b>Fund raising Campaign</b> WITH SAVE THE CHILDREN for the Civicozero shelters for unaccompanied migrant minors</p> 	<p><b>Redevelopment and opening</b> of the former Potenza Superiore cargo hub <b>AS A GREEN STATION</b></p> 

### WHAT WE AIM TO DO >

<p>Opening of new <b>Help Center</b> at the Viareggio, Pisa, Livorno, Prato and Pistoia stations</p> 	<p>Feasibility analysis for the opening of new <b>Help Center</b> at Genova Piazza Principe, Terni, Foligno, Cesena and Rovereto</p> 
<p>SROI analysis of FS ITALIANE GROUP'S <b>Social Activities</b></p> 	<p><b>European charter FOR SOLIDARITY:</b> extension to new partners (Germany, Greece, Serbia and Croatia) and proposal for a new European project, Switch in Stations</p> 
<p>Opening of the <b>Center Multi-function</b> FOR YOUNG AND OLD FORMER inmates at Napoli Gianturco</p> 	

## SOLIDARITY INITIATIVES

G4-24 G4-EC1 G4-EC7 G4-EC9 G4-SO1



Involvement in solidarity initiatives has always been fundamental for FS Italiane Group, which is tangibly committed to carrying out projects and initiatives to help disadvantaged people.

In collaboration with non-profit associations and local bodies, FS Italiane Group has embraced a policy to support and plan social initiatives in railway areas. Indeed, beginning with the stations, a new welfare system is being created. Rather than the welfare state of the past 70 years, but a collaborative welfare system based on the circular solidarity of the public, private and non-profit sectors. Help Centers, day and night shelters and the countless projects in the areas at stations granted for free use are all part of this new welfare experiment. Moreover, this transformation of the model for social welfare goes hand-in-hand with the new interpretation of corporate social responsibility (CSR), increasingly focused on the creation of shared value (CSV): creating value for the business that is also value for all stakeholders, the community and the local areas.

FS Italiane Group is completing a pilot SROI (Social Return on Investment) analysis project to estimate the direct and indirect social and economic impacts of the Help Center project and shelters in Rome and Milan. The analysis covers the three years from 2014 to 2016 and involves all Help Centers operating at 31 December 2016<sup>1</sup> and the shelters in Milan (Progetto Arca) and Rome (Caritas). The objective of the analysis is to measure the welfare value generated for the community through FS Italiane Group's social commitment.

### Help Centers and shelters

As the economic crisis continues and migration surges, all of Italy is experiencing the deteri-

oration of social conditions, which can be especially seen at railway stations. Promoted and managed in collaboration with local bodies and non-profit associations, the Help Centers are the Group's answer to the growing phenomenon of social crisis and the considerable rise in migration to Europe and Italy in particular, as it is an access point.

The Help Centers are "low threshold" information points - i.e. without any filtering of users - created to welcome and shelter those who are most in need and help begin their rehabilitation with the city's social services and institutions. The Group plays a key role in this project, providing space inside or near to the station on free loan to associations and authorities engaged in combating social marginalisation and covering urgent needs so they can create Help Centers.

The existing network has recently grown with the opening of Help Centers in 2016 in Brescia and Trieste, the latter being definitively opened following the experimental stage that began in December 2015.

The Help Center network currently spans 17 railway stations from Northern to Southern Italy.

The initial results of the Group's intense efforts to find new spaces in Southern Italy, given the greater influx of migrants, have been the Help Centers established in Reggio Calabria in 2015 and the expansion of those in Catania. This migration trend, which first affected the regions in Southern Italy, as now spread to other cities as well, like Ventimiglia, Bolzen, Como and especially Milan<sup>2</sup>, the crossroads to other European countries.

In this context of emergency, Ferrovie dello Stato Italiane has taken action by granting spaces to the Milan municipal authorities where the Fondazione Progetto Arca has carried out an impor-

<sup>1</sup> The Help Centers in the scope of analysis are currently those in: Bari, Bologna, Catania, Florence, Genoa, Messina, Milan, Naples, Pescara, Reggio Calabria, Rome, Turin and Trieste.

<sup>2</sup> Since 2013, an estimated 110,000 refugees escaping war and poverty, mainly from Syria and Eritrea, have passed through the Milano Centrale station.

tant project to provide shelter and orientation to migrants<sup>3</sup>.

Additional Help Centers will be opening soon in Tuscany in the wake of a three-year agreement protocol signed by FS Italiane Group and the Tuscan regional authorities, signed in 2013, for the re-use of idle assets for social solidarity: the next Help Centers will be located in Viareggio<sup>4</sup>, Pistoia, Pisa, Prato and Livorno. With the Tuscan regional authorities, the Group is working on a new agreement for 2017-2020. Other Help

Centers, like the one in Rome, have been improved and checks are underway to expand the Help Centers in Bari and Messina. The opening of new centres at the Genova Piazza Principe, Terni, Foligno, Cesena and Rovereto stations is under consideration.

The 2016 data on the Help Centers confirm the important role that they play. In 2016, a total of over 22,500 people received help and roughly 470,000 social projects were carried out, including orientation and low threshold projects.

## NETWORK OF HELP CENTERS AT STATIONS

Existing	Potential	
Rome*	Pistoia	<p>(*) Following the introduction of access gates to the train platforms at the Roma Termini station in 2016, the Help Center is being relocated to Via di Porta San Lorenzo (in the San Lorenzo neighbourhood near the station) where the Group has made more spacious facilities available. They are currently being renovated.</p> <p>(**) The Group granted additional areas to Caritas Diocesana. The expansion of the canteen means more meals can now be provided (currently 400 meals a day, with up to 150 people being</p> <p>(***) The new Reggio Calabria Help Center was opened in March on "International Anti-Racism Day". It provides shelter, assistance and orientation for people suffering serious social marginalisation, without a home and financial, health or relationship difficulties. Named "Casa di Lena", the centre is in a property granted by FS Italiane Group for free use with the collaboration of the municipal authorities, and is managed by Caritas Diocesana in partnership with Acisjif, Agesci (Rc1 and Rc9), Comunità di Sant'Egidio, Maestri di Speranza and Masci Rc5.</p>
Chivasso	Prato	
Milan	Pisa	
Genoa	Livorno	
Messina	Genoa (P. Principe)	
Bologna	Viareggio	
Bari	Foligno	
Pescara	Terni	
Foggia	Rovereto	
Naples	Cesena	
Catania**		
Turin		
Firenze Santa Maria Novella		
Melfi		
Reggio Calabria ***		
Trieste		
Brescia		

<sup>3</sup> In all, 2,450 square meters of space have been granted to the Fondazione Progetto Arca for free use as part of its "HUB" project in Via Sammartini, numbers 106 to 124 (excluding 100 to 116 where the Caritas shelter has been managed by Caritas Ambrosiana for many years), in which a medical clinic, bathrooms and showers, a canteen, areas set up with wi-fi and computers so the refugees can contact their families, and play area for children have been set up. The refugees have been sheltered and given personal hygiene kits. The HUB activities at the Milan Centrale station have been carried out, supported and

integrated by many different institutions, companies and local associations.

<sup>4</sup> Once opened, the Help Center will be managed as an information, orientation and social re-integration point. An accommodation center hosting women, including those with underage children in distress, will be placed on the first floor. Viareggio has been the first town in Tuscany region to have signed a granted for free contract in order to open a Help Center, after having signed a memorandum of understanding with Regione Toscana.

The various international projects pursued in each country are the subject of ongoing discussion continuously within the context of the *Gare Européenne et Solidarité*, a European charter for the development of social initiatives in stations signed in Rome in 2008 through the joint efforts of railway companies on the basis of their experience with social distress. The network was set up in Rome in 2008 when five railway companies from five countries signed the charter: Italy (FS Italiane), France (SNCF), Luxembourg (CFL), Belgium (SNCFB) and Poland (PKP). The charter has since been signed by another seven European railway companies from Romania (CFR), Slovenia (Zeleznice), Norway (NSB), Bulgaria (NRIC), Denmark (DSB), Czech Republic (CD) and Sweden (Jernhusen).

By exchanging best practices between the railway companies that have signed the European charter for the development of social initiatives in stations, additional Help Centers or similar structures have been established in Europe: in Strasbourg, France and at the Gare du Nord e de l'Est in Brussels, with centres at major Bulgarian stations slated to open soon. In addition, the Luxembourg Help Center was opened in March, twinned with the Trieste Help Center. The two Help Centers will work together, sharing employee training and information on homelessness and migration issues.

Finally, in June, the European Train in Station project was concluded in Paris. It involved the collaboration of Italian, French, Luxembourg and Bulgarian railways on a railway worker training project concerning migration issues and assistance to the homeless, potential Help Center beneficiaries.

In addition to the Help Centers, through major Italian non-profit associations, many shelters have been set up in idle railways areas, particularly in Rome and Milan:

- / the "Don Luigi Di Liegro" shelter at Rome Termini managed by Rome Caritas;
- / the "Rifugio Caritas" centre in Milan managed by Caritas Ambrosiana;
- / the "Binario 95" day shelter in Via Marsala, Rome managed by the Europe Consulting social cooperative<sup>7</sup>;
- / the "Pedro Arrupe" shelter for those seeking asylum and political refugees, managed by the "Centro Astalli" association<sup>5</sup>.
- / The new migrant hub is being set up in a former Ferrotel across the street from the Tiburtina station, which was granted on free loan to the Rome municipal authorities.

The total surface area<sup>6</sup> granted under free loan agreements for social activities in 2016 measures 23,821 m<sup>2</sup>, with a total estimated value of €35,731,500<sup>7</sup>.

The Group collaborates closely with ONDS, the Italian observatory for poverty and solidarity at stations, so the Help Centers can work in synergy. ONDS, which is managed by the social cooperative Europe Consulting Onlus, coordinates all the centres, handles training for Help Center workers and performs detailed analyses of social distress<sup>8</sup>. The real-time situation of the online Help Centers is published on the website [www.onds.it](http://www.onds.it), along with useful information for social workers.

<sup>5</sup> The centre has operated in the former Rome shunting site Ferrotel since 2002, with the support of the United Nations High Commissioner for Refugees, the UN refugee agency and is part of the National Asylum Project promoted by the Ministry of the Interior, the National association of Italian Municipal Authorities (ANCI) and the Rome Municipal Authority. Its activities include professional training, education for minors and Italian language courses to help guests enter the work force and society. Training was given to 40 people, including 20 unaccompanied foreign minors. The centre hosted 55 minors and held 50 education projects. 15 people entered the workforce.

<sup>6</sup> The surface area data include the Help Center network (2,703 m<sup>2</sup>) and the shelters (14,118 m<sup>2</sup>). In addition, areas have been granted for social and cultural purposes, such as

the Shoah Memorial (7,000 m<sup>2</sup> at the Milan Centrale station, with a market value of €10,500,000), granted to the Shoah foundation for a symbolic fee. A total of 4,500 refugees from Syria and Eritrea were granted shelter there during the year.

<sup>7</sup> The total value of €35,731,500 was calculated considering the average sales value based on the market rate of €1,500/m<sup>2</sup>. Ferservizi provided the latter figure (unchanged with respect to the previous year) by referring to average market values for properties in large cities that have partially deteriorated and are in areas with low commercial value.

<sup>8</sup> To collect and analyse data, ONDS uses the IT platform Anthology specifically created with the contribution of all network players and which won the Sodalitas Social Innovation Award.

## THE HELP CENTER NETWORK'S MAIN SERVICES

	2016	2015	2014	2013	2016 vs 2015
Total days open	4,565	3,798	3,570	3,744	20%
Total hours open	31,721	26,251	29,369	23,660	21%
Social orientation projects	62,671	84,085	139,978	82,534	-25%
Low threshold projects	406,715	364,987	330,844	133,196	11%
<b>TOTAL SOCIAL PROJECTS*</b>	<b>469,386</b>	<b>449,072</b>	<b>470,822</b>	<b>215,730</b>	5%
Total people served	22,687	21,292	31,702	25,110	7%
Total new people served	9,056	9,135	17,184	12,040	-1%
<b>Average impact**</b>					
Social projects/day	195	285	445	284	-32%
Low threshold projects/day	1,251	1,404	1,108	442	-11%
Users/day	67	68	96	79	-1%
New users/day	33	30	52	39	9%

(\*) The 2015 ONDS Report describes a total of 520,000 projects, but this number also included the 71,500 low threshold projects carried out by the Arca project's migrant hub at the Milano Centrale station. In 2016, these projects numbered 167,000, and were excluded from the total to present more consistent data.

(\*\*) The "average impact" is calculated as the sum of the averages of relevant amounts obtained from individual Help Centers.

See the *Additional information* section for more details.

## Fund raising campaign

During the Christmas holiday season, in partnership with Save the Children, a solidarity campaign named "#aBracciaAperte"<sup>9</sup> was organised to support the day shelters for migrant minors who arrive in Italy without an adult caregiver and who are particularly vulnerable and often exposed to the risk of abuse, violence, child labour or sexual exploitation. In 2016, according to Save the Children estimates, of the roughly 177,190 migrants who arrive on the Italian coastline, 27,660 are minors and at least 25,225 are unaccompanied, more than twice the number who arrived in 2015. Funds are raised through various channels and, in particular, *Frecce* passengers were offered Sperlari torroncino chocolates in exchange for a donation. Other fund raisers were organised at stations where customers can donate using the self

<sup>9</sup> Litocartotecnica Ival, Sirena Group and Sperlari collaborated with this initiative.

<sup>10</sup> In particular, the Reggio Calabria, Messina, Catania, Bari, Naples and Rome Help Centers were involved in this project.

service ticketing machines, at ticket counters and in the *FRECCIAClubs*. Even Group employees contributed to fund raising within the company. The proceeds went to the day shelters to support, assist and protect minors run by Save the Children's *CivicoZero* team.

January saw the conclusion of the Christmas campaign launched in December 2015 to improve *Ostello Caritas Don Luigi Di Liegro*, a shelter in via Marsala, Rome (approximately €347,000 was raised).

## National projects and social awareness campaigns

During the year, the Group implemented a "Cold plan" to strengthen activities carried out in the winter months<sup>10</sup> by its Help Centers and leading Italian non-profit associations<sup>11</sup>.

28,912 disadvantaged people were contacted and 3,535 were hosted in the shelters. 14,404 blankets were distributed (Trenitalia provided another 2,795 blankets that are no longer used

<sup>11</sup> Specifically, the following non-profit associations: Associazione Centro Astalli, Caritas Ambrosiana, Caritas Roma, Community di Sant'Egidio and Fondazione Progetto Arca.

on trains, which were distributed at the Group's Help Centers) and 88,047 meals were served. 936 people from the non-profit associations worked on these initiatives.

In 2016, the main partnerships for awareness campaigns were with:

- / WeWorld Onlus, to fight violence against women with the "#potreissereio" project;
- / Censis, for solidarity through the "Non passarci sopra" photography exhibition at the Tiburtina station;
- / Associazione Telefono Amico, to prevent suicides, with the "Riemergere si può" campaign.

The Group participated in the fourth edition of the CSR salon, reporting to the academic world on its social commitment through various solidarity initiatives and projects.

Furthermore, the Group's commitment to the university programme continued, with the aim of encouraging theses and investigations on the Group's social initiatives, which can be used as proposals to supplement/improve projects underway or launch new ones.

## Socio-labour repercussions of the Help Centers

In 2016, FS Italiane Group invested over €187 thousand in social responsibility initiatives and projects related to activities for socially disadvantaged people.

## ECONOMIC VALUE OF SOCIAL ACTIVITIES

Activities	Detail of activities	Amount (€)
<b>Continued ONDS activities</b>	Agreement with the National Observatory for the Disadvantaged and Solidarity at Stations; global activities, fund raising activities; management of new databases on the reuse of idle railway assets for social purposes and on the country's socio-economic situation.	129,804
<b>Social editor</b>	Daily reporting agency on social distress and commitment to relieving it in Italy and around the world.	1,446
<b>Communication projects on the Group's corporate social responsibility ("CSR")</b>	Participation in initiatives, seminars and events on CSR issues and reporting on what FS Italiane Group has done in terms of social activities.	37,000
<b>Social projects</b>	The <i>Ostello Rome Termini</i> fund raising campaign.	9,500
<b>Total</b>		<b>177,750</b>

These projects have had positive repercussions on employment, both in terms of the creation of new jobs for social workers at the shelters and the integration of disadvantaged people into the workforce and society.

As for the creation of new social worker jobs, in 2016, for every hour in which they are open, 46 regularly employed social workers are in service at the Help Centers, working with the support of thousands of volunteers.

### Reuse of idle real estate assets and railway lines

IFS Italiane Group owns not only assets that are functional for its core business, but also extensive real estate holdings, some of which are no longer

used, consisting of railway stations, booths and tracks<sup>12</sup>. To date, in collaboration with local bodies and non-profit associations, 432 stations have been dedicated to activities that enhance the value of the area or activate services for the public. Areas of roughly 91,594<sup>13</sup> m<sup>2</sup> have been set aside for a total amount of €91,594,000<sup>14</sup>. At the Ecomondo fair was presented the "Atlas of idle Italian railway lines" to foster projects to redevelop idle railways, transforming them into recreational paths. These assets are estimated to comprise about 1,500 km of former railway lines, including definitively discontinued lines pursuant to Ministerial decrees, and lines discontinued due to route variations.

See the *Additional information* section for more details.

<sup>12</sup> The number refers to stations with at least one free loan agreement in place.

<sup>13</sup> The number refers to buildings granted on a free loan basis. The Group also granted yards outside the stations and/or land of 3,542,105 m<sup>2</sup>.

<sup>14</sup> Ferservizi estimated the average value per square metre as €1,000/m<sup>2</sup>, as these are non-prime properties located in areas without significant commercial value in small and medium-size cities.



## SOCIAL AND CULTURAL ACTIVITIES

### Ferrovie dello Stato Italiane Group supporting culture

The Group constantly sponsors national events like concerts, exhibitions, performances, conventions and initiatives to safeguard artistic, cultural and scientific heritage.

Again in 2016, the Group renewed a major partnership with leading foundations and museums in the country to create new travel opportunities by encouraging the use of trains as the ideal way to reach cultural capitals, learn about Italian heritage and see the most important exhibitions. The main events in which FS Italiane Group participated in 2016 were:

- / the Venice Biennale (Art and Film Festival);
  - / exhibitions at Palazzo Strozzi (Florence), Scuderie del Quirinale, Palazzo delle Esposizioni and Museo delle Culture (Milan).
- Furthermore, the Group partnered with Musei Civici di Venezia, Brescia Musei and Ferrara Arte. The Group is also a member of:
- / Associazione Civita, a landmark in the national debate for the protection and enhancement of cultural and environmental heritage;
  - / Accademia Nazionale di Santa Cecilia, on whose behalf it promotes concerts and events.

### Ferrovie dello Stato Italiane Group's commitment to crucial social issues

In 2016, Ferrovie dello Stato Italiane Group developed, together with leading institutions and associations in the sector, initiatives to support current social issues like protecting children's health, tackling the risk of school drop-outs and promoting and protecting women's health and eco-sustainability.

The main projects developed in the year were:

- / *Frecciarossa*: "Prevention Travels at High Speeds" – an initiative on board *Frecciarossa* trains to prevent and treat breast disease and education about healthy lifestyles;
- / Children's train - an initiative under Cortile dei Gentili, a branch of the Pope's Cultural Council - a journey on a *Frecciargento* train to the Vatican for children from schools in Calabria, a region that takes in migrants every day;
- / Green train - an initiative in partnership with Legambiente now in its 28th edition covering four main issues in 2016: smart cities, eco-neighbourhoods, new mobility and lifestyles with over 35,000 visitors, including students and citizens.



## MEDIA RELATIONS

In 2016, Ferrovie dello Stato Italiane Group managed relationships with national, local and international media (press agencies and national, local and foreign newspapers, the free press, magazines and general and trade publications, radio, television and photography agencies), in addition to online newspapers, websites and blogs, via the Press Office and other communication channels outside the Group, which include:

- / the online newspaper fsnews.it;
- / the Group's website fsitaliane.it;
- / the radio FSNews Radio;
- / the web television station *La Freccia.TV*;
- / *La Freccia* and *FrecciaViaggi* magazines;
- / social networks.

### Media relations and publishing activities

In 2016, FS Italiane's Press Office prepared over 3,000 media communication documents, including press releases, notes to the press, articles and news for the Group's website.

The Group communicates at local level through its network of local correspondents who, in 2016, produced more than 1,700 documents, like press releases, notes to the press and replies. Furthermore, the office responsible for relationships with the media and publishing activities (RMAR) handled relationships with consumer associations and people with reduced mobility in the year<sup>1</sup>.

### FSNews Radio

In 2016, the FSNews Radio editorial department broadcast 2,880 hours of live content, providing over 4,976 updates on train circulation.

<sup>1</sup> FS S.p.A.'s CEO held two meetings and Trenitalia's top management held one meeting with the Consumers' Associations, while both FS S.p.A.'s CEO and top managers and engineers of Trenitalia and RFI held a series of meetings with the associations representing people with reduced mobility. During the year, the RMAR department also had one-on-one discussions with representatives of these associations and participated in various panels promoted by the same associations and the Consumers' Forum, of which FS Italiane is a member.

### La Freccia.TV

In 2016, the *LaFreccia.TV* editorial department broadcast 91 video news segments, 25 FS news reports, 18 specials and video tutorials, completed six advertisements for programming on board *Freccie* trains and made four direct programmes for streaming.

The photography department produced 252 shoots for events, conferences, documentation and promotional material. The audio-visual department created 76 corporate and promotional videos and documentaries uploaded to new media platforms and broadcast on screens at stations.

### La Freccia and In Regione editions

*La Freccia* and *In Regione* published hardcopy and online magazines. All publications are available to read on ISSUU and the Media and events section of fsitaliane.it and are printed on FSC® certified paper.

*La Freccia* publications include:

- / *La Freccia*, FS Italiane Group's general-interest monthly publication;
- / *Frecciaviaggi*, the quarterly travel magazine;
- / *La Freccia Fashion*, a special edition devoted to the Pitti Immagine Uomo fashion shows, printed in an extra-large format;
- / *La Freccia Gourmet*, a magazine dedicated to large food and wine events published every two months;
- / *La Freccia Arte*, an art magazine created for the exhibitions ArteFiera in Bologna, Artissima in Turin and Quadriennale in Rome;
- / *La Freccia Design*, a special magazine for the Milan Salone del Mobile and Milan Triennale;
- / *La Freccia Beauty*, a special publication printed in an extra-large format for the Cosmoprof in Bologna;
- / *La Freccia Bio*, a special publication printed in an extra-large format about organic food devoted to the Salone Internazionale del Biologico e del Naturale in Bologna;
- / *La Freccia Wellness*, a special edition for the Riminiwellness event;

- / *La Freccia Collection*, a special edition about Unesco Italia sites (distributed on *Freccie* trains and in the *FrecciaClubs*).

*In Regione* publications include:

- / #Note, the twice-monthly pocket edition on regional transport, published weekly since 6 October 2016 (distributed at the Roma Termini and Milano Centrale stations and, since 6 October 2016 at the Bologna Centrale, Firenze Santa Maria Novella, Torino Porta Susa and Venezia Mestre stations as well).

### Web & New Media

In 2016, the company website FSitaliane.it was expanded with sections on strategic works and CSR, *interalia*.<sup>2</sup>

The "Opentreno – sui binari della rete" blog was started to informally discuss issues like the environment, innovation, travel, history and social responsibility.<sup>3</sup>

To keep the public informed about works on the Naples-Bari and Palermo-Catania-Messina railway lines, the two websites on the initiatives ([www.napolibari.it](http://www.napolibari.it) and [www.palermocatania-messina.it](http://www.palermocatania-messina.it)) are updated. They provide information on projects, the progress of works and official ordinances.

The revamping process carried out on the Group companies' websites, to improve the effectiveness of visual and architectural communications, was consolidated, while the FS Italiane "Work with us" section's innovation process continued, bringing together the company and labour market.

The continuous updating of the websites [www.fondazionefsitaliane.it](http://www.fondazionefsitaliane.it) and [<sup>2</sup> This included content about events like the second edition of the MED \(Mediterranean Dialogues\) Forum, the 20th edition of Ecomondo, FS Competition, the CSR and Innovation Salon, the presentation of the 2017-2026 business plan, Innotrans, the World Congress on Railway Research, the 2016 edition of Trenoverde and ILCAD 2016.](http://www.museodipietrar-</a></p>
</div>
<div data-bbox=)

<sup>3</sup> An in-house blogging team develops the blog content with bloggers representing the various Group areas and with the collaboration of "Cittadini di Twitter", the first online newspaper that explores and develops social networks in people's public and private lives every day and in every field. The blog is accompanied by a Facebook page and Twitter profile.

sa.it continued in 2016, while FSNews.it, the Group's online newspaper, remained a reliable service site for travellers and added two new channels for information on mobility and corporate communications on Telegram (@Infotreno and @FSNews).

The Group can also be found on:



# 06

OUR  
PEOPLE



An overview to better know  
who works for the Group



# OUR PEOPLE



We are Ferrovie dello Stato Italiane Group, Italian leader and a major European player in the transport of passengers and cargo. We have always worked alongside the country, meeting our customers' mobility needs with speed and quality. We believe in the continuous innovation that

our business can create through the integration of ideas and the engagement of each of us, in Italy and abroad. We enthusiastically operate every day in accordance with ethical principles to achieve the objectives of our new business plan.

## Highlights

G4-2

### WHAT WE HAVE ACCOMPLISHED >

FS Italiane Group placed first in the **Best Employer of Choice**

**2,296**  
NEW EMPLOYEES HIRED  
over 20% women

MAN/DAYS OF TRAINING  
Over **355,000**  
Approximately **90%** in technical/professional training

DROP IN ACCIDENTS AND THE FREQUENCY RATE  
**2016 results**  
were well beyond targets

The **Moving Forward**

project to share the values and strategies of the new business plan with all employees

The renewal of the **National labour agreement**

and the Group's employment contract were signed

### WHAT WE AIM TO DO >

Increase in the number of people involved in the  
**performance management process**  
and development of the MBO programme

Continue  
**reducing accidents AND THE FREQUENCY RATE**  
and investing in the well-being of people

Promote  
**job rotation**  
WITHIN THE GROUP

**Value THE CONTRIBUTION**  
of the different generations working within the business

**Increase THE NUMBER OF WOMEN**  
working in technical areas

**Promote WELFARE INITIATIVES**  
for employees and their families

**COMMUNICATION AND social collaboration**

# WORKFORCE BREAKDOWN

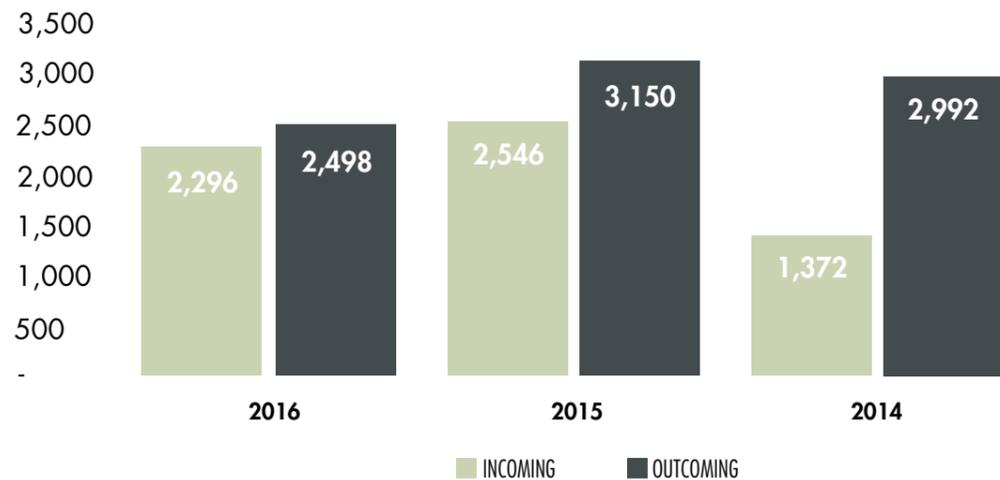
G4-10 G4-EC6 G4-LA1 G4-LA10 G4-LA12

## NUMBER OF EMPLOYEES OF FERROVIE DELLO STATO ITALIANE GROUP

	2016	2015	2014
<b>Managers</b>	727	714	721
<b>Junior managers</b>	11,005	10,945	10,867
<b>White collars</b>	32,117	31,296	31,163
<b>Blue collars</b>	26,331	26,047	26,364
<b>Total number of employees at 31 December</b>	<b>70,180</b>	<b>69,002</b>	<b>69,115</b>
% of women	14.6%	14.5%	14.0%
% of men	85.4%	85.5%	86.0%
<b>Average number of the year</b>	<b>69,056</b>	<b>69,276</b>	<b>69,487</b>

The increase in the number of employees compared to the end of 2015 is mainly due to changes in the consolidation scope (Ferrovie del Sud Est). In 2016, there was an increase in the percentage of women in the total workforce. In particular, the percentage of women in management positions increased, rising to 16.1%. In addition, there were 2,296 new hires, confirming the 2015 trend.

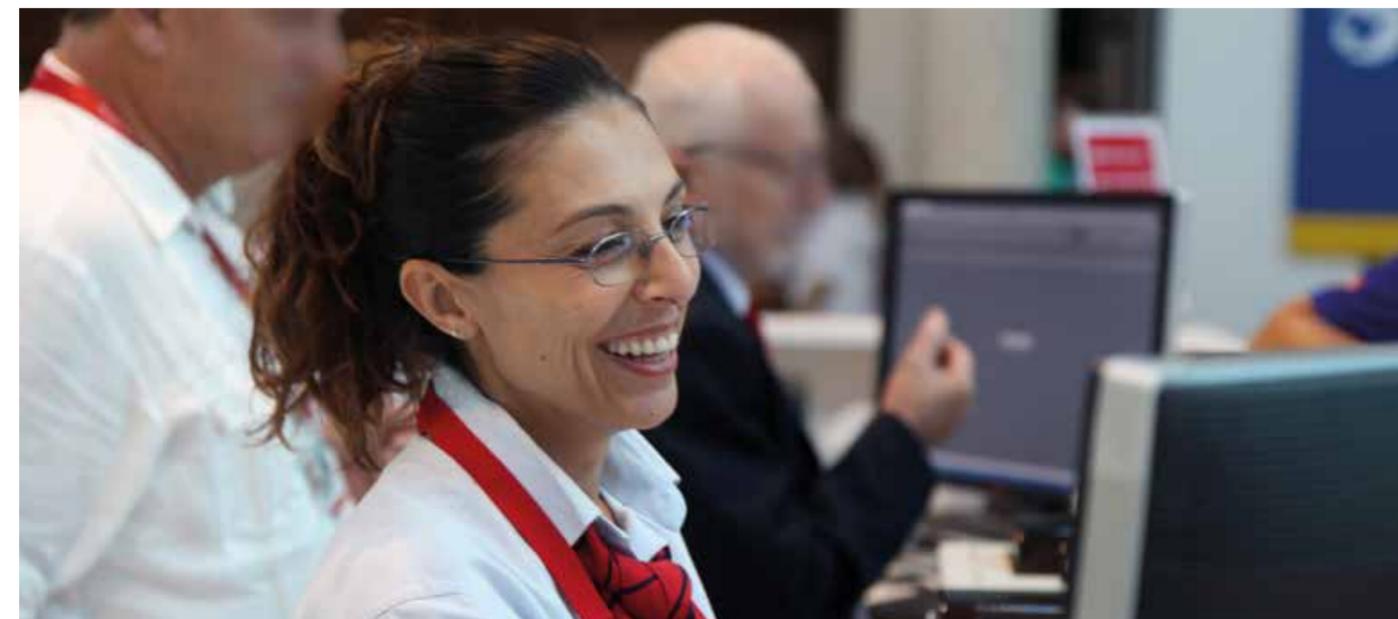
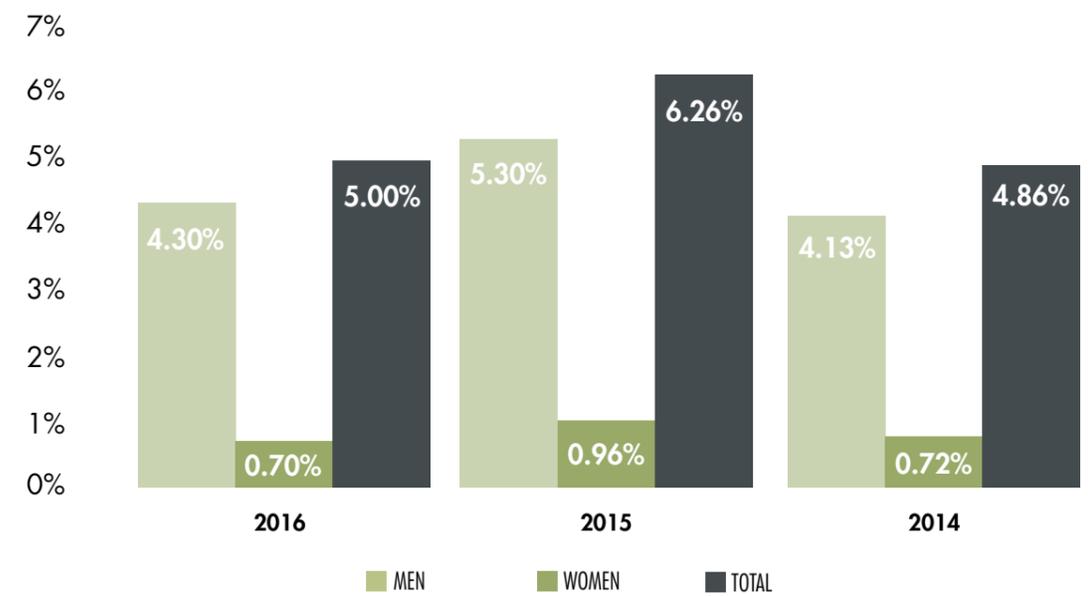
## TREND IN INCOMING AND OUTGOING EMPLOYEES



The following graphs show a detailed breakdown of the year's figures<sup>1</sup>.

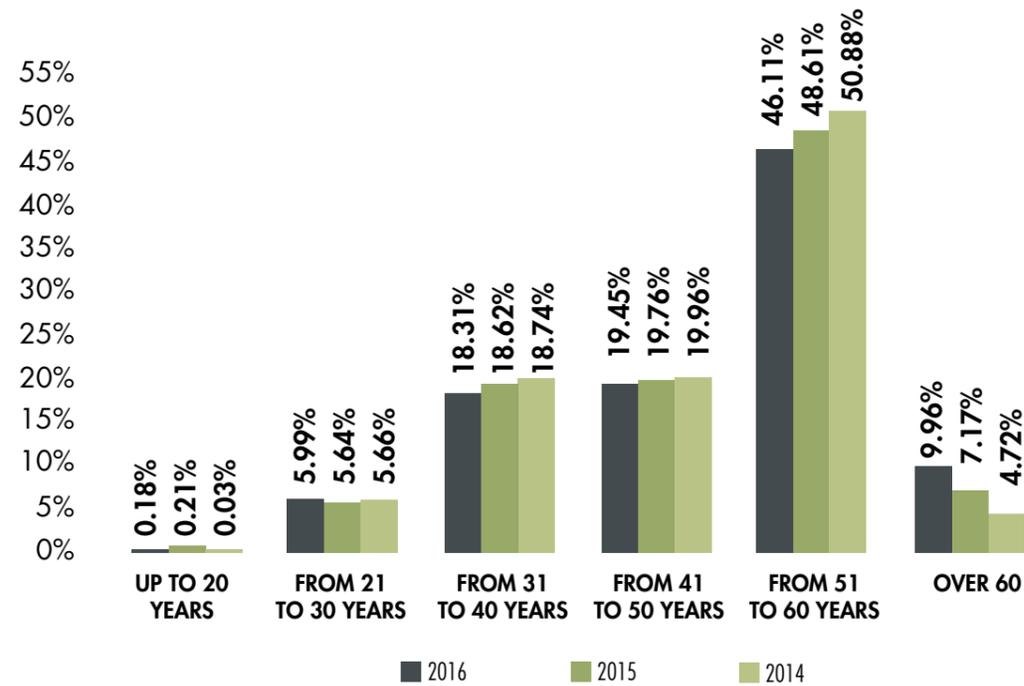
<sup>1</sup>The data refer to the following companies: FS S.p.A., RFI, Trenitalia, Ferservizi, Italferr, FS Logistica, FS Jit, FS Sistemi Urbani, Terminali Italia and Cemot. The total number of employees in this scope of analysis is 60,191, approximately 86% of the Group's total workforce.

## TURNOVER BY GENDER

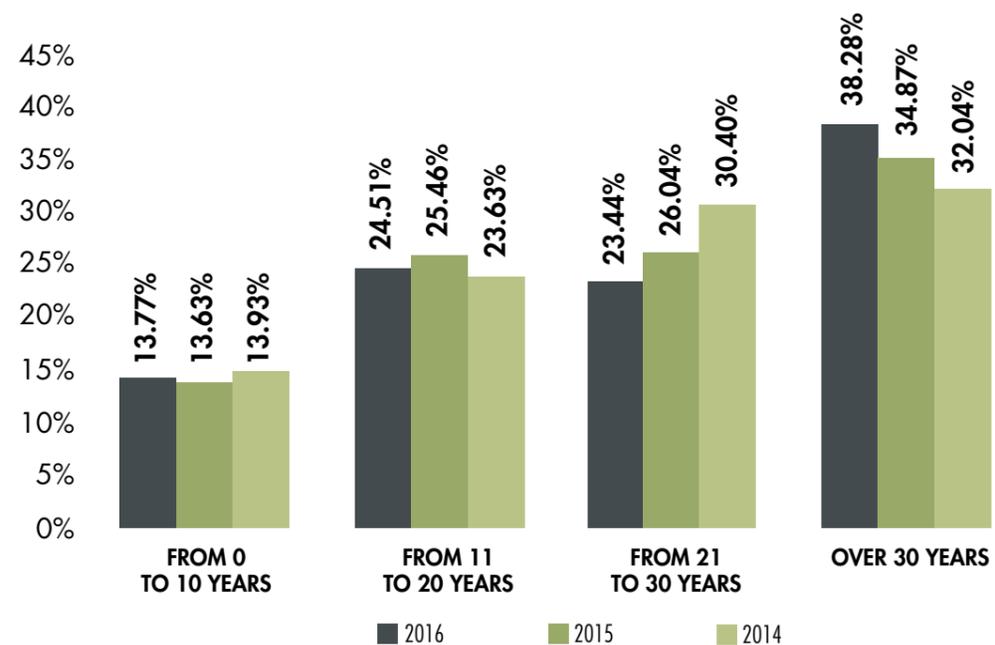


The turnover rate was 5.00%, compared to 6.26% in 2015. The decrease was due to the smaller number of employees who left the company during the year.

BREAKDOWN OF PERSONNEL BY AGE BRACKET



BREAKDOWN OF PERSONNEL BY SENIORITY



The average number of years with the company in 2016 is 24 years, while the average age is 49 years old. See the *Additional information* section for charts detailing the workforce and employee turnover.

Recruitment

In 2016, training on the new IT system for in-house job postings involved over 120 members of HR personnel who work in these processes both locally and centrally, highlighting the importance of promoting the enhancement of people within the Group and encouraging intraGroup job mobility through professional diversification and job rotation processes. This area saw a considerable increase in Group employees' interest in new job opportunities, with a 40% spike in applications to participate in in-house recruitment. Recruitment on the market outside the Group, which encompasses international candidates to meet the Group's development needs on foreign markets, has focused on recent graduates, not only in engineering, but in business and law as well, and on specialised experts needed for the core business. In particular, over 440,000 curriculum vitae in the Group's database were evaluated, with the identification of around 179 recent graduates who are interesting candidates for the various Group positions to be filled. Of these, 105 were found through intense, ongoing collaboration with universities and various employer branding activities (e.g., the FS compe-

titution). Furthermore, 68 expert positions and 15 managerial positions were filled.

In the selection of operational personnel, while upholding the Group's principles and guidelines, each company followed its own specific procedures, considering the candidate's residence in the region where the job was based as a priority requisite.

Communication channels for job opportunities within the various companies were expanded, including with participation in virtual job fairs on Twitter. The development of the career website was also boosted dramatically, and each month it receives an average of 150,000 visitors. The online mobile responsive application was also implemented, with an average of 1,000 visits received per day. To encourage young people receive job orientation and access to opportunities, online video interviews with spokespeople and brand ambassadors are created and posted online, along with web pages providing useful tips on how to apply for jobs. The LinkedIn page was also developed further with sections and updates on People, Recruitment, Company and Events/news, reaching nearly 100,000 followers at Group level.

FS Italiane Group won first place for the third year in a row as "Best Employer of Choice 2016", a statistics-based survey carried out by Cesop Communication<sup>2</sup> of a sample of 2,500 recent university graduates in Italy, considering 101 Italian and international companies.

<sup>2</sup> Employer branding consultancy firm.

# HUMAN CAPITAL

G4-LA9 G4-LA10 G4-LA11

## Development

In 2016, development activities focused on the following aspects:

- / assessing participants of Group interest (managers, key junior managers and university graduates: 468 people) and company interest (junior managers and white collars: 529 people) for a total of 997 participants, along with the management of feedback and development plans following the assessments;
- / training for the corporate trainers to maintain and develop their skills (27 people) and for new trainers (12 people);
- / piloting a new methodology for the identification, development and management of talent, with a specific focus on developmental agility and leadership potential.

As part of FS Italiane Group's annual performance assessment by the department heads using the SIV platform for key groups of employees (managers, junior managers and university graduates), 6,476 men and 1,838 women were assessed, making up about 12% of the average annual number of resources, up approximately 12% on the number of employees who received assessments in 2015.

The annual performance of resources who are not included in the SIV assessment process is reviewed by their managers informally (e.g., with feedback on strengths and areas for improvement).

## Training

The purpose of training is to develop managerial skills and maintain and update professional technical expertise, supporting resources in the achievement of business targets and individual professional growth.

More than 355,000 man/days of training were provided in 2016 at Group level<sup>1</sup>, aimed at fos-

<sup>1</sup> The data refer to the following companies: Ferrovie dello Stato Italiane, RFI, Trenitalia, Ferservizi, Italferr and FS Sistemi Urbani.

tering a Group culture focused on the customer, safety, constantly pursuing efficiency and operating quality and enhancing merit.

Furthermore, around 15,000 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 for employees alone came to €7 million, which was mostly covered by funding received for training.

The Group's training activities are broken down into the following areas:

- / **Corporate:** training/information initiatives dedicated to presenting the Group and its strategic pathways;
- / **Behavioural/managerial** courses and seminars aimed at acquiring and/or developing typically managerial, behavioural and interpersonal skills;
- / **Technical/professional:** training aimed at acquiring and updating both practical and theoretical technical/professional skills;
- / **Shared/cross training:** training initiatives dedicated to acquiring and updating skills shared by people of the same level and professional group (languages, IT, etc.).

The parent and operating companies generally intervene on all of the above training types. Specifically, the parent is, above all, directly responsible for corporate and managerial training for target groups, while the operating companies mainly look after technical/professional and cross training for professional groups and specific business roles.

The following main training targets were achieved:

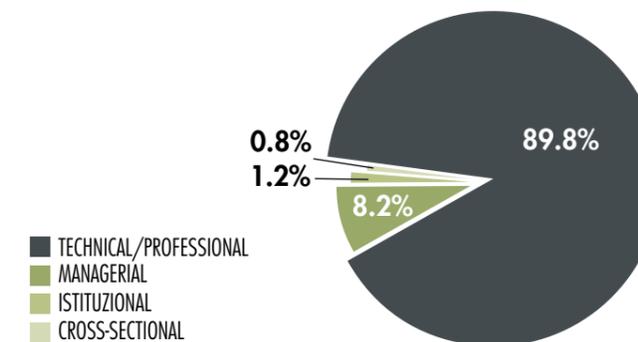
- / supporting workers' professional growth, making the most of each individual's abilities and potential;
- / reinforcing expert knowledge in connection with the different technical trades;

- / focussing on the behavioural approach to occupational safety and updating technical regulations;
- / developing an orientation centred around the customer, market and competition;
- / encouraging the spread of a business culture focused on internationalisation;
- / following through with the innovation and change processes, as well as the processes to continuously improve efficiency;
- / consolidating managerial expertise by sup-

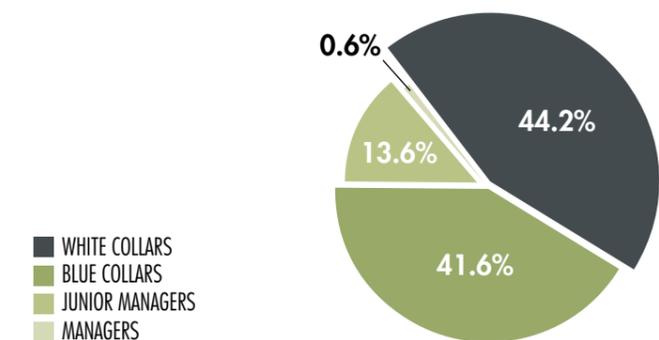
- porting the performance of people who reach the highest positions and most important responsibilities;
- / sustaining a culture of diversity management, including by focusing sharply on life/work balance issues;
- / accompanying recent graduates through induction programmes.

See the *Additional information* section for more details.

MAN-DAYS OF TRAINING BY AREA - 2016



MAN-DAYS OF TRAINING BY POSITION - 2016



## Partnerships with universities and other institutions

In 2016, the Group promoted significant employer branding initiatives also aimed at:

- / developing excellent training to ensure innovation and development in the production system;
- / aligning school and university training to meet business requirements;
- / guiding and introducing young people to the employment experience;
- / consolidating the Group's highly attractive image with young people.

Specifically, the main activities developed include:

- / over 10 master courses in collaboration (at various levels) with major Italian universities, academic institutions and business schools to develop above-par training that better meets business needs, entailing support in the recruitment and organisation process, teachers and presentations in the classroom by FS managers, project work and work experience at Group companies and scholarships;
- / international university courses to encourage internationalisation and the development of Group know-how: meetings with over 100 young Italians and foreigners attending post-graduate university programmes in engineering and business;

- / work experience and support in the preparation of university theses to foster an exchange of company and university know-how through the development of training projects and innovative aspects, respectively (over 50 in the year);
- / specialist seminars and workshops within university courses, aimed at introducing young people into world of employment and developing technical skills in the railway sector and personnel processes (seven in all, with over 250 students involved);
- / business games and contests for ideas on new systems and technologies of interest to the Group, with the aim of attracting, rewarding and training students (approximately 3,000 online participants and 60 on-site participants);
- / round tables with engineering students to present the "engineering profession" within the Group companies (50 students were involved);
- / projects to support research and innovation by promoting research stipends and PhDs with apprenticeships in partnership with universities, concerning issues of particular interest to the Group companies (over 50 candidates for three research stipends and one PhD);
- / organising 15 targeted events all over Italy, including recruiting days, career days and job meetings, as well as open days and events for counselling, orientation and recruitment of about 7,000 young people. During these events, the Group and the job opportunities in the various companies are presented.



## REMUNERATION AND PENSIONS<sup>1</sup>

G4-11 G4-52 G4-EC3 G4-EC5 G4-LA2 G4-LA7 G4-LA10 G4-LA13

The most common type of contract is open-ended, which is used for 99.9% of the Group's personnel<sup>2</sup>. As in previous years, all employees are covered by national labour agreements. The national labour agreement applied to the Group's non-management employees is that for the Mobility/Railway sector, integrated by the Group's company agreement of 20 July 2012, renewed on 16 December 2016. The parameter group for apprenticeship contracts during the first 24 months is higher than the professional level one step lower than the final level and, for the subsequent 12 months, at the starting remuneration of the final level. All employees, including newly hired employees, receive the contrac-

tual minimums plus the fixed remuneration items provided for by the national labour agreement (including seniority rises) and additional amounts related to the various positions held. There are no differences in remuneration based on gender. Any average differences between men and women, as reported in the table below, are due exclusively to the fact that they hold different positions in the companies, the ways in which they provide service and their responsibilities. For example, there are fewer women in transport operation jobs and, accordingly, average remuneration is affected by this factor (less compensation for shifts, working on holidays, working at night, etc.).

### REMUNERATION OF NON-MANAGEMENT PERSONNEL: RATIO OF WOMEN'S ANNUAL REMUNERATION TO MEN'S ANNUAL REMUNERATION (%)

		2016	2015	2014
Junior managers	Gross annual remuneration*	102.3	101.9	101.5
	Total annual remuneration**	96.3	96.2	96.1
White collars*	Gross annual remuneration	98.0	97.8	98.3
	Total annual remuneration	83.7	82.8	83.5
Blue collars	Gross annual remuneration	100.9	100.7	100.6
	Total annual remuneration	94.4	94.2	94.1

(\* ) White collars include office workers, but mainly consist of people filling positions typical of railway operations (station heads, maintenance managers, drivers and train supervisors).

<sup>1</sup> The scope of analysis includes the following companies: FS S.p.A., RFI, Trenitalia, Ferservizi, Italferr, FS Logistica, FS Jit, FS Sistemi Urbani, Terminali Italia and Cemat. <sup>2</sup> 1.5% of open-ended contracts are part-time.

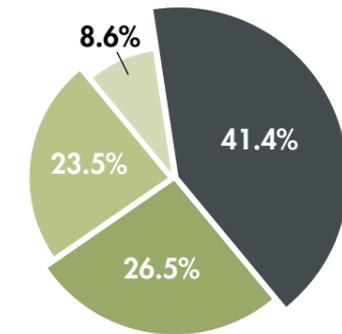
Employees' pensions are financed through specific mandatory contributions shared by employees and employers. Employees pay contributions equal to 9.19% of their remuneration base. This percentage is increased by 1% if the monthly base for the calculation of contributions exceeds €3,844<sup>3</sup>. On the other hand, employers pay contributions equal to 23.81% of each employees' remuneration base for the calculation of contributions. Employers in the Group cover, for all employees, additional costs for maternity leave, illness, social employment insurance<sup>4</sup> and ordinary contributions to the fund for income and employment assistance. Such fund implements actions for Group company employees to promote training programmes for professional retraining and/or requalification, set up active income and employment assistance policies, and provide extraordinary allowances to support income due to employees under voluntary redundancy. With regard to the supplementary pension fund, Group employees can pay into the negotiation fund provided for by the railway national labour agreement (Eurofer) or an open-end fund.

The employer and the employee share contributions to the Eurofer fund equally<sup>5</sup>. Employees may increase their contributions on a voluntary basis, without any obligation for the employer to increase its share of the contributions. Furthermore, the Mobility Contract and FS Italiane Group's contract of 16 December 2016 introduced additional increases in contributions to the Eurofer fund, including an annual contribution of €100 each for all employees, another €100 per employee for those who did not receive work/life balance benefits and a voluntary contribution of up to 40% of the 2016 performance bonus. 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.

Since 2012, non-managerial employees are offered supplementary healthcare plans covering specific medical services for employees of the Group companies that apply the Mobility Contract for the railway sector and FS Italiane Group's contract. Employees have the option of extending the insur-

ance coverage to members of their family. In such case the supplement is paid by the employee. The following table illustrates employees' selection of where to allocate their post-employment benefits.

ALLOCATION OF POST-EMPLOYMENT BENEFITS - 2016



- FULLY TRANSFERRED TO INPS
- FULLY TRANSFERRED TO EUROFER
- TRANSFERRED TO BOTH INPS/EUROFER
- FULLY TRANSFERRED TO OTHER FUNDS

On the other hand, the national labour agreement for managers of companies that produce goods and services are used for the Group company managers. The remuneration system for Ferrovie dello Stato Italiane Group managers implements that set forth by the relevant national labour agreement with respect to the definition of the minimum guaranteed salary. The rest of remuneration - both fixed and variable - is defined considering the professional and managerial duties of each position and management and performance assessment scores. Each position is evaluated using a specific weighting method to obtain objective elements for planning and managing remuneration policies, organisational decisions and career paths.

The method adopted to evaluate positions and compare their remuneration with similar positions within the Group and on the market was

workers with employment contracts who have involuntarily lost their jobs, has been in place.

<sup>5</sup> Contributions to the Eurofer fund amount to 1% of monthly remuneration, as per article 22 of the Group contract.

<sup>3</sup> INPS maximum for 2016.

<sup>4</sup> As per article 1 of Legislative decree no. 22 of 4 March 2015, as of 1 May 2015, a monthly unemployment benefit called NASpl, aimed at providing income assistance to

developed by a leading international Group in the rewards sector which, in addition to having created the method, boasts one of the most extensive databases on remuneration in the world. The guidelines used to define the remuneration policies for managers are: market benchmarking to check that the remuneration offered is consistent, focus that remuneration is also consistent internally considering the complexity of the position held and updates of evaluation of managerial positions to benchmark remuneration against the development of the Group's organisational structure over time. Remuneration policies provide for two types of bonuses: merit-based to support internal management and development policies and annual bonuses to recognise the contribution of individuals.

For almost all managers, the overall remuneration offered also includes a system of short-term incentives as part of the MBO (Management By Objective) plan, in which the variable component of remuneration is linked to the achievement of specific performance targets that are indicated in advance and set on the basis of business targets<sup>6</sup>.

As in the past, again in 2016, FS Italiane has an incentive system in which individual objectives are defined in direct relation to each manager's responsibilities and the collective results of the company and/or Group for business optimisation and development.

In the 2016 MBO process, occupational safety and environmental sustainability were confirmed as crucial principles and values to be used as the basis for growing the culture and awareness of all Group employees.

The data in the table show that the gap between women's and men's gross annual remuneration and total annual remuneration is narrowing.

Total remuneration to managers is also integrated with a series of benefits, mainly consisting of: mobile phones, insurance coverage for both occupational and other accidents and permanent disability due to illness and death, the supplementary health care plan (FASI), the supplementary pension fund (PREVINDAI) and additional supplementary healthcare insurance (ASSIDAI).

REMUNERATION OF MANAGEMENT PERSONNEL: RATIO OF WOMEN'S ANNUAL REMUNERATION TO MEN'S ANNUAL REMUNERATION (%)

	2016	2015	2014
Gross annual remuneration	95.51%	94.70%	93.90%
Total annual remuneration	96.63%	95.90%	93.30%

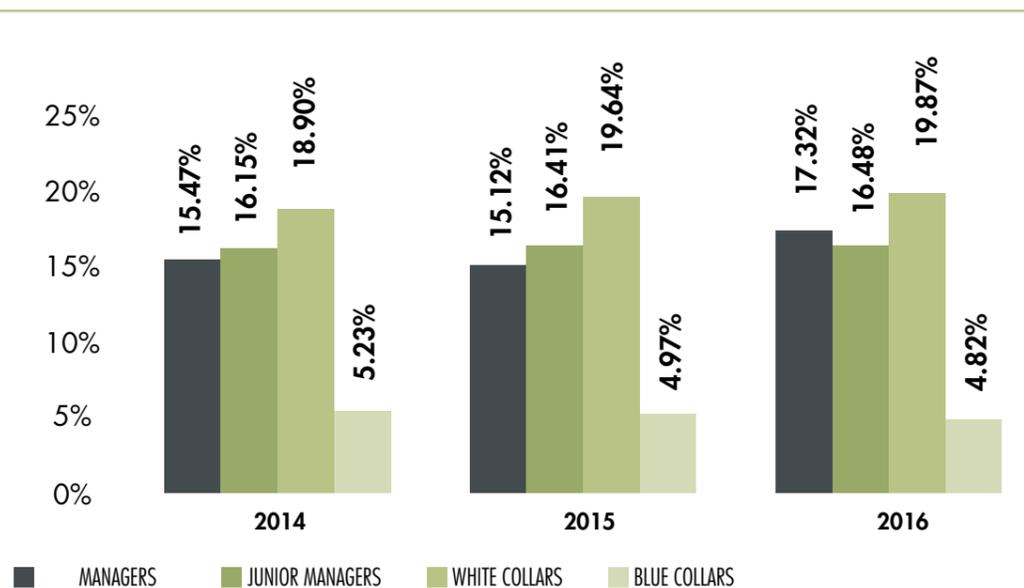
<sup>6</sup> The objectives must reflect the priorities of business strategies and should be identified transparently so they can be measured and certified objectively through the Group's accounting and reporting systems.

## PEOPLE CARE

G4-10 G4-LA12

FS Italiane Group manages and organises human resources in full compliance with the rights guaranteed by legislation and its Code of Ethics which expressly states that "human resources are the Group's great wealth". Through the Code of Ethics, the Group undertakes in a formal and substantial manner, to never discriminate based on gender, ethnicity, language, religion, political opinions or personal/social status. Furthermore, through the steps taken by the relevant HR departments and the Equal Opportunities Committee, the Group is also committed to promoting inclusive environments in order to make the most of diversity and encourage programmes for women workers. At the end of 2016, women made up 15% of the Group's employees.<sup>1</sup>

PERCENTAGE OF FEMALE EMPLOYEES  
BY POSITION



<sup>1</sup> A bilateral body with equal standing set up pursuant to article 1.3.C) of the National Labour Agreement for the Mobility/Railway sector and article 3 of the Ferrovie dello Stato Italiane Group's Contract of 16 December 2016. The Committee is organized in one national committee and 15 local committees.

The activities and projects for the big family of Group employees are supported by both the National and Local Equal Opportunities Committees and directly by specific internal structures.

### Group initiatives

#### Structural and transversal activities:

- / A **policy on D&I (Diversity&Inclusion)** issues is under development for various Human Resources processes and a monitoring system is being defined with specific indicators for each process;

#### Gender:

- / **30% Club:** the Group's top management has joined the "30% Club", a global initiative created to promote more women in private and public management by 2020. To this end, the Board of Directors of FS S.p.A. has signed a measure committing the Group to reaching 30% of women in managerial staff positions and 20% in managerial line positions by 2020, entailing an increase of 9% in both areas;
- / **Network of Chairwomen:** a network of women who chair large companies, leading associations or small and medium size companies was established to support women in the business world. FS S.p.A. coordinates the work group on D&I issues, the creation of a shared policy and activities in connection with the new joint project Women in Motion (WIM);
- / **Women in Motion:** the WIM project was kicked off in collaboration with "Valore D", an association of large companies focused on diversity and female leadership whose mission is to promote women's careers in technical fields and business sectors that until now have been predominantly male. The overall campaign was planned in 2016 with outside events consisting of visits to schools and universities to encourage female students

to pursue technical studies, to tell them about job prospects and to provide them with tools to best realise their potential and talent, Internal events include a change management programme to improve working conditions for women employed in technical fields and to break down cultural barriers. In this respect, 13 focus groups were held (involving 63 male and female resources responsible for Trenitalia's and RFI's maintenance plants); an in-house survey (involving over 1,000 maintenance employees); six improvement groups with the aim of finding tangible ways of overcoming obstacles to women entering technical fields (49 resources participated). The external actions included a survey conducted in order to analyse the perception of careers with FS Italiane based on gender and mentorship from December 2016 to February 2017 (involving approximately 80 women from FS Italiane Group in five separate modules);

/ **parental leave management:** another four sessions were held for 47 women after they returned from maternity leave, with the involvement of 31 of their direct or higher supervisors for a total of 360 man/days. As with the previous editions, over the six days of the course, the employees with their supervisors worked on their awareness of the reciprocal demands of motherhood; the women reflected on strategies and tools to establish a balance between their professional life and family life and on their own motivation and professional effectiveness; their direct supervisors explored issues related to multi-faceted leadership and managing motivation;

/ **Associazione Valore D:** this association led to participation in 57 skill building and work/life balance events to support women with targeted training and four intercompany mentoring programmes (91 employees participated). The Group's role as a supporting member of the association also entailed its continued membership in the network of companies that focus on diversity and the equal employment of men and women with its participation in workshops and knowledge sharing meetings for HR experts;

/ programming **specific seminars on female talent**: in particular, three one-day sessions aimed at guiding the Group's women on a journey of discovery and observation of the distinctive traits of female models, with their positive and negative aspects, in order to recognise them, see them in themselves and enhance them. The project comprises three laboratories on issues of self-confidence, self-awareness and awareness of one's own multiple identities and on various communication styles.

### Welfare

/ Smart working – following the legislation analyses and benchmarking carried out in 2015, an intercompany work group was set up to analyse organisation and identify the areas in which the implementation of a pilot programme could be tested;

/ in addition to the activities planned via the company intranet (e.g., discounted tickets for cultural events in Italy offered to employees), 36 socio-cultural events and classical and modern music concerts were organised;

/ carrying on from previous years, the Group's team was rewarded for its participation in the Rome edition of the "Race For the Cure" relay for solidarity in support of scientific research and cancer prevention;

/ a health awareness section was developed on the Group's intranet in collaboration with RFI's Health Department.

### Internal communication

/ **Moving forward and Cascading of the business plan**: a new website was designed to share with all employees the values and guidelines of the new business plan: in addition to the material presented at the managers' convention, the website now provides testimonials about cascading activities (with geolocalisation) carried out locally by the various managers to spread the main themes of the plan. In 2017, the CEOs will go on a roadshow to reinforce the commitment of the Group's operating sites;

/ **Self service area**: a new employee service section was designed for the company website with quick access and updated graphics (launched in the first few months of 2017);

/ **National labour agreement section**: a specific section was created on the company intranet about the new national labour agreement, enabling employees to view content and send online requests for information.

## Equal Opportunities Committee initiatives

### Prevention

/ **Prevention... off we go!**: local seminars for cancer prevention held with Europa Donna Italia, involving employees not covered by regional screening services in the Marche, Umbria, Abruzzo, Veneto, Trentino Alto Adige, Friuli Venezia Giulia and Calabria regions;

/ **"Frecciarosa: high speed prevention"**: the fifth edition of the initiative sponsored in partnership with Incontra Donna Onlus, INAIL and the National Councilwoman for Equal Opportunities with the Ministry of Labour and Social Policy, involving Group employees and, in 2016 for the first time, including men, to prevent cancer and encourage healthy lifestyles, including in the workplace;

/ **"Give yourself the gift of a week of prevention"**: a breast cancer prevention campaign for employees in Genoa, in partnership with LILT, the Regional INAIL Department and the Liguria Councilwoman for Equal Opportunities, who sponsored the initiative as a good business practice.

/ **"Take care of yourself... start prevention"**: initiative to prevent breast cancer and encourage healthy habits and occupational safety for employees in Piedmont and Valle d'Aosta in partnership with LILT, the Regional INAIL Department and the Turin Councilwoman for Equal Opportunities, who sponsored the initiative as a good business practice.

### Working conditions

/ **"The language of non-violence"**: a booklet was distributed at the railway plants in Tuscany and was published on the company intranet. It is a compendium of testimonials of visitors to the photography exhibition ("Stop! Look at the faces of violence") held in 2015

at the Pisa station to spread awareness about violence against women;

/ **Code of conduct to prevent sexual harassment in the workplace**: consistent guidelines were drawn up on how to prevent sexual harassment in the workplace. The code was implemented in the new national labour

agreement that was renewed on 16 December 2016;

/ **"female" work shifts**: support continued for the "female shifts" with reduced working hours for female on-board train personnel; extended to men under parental leave.



## HEALTH AND SAFETY

G4-25 G4-LA6 G4-LA7

The new 2017-2026 business plan puts occupational health and safety at the centre of the Group's growth and development as a determinant element for its industrial identity. With a specific Group measure, FS S.p.A.'s CEO has defined new prevention targets for the Group companies, which include an annual reduction of at least 3% in the number of accidents and an annual decrease of at least 2% in the accident frequency rate, particularly the most serious accidents. Achieving these targets will confirm the Group's position as a European leader in occupational health and safety.

Accident prevention in 2016 has focused on fully implementing the targets to reduce accidents and improve prevention measures in accordance with the new guidelines.

The methods for actively involving workers and empowering them in the prevention of accidents were covered in a seminar held in Rome in July "The conscious role and responsibility of workers in occupational health and safety". This initiative involved the health and safety managers of Group companies and is part of the schedule of events to develop good practices and better solutions within the Group.

As part of the activities under the "Intercompany health and safety panel", in which leading Italian companies take part (ENI, Enel, Telecom, Poste Italiane, Terna, Anas, Autostrade per l'Italia, Vodafone, etc.), two seminars were held in Rome in June and November, respectively concerning the organisation of health monitoring and the prevention of accidents and on "Work, alcohol and drugs: the past, present and future".

The continuous improvement in the accident trend continued in 2016. In particular, as shown in the

table, despite unconsolidated data, there was a decrease in the number of accidents and in the frequency rate, down by approximately 6% on 2015, outperforming the target improvements of 3% and 2% respectively. However, accidents involving employees on the way to work were up in the year.

In Italy, occupational diseases, which lead to immediate damage to employees' health, are reported by the employer to INAIL within the scope of accidents at work, as required by relevant legislation, and they are counted by INAIL among the category of accidents at work. In the Group's case, specifically, there are reports of accidents at work relating to the post-traumatic stress of train drivers (in cases of hitting people along the train tracks, generally suicides).

In addition, there are professional diseases originating in the long term due to pathogenic factors found in the workplace. In the Group's case, by their nature, professional diseases, which usually account for no more than 50% of reports, relate to organisational events dating back many years, in some cases decades.

In general, the most common professional diseases in the railway sector are hearing impairment caused by noise and bone and joint or skeletal muscle problems. The following table sets out the data of the periodical medical check-ups, related to various risk factors, which are one of the most significant elements of Group companies' efforts to prevent occupational diseases.

About 15% of man-days in the technical/professional learning area were devoted to occupational health and safety and environment training, for a total of 52,000 man-days.

### THE GROUP COMPANIES' OCCUPATIONAL HEALTH AND SAFETY ORGANISATION\*

	2016	2015	2014
Number of production units	119	125	123
Production units with occupational safety certification	84	114	113
Prevention and Protection Representatives	104	115	113
Company doctors	158	192	190
Workers' Safety Representatives	474	473	534
Personnel subject to health monitoring check-ups	45,074	45,495	46,753
Personnel subject to railway safety medical check-ups	16,266	15,772	14,646

(\*) The data refer to the following companies: Ferrovie dello Stato Italiane, RFI, Trenitalia, Ferservizi, Italferr and FS Sistemi Urbani. Italcertifer and FS Logistica have been included in the reporting scope since 2015.

### ACCIDENTS INDEMNIFIED BY INAIL, WITH ACCIDENTS AT WORK AND IN TRANSIT SHOWN SEPARATELY\*

Year	Accidents at work	Frequency**	Accidents Fatalities	Seriousness index***	Accidents in transit
2016****	1,322	22.09	2	n.a.*****	290
2015*****	1,453	24.08	0	827	264
2014	1,717	27.84	5	939	314
2013	1,933	30.01	2	1,022	344
2012	2,197	32.79	1	1,210	420

(\*) The slight differences with the data published in the 2015 Sustainability Report are due to changes in INAIL's data.

(\*\*) Frequency rate: [no. of accidents at work/amount]x 1,000 employees, calculated in accordance with European ESAW standards.

(\*\*\*) Seriousness index: [number of missed days]/amount]x 1,000 employees.

(\*\*\*\*) 2016 INAIL data subject to consolidation.

(\*\*\*\*\*) INAIL data not yet available.

(\*\*\*\*\*) INAIL data under consolidation.

### ACCIDENTS INDEMNIFIED BY INAIL: BROKEN DOWN BY GENDER

Year	Accidents - women	Accidents - men	Frequency - women	Frequency - men
2016*	165	1,157	19.15	22.59
2015**	177	1,276	20.02	24.60
2014	198	1,519	23.23	30.80
2013	225	1,708	25.41	31.30
2012	230	1,967	25.11	34.00

(\*) 2016 INAIL data subject to consolidation.

(\*\*) INAIL data under consolidation.

# TRADE UNIONS

G4-11 G4-15 G4-LA3 G4-LA4 G4-LA6 G4-LA8

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 disclosures and carry out bargaining activities in accordance with the national labour agreement<sup>1</sup>. Changes to the overall corporate organisational structures and those of the individual production units are disclosed to the trade unions.

The national labour agreement requires that before changes can be made to the organisation of labour and the structure of time shifts, 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. For additional information, reference should be made to the 2016 Annual Report (Directors' report: Human resources).

The percentage of Group employees who are members of trade unions and Group employee

absenteeism remained substantially the same at 63.16% and 8.9%, respectively.

	2016	2015	2014
Absenteeism rate*	8.9%	8.8%	8.8%
Missed hours due to strikes	108,776	50,617	167,439

(\* ) The absenteeism rate is calculated considering, specifically, hours missed due to illness, accidents, maternity leave, strikes, Law no. 104, study leave, marital and extraordinary leave.

The number of missed hours due to strikes increased on the previous year due to political strikes called by the independent trade unions that are not signatories of the national labour agreement. Hours missed because of these strikes accounted for 85% of the total.

## Parental leave

FS Italiane Group implemented the new measures introduced by the Jobs Act, increasing the term of parental leave up to 12 years of the child's life: in addition to the mandatory maternity leave established by law, employees (father and/or mother) may opt to take a period of voluntary leave for up to a maximum of six months for each parent, but the parental leave may not exceed a total of 11 months for both parents.

The national labour agreement for the mobility sector implements the provisions of Legislative decree no. 151/2011<sup>2</sup> and establishes, in the Group's supplementary contract, better economic conditions during the voluntary leave for any employee who takes it (from three to six years of the child's life in accordance with the new legislation amendments introduced).

The number of employees who took at least one day of parental leave in 2016 is as follows:

	No.	days
Women	988	22,284
Men	3,530	48,110
<b>Total</b>	<b>4,518</b>	<b>70,394</b>

<sup>2</sup> Consolidated act of legislation protecting and supporting parenthood.



<sup>1</sup> There are no risks to the freedom of association and bargaining within Ferrovie dello Stato Italiane Group.

## DISPUTES WITH EMPLOYEES<sup>1</sup>

G4-SO8

	2016	2015	2014
No. of appeals filed during the year	1,680	2,074	2,398
No. of pending disputes	3,238	3,939	5,144
Economic value of the disputes (€)	44,494,000	46,811,000	47,678,000

The most significant types of disputes in 2016, with regard to potential costs, for the main Group companies are detailed below:

/ Claims for promotions.

These are human resource management disputes and are a significant issue for the Group companies, both in terms of costs and consequences for the organisational plan.

/ Claims for subordinated employment contracts against Group companies for alleged violation of current labour legislation prohibiting the interposition of labour.

In the light of current legislation, disputes in relation to the fraudulent interposition of labour remain significant, especially in terms of the companies' financial exposure.

In order to reduce the costs arising from the assignment of contracting companies' personnel in positions at Group companies, the Group seeks to settle these disputes if the Group companies are found in violation, by paying amounts out of court in exchange for the charges to be dropped.

/ Joint obligation.

As in 2015, this year once again saw a decrease with respect to previous years in the

number of disputes pursuant to article 29.2 of Legislative decree no. 276/2003 initiated by employees of contracting companies that, when their employers are insolvent, turn to the Group companies, as customers, for payment of outstanding amounts due from the contractor for remuneration and contributions.

Following the Supreme Court's important ruling no. 15432/2014, which had upheld the non-applicability of article 29 of legislative decree no. 276/03 for public contracts, as the contractor's or sub-contractor's employees must use the special tools available to them for their protection under articles 4 and 5 of Presidential decree no. 207/2010, various rulings were issued in 2016, both first instance and appeal rulings, which confirmed such position.

/ Conversion of fixed-term employment contracts in the shipping sector into open-ended contracts.

In 2016, based on their claims that they worked for RFI over several periods of time, shipping sector workers took legal action, asking the court to admit the existence of one open-ended subordinated employment arrangement, with their right to be re-hired, and to order the company to pay missed remuneration and social security contributions.

The judges equated the recruitment agreements in which the maximum term of employ-



ment was indicated to fixed-term employment contracts and therefore disagreed with the workers' demands.

However, previous court rulings on recruitment agreements for "one or more journeys" have continued to be unfavourable to the company, as the contracts appealed in court have been found to be in violation of the requirement of the waterway code and, for this reason, have been converted into one open-ended contract terminated with compensation for workers.

In cases in which the judges have found there to be abusive use of repeated fixed-term contracts, certain judges have found that the mere formal existence of several fixed-term contracts did not suffice for consideration as fraudulent conduct by the employer, whereas other judges have found these circumstances to constitute fraud under the law, based on the number, frequency and proximity of the recruitment

contracts. Accordingly, they ruled in favour of the workers.

/ Asbestos

The Group also manages asbestos lawsuits filed by workers who have fallen ill after being exposed to asbestos in the course of their duties and in the areas where they worked.

Since the use of asbestos dates back to before Law no. 257/1992 prohibiting the use of the material, the asbestos dispute mainly relates to RFI, as the successor of Ente Ferrovie dello Stato, as it was known at that time. The dispute now consists of lawsuits filed by former Group employees or their heirs, for workers who have died, who, when the asbestos-related illnesses arose, claimed compensation for financial and non-financial (physical, emotional or death) damage on their own behalf and/or as heirs.

<sup>1</sup> The scope of analysis covers the following companies: FS, RFI, Trenitalia, Ferservizi, Italferr, Busitalia - Sita Nord and Sita Ataf Gestioni, Blufferies, FS Logistica, Metropark, Grandi Stazioni Rail and Serfer. The economic value refers to the first five companies only.

# 07

## RESPECTING AND PROTECTING THE ENVIRONMENT



Constant interaction  
among different aspects of the Group  
towards a continuous improvement





## OUR APPROACH

G4-1 G4-2



FS Italiane Group's aim is to meet passenger and cargo transport needs, offering a transport system centred around the railway network and integrated by other mass and sustainable mobility means.

The Group's environmental management model inspires and coordinates the environmental programme, setting out short and long-term strategies and principles, stimulating the internalisation of environmental sustainability protection strategies.

Thanks to a procedure-making process comprised of actions, monitoring and assessment, the companies translate the Group's environmental strategy into independent paths for improving their own performance, maximising the environmental advantages of their activities and especially focusing on the rational use of resources, cutting emissions of CO<sub>2</sub> and other polluting substances, and generally reducing their carbon footprint.

The level of maturity achieved in this field has spurred additional developments: in 2016, a process began that will transform the current environmental management system governance model into a business model that ensures a balance between the economic, social and environmental components of Group activities.

Beginning with the 2017-2026 FS Italiane Group business plan, the Group aims to promote a complex long-term mobility project within which it will strive to achieve greater sustainability through the development of two areas:

- / reduction in the consumption of natural capital;
- / synergies between operators and technologies to promote a shift towards more efficient modes of transport.

In terms of reducing the consumption of natural capital, the Group's target is to cut emissions (pollutants and greenhouse gases) and rationalise the consumption of the railway network, transport services and buildings by taking steps that include renewing the vehicle fleet, making buildings more energy efficient, building plants powered by renewable sources and purchasing certified green energy.

The scope of the synergies between operators and technologies constitutes a significant part of the business plan, on the basis of which FS Itali-

ane Group intends to promote and offer services capable of meeting the need for flexible, widespread and punctual transport, reinforcing strong lines and hubs and combining the solutions offered by different means, infrastructures and technological platforms. As for passengers, the primary target is to decrease the amount of travel by private car and increase the use of mass transport by road, rail or both (i.e., sharing mobility). This development is a crucial aspect, particularly in urban areas where most of the population is concentrated and where the most negative repercussions of transport are seen (concentration of pollution, average speed of vehicles, rate of accidents, etc.).

This is why FS Italiane Group is interested in local public transport - with the acquisition of new LPT players throughout the country - and in road transport - for long hauls to cover routes that it does not offer - and why it is focused on the expansion of *Freccialink* connections, which it can use to combine road transport with high speed trains.

In addition to these initiatives, partnerships are being forged with other public and private operators, consisting of, for example, the car/scooter/bike sharing services launched in various cities in previous years.

Furthermore, key parts of this modal integration project include the development of platforms that reduce inconveniences for travellers (real-time information, integrated ticketing, etc.) and encouraging an alternative mobility offer that is a competitive solution to individual transport, helping shift choices towards mass mobility solutions.

Similarly, for cargo traffic, FS Italiane Group pursue as strategy aimed at maximising the benefits of intermodal transport by creating a logistics hub and strengthening corridors and hubs to reorganise the cargo segment with railway transport as the main axis.

This is all subject to the optimisation of material infrastructures (e.g., stations, car parts and hubs) and digital infrastructures (e.g., software, IT systems, etc.) that make it easier for users to choose more sustainable means of transport.

## ENVIRONMENTAL PERFORMANCE

### Highlights

G4-2

### WHAT WE HAVE ACCOMPLISHED >

Over **€14.8 million** IS THE COST OF PERSONNEL DEDICATED TO MANAGING ENVIRONMENTAL ISSUES  showing the Group's commitment to reducing environmental impacts

**renewable energy** SIGNING OF AN UNDER-STANDING WITH TERNA to identify renewable energy initiatives 

Over **410 km** OF SOUND ABSORPTION BARRIERS AND DIRECT WORKS ON ISOLATED RECEIVERS AS OF 2016  The design and implementation of works to reduce noise are important activities for the Group

**€665,000** IN ENVIRONMENTAL TRAINING COSTS to ensure the professional growth of personnel dedicated to managing environmental issues 

**Environmental targets INCLUDED IN THE 2017-2026 STRATEGIC PLAN** 

- Energy efficiency of the railway network, passenger transport, stations and fixed plant
- Rationalisation of utilities accounts for electricity, natural gas and water
- Energy procurement: construction of solar power systems and mini-wind farms and purchase of certified green energy

Over **2,100** TONNES OF CO<sub>2</sub> PER DAY  In 2016, passengers who opted for high speed trains over their own cars prevented atmospheric emissions of over 2,100 tonnes of CO<sub>2</sub>

### WHAT WE AIM TO DO >

Transition to the new standard **ISO 14001:2015** extending improvement strategies to a wider range of environmental sustainability issues 

**Evaluate EXTERNAL ENVIRONMENTAL FACTORS** with a focus on creating shared value di valore condiviso 

## The Group's main environmental issues

G4-2 G4-EN31

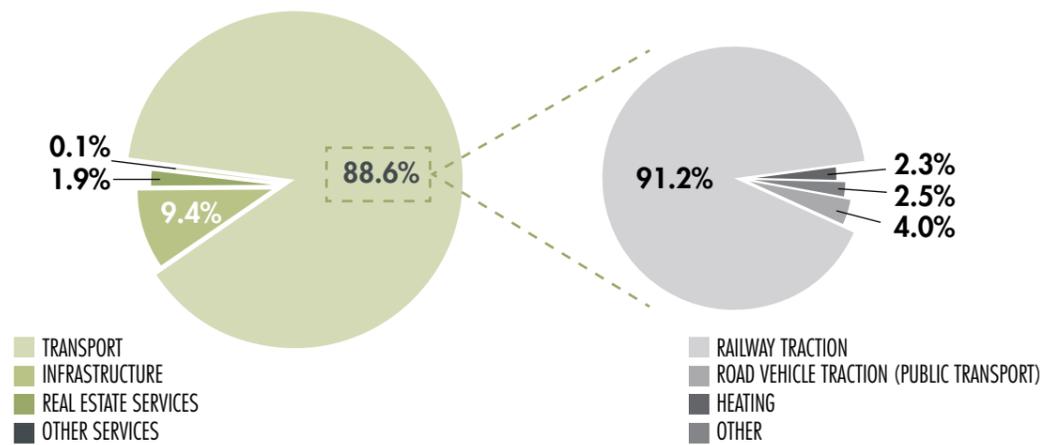
FS Italiane Group continuously monitors its environmental impacts with the aim of minimising negative impacts, while taking the necessary steps to promote the environmental advantages of mass transport, making the most of local resources.

The companies included in the reporting scope are grouped together on the basis of their business sector:

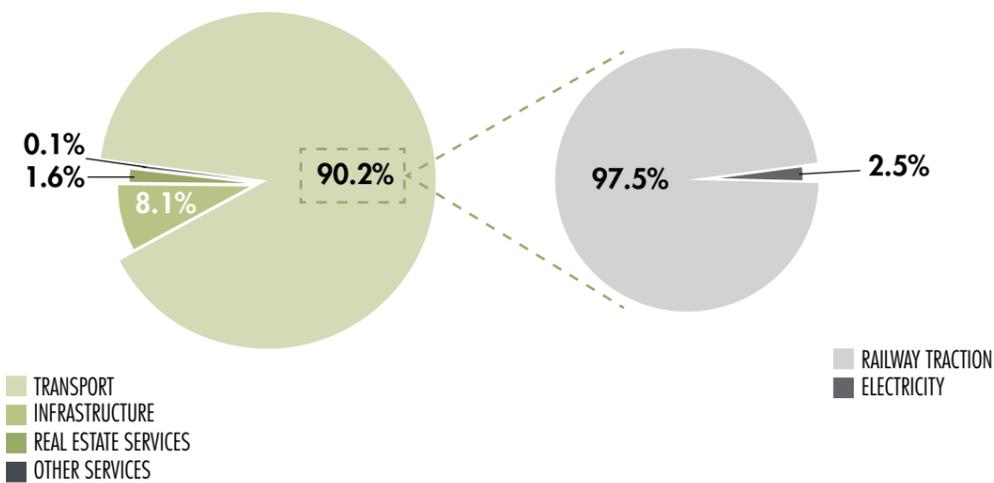
- / Infrastructure: RFI, Italferr;
- / Transport: Trenitalia, Netinera Group, Busitalia - Sita Nord, Busitalia Veneto, Mercitalia Logistics (formerly FS Logistica), Serfer, Terminali Italia, TX Logistik, Ataf Gestioni and Bluferries;
- / Real estate services: Grandi Stazioni Rail, Centostazioni, FS Sistemi Urbani and Ferrovie dello Stato Italiane<sup>1</sup>;
- / Other services: Ferservizi.

<sup>1</sup> Ferrovie dello Stato Italiane's environmental aspects were included in the "Real estate services" because they relate to the company's real estate management activities.

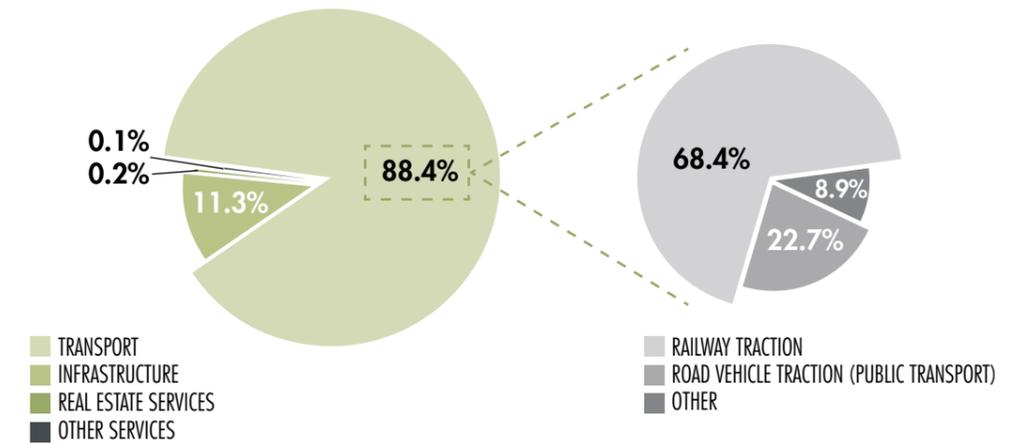
CONSUMPTION OF PRIMARY ENERGY  
40.4 MILLION GJ



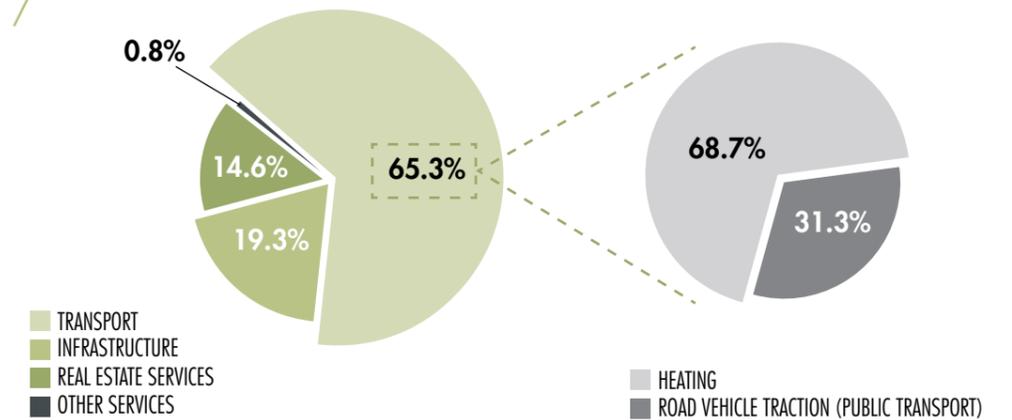
ELECTRICITY  
5,164 GJ



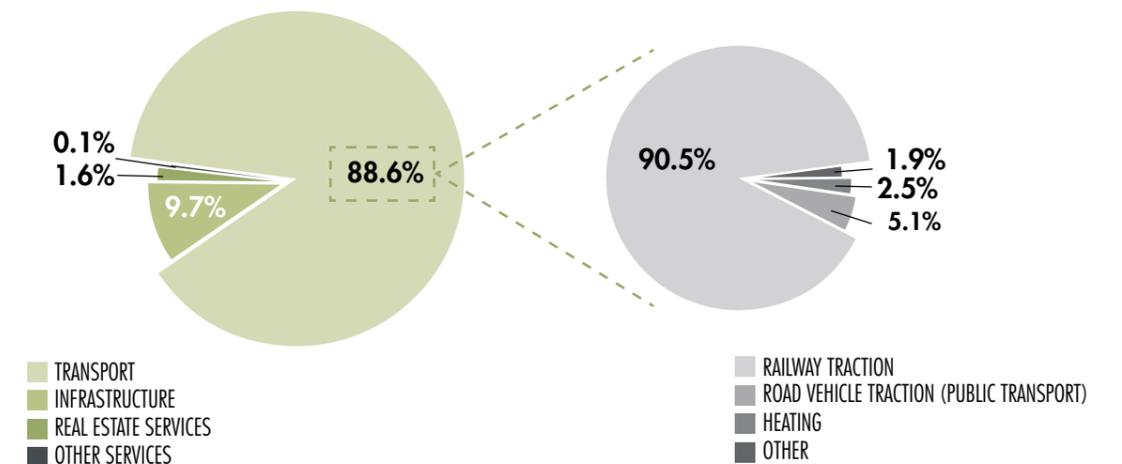
DIESEL  
130,000 TONNES



NATURAL GAS  
46.8 MILLION METRIC CUBES



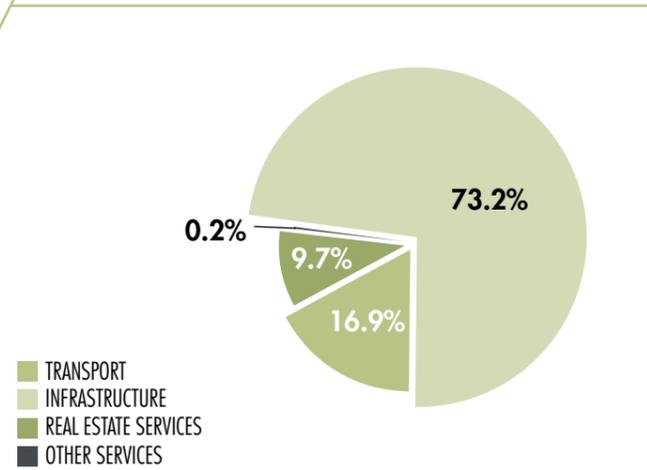
GREENHOUSE GAS EMISSIONS  
2.2 MILLION TONNES OF CO<sub>2</sub>



As illustrated by the figures and charts, the transport segment, which is significantly affected by railway operations, makes up the largest share of the Group's energy consumption by far, accounting for 89% of primary energy. In particular, transport activities account for approximately 90% of electricity consumption, nearly all of which for railway traction, while the remaining electrical energy was used for the infrastructure (lighting in the stations, railway yards, etc.).

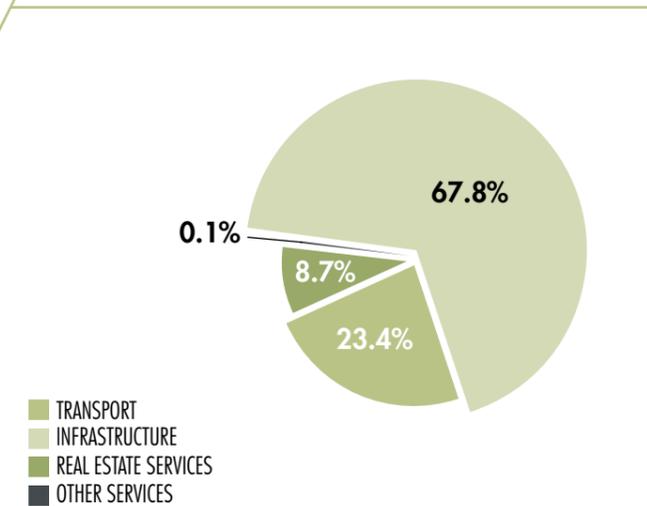
The observations on the use of diesel differ because, while diesel consumption is concentrated on transport services as well, the various activities contribute differently: while railway transport accounts for a significant share of the consumption - nearly two-thirds of the total - road transport (for the passenger service), is a substantial part of the total value. On the other hand, the segments use natural gas mainly for a different reason: the real estate services, infrastructure and transport segments mainly use natural gas to heat stations, workshops, offices and buildings. To offset the consumption described above, FS Italiane Group monitors and analyses the quantities of greenhouse gases that its operations emit each year. Its direct and indirect emissions make up roughly 0.5% of total annual emissions in Italy. The amount of climate-changing gases emitted by the Group in 2016 came to an estimated 2.2 million tonnes, nearly the same as in the previous year. Similarly to its use of primary energy, nearly 90% of emissions were due to the different types of transport operations, with most due to railway transport and a residual amount of emissions due to infrastructure management.

**WATER CONSUMPTION**  
24.5 MILLION M<sup>3</sup>

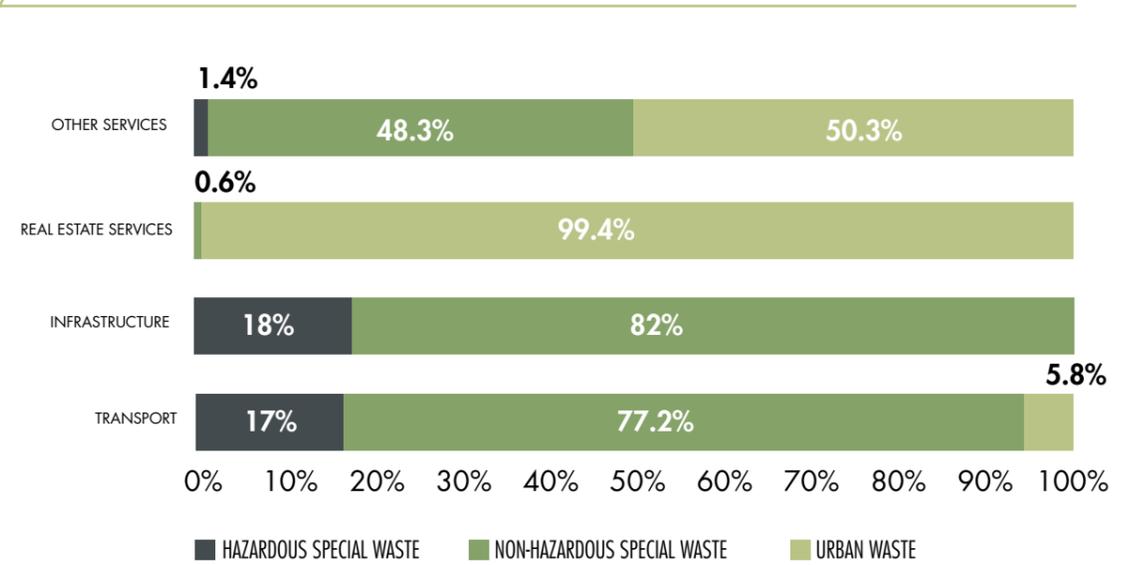


Water use is another critical aspect of environmental performance for FS Italiane Group. Most water is used for non-industrial purposes (offices, toilets, showers, drinking water at stations, etc.) and the Group companies periodically run awareness campaigns for the responsible use of water. Furthermore, the Group has activated various systems to rationalise the use of water for industrial purposes, both for appropriate water collection and effective treatment at the end of its use in the production cycle.

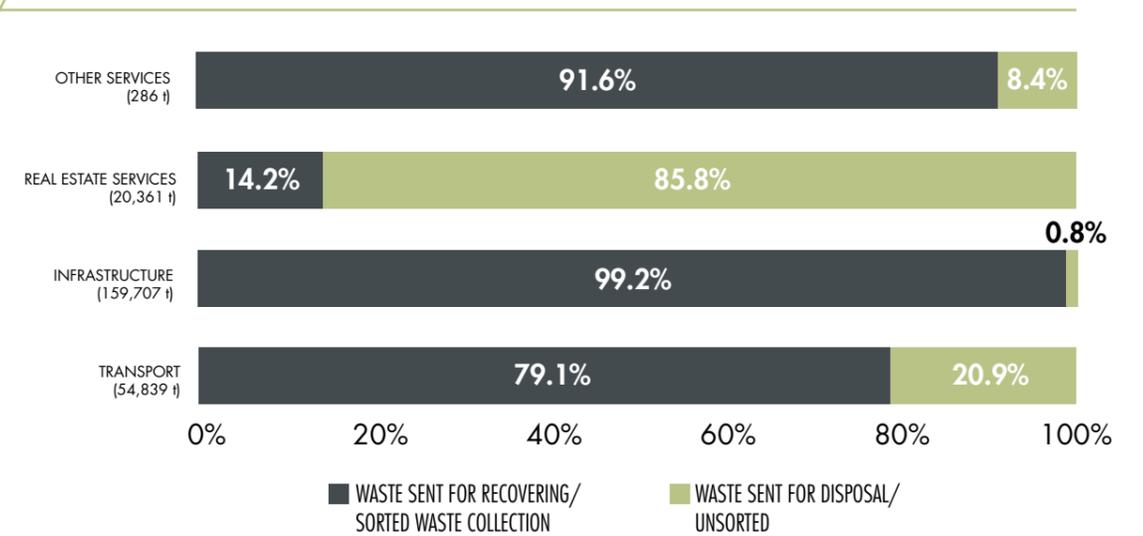
**WASTE PRODUCED**  
235,000 TONNES



**WASTE PRODUCED**



**WASTE SENT FOR TREATMENT**



The Group's focus on the use of materials also extends to disposal. Within the Group, infrastructure and rolling stock maintenance activities are those that generate the most waste, which can be duly sent to treatment centres for recycling (e.g., iron for the infrastructure). Initiatives are being carried out to increase the sorting of waste produced in the Group's public areas, like stations. The percentage of waste that is sorted could be improved through new systems

for its collection and more effective awareness campaigns. However, the Group's commitment to reducing environmental impacts is not limited exclusively to waste management but extends to all environmental issues as well, which can be seen in the analysis of personnel expenses (over €14.8 million spent for personnel dedicated to managing environmental aspects) and expenditure (roughly €665 thousand) for their professional growth.

## Energy

**G4-EN3 G4-EN4 G4-EN5 G4-EN6**  
**G4-EN7 G4-EN27**

As FS Italiane Group is aware that it is a high-energy consumption business and one of the largest energy consumers in the country, it firmly believes in searching for the best energy efficiency solutions to improve its energy performance and offer low environmental impact services.

The range of activities in which the Group companies are involved cover a variety of sectors, and each with its own impact on energy consumption. Passenger and cargo transport accounts for the largest share of energy consumption, with around 86% in 2016, and is also the factor that generated most of the increase (4%) in primary energy consumption<sup>2</sup>, due to the growing trend in railway traction. The higher volume of energy used by railway transport was due to a number of different factors, including the increase in railway traffic, with train-km up by over 2% on 2015. On the other hand, primary energy used for electricity and heating remained substantially the same.

### PRIMARY ENERGY CONSUMPTION BY DESTINATION\*

	2016	2015	2014	% Δ 16/15
Railway traction	32,714,556	31,034,957	29,495,992	5.4%
Road vehicle traction (public transport)	1,444,503	1,407,618	1,330,878	2.6%
Waterway	537,695	573,361	562,937	-6.2%
Electricity	3,861,580	3,917,958	3,960,659	-1.4%
Heating	1,514,334	1,512,147	1,392,902	0.1%
Road vehicle traction (road and work vehicles)	286,543	286,845	280,541	-0.1%
<b>Total</b>	<b>40,359,211</b>	<b>38,732,886</b>	<b>37,023,909</b>	<b>4.2%</b>

Amounts in GJ

(\*): Our processing of data according to the guidelines issued by Terna, International Union of Railways (UIC), Eurostat, International Energy Agency (IEA) and ISPRA.

Over the three years considered, all transport activities consumed more energy, except for waterways, which consumed less in both absolute terms and as a percentage of the total,

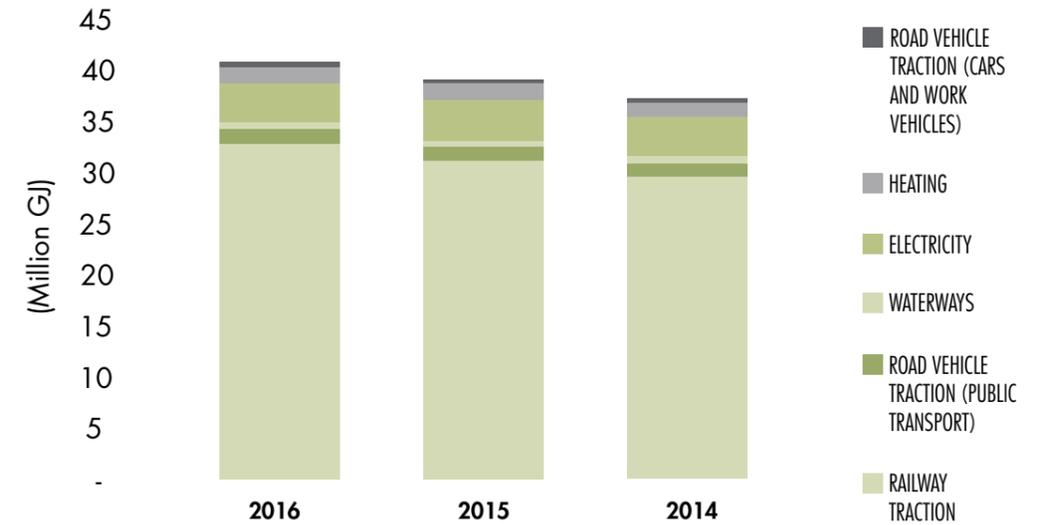
as waterway transport was particularly affected by the drop in commercial traffic across the Messina Strait in 2016.

<sup>2</sup> Primary energy is the energy content of sources that can be used directly, as they are found in nature, such as carbon, oil and natural gas, sun, wind, seas, mountain lakes and rivers (which can generate hydroelectric energy) and the heat trapped by the earth which provides geothermal energy. Primary energy differs from secondary (or intermediate) energy which is instead derived from the transformation of the primary sources of energy (such as pet-

rol, which is derived from the treatment of crude oil, or electrical energy, which is generated by the transformation of mechanical or chemical energy and is, in this form, delivered to end users. Final energy is the quantity of energy that end users use to complete a task, after any further transformation (e.g., from alternating current to direct current) or in the same form in which it was delivered, in which case intermediate and final energy are the same.

## Primary energy consumption trends

PRIMARY ENERGY CONSUMPTION TRENDS



Specific final consumption for Trenitalia's railway traction only can be broken down into the passenger segment (measured in KJ per passenger\*km) and the cargo segment (measured in KJ per tonne\*km).

The increase in passenger transport was substantially due to the greater HS offer as the fleet of new *Frecciarossa 1000* trains is progressively rolled out.

Travelling at speeds of over 250 km/h, these trains' total air resistance constitutes up to 80% of their total motion resistance, accounting for a significant share of total energy consumption. This is why the *Frecciarossa 1000* was specifically designed with utmost focus on details, for an aerodynamic shape tested in wind tunnels, enabling the train to fluidly and silently reach high speeds with over 35% more efficiency than the previous generation of *Frecciarossa* trains.

To offset the higher energy consumption due to the high speeds at which it travels, additional solutions involving other aspects of its build were studied: the LEDs used to light the carriages generate energy savings of over 70% compared to previous light bulbs; devices were installed that recover energy from braking and return up to 15% of energy withdrawn from the electricity grid back to it; temperature control inside the

train is managed by a series of sensors installed on board carriages and latest generation heat pumps are used for maximum comfort and minimum consumption.

Specific final consumption for cargo transport decreased by 11% in the year, counter to the +17% trend seen in 2014-2015. This result was partly due to the decrease in distances travelled by cargo trains powered by diesel, which were approximately halved in 2016 compared to 2015.

However, there are additional factors to consider. As reported in the previous year's report, 2014 data were irregular compared to expected trends and the reason can be traced to possible future energy adjustments that can be notified up to five years after the consumption period.

Another element of uncertainty is the significant transaction that began in late 2015, when Terna acquired RFI's high voltage electricity grid encompassing approximately 8,400 km of power lines to optimise its use. Because of this transaction, energy lost as it leaves the grid that formerly belonged to RFI cannot be fairly recognised.

In any event, the FS Italiane Group companies have aligned their environmental policies to maximise the environmental benefits of their operations and to minimise their environmental im-

pacts. They pursue these policies through routine and non-routine activities.

The new generation of vehicles periodically provided to customers ensure more energy efficiency services without losing service quality.

Following the roll-out of the *Frecciarossa 1000* trains that began in 2015 with the initial models and continued into 2016, Trenitalia launched a sweeping campaign to update the rolling stock for regional transport. Indeed, it recently completed the call for bids to supply 450 trains meeting extremely high energy efficiency standards. The trains will begin operating in 2019, first in Emilia Romagna, where Trenitalia, together with TPER, has won the "rail contest" and where the first 86 new trains will hit the tracks.

Older vehicles are being progressively replaced with more energy efficient vehicles in the road transport sector as well. In 2016, Ataf Gestioni, Busitalia - Sita Nord and Busitalia Veneto rolled out more than 90 new vehicles featuring construction technologies and equipped with devices that increasingly reduce consumption.

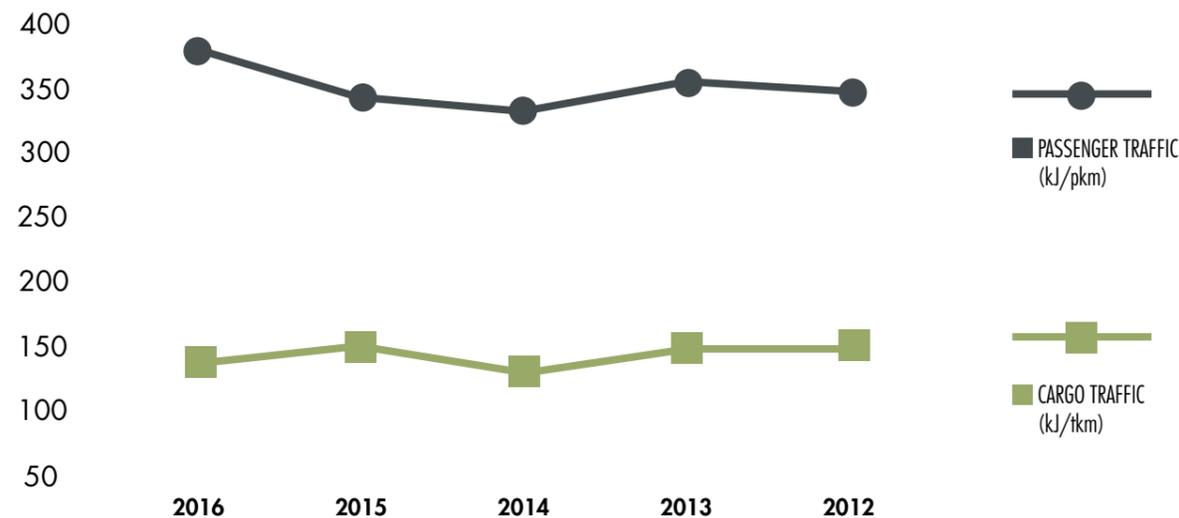
Additional efficiency initiatives have also involved the infrastructure and building management. RFI continues its campaign to install more efficient lighting systems: it has already replaced nearly one-third of the roughly 13,000 low shunting

signals with LED technology and plans to replace fluorescent light bulbs with LED lights in more than 500 stations and offices over five years, extending LED lighting systems to workshops, traffic control centres, etc. over the next decade.

The energy diagnoses carried out by the Group companies further propelled the installation of energy efficient systems. Trenitalia has conducted diagnoses on ten of its plants, kicked off energy efficiency projects including the installation of radiant strips for heating at the current maintenance workshops in Rimini and Vicenza and prepared works for the transition to LED lighting systems at the ETR current maintenance plant at the Napoli Gianturco station, the Eurostar current maintenance plant in Rome, the rolling stock maintenance workshop in Lecce and the current maintenance workshop in Foligno.

Furthermore, based on the self-assessment questionnaire distributed to the Group's main suppliers, it is estimated that RFI's suppliers use over 26 billion kJ of energy to manufacture the materials purchased in the year for railway infrastructures and 200 billion kJ of energy was consumed by Hitachi Rail to build the trains supplied to Trenitalia in the year.

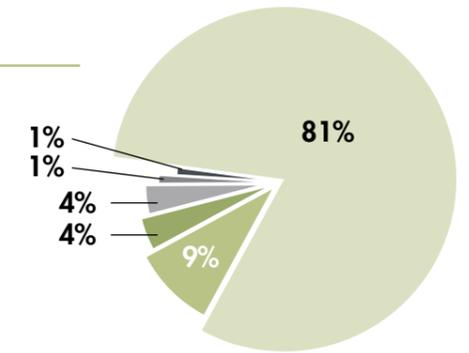
FINAL SPECIFIC CONSUMPTION FOR RAILWAY TRACTION (TRENITALIA)



Total consumption of primary energy by use (2016)

PRIMARY ENERGY BY USE  
40.4 MILLION GJ

- RAILWAY TRACTION
- ELECTRICITY
- ROAD VEHICLE TRACTION (PUBLIC TRANSPORT)
- HEATING
- WATERWAYS
- ROAD VEHICLE TRACTION (CARS AND WORK VEHICLES)



DIRECT CONSUMPTION OF ENERGY FROM PRIMARY SOURCES

	2016	2015	2014	% Δ 16/15
<b>Total direct consumption of energy from primary sources (A+B)</b>	<b>7,238,779</b>	<b>7,278,229</b>	<b>6,465,697</b>	<b>-0.5%</b>
<b>Direct consumption of energy from non-renewable primary sources (A)</b>	<b>7,236,351</b>	<b>7,275,381</b>	<b>6,463,432</b>	<b>-0.5%</b>
Diesel	5,611,869	5,674,722	5,055,985	-1.1%
Natural gas	1,603,403	1,575,582	1,372,906	1.8%
Petrol	6,974	10,376	14,452	-32.8%
LPG	4,470	6,853	7,567	-34.8%
Fuel oil	9,635	7,847	12,522	22.8%
<b>Direct consumption of energy from renewable primary sources (B)</b>	<b>2,428</b>	<b>2,849</b>	<b>2,264</b>	<b>-14.8%</b>
<b>Solar power used internally</b>	<b>2,428</b>	<b>2,849</b>	<b>2,264</b>	<b>-14.8%</b>

Amounts in GJ

INDIRECT CONSUMPTION OF ENERGY FROM PRIMARY SOURCES

	2016	2015	2014	% Δ 16/15
<b>Indirect consumption of primary energy for the generation of intermediate energy</b>	<b>33,120,432</b>	<b>31,454,657</b>	<b>30,558,212</b>	<b>5.3%</b>
<b>Direct intermediate energy consumption</b>	<b>18,621,182</b>	<b>17,522,259</b>	<b>16,478,586</b>	<b>6.3%</b>
<b>Electricity</b>	<b>18,589,585</b>	<b>17,492,913</b>	<b>16,451,775</b>	<b>6.3%</b>
- for railway traction	16,368,857	15,330,442	14,364,059	6.8%
- for other uses	2,220,728	2,162,471	2,087,716	2.7%
<b>Heat</b>	<b>31,597</b>	<b>29,346</b>	<b>26,811</b>	<b>7.7%</b>
- for heating energy	31,597	29,346	26,811	7.7%

Amounts in GJ

## Emissions

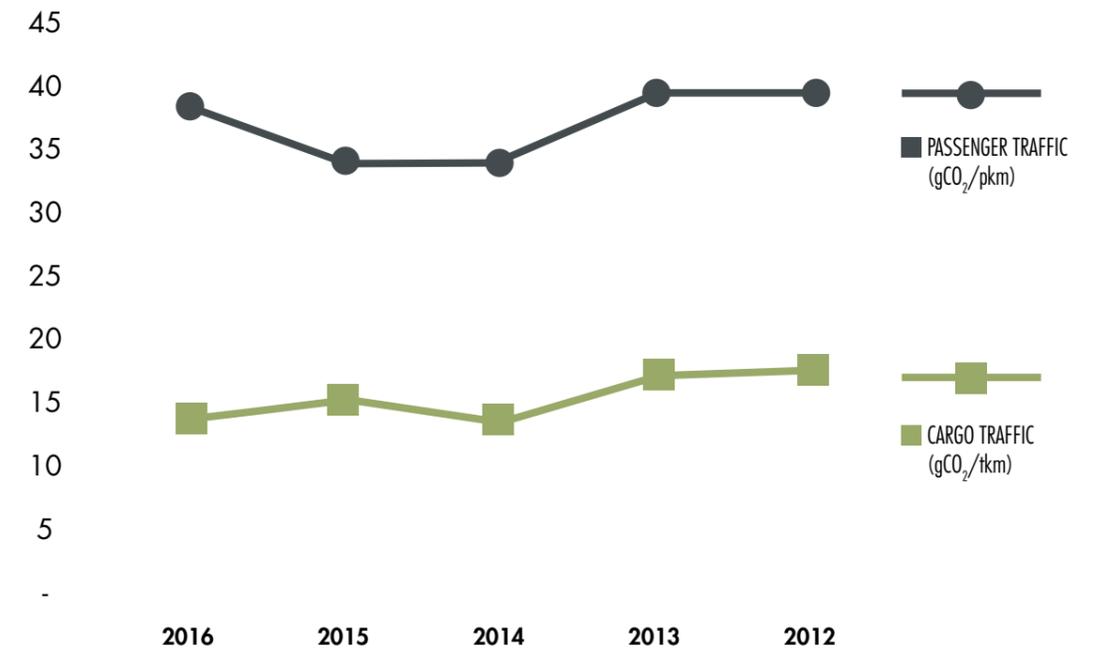
G4-EN6	G4-EN15	G4-EN16
G4-EN17	G4-EN18	G4-EN19
G4-EN20	G4-EN21	G4-EN27
G4-EN30	G4-PR1	

In the past three years, the greenhouse gases generated by the Group's activities rose by 1% from 2014 to 2015 and by 5% from 2015 to 2016. While direct emission volumes remained more or less the same as in the previous year, there was a considerable increase in indirect emissions (+6.7%), mainly due to electricity on railways, which, as illustrated in the data on energy, was redefined both in terms of traffic and the quality offered. In 2016, more than 1.5 million tonnes of CO<sub>2</sub> were generated for electrical traction, accounting for more than two-thirds of the 2.2 million tonnes emitted by the entire Group.



The trends described above are the same for specific carbon dioxide emissions analysed by traffic unit for each type of traction. In the passenger transport segment, these trends continued to show the growth seen in the previous two years, while cargo transport, thanks to the reduction in diesel consumption, returned to the same grams per tonne-km of 2014.

### SPECIFIC CO<sub>2</sub> EMISSIONS FOR RAILWAY TRACTION (TRENITALIA)



In addition to its carbon dioxide emissions, the transport sector is also responsible for other pollutants that are harmful to air quality, with repercussions on people's health, especially in urban areas, and for the environment. Although the mobility system that the Group promotes centres around reducing environmental impacts, especially through railway transport, it is crucial to

carefully and constantly monitor what and how much is emitted into the atmosphere. Accordingly, it has registered a general increase in other main emissions, an increase that is particularly dramatic for nitrogen oxide and particulates. Most of the increase in these two substances is due to direct emissions, whereas sulphur oxide emissions are mostly the result of indirect sources.

### GREENHOUSE GAS EMISSIONS\*

	2016	2015	2014	% Δ 16/15
<b>Total greenhouse gas emissions (A+B)</b>	<b>2,224,065</b>	<b>2,119,862</b>	<b>2,094,927</b>	<b>4.9%</b>
<b>Total direct greenhouse gas emissions (A)</b>	<b>507,558</b>	<b>510,926</b>	<b>453,340</b>	<b>-0.7%</b>
Diesel	414,677	419,326	372,711	-1.1%
Natural gas	91,339	89,791	78,165	1.7%
Petrol	511	761	1,028	-32.8%
LPG	293	450	491	-34.8%
Fuel oil	737	600	945	22.8%
<b>Total indirect greenhouse gas emissions (B)</b>	<b>1,716,507</b>	<b>1,608,936</b>	<b>1,641,586</b>	<b>6.7%</b>
<b>Electricity</b>	<b>1,714,707</b>	<b>1,607,264</b>	<b>1,640,060</b>	<b>6.7%</b>
- for railway traction	1,531,721	1,414,908	1,433,290	8.3%
- for other uses	182,986	192,355	206,770	-4.9%
<b>Heat</b>	<b>1,800</b>	<b>1,672</b>	<b>1,526</b>	<b>7.6%</b>
- for heating energy	1,800	1,672	1,526	7.6%

Amounts in tCO<sub>2</sub>  
 (\*) The rates indicated in the IPCC's "2006 Guidelines for National Greenhouse Gas inventories" and the ISPRA's rates were used to calculate 2015 emissions.

## OTHER MATERIAL ATMOSPHERIC EMISSIONS\*

	2016	2015	2014	% Δ 16/15
<b>Total indirect emissions</b>				
SO <sub>2</sub>	1,015.7	967.9	1,030.0	4.9%
NO <sub>x</sub>	1,282.2	1,164.7	1,185.7	10.1%
PM <sub>10</sub>	35.1	36.7	39.7	-4.3%
<b>Total direct emissions</b>				
SO <sub>2</sub>	381.9	399.0	394.2	-4.3%
NO <sub>x</sub>	6,401.5	6,469.6	5,710.6	-1.1%
PM <sub>10</sub>	182.2	184.0	163.3	-1.0%
<b>Total emissions</b>				
<b>SO<sub>2</sub></b>	<b>1,397.5</b>	<b>1,366.9</b>	<b>1,424.2</b>	<b>2.2%</b>
<b>NO<sub>x</sub></b>	<b>7,683.7</b>	<b>7,634.3</b>	<b>6,896.3</b>	<b>0.6%</b>
<b>PM<sub>10</sub></b>	<b>217.3</b>	<b>220.7</b>	<b>203.0</b>	<b>-1.5%</b>

Amounts in t

(\* ) The transformation rates indicated in the "EMEP/EEA air Guidebook 2009" were used to calculate direct emissions, while the ENEL rates in the "2015 Sustainability Report" - datasheet were used for indirect emissions.

Other immaterial emissions consisted of SF<sub>6</sub>, which is used as a dielectric in high voltage switches at the electric substations, and HFC, which is used as a cooling gas in the air conditioning systems. Only a small number of air conditioning systems use HCFC and they are continuously being reduced: any ozone-depleting gas leaks have been estimated and are not material for the purposes of this report.

As demonstrated by several different studies<sup>3</sup>, the transport sector has a significant impact on climate change and pollution, and this is closely related to the sector's current dependence on fossil fuels, as transport is heavily skewed towards with a prevalence of private transport.

With the approval of the 2017-2026 business plan, FS Italiane Group renewed its commitment to promoting an integrated mobility system with the aim of improving the mass transport of passengers and cargo, and thereby helping curtail greenhouse gas emissions. This new goal makes it even more important to promote transport solution synergies supported by the foundation of sustainability transport: railway transport.

There was a 4.5% decrease in the CO<sub>2</sub> emissions of Trenitalia's industrial plants subject to the Emission Trading System directive (combustion

plants with Pt > 20 MW being used at the sites of the Technical divisions at Rimini, Foligno and Bologna); In the past, these plants were subject to technical and managerial efficiency measures and, therefore, emissions data are mainly linked to oscillations in average seasonal temperatures. Overall, the 2016 CO<sub>2</sub> emissions of the above plants amounted to 7,525 tonnes.

The Group's road transport companies have also implemented policies to minimise their environmental impacts. One example of this is the renewal of their vehicle fleets. Ataf Gestioni rolled out 39 new Euro 6 diesel buses and pulled 11 Euro 1 and 2 buses that ran on petrol out of service, replacing them with more modern Euro 5 diesel buses. Busitalia - Sita Nord is moving in the same direction. In 2016, it included 25 new Euro 6 motorised buses technologically built and equipped with

clean and smart mobility. *Transport and environment in Europe* (2016).

<sup>3</sup> See, inter alia, IEA - UIC, *Railway handbook 2016, Energy consumption and CO<sub>2</sub> emissions (2016)* and EEA, *Toward*

special devices to ensure low consumption. Furthermore, consolidating this commitment, a tyre pressure monitoring system was rolled out and a pilot project began to check the drivers' performance in terms of energy savings.

During the year, Busitalia Veneto rolled out 28 Euro 6 buses for urban and suburban lines, which replaced the old generation (Euro 0 and Euro 2) buses and are technologically built and equipped with special devices to ensure low consumption. Four of these new buses run on biodiesel.

In order to spread more awareness of environmental issues, especially among young people, Ferrovie dello Stato Italiane and Legambiente put the Green Train back on the tracks in 2016. This is an environmental initiative that, since 1988, helps spread environmental awareness and promote environmental sustainability in consumption, lifestyle, productive activities and, especially, mobility. The Green Train stopped at 11 places around the Italian peninsula, highlighting virtuous anti-smog experiments in towns and cities that have had the courage to bet on urban regeneration, energy efficiency, urban parks and sustainability mobility.

As part of its focus on integrated door-to-door mobility, FS Italiane Group, and, in particular, Trenitalia, has forged a series of partnerships with leading urban mobility companies, achieving considerable success in terms of reducing transport volumes using individual vehicles. In 2016, the agreement between Trenitalia and Clear Channel was renewed to promote bike sharing in Verona and Milan, while another partnership was signed with Bicincittà, which offers regional transport service customers special discounts for annual bike sharing services in most Italian cities. Enjoy, the sharing mobility service managed by Eni in partnership with Trenitalia, has extended the scooter and three-wheeled Piaggio MP3 rentals already available in Milan to Rome as well. Furthermore, during the year, car and scooter sharing services were launched in Catania, increasing the total number of cities in which Enjoy offers its mobility solutions to five. Enjoy rentals consist of over 2,000 Fiat 500s in Milan, Rome, Catania, Turin and Florence and Piaggio MP3 scooters in Milan, Rome and Catania.

In 2016, greenhouse gas emissions resulting from travel for work were estimated to be ap-

proximately 4,067 tonnes of CO<sub>2</sub><sup>4</sup>; CO<sub>2</sub> was calculated considering all services booked on the centralised system and includes air and road transport in addition to hotel accommodation.

## Land development and protection

G4-14	G4-EN1	G4-EN2	G4-EN3
G4-EN4	G4-EN6	G4-EN8	G4-EN9
G4-EN22	G4-EN23	G4-EN24	
G4-EN25	G4-EN26	G4-EN27	
G4-EN31	G4-EC7	G4-SO1	
G4-SO2	G4-SO10	G4-PR1	

## Making the most of the land: design

The Group believes it is a priority to plan and implement infrastructural investments to minimise environmental impacts on the land. The tools it uses to prevent and mitigate the potential environmental impacts of the design and construction of infrastructural works are as follows:

- / Environmental Impact Assessment (EIA);
- / Service Conference;
- / special rules for priority projects.

As the proposing party, when submitting the designs to assessment and authorisation procedures as per ruling legislation, right from the early study and design stages (performed by RFI itself or via the technical company Italferr or other third parties engaged), RFI looks at every possible area of impact on the environment and the land, identifying the most suitable technical and design solutions starting with the definition of where the tracks will run, the lowest-impact types of works, required mitigation works, in relation to the natural, anthropic and historical-archaeological characteristics of the areas being crossed through and depending on the type of transport to be used (cargo, passenger, LPT, long haul), as well as in reference to the type and duration of the work-site activities.

As the technical expert, Italferr initially prepares

<sup>4</sup> Source: Cislalpina Tour.

an environmental pre-feasibility study for the project, which:

- / checks the project's compatibility with the provisions of any landscape, land and urban planning;
- / identifies the foreseeable effects of the project and its execution on the environment and residents' health;
- / determines the environmental impact mitigation measures and any reclamation, re-development and environmental/landscape improvements.

To improve the way in which the work interacts with the land and local communities, Italferr develops specific design plans, including the environmental site plan and the environmental monitoring plan, to identify material aspects relating to work sites, along with mitigation measures and environmental monitoring activities. In particular, the environmental monitoring plan defines the material factors to be recorded and monitored, the measurement points, parameters and the frequency of monitoring activities before, during and after the work.

Since 2009, for the most complex projects, Italferr also monitors social aspects to assess the local population's perception of works, both during construction and during operation. Promoting engagement in the decisions regarding infrastructural development as early as the design stage, by actively involving institutional and non-institutional stakeholders, makes it possible to focus on specific needs and therefore improve relationships with the local communities. Systematic consultation with all players involved in the construction of large works, such as railway infrastructures includes, for example, participation in Service Conferences where it is possible to steer project decisions. In this respect, in 2016, the social and environmental aspects of the Bari hub restructuring project were monitored to determine stakeholders' needs and their perception of the works.

Environmental plans also include a specific study to identify the sites where inert materials to be used in infrastructure construction can be delivered and where the resulting scraps can be disposed of. They also provide for inquiries with the regional municipal offices regarding the census of contaminated sites that might inter-

fere with the work. Where planning decisions require, the study is integrated with excavated land and rock management or use plans reporting the description of the planned works, as well as information on surveys and the characteristics, quantity and management of resulting scraps.

Environmental communication policies are, for Italferr, a tool that gives it a complete and transparent view of the effects resulting from the choices made in the planning stage. Where necessary - in collaboration with the Ministry of the Environment and Land and Sea Protection and with local bodies and government - databases and websites have been designed and developed to constantly inform residents about construction activities, the progress of environmental mitigation and/or offsetting works in connection with the project and environmental monitoring activities.

In particular, to ensure the accurate effective management and consultation of the environmental data it acquires through the various monitoring activities, Italferr has developed a database called SIGMAP (geographical environmental and project information monitoring system). In recent years, it has expanded the system to include a section on environmental reclamation, which enables it to constantly track and plan the activities of all reclamation projects underway, along with a "Planning" section that gathers data and information useful for the development of new projects.

A map portal was created to centralise local geographical data, share the thematic maps generated by Italferr's special units and archive specific data. It makes it possible to search for, analyse and download geographical information. These data are also reorganised and made available to the public.

The systems described provide ARPA (the regional environmental protection agency) with valid support in control activities during construction, and help the various environmental observers as well. Finally, the section "Environment and Sustainability" is constantly updated on Italferr's website. It was created to showcase the company's approach to environmental planning, which, by giving a broader and more integrated view of traditional issues and aspects, enables visitors to see the actual environmental balance of work, rather than its impact only.

### Making the most of the land: constructing new infrastructures

The construction of new infrastructures is a complex stage, particularly given the potential environmental repercussions on the land where the projects are being carried out.

As the customer, RFI entrusts the works to third-party companies, assigning Italferr 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 environmental monitoring activities before, during and after the works, identifying any critical issues and suitable corrective measures.

Construction contracts for works require the contractors to adopt specific environmental management systems that meet UNI EN ISO 14001 standards. Italferr requires that the construction companies responsible for the works design and implement, for the entire duration of the works, environmental management systems for the sites that provide the company and appointed bodies with objective evidence of the controls conducted over the course of the work. In particular, these systems require that, before commencing the work, the contracting companies carry out

an environmental analysis of the site activities that identify the material environmental aspects to be managed during the work and define the operating methods to be used for the proper environmental supervision of the site.

Through this procedure, over time, Italferr has contributed to establishing a growing awareness of and focus on environmental management issues and land protection in the construction sector. Environmental control at sites includes inspections and periodic supervisory audits conducted by a team of Italferr experts and environmental monitoring activities to check whether the construction work has caused any changes to the environment. Environmental status monitoring enables Italferr to:

- / check whether the expected impact has actually occurred;
- / check that the mitigation systems in place are effective;
- / ensure proper environmental management at the site;
- / monitor and immediately manage any environmental emergencies.

The most material environmental aspects in relation to Italferr's operations at the work sites of new railway infrastructures are described in this paragraph<sup>5</sup>.

<sup>5</sup> The data reported below refer to the work sites considered for 2016, i.e.: the Florence hub, the Palermo hub, the Bari-Sant'Andrea Bitetto line, the Fiumetorto-Ogliastrello line, the Castelplanio-Montecarotto line, the laying of double tracks north of Ortona, the Brescia hub, the Catania Ogina-Catania Centrale line, the Catania-Siracusa line, the Lunghezza-Guidonia line, the Arcisate-Stabio line, the Cattolica tunnel, the Rastignano variation, the Bologna hub - lot 15, the Bologna hub - lot 13, the Bologna hub - Rastignano

variation, the Ogliastrello-Castelbuono line, the closure of the Palermo railway ring, the general urban planning regulation for the Bari station, the Bradano River viaduct, the Arcisate-Stabio line, Brescia contract 2, the Treviglio-Brescia HS line, advance works on the Catenanuova-Raddusa Agira line, advance works on the Bicocca-Catenanuova line, the closure of the Istrana railroad crossing, the Turin-Padua line and the central computerised device in Brescia.

The indicators relate exclusively to the current year because performance over time is not relevant as the figures are significantly influenced by the number, type and progress of site operations.

#### RAW MATERIALS (SITES)

	2016
Earth - procurement	163,424
Earth - reuse	1,897,038
Concrete	1,449,796
Inert material	366,825
Steel for railway superstructure	1,710
Steel for railway technology systems	59,884
Stone	478,841
CAP sleepers	1,695
Iron	58,946
Aluminium	2,440
Copper	430

Amounts in tonnes

#### WASTE PRODUCED (SITES)

	2016
Non-hazardous special waste	653,072
Hazardous special waste	8,876
<i>Hazardous special waste - asbestos</i>	124

Amounts in tonnes

#### WASTE SENT FOR DISPOSAL OR RECYCLING (SITES)

	2016
Non-hazardous special waste sent for recycling	564,078
Non-hazardous special waste sent for disposal	90,996
Hazardous special waste sent for recycling	6,346
Hazardous special waste sent for disposal	2,529

Amounts in tonnes

#### WATER WITHDRAWN (SITES)

	2016
Water withdrawn from the aqueduct for non-industrial use	61,615
Water withdrawn from the aqueduct for industrial use	31,256
Water withdrawn from bodies of water for industrial use	7,118
Water withdrawn from underground water for industrial use	133,082

Amounts in cubic metres

#### DRAINED WASTEWATER (SITES)

	2016
Industrial wastewater sent to sewers	135,992
<i>Industrial wastewater sent to sewers - for treatment</i>	135,892
Industrial wastewater sent elsewhere	181,543
<i>Industrial wastewater sent elsewhere - for treatment</i>	16,972
Domestic wastewater sent to sewers	2,246
Domestic wastewater sent elsewhere	135

Amounts in cubic metres

In 2016, as in the previous year, there were no significant withdrawals of water from sources in protected areas, i.e., there were no withdrawals of water exceeding 5% of total water volumes. In the design and construction of infrastructural works, RFI and Italferr have launched a number of different initiatives to achieve an ever more rationalised use of resources, privileging the use of materials available in the area, re-using excavated materials as much as possible and transporting materials by railway whenever possible. Specific focus has been devoted to the use of the methodology that Italferr has developed in accordance with the UNI EN ISO 14064-1 standard to calculate its carbon footprint in the

design and construction of railway infrastructures. The results of using this methodology have shown that emissions from the production of cement and steel outweigh total CO<sub>2</sub> emissions during construction. In this respect, in 2015, a status report was set up for the application of the methodology used to calculate the carbon footprint, currently applied to projects in the implementation stage with the involvement of contractors. In 2016, the costs incurred for environmental monitoring totalled roughly €2.4 million, while the costs of environmental reclamation, including soil reclamation, came to just under €4.4 million.

#### PRIMARY ENERGY CONSUMPTION (SITES)

	2016
Electricity	161,420
Diesel for road and work vehicles	713,333

Amounts in GJ

#### GREENHOUSE GAS EMISSIONS\* (SITES)

	2016
Electricity	54
Diesel for road and work vehicles	52,536

Amounts in tonnes of CO<sub>2</sub>

(\*) The rates indicated in the IPCC's "2006 Guidelines for National Greenhouse Gas inventories" and the ISPRA's "National Inventory Report 2015" were used to calculate emissions

### Land protection: biodiversity

The development of transport infrastructures plays a particularly delicate role with respect to biodiversity. Indeed, it can cause the loss of habitats, the fragmentation of ecosystems, an increase in the mortality of certain species and other negative repercussions on biological diversity.

Making infrastructure development sustainable means, *inter alia*:

- / prevention: abstaining from building unnecessary infrastructures and, above all, not involving protected areas;
- / mitigation: minimising impacts where prevention is not possible, with suitable measures (underpasses, overpasses and fencing);
- / offsetting: restoring the overall balance of biodiversity lost due to the construction of the infrastructure by re-establishing ecosystems, recreating alternative habitats elsewhere.

The deep commitment to preserving biodiversity includes the definitive "Potenza Foggia line - lot 3 - Mitigation of hydrological and hydraulic risk on the line" project developed in 2016. In this case, the areas in the "Natura 2000" network of sites of EC interest - the Cervaro valley, Incoronata forest and additional sites of EC interest - the Ofanto valley and Capaciotti lake affected by the railway line, were analysed for potential interference with habitats of EC interest.

### Land preservation: archaeology

The archaeological findings known to be present since the start are considered basic data, which must be considered during the design stage. Italferr has created an archaeological impact assessment procedure to identify the interference of civil works on archaeological assets from when it begins the initial design. This procedure was included in the public contract code and has since become a legal requirement. An archaeological assessment is first conducted to identify the risk level for archaeological assets, which may include:

- / analysis of bibliographical and archive data;
- / analysis of current and historic maps;
- / toponomy analysis;
- / analysis of aerial photographs;
- / survey of the area affected by the railway plans.

The results are sent to the relevant local superintendents who may, if necessary, request the activation of a prior archaeological interest assessment procedure consisting of progressive stages of analysis that integrate the technical/economic feasibility study:

- / probing;
- / geo-physical and geo-chemical surveys;
- / archaeological sampling and, where necessary, extended surveys and digs.

The findings of these explorations enable the superintendent to express a justified opinion on each stage of the design.

In particular, in 2016, to obtain the local archaeological superintendent's opinions, archaeological studies were carried out on the following projects:

- / Trieste-Divaca;
- / Strassoldo-Carnacchio line;
- / Verona-Fortezza lot 3, bypassing of Trento and Rovereto;
- / Verona west entrance, lot 4 Verona Fortezza;
- / Technological upgrade of the Bologna Ferrara line;
- / Potenza-Foggia, Lot 3;
- / Bari hub, Sant'Anna underpass.

During the year, work was also carried out directly by Italferr on the design and execution of the following surveys/archaeological digs:

- / Turin-Lyon line, Ferriera stop;
- / Turin-Lyon line;
- / HS Milan-Genoa line, Libarna archaeological area;
- / Bologna Carracci roundabout hub, stage 2;
- / Guidonia line, auxiliary works;
- / Aprilia line, Campoleone-Villa Literno;
- / Naples-Bari route on the Cancellone-Frasso line;
- / Naples-Bari route on the Naples-Cancellone line;
- / Naples-Bari route on the Frasso-Vitulano line;
- / Naples-Bari route on the Apice-Orsara line;
- / Afragola HS station;
- / Access roads to the Afragola HS station, letter b and letters d-g;
- / technological upgrade to the Naples hub;
- / Falconara hub, Esino road viaduct variation;
- / Termoli-Lesina line, Ripalta Lesina, Lot 1;
- / laying of double track on the Cervaro-Bovino line;
- / updating of the Potenza-Foggia line, lots 2 and 4.

### Waste management

**G4-EN23 G4-EN25 G4-EN27**

The Group's commitment to reducing waste production can be seen in the analysis of waste indicators, which show a steady trend in recent years. In particular, despite increasing in the previous year (+1.4%), waste produced in 2016 remained slightly below 2014 levels. The rationalisation and improvement of waste management activities within the management systems implemented by the Group companies also ensure a smaller environmental impact, which is achieved partly through the constant recovery of the special waste that is produced, equal to 95% in 2016.

An analysis of data related to RFI and Trenitalia<sup>6</sup>, which account for 95% of the Group's overall figure, shows that:

<sup>6</sup> Reference should be made to the company attachments for data on the individual Group companies.

/ Measured in absolute tonnes, the waste produced by RFI, which contributes over 74% of the Group's total special waste production, decreased by 4.1% on 2015, a year in which maintenance on the infrastructure network outsized previous years.

/ Trenitalia contributes roughly 21% of special waste and saw a specific increase of around 15% on 2015 to over 43,000 tonnes produced. This is due to the equal increases in hazardous and non-hazardous special waste. The increase in the former is nearly entirely due to maintenance and the consequent production of waste of the Long Haul Passenger Transport Division. On the other hand, the growth in non-hazardous special waste is due to the non-routine production of waste by the demolishing of regional transport rolling stock and the increase in waste produced to clean long haul trains.



### WASTE PRODUCED BY FERROVIE DELLO STATO ITALIANE GROUP

	2016	2015	2014
Waste classified as urban waste	3,852	3,266	4,442
<i>sorted waste</i>	1,457	1,413	2,606
Non-hazardous special waste	173,649	154,738	168,873
Hazardous special waste	38,101	54,720	42,572
<b>Total waste produced</b>	<b>215,601</b>	<b>212,724</b>	<b>215,887</b>

Amounts in tonnes

### WASTE SENT FOR DISPOSAL OR RECOVERING BY FERROVIE DELLO STATO ITALIANE GROUP

	2016	2015	2014
<b>Total special waste</b>	<b>211,520</b>	<b>209,376</b>	<b>211,299</b>
<i>recovered</i>	95%	96%	94%

Amounts in tonnes

The Group companies have also improved the collection systems for waste classified as urban waste resulting from their own activities and those of their customers or suppliers. In this respect, Centostazioni and Grandi Stazioni Rail continue to make efforts to maintain the efficiency of the sorted waste collection systems for waste produced by commercial businesses and in the public areas at stations in the network.

The Group companies are also aware of the importance of monitoring and, where possible, improving - including through training - the quantities of waste created at its sites by third parties, whether they are contractors/suppliers or customers. This has led to increased control over the work of external businesses, as provided for by the environmental criteria introduced in tenders and contracts.

### WASTE PRODUCED BY THIRD PARTIES ON BEHALF OF FERROVIE DELLO STATO ITALIANE GROUP\*

	2016
Waste classified as urban waste**	19,964
<i>sorted waste</i>	14%
Non-hazardous special waste	8,489
<i>recovered</i>	73%
Hazardous special waste	356
<i>recovered</i>	32%

Amounts in tonnes

(\*) \*Excluding waste produced at the sites for new railway lines, which is covered in the paragraph "Land development and protection".

(\*\*) \*\* Including the waste collected at the main railway stations.

Under the Basel Convention, Trenitalia and TX Logistik transport hazardous waste to and from abroad on behalf of third parties. The following table shows the volumes of waste monitored in accordance with the convention.

### HAZARDOUS WASTE TRANSPORTED ON BEHALF OF THIRD PARTIES UNDER THE BASEL CONVENTION

	2016	2015	2014
Recovered waste	138,532	156,449	159,509
Disposed waste	190,459	316,328	150,863

Amounts in tonnes

Special waste is also transported domestically. The volumes that Trenitalia transports on behalf of the Group companies and third parties are reported below.

### WASTE TRANSPORTED DOMESTICALLY

	2016	2015	2014
Non-hazardous waste	55,974	58,746	90,953
<i>transported on behalf of third parties</i>	100%	100%	100%
Hazardous waste	21,604	37,082	24,498
<i>transported on behalf of third parties</i>	92%	61%	92%

Amounts in tonnes



## Noise

**G4-EN27** **G4-EN31**

In the development and execution of infrastructural investments and, in particular, within the scope of activities to mitigate the resulting environmental impact, the design and implementation of projects to reduce noise are particularly important, and relate to site activities and noise produced by the passing of trains following the activation of new lines and plants.

The following are the most common solutions that can be used to mitigate noise pollution generated by fixed plants and sites:

- / enclosing the noisiest machinery, operations and maintenance permitting;
- / acoustic screens (noise dampening barriers or enclosures with noise dampening treatment);
- / scaling of shifts when the noisiest machinery operates and its use during the day where permitted by production requirements.

The mitigation that can be achieved varies on a case-by-case basis, depending on a multitude of variables (reciprocal source/receptor position, topography, obstacles to the propagation of noise, etc.), and can reach 10-15 dB(A).

In investing substantial resources for projects to maintain and improve the existing network (new technologies for train traffic, electrification, double tracks, upgrading, redevelopment of stations, maintenance, etc.) and for new railway infrastructures (new lines and new systems for passenger and cargo traffic, including intermodal solutions), RFI is constantly committed to mitigating noise at source, at sites and stations, as well as implementing permanent sound reduction fixtures due to railway operations and in experimenting with devices to be applied to the superstructure to reduce the noise generated by train/track contact. With regard to new lines or those being upgraded, for which Italferr acts as technical expert for RFI, design and implementation activities have attained the following results to date:

	2016	2015	2014
Design of acoustic barriers	114,078	37,000	29,500
Acoustic barriers under construction	48,208	66,487	102,755
Acoustic barriers built (total accumulated length per year)	350,352	343,434	306,816

Amounts in metres

The table shows the data of acoustic barriers in various stages of progress (design and under construction) for the year.

For the lines that are already operational, RFI is involved in the noise reduction activities included in the noise reclamation plan approved by the Unified Government-Region Conference based on the scale of priorities defined by the Decree of the Ministry for the Environment of 29 November 2000. Current plans provide for 428 improvement projects over the course of four years, and these projects will be monitored using specific company noise mitigation monitoring software called MolRA.

The following provides a summary of RFI's results.

	2016	2015	2014
Design of acoustic barriers	452,837	394,387	371,316
Acoustic barriers approved	12,950	17,110	17,008
Acoustic barriers under construction	12,376	8,927	8,423
Acoustic barriers built (total accumulated length per year)	60,566	60,566	58,988

Amounts in metres

The table shows the data of noise dampening barriers in various stages of progress (design, approved and under construction) for the year.

Trenitalia did not perform any mitigation projects in 2016 on the source of railway noise (maintenance systems and rolling stock) as it carried out, where necessary, management/operating projects to reduce any impact of sound pollution connected to its activities. Lastly, no criticalities were noted at maintenance sites in terms of the environmental impact caused by vibrations.

In 2016, monitoring, environmental classification and reclamation activities continued with respect to the infrastructural upgrading of the Genoa hub, the Brescia hub, the Porto di Taranto railway connection to the national network, the Bologna Centrale HS station, Bologna Cava Corticella, the Napoli Centrale station, the Campoleone – Villa Literno line, the Falconara hub, the new Chiasso station, RFI's areas in Trieste and Pioltello Rodano and the Madonna della Grotta landfill on the Bari-Bitetto line.

Trenitalia continued managing the issues arising from its contaminated sites and their upgrading to safety standards. In particular, it monitored design activities commissioned outside the company and defined technical/operational aspects to include in technical specifications for the contracting of reclamation/upgrading to safety standards. The activities that RFI performed directly include a total of 18 sites under reclamation in 2016, nearly all of which were polluted in the past. The decrease on the 41 reclamation sites of 2015 was due to the conclusion of many of the reclamation processes that were in progress in 2015. Environmental recovery costs incurred, including the cost of reclamation, amounted to almost €2 million.

## Other impacts

**G4-EN8** **G4-EN9** **G4-EN10**  
**G4-EN22** **G4-EN24** **G4-EN26**  
**G4-EN27** **G4-EN31** **G4-PR1**

### Management of potentially contaminated sites

In RFI's building of new infrastructures and upgrading of existing lines with the technical support of Italferr, the survey of potentially contaminated sites is aimed at identifying, during the preliminary design stage, all areas interfering with project works where there could be an alteration in the quality of the surface soil, subsoil and underground water. An environmental characterisation plan is then defined for any risk areas that are identified, consisting of the assessment of any pollutants.

The information that Italferr gathers is collected in the geographical environmental monitoring and project information system's database (SIGMAP, Sistema Informativo Geografico Monitoraggio Ambiente e Progetti). This system includes the section for environmental reclamation in which the reclamation and recovery procedures under way can be checked and planned.

## Water

The Group companies remained committed to rationalising the use of water, and this includes training and spreading awareness on water efficiency. The water use data analysis shows a steady trend despite the slight increase in 2016 (+4.4% on the previous year and +3.6% on 2014). The Group companies did not withdraw any water from protected areas.

The Group's water withdrawals are mainly for non-industrial use (offices, bathrooms and workshop showers, fountains at stations, etc.), equal to over 87% of total consumption. In the withdrawal of water for non-industrial use, one of the key aspects that cannot be overlooked is the management of biological risk. Water to replenish

#### WITHDRAWALS BY USE AND SOURCE

	2016	2015	2014
Industrial use	3,098,311	2,963,111	3,174,072
<i>from aqueducts</i>	47.5%	50.6%	45.5%
<i>from underground water*</i>	51.1%	47.9%	53.1%
<i>from bodies of water</i>	1.4%	1.5%	1.4%
Non-industrial use m <sup>3</sup>	21,395,030	20,497,764	20,459,199
<i>from aqueducts</i>	39.3%	36.9%	41.9%
<i>from underground water*</i>	60.7%	63.1%	58.1%
<b>Total water withdrawn</b>	<b>24,493,341</b>	<b>23,460,874</b>	<b>23,633,271</b>

Amounts in cubic metres

(\*) Withdrawal of water from the water table and sources.

ish passenger carriages, for example, must meet health and bacteriological standards. Indeed, utmost attention is devoted to the quality of water used, the management and maintenance of water infrastructures and the ways in which loading operations are handled. In this respect, routine checks are scheduled to provide information on the water quality and the effectiveness of water treatment. The entire train water circuit is also reclaimed (tanks, pipes, etc.) with the removal of lime and sanitising.

Wastewater resulting from the Group use is mainly classified as domestic wastewater. This water

is disposed of by being sent to the municipal sewage system in accordance with the requirements of legislative decree no. 152/06.

Finally, the Group's main workshops are equipped with systems to collect and treat (chemically/physically) the wastewater resulting from the Group companies' industrial activities. The water treatment process is managed by specialised companies.

#### WATER DISPOSAL

	2016	2015	2014
<b>Wastewater sent to sewers</b>	<b>20,624,268</b>	<b>19,796,923</b>	<b>19,881,307</b>
<i>water treated beforehand</i>	4.5%	4.2%	5.0%
<b>Wastewater sent elsewhere</b>	<b>360,257</b>	<b>388,969</b>	<b>363,561</b>
<i>water treated beforehand</i>	92.5%	90.1%	89.2%

Amounts in cubic metres

#### Electromagnetic fields

Since the early 1980s, in collaboration with qualified national structures such as the Istituto Superiore di Sanità (Italian institute of health), ANPA (environmental protection agency) and Enel, the main Ferrovie dello Stato Italiane operating companies have provided a genuine contribution to analysing and assessing the interaction between the environment and the electromagnetic fields created on the rails. Many investigations have been conducted to check that the electromagnetic field thresholds pursuant to law are complied with, both on board operating trains and in the areas surrounding the infrastructure that generates the radiation. In particular, the following railway systems generate electromagnetic fields with non-negligible frequencies under current legislation:

- / electrical power lines and stations, i.e., all electrical lines, substations and transformation stations;

- / electrical traction contact cables;
- / telecommunication and radio transmission systems used to meet service requirements;
- / medium and low voltage systems for lighting and other services.

Trenitalia now measures the electromagnetic fields of its rolling stock for the purposes of risk assessment as per Legislative decree no. 81/2008. Testing in the drivers' cabs show an overall profile that is in line with the legislative requirements for occupational exposure to electromagnetic fields. With respect to the 50 Hz electromagnetic fields generated by the power lines and systems, RFI constantly monitors voltage on its high voltage lines<sup>7</sup> and reports the values to the relevant ARPA (environmental agency) offices.

<sup>7</sup> Title was transferred to Terna on 23 December 2015.



# 08

## ADDITIONAL INFORMATION



Focus on details





## METHODOLOGY

Since 2011, an IT solution (SuPM – Sustainability Performance Management) has been adopted for the data collection process to monitor and report information. The implementation of SuPM involves, throughout all the Group's operating companies, reporting at various levels, in order to collect and monitor data across Italy. To date, the implementation at different levels has been completed for Trenitalia, RFI, Ferservizi, FS Italiane, Busitalia-Sita Nord and Netinera Group, while the other Group companies, because they fall within the scope of the Sustainability Report, are included in the system with one single reporting level.

The approach taken has enabled the Group to report on the standard elements and performance indicators required by the GRI's G4

Guidelines. The audit, performed by an independent company (KPMG), was conducted to evaluate the accuracy of data and the compliance of contents with such Guidelines. As required by the GRI Guidelines, an integrated Disclosure Management Approach document was prepared - summarising the approach of Ferrovie dello Stato Italiane Group to sustainability management - along with the Content Index, indicating the sections of the document containing standard information on the organisation and its performance. Such document is attached to this report.





### Materiality matrix

Since 2014, Ferrovie dello Stato Italiane Group has reported the economic, social and environmental activities deemed to be the most significant (or material) in the Sustainability Report. With the aim of developing a broader and more organic stakeholder engagement process, the Group has decided to gather in a structured way external and internal feedback on the materiality of sustainability issues for the Group.

To this end, in July 2016, an online survey was conducted where the internal and external stakeholder community (roughly 300 stakeholders) were asked to rate the materiality of 35 sustainability issues identified on the basis of the GRI-G4 Guidelines. Additional input for the external context analysis came from a media analysis, the fourth stakeholder panel, sustainability standards (Global Reporting Initiative, Down Jones Sustainability Index, ISO14001, etc.) and studies of competitors, peers, best in class and trade associations (UIC, CER, etc.).

In order to gain an understanding of how well the Group's strategies respond to sustainability issues, an internal survey was also conducted online with the Group's top management, along with interviews with the CEOs of the main Group companies (additional internal input was gathered from the 2017-2026 business plan, policies, principles and internal models guiding the Group's corporate governance).

The Group's materiality matrix was prepared by cross-referencing the results of the external stakeholder analysis with the Group's strategies. The materiality of each issue has been calculated as the weighted average of the internal and external sources and mapped in the matrix reported in the Methodology section. The Sustainability Report amply reports on the issues deemed material, placed in the top right hand corner.

The following is a bridging table between the material issues identified, the related GRI issue and the scope of reporting.

MATERIAL ISSUES FOR FS ITALIANE GROUP	INTERNAL SCOPE	EXTERNAL SCOPE	GRI ISSUE	COMMENTS
Energy efficiency	✓	✓	Energy	The assessment only calculates consumption related to site operations for the external scope
Customer safety	✓		Consumer health and safety	
Atmospheric emissions	✓	✓	Emissions	The assessment only calculates emissions related to site activities for the external scope
Occupational health and safety	✓		Occupational health and safety	
Economic value directly generated and distributed to the stakeholders	✓		Financial performance	
Waste, wastewater and soil pollution	✓	✓	Wastewater and waste	The assessment covers site operations for the external scope
Customer satisfaction	✓	✓	Labelling of products and services	
Sustainable mobility	✓		Emissions	
Indirect economic impact on communities	✓		Financial performance, indirect economic impacts	
Land development and protection	✓	✓	Local communities Materials Water Wastewater and waste	The assessment covers site operations for the external scope
Relationships with stakeholders	✓		Stakeholder engagement	
Employee training and development	✓		Training and education	
Environmental requirements of the supply chain		✓	Environmental assessment of suppliers	Only strategic core suppliers were included in the assessment
Diversity and equal opportunities	✓		Diversity and equal opportunities	
Personnel policies	✓		Employment Equal pay for men and women	
Anti-corruption	✓		Anti-corruption	
Digital transformation	✓	✓	Transversal aspect	

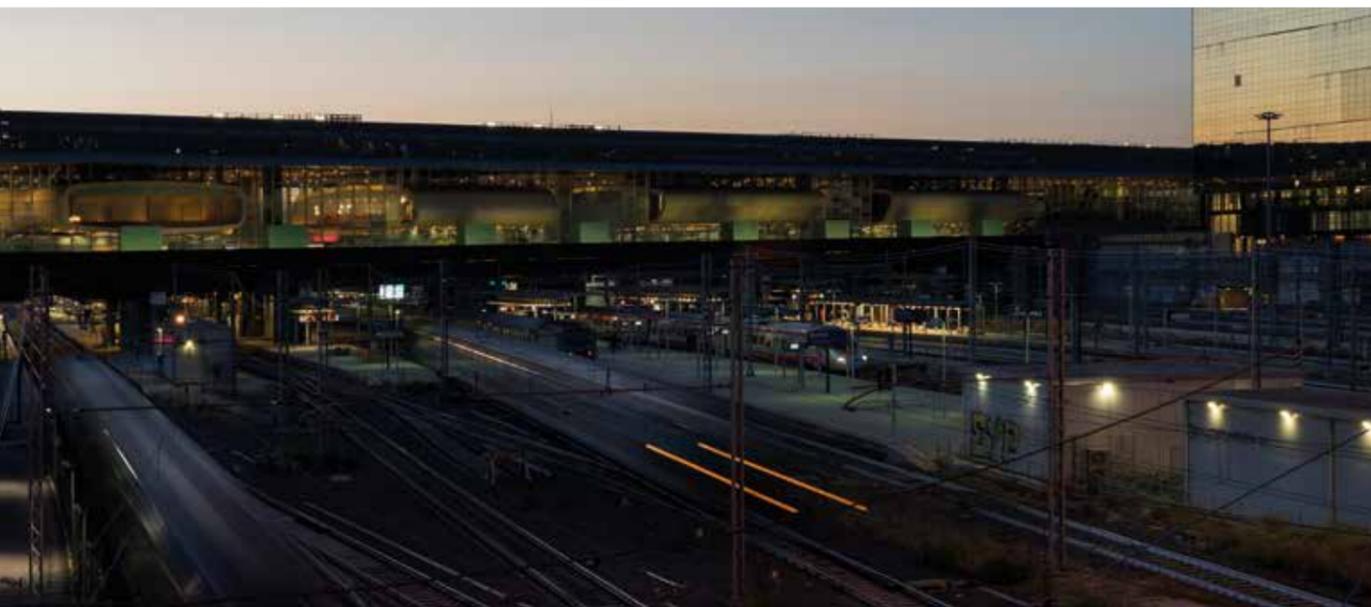
# GROUP SUSTAINABILITY

## Management systems

The following table shows the certification standards for each company and the related scope. The "Integrated systems" column shows information on the integration of the management systems (Quality, Environment, Occupational safety).

### FERROVIE DELLO STATO ITALIANE

		Integrated systems: -
<b>Quality (Q) ISO 9001</b>	<b>Central Audit Department and audit departments of Ferrovie dello Stato Italiane Group</b> Scope: / design and provision of internal audit services to the Group companies.	
<b>Environment (E) ISO 14001</b>	<b>Ferrovie dello Stato Italiane (Headquarters)</b> Scope: / setting the guidelines and coordinating policies and industrial strategies for the Group's operating companies, implementing corporate governance processes, preparing the Group's business plan, governing and monitoring corporate relationships within the Group, managing relationships with the government and other institutional authorities.	



## RFI

### Integrated systems: Q + E + S

<b>Quality (Q) ISO 9001</b>	<b>Commercial and Network Operation Department and Steering Departments</b> Scope: / management of train traffic to ensure safe railway operation.
	<b>Production Department (PD) and Local Production Units</b> Scope: / maintenance of the railway infrastructure to ensure safe train travel and railway operation and the performance of train travel and shunting activities; / design in the railway engineering sector (superstructure, signalling and telecommunications systems and electrical traction), civil engineering, road engineering and environmental protection in the railway field.
	<b>National Electrical Equipment Workshop - Bologna, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation through the inspection, repair, rehaul and assistance for vehicles operating on the rails and railway equipment for electrical traction systems and safety and signalling systems.
	<b>National Superstructure Workshop - Pontassieve, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation; construction of railway superstructure equipment through mechanical processing, welding, assembly and attachment of rails and railway diverters.
<b>Environment (E) ISO 14001</b>	<b>National Carriage Workshop - Catanzaro, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation through general inspections, non-routine maintenance, 5-year checks, repairs and assistance for the vehicles operating on rails.
	<b>Central Divisions</b> Scope: / design, construction, implementation, management and maintenance of national railway infrastructure.
	<b>Steering Divisions</b> Scope: / management of train traffic to ensure safe railway operation.
	<b>Local Production Units</b> Scope: / maintenance of the railway infrastructure to ensure safe train travel and railway operation and the performance of train travel and shunting activities.
<b>Environment (E) ISO 14001</b>	<b>National Electrical Equipment Workshop - Bologna, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation through the inspection, repair, rehaul and assistance for vehicles operating on the rails and railway equipment for electrical traction systems and safety and signalling systems.
	<b>National Superstructure Workshop - Pontassieve, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation; construction of railway superstructure equipment through mechanical processing, welding, assembly and attachment of rails and railway diverters.
	<b>National Carriage Workshop - Catanzaro, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation through general inspections, non-routine maintenance, 5-year checks, repairs and assistance for the vehicles operating on rails.

RFI

Integrated systems: Q + E + S

Occupational safety (S) OHSAS 18001	<b>Steering Divisions</b> Scope: / management of train traffic to ensure safe railway operation.
	<b>Local Production Units</b> Scope: / maintenance of the railway infrastructure to ensure safe train travel and railway operation and the performance of train travel and shunting activities.
	<b>National Electrical Equipment Workshop - Bologna, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation through the inspection, repair, rehaul and assistance for vehicles operating on the rails and railway equipment for electrical traction systems and safety and signalling systems.
	<b>National Superstructure Workshop - Pontassieve, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation; construction of railway superstructure equipment through mechanical processing, welding, assembly and attachment of rails and railway diverters.
	<b>National Carriage Workshop - Catanzaro, the PD's national workshops</b> Scope: / maintenance to ensure safe train travel and railway operation through general inspections, non-routine maintenance, 5-year checks, repairs and assistance for the vehicles operating on rails.

TRENITALIA

Integrated systems: Q + E + S

Quality (Q) ISO 9001	<b>Trenitalia (Headquarters and operating sites)</b> Scope: / design and provision of passenger and cargo transport services by rail.
Environment (E) ISO 14001	
Occupational safety (S) OHSAS 18001	

ITALFERR

Integrated systems: Q + E + S

Quality (Q) ISO 9001	<b>Italferr (Headquarters and operating sites)</b> Scope: / design, management of works contracting, works oversight and supervision of works on guided transport and the related interferences.
Environment (E) ISO 14001	
Occupational safety (S) OHSAS 18001	

NETINERA GROUP\*

Integrated systems: -

Quality (Q) ISO 9001	<b>SBN (Headquarters and operating sites)</b> Scope: / transport services using buses: regional and urban public transport, occasional transport, maintenance and customer assistance.
	<b>Netinera Werke</b> Scope: / maintenance and inspection of railway vehicles in accordance with the operating rules of construction and the German railway service.
	<b>OHE (Headquarters and operating sites)</b> Scope: / maintenance and updating of owned and third party railway vehicles.

(\* The Netinera Group companies that fall under the scope of the Sustainability Report have been considered.

BUSITALIA - SITA NORD

Integrated systems: Q + E + S

Quality (Q) ISO 9001	<b>Busitalia-Sita Nord (Headquarters and operating sites)*</b> Scope: / design and provision of transport services using buses and trolleys: local public transport. Design and provision of transport services using buses: long haul lines, rentals and atypical services. Maintenance and depot facilities for its own vehicle fleet.
Environment (E) ISO 14001	
Occupational safety (S) OHSAS 18001	

(\* The certification authority has approved the quality and environment management system integration process of Umbria Mobilità Esercizio (a company that was transformed into the regional division of Busitalia – Sita Nord in 2016) for it to become part of Busitalia – Sita Nord's integrated management system. Certification will not cover all the operating sites of the Umbria regional division. In the first half of 2017, activities will begin to extend ISO 14001 certification to other Umbrian sites and a process will also be defined in collaboration with the certification authority to extend Busitalia – Sita Nord's OHSAS 18001 certification to the Umbria regional division.

BUSITALIA VENETO

Integrated systems: Q + E + S

Quality (Q)  
ISO 9001

**Busitalia Veneto (Headquarters and operating sites)**

Scope:

/ design and provision of transport services using buses and trolleys: local public transport. Design and provision of transport services using buses: long haul lines, rentals and atypical services. Maintenance and depot facilities for its own vehicle fleet.

Environment (E)  
ISO 14001

Occupational safety (S)  
OHSAS 18001

CENTOSTAZIONI

Integrated systems: Q + E + S

Quality (Q)  
ISO 9001

**Centostazioni (Headquarters and sites)**

Scope:

/ development and redevelopment of real estate complexes;  
/ design and works oversight services;  
/ commercial development and advertising services;  
/ real estate portfolio management, property and facility management services.

Environment (E)  
ISO 14001

Occupational safety (S)  
OHSAS 18001

FERSERVIZI

Integrated systems: Q + E + S

Quality (Q)  
ISO 9001

**Ferservizi (Headquarters and operating units)**

Scope:

/ service management: administration, procurement, real estate sales services, leases and agreements, technical and asset services, maintenance and facility management services for office buildings and hotels, the issue of travel concessions, company canteen services, real estate and legal custody services, printing services, credit management, tax services, correspondence and notifications.

Environment (E)  
ISO 14001

**Ferservizi (Headquarters and operating units)**

Scope:

/ provision of all the activities that the company performs to manage administrative, sale and lease of real estate, custody and safeguarding of real estate and facility services, in addition to Group procurement, IT and maintenance and provision of assistance services for creches.

Occupational safety (S)  
OHSAS 18001

**Ferservizi (Headquarters and operating units)**

Scope:

/ provision of all the activities that the company performs to manage administrative, sale and lease of real estate, custody and safeguarding of real estate and facility services, in addition to Group procurement, IT and maintenance;  
/ provision of assistance services for creches.

MERCITALIA LOGISTICS

Integrated systems: Q + E + S

Quality (Q)  
ISO 9001

**Mercitalia Logistics (Rome headquarters)**

Scope:

/ organisation and provision of logistics services in connection with sundry cargo;  
/ management of real estate assets.

Environment (E)  
ISO 14001

**Mercitalia Logistics (Rome headquarters, Bologna San Donato and Catania Bicocca sites and the local units in Torino Orbassano, Bologna Interport, Pomezia S. Palomba, Verona Porta Nuova and Marcianise)**

Scope:

/ management and development of the company's real estate assets;  
/ organisation of logistics services in relation to sundry cargo and the provision of such services via third parties.

Occupational safety (S)  
OHSAS 18001

**Mercitalia Logistics (Rome headquarters, Bologna Interport and Milan via Valtellina)**

Scope:

/ management and development of the company's real estate assets;  
/ organisation and coordination of logistics services in connection with sundry cargo;  
/ services supporting business activities.

FS SISTEMI URBANI

Integrated systems: -

Environment (E)  
ISO 14001

**FS Sistemi Urbani (Sede centrale)**

Scope:

/ management, on its own behalf or by appointing third parties, of the company's real estate assets;  
/ real estate development, on its own behalf or by appointing third parties, of the company's real estate assets and other Group companies' real estate assets not functional for railway operations.  
/ planning, development and implementation of real estate development and management processes and urban intermodal systems

## SERFER

Integrated systems: Q + E + S

**Quality (Q)**  
ISO 9001**Serfer (Headquarters, Genoa office\* and operating site in Udine)**

Scope:

**Environment (E)**  
ISO 14001

/ design, construction, maintenance and restructuring of railway connections;  
 / cargo and passenger transport services as railway company in the national railway infrastructure;  
 / welcome, assistance and catering services on equipped passenger cars;  
 / management of shunting in railway connections;  
 / maintenance and reconditioning of diesel traction vehicles, railway rolling stock for cargo transport and related services.

**Occupational safety (S)**  
OHSAS 18001

(\*) The Genoa office is only certified in accordance with ISO 14001.

## TERMINALI ITALIA

Integrated systems: -

**Environment (E)**  
ISO 14001**Terminali Italia (Headquarters and operating sites)**

Scope:

/ management and operation of terminals equipped for intermodal transport;  
 / provision of terminal services

## ATAF GESTIONI

Integrated systems: Q + E

**Quality (Q)**  
ISO 9001**Ataf Gestioni (Headquarters and operating sites)**

Scope:

/ design of public transport;  
 / provision of customised urban public transport services: conventional and flexible services.

**Environment (E)**  
ISO 14001**Ataf Gestioni (Headquarters and operating sites)**

Scope:

/ provision of public mass transport services by road in the following stages: transport service operation, deposit, cleaning, electrical and mechanical maintenance, provisioning, entry and exit of vehicles.

BUSINESS  
SUSTAINABILITY

## Customers

## Highlights

## WHAT WE HAVE ACCOMPLISHED

## Passenger services

## RFI

- / Continuation of works under the 500 stations project, with specific regard to works to raise platforms, install new lifts, install tactile walkways, re-floor platforms and halls and replace lighting systems with LED lights.
- / Expansion of the scope of stations to be renovated and redesign of projects to make them more accessible, connected and sustainable: €2.5 billion allocated in the new business plan for the "Easy Stations" and "Smart Stations" projects.
- / Continuation of the plan to activate the new public information system leC - information and communication (included in the scope of the Easy Stations project).
- / Continuation of activities to assign cleaning services at RFI stations according to assessment criteria that consider the environmental sustainability of products, machinery and equipment used.
- / Improvement in accessibility at stations included in the agreement with FIAB (the Italian federation of bicycle lovers) to implement facilities for bike-train exchanges (adequately floored and equipped compartments, systems for taking bikes up and down stairs in underpasses, rental/maintenance in areas at stations, bike sharing zones and specific fixed signs and digital message panels).
- / Publication of the call for bids for the Muovilarte - street art project at stations to renovate them.

## TRENITALIA

## Long Haul Passenger Transport Division

- / Increase in the *Frecciarossa* 1000 fleet on the Turin - Salerno route by upgrading services operated using ETR500 trains and the introduction of new connections during peak hours.
- / Roll-out of the *Frecciarossa* on the Po Valley line connecting Turin, Milan and Venice.
- / Consolidation of the *Frecciarossa* trains used on the Venice-Rome/Naples/Salerno route by upgrading *Frecciargento* services and adding new connections.
- / Launch of the *Frecciargento* Bolzen-Trento-Verona-Naples, Rome-Modena-Mantua and Rome-Bergamo routes.
- / Completion of the restyling of the *Frecciarossa* Bistrò cars.
- / Consolidation of the new single on board website named "FRECCE", with new services and a completely free offer.
- / Launch of the new free app for Androids and IOS to use the on board "FRECCE" website.
- / Launch of new on-board monitor functions (such as geo-referencing content, customised broadcasting schedules based on where the train stops and news updates).
- / Continuation of the project to give the *Frecciabianca* trains a new look.
- / Revamping of vehicles used in daytime *Intercity* services.
- / Start of the upgrading project for WiFi on ETR500 trains with the installation of new, higher performance modems.

## WHAT WE HAVE ACCOMPLISHED

## Passenger services

## TRENITALIA

## Regional Passenger Division

- / Continuation of the fleet modernisation, also in the light of the long-term service contracts signed with the regions.
- / Introduction of the new regional tickets which indicate the travel date and elimination of distance-based ticketing: these are key components of the plan to counter fare evasion launched in 2015 by Trenitalia's Regional Passenger Division, which employs a force of over 150 agents who conduct more than 3 million checks in about a year.
- / Introduction of the possibility to purchase regional e-tickets up to five minutes before the train departs, rather than up to 20 minutes before as was previously the case.
- / Elimination of the requirement of printing monthly passes that are purchased online, allowing passholders to show their passes on an electronic device (e.g., smartphone or tablet).
- / Signing of agreements to create incentives for integrated train+bike mobility.
- / Organisation of the 1st international training day on "Commuter and Regional Train Services". In collaboration with the UIC, the purpose of this event is to explore certain European regional transport issues.

## Cargo Division

- / Establishment of the new company Mercitalia Rail within the single Mercitalia logistics hub, which will give rise to more synergies with other Group companies that handle logistics.
- / Strengthening of the customer care service with the aim of consolidating and improving information provided to customers.

## BUSITALIA - SITA NORD

- / 25 new Euro 6 motorised buses technologically built and equipped with special devices to ensure lower consumption joined the fleet.
- / The Bus & Bike service was set up with the Umbria regional division on the Terni-Scheggino and Spoleto-Norcia lines using buses with bike racks.
- / Busitalia-Sita Nord e-commerce sales were launched for connections to the *The Mall*, allowing customers to buy their tickets online.
- / Co-marketing campaigns were launched to promote events and projects through advertising space made available on board buses, on the website, etc., to give customers the chance to use discounts and promotions for exhibitions, cinemas, trade fairs, etc..
- / Restyling of ticketing offices at the bus terminals in Perugia and Terni

## ATAF GESTIONI

- / Roll-out of new buses in the vehicle fleet (39 Euro 6 diesel vehicles).
- / Activities were completed to monitor consumption, thanks in part to the Mercurio programme for the automated management of energy data to quantify energy savings as a result of actions taken.

## BUSITALIA VENETO

- / Establishment of new urban and suburban connections in Padua and urban connections in Rovigo.
- / Growth in the offer of evening trolley services and roll-out of two new trolleys for more frequent runs.
- / Roll-out of 28 urban and suburban buses with devices that can improve the service offered. Busitalia Veneto will continue upgrading its fleet to EU environmental standards in line with more modern technologies.

## WHAT WE HAVE ACCOMPLISHED

## Train traffic safety

## TRENITALIA

- / Better traceability of maintenance on vehicle safety systems.
- / Continuation of the implementation of systems to measure the temperature of the axle boxes by crew using portable devices.
- / Conclusion of the mapping of hydro-geological and anthropic risks with a potential impact on railway lines.
- / Continued improvement of the IT systems used to manage and monitor activities for maintenance and operating safety.
- / Continuation of activities to equip shunting locomotives with security devices in accordance with ANSF decree no. 1/2015.
- / Continuation of activities to reactivate the system used to control driver vigilance.
- / Continuation of activities to update hardware installed on the computerised brake testing equipment.
- / Conclusion of the project to improve the safety of hazardous cargo transport.
- / Installation of the new door system on "Aln 668/663" vehicles and improvements to the door system on medium-haul and low-floor carriages.
- / Development of predictive maintenance to identify and prevent possible breakdowns before they happen during operation.

## Safety services

## Ferrovie dello Stato Italiane - Company Security

- / Building of approximately 70 new security systems at railway stations located throughout Italy.
- / Start of work sites and activities in preparation for the construction of definitive access gates separating the train operating areas and the commercial areas at the Rome Termini station.

Assistance  
to passengers  
with disabilities

## RFI

- / Extension of assistance for people with reduced mobility, expanding the network of stations where assistance is offered to include the Campobasso, Isernia and Scalea stations and HS passengers using modal exchanges with buses provided by the railway companies to/from: Siena and Perugia (Firenze SMN), L'Aquila (Roma Tiburtina), Potenza and Matera (Salerno), Cortina D'Ampezzo (Venezia Mestre), Courmayeur (Torino Porta Susa) and Madonna di Campiglio (Verona and Trento).
- / Increase in the number of stations in the circuit with lifts to help people in wheelchairs board and deboard (these are necessary when the track is not at the same height as the train's running board), now also installed at Belluno, Cagliari, Campobasso, Isernia, Sassari, Scalea and Villafranca di Verona.
- / Equipping ferries crossing the Messina Strait with lifts.
- / Introduction of a new call centre using VoIP technology, which has considerably improved the efficiency of the telephone channel (national number 199303060 and toll-free number 800906060), raising the percentage of customers who receive responses on their first try to 90%.
- / Advancement of the Infoaccessibilità information service at stations (on the RFI website in the "Station accessibility" section) to provide information on accessibility services and facilities at the main stations in the network.
- / Issue of ReteBlu functions for railway companies and contracting firms.
- / Start of the activation of the PRM-Assistance Booking Tool IT system for international journeys between stations in European networks.
- / Activation of a specific control for the management of complaints relating to assistance services for people with disabilities and reduced mobility.

## WHAT WE HAVE ACCOMPLISHED

**To make use of assets  
for social purposes****RFI**

- / Renewal and signing of new agreements with non-profit organisations and local bodies to grant areas in stations and nearby areas on free loan.
- / Publication of the "Atlas of the discontinued lines" to promote their reuse as greenways by local institutions and bodies.
- / Reactivation or maintenance of secondary lines no longer used for local public transport in historic and scenic areas for the creation of tourist routes on historic trains organised by Fondazione FS.

## WHAT WE AIM TO DO

**Passenger services****RFI**

- / Continuation of works under the 500 stations project in accordance with RFI's business plan for the Easy Station and Smart Station projects.
- / Continuation of the plan to activate the new public information system leC (included in the scope of the Easy Stations project).
- / Equipping the stations included in the FIAB agreement with facilities for bike/train exchanges.
- / Testing of a remote control and management system for lifting plants.

**TRENITALIA***Long Haul Passenger Transport Division*

- / Conclusion of the roll-out of the *Frecciarossa* 1000 fleet.
- / Completion of the conversion of trains used for the Po Valley connection between Turin-Milan-Venice to *Frecciarossa*.
- / Use of the *Frecciarossa* 1000 fleet on the Venice-Romr/Naples/Salerno route.
- / Launch of the double-train *Frecciarossa* 1000 service.
- / Increase in seats offered and connections during peak hours on the most popular routes.
- / Launch of the *Frecciargento* Rome-Genoa via Florence route.
- / Access to the waterway service from the on-board website for mobile devices with Windows software.
- / Completion of the WiFi upgrading project on ETR500 trains with the installation of new, higher performance modems.
- / Creation of a unique experience on the multimedia entertainment services and internet connectivity between stations, *FrecciaClub* and on board trains.
- / Continuation of the project to give the *Frecciabianca* trains a new look.
- / Start of interior restyling on *Frecciabianca* trains.
- / Creation of a new look for *Intercity* and *Intercity* night trains.
- / Inclusion of the travelling cleaning service on longer haul trains and the minibar service on high-capacity trains and universal service trains.

## WHAT WE AIM TO DO

**Passenger services****TRENITALIA***Regional Passenger Division*

- / Extension of the Trenitalia Smart Card - already present in Piedmont and Valle d'Aosta - to other regions as well, beginning with Veneto, Emilia Romagna, Tuscany, Umbria and Lazio.
- / Expansion of the possibility of purchasing tickets and passes online and via apps even using credit with mobile telephone service providers.
- / Creation of automated push notices via apps, with real time information on railway scheduling.

**BUSITALIA - SITA NORD**

- / Activation of an integrated train/bus service to/from the *The Mall* in partnership with Trenitalia.
- / Design of a new connection between the Livorno port and the *The Mall* during the cruise ship season (March - October)
- / Activation of online ticketing systems to purchase tickets for *The Mall* and Volainbus (connection between the city of Florence and the Vespucci airport);
- / Implementation of a new management system for complaints and reports from customers, optimised at both the front and back ends for the alignment of complaints management throughout all Busitalia Group subsidiaries.
- / Redesign of customer satisfaction surveys, using a shared methodology for all Busitalia Group companies.
- / Continuation of the project to integrate the road/railway LPT services operated by Busitalia, Trenitalia and Centostazioni in the Umbria regional division.

**ATAF GESTIONI**

- / The roll-out of 34 new Euro 6 vehicles has been planned to replace the old Euro 2 and Euro 3 buses in 2017.
- / Four automatic ticketing machines will be installed in areas agreed with the University of Florence.



## WHAT WE AIM TO DO

## Train traffic safety

## TRENITALIA

- / Development of the "My bag" app on tablets to implement tools that help drivers reduce the risk of skipping stops

## Safety services

## FERROVIE DELLO STATO ITALIANE - COMPANY SECURITY

- / Construction of five access gates dividing the train areas from the commercial areas at the Roma Termini and Firenze Santa Maria Novella stations and start of designs for similar structures at the Venezia Santa Lucia station.
- / Boosting the ability to identify security glitches in traffic sent online and file sharing via e-mail.
- / Creation of a centralised infrastructure and activation of technical and organisational measures to monitor the status of the Group's logical security.
- / Signing/renewal of agreements between FS S.p.A. and the local branches of the Civil Protection Service.
- / Creation of new integrated security systems installed at high-passenger traffic stations throughout Italy.
- / Installation of fixed and mobile obstacles to prevent cars from illegally accessing the Roma Tiburtina station.
- / Preparation and disclosure of the functional operating procedure for the "Prevention and management of aggression against Company Security personnel" for all such personnel operating on the front line.

Assistance  
to passengers  
with disabilities

## RFI

- / Expansion of the *InfoAccessibilità* stations web service to new stations.
- / Start-up of the new contract for the assistance to people with reduced mobility service, structured in a way that promotes intermodal transport.
- / Development of apps with functions for people with reduced mobility.
- / Publication of the online form to request Sala Blu assistance, which can be accessed from the websites of associations for people with disabilities.
- / Activation of the new channel for booking services for the visually and hearing impaired using chat and videochat functions already existing on the VolP platform.
- / Creation of a new Sala Blu in Rome.
- / Further developments in the ReteBlu IT system functions.

Management  
of reports  
and complaints

## RFI

- / Re-engineering of the IT system to support the "RFI in transit" complaints process and develop new areas and functions, particularly to encourage interaction with the IT systems used to manage complaints of Grandi Stazioni Rail, Centostazioni and railway companies.

Infrastructure sector:  
mobility services

In the period from 1 January 2016 to 10 December 2016, the market has:

- / 39 railway companies with valid railway operation licences issued by the MIT (three of which were valid for traffic originating/ending in Italy)<sup>1</sup>;
- / one railway company with a European railway licence issued by the German authority (TX Logistik);
- / 33 railway companies providing transport services after signing infrastructure use contracts;
- / 41 infrastructure use contracts, broken down as follows:<sup>2</sup>
  - 19 for passenger traffic;
  - 19 for cargo traffic;
  - three for technical train traffic in order to test the rolling stock.

In the period from 11 December 2016 to 31 December 2016, the only changes in the market on the previous period relate to the following:

- / 32 railway companies providing transport services after signing infrastructure use contracts;
- / 39 infrastructure use contracts, broken down as follows:<sup>3</sup>
  - 19 for passenger traffic;
  - 19 for cargo traffic;
  - one for technical train traffic in order to test the rolling stock.

In addition, 21 framework agreements/protocols of understanding were in place at 31 December 2016, broken down as follows:

- / 15 with applicants classified as entities of public interest (13 with regions and two signed with autonomous provinces);
- / three with applicants classified as entities of commercial interest, for cargo transport;
- / three with railway companies, including two for passenger transport on the network and one for cargo transport.

## Service quality

## Trenitalia

## &gt; Complaints management

The complaints management process is as follows:

- / complaints received from customers - online, complaint form or via letter - are forwarded to the IT programme for complaints and assigned to the specific local offices responsible for managing them;
- / 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 fault reported and providing the complaint manager with the information necessary to send a response (if necessary, the customer is asked for additional details);
- / the response is sent and, where appropriate, consideration the seriousness of the fault, the customer is offered a voucher.

<sup>1</sup> Source: Ministry of Infrastructure and Transport - General Railway Transport Department ( <http://www.mit.gov.it/documentazione/impreseferroviarie-titolari-licenza>).

<sup>2</sup> The difference between the number of contracts (41) and the number of railway companies party to such contracts (33) is due to the fact that the railway company Trenitalia has six contracts (cargo, long haul passenger transport (market service), long haul passenger transport (universal service), long haul passenger transport on the HS network, regional passenger transport and technical trains) and the railway companies TUA, Serfer and Ferrovie Udine Cividale have each signed two contracts (which differ depending on the type of service).

<sup>3</sup> The difference between the number of contracts (39) and the number of railway companies party to such contracts (32) is due to the fact that the railway company Trenitalia has five contracts (cargo, long haul passenger transport (market service), long haul passenger transport (universal service), long haul passenger transport on the HS network and regional passenger transport) and the railway companies TUA, Serfer and Ferrovie Udine Cividale have each signed two contracts (which differ depending on the type of service).

## Rete Ferroviaria Italiana

### Customer satisfaction: survey techniques

The standard customer satisfaction surveys are performed monthly on a sample of 755 stations and are integrated by ad-hoc focus groups to gather qualitative information on specific areas or issues:

- the detailed results of the surveys with respect to the indicators subject to monitoring are used

to set local improvement plans, strategic and operational marketing decisions and contracts with companies involved in station management. Within 24 hours of the survey, the data are made available to company management so that if there are any critical issues, immediate solutions can be prepared where possible. The results of the most meaningful indicators of the 90 indicators that are monitored are presented annually in the RFI service charter together with the corresponding objectives.

### CUSTOMER SATISFACTION – SURVEY METHODS

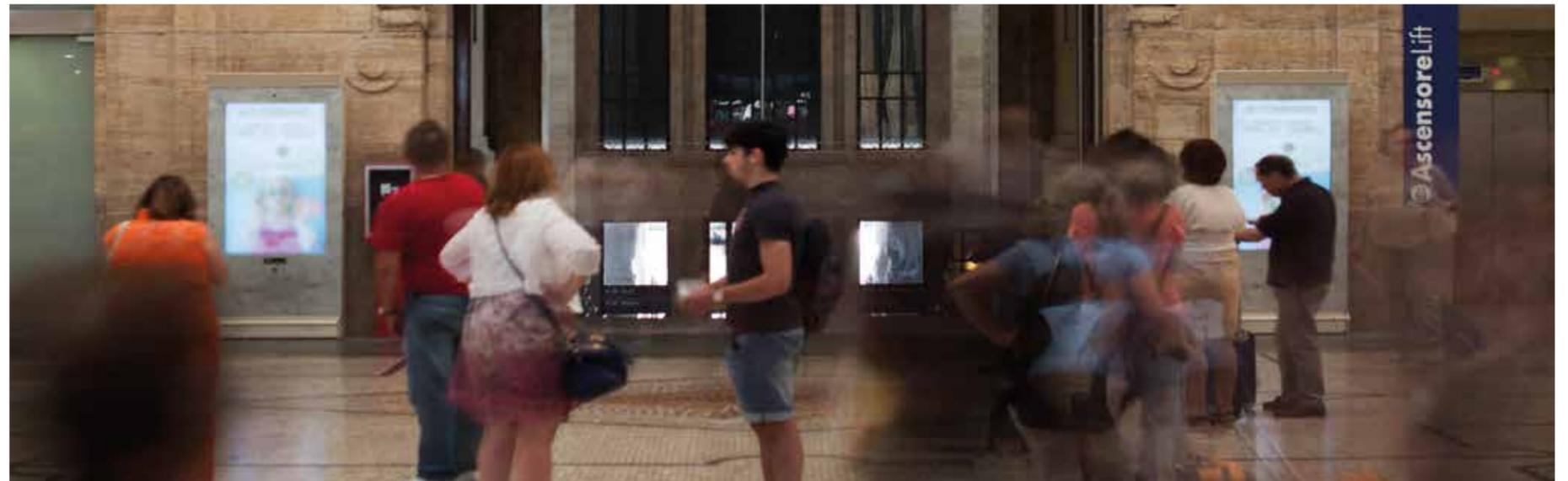
<b>Scope</b>	More than 2,000 RFI stations with active passenger services, which it manages directly and indirectly through Grandi Stazioni and Centostazioni
<b>Target</b>	Departing passengers aged over 14 years old and resident in Italy
<b>Perceived quality annual sample</b>	755 stations, through which almost 95% of passengers travel, belonging to the platinum, gold and silver categories 157,160 interviews
<b>Delivered quality annual sample</b>	755 stations, the same that were surveyed for perceived quality 9,404 mystery customer surveys

### Classification of stations

The four classes are identified as follows:

- platinum:** includes extremely high-traffic stations (over 25,000 average users per day approximately) and high-quality passenger services for long, medium and short haul journeys. Services for HS and specific services for the city and non-passenger users are generally always guaranteed. RFI normally assigns management of platinum to Grandi Stazioni and Centostazioni (the only exceptions being the Milan Porta Garibaldi underground stations which RFI manages directly);
- gold:** includes medium/large high-traffic stations (over 10,000 average users per day approximately) and high-quality passenger services for long, medium and short haul journeys. These stations generally offer services to non-travelling users as well and less frequently provide services for the city. RFI normally assigns management of gold stations to Grandi Stazioni and Centostazioni;
- silver:** includes two types of stations:
  - medium/small stations and stops with high traffic volumes (generally over 2,500 average users per day approximately) and services for long, medium and short haul journeys: they are normally managed by Centostazioni or directly by RFI (for a specific analysis, this category also includes the "Top Silver" sub-category of stations with the highest traffic volumes);
  - medium/small stations and stops with high or very high traffic volumes in urban cities (traffic may exceed 4,000 average users per day), frequently without passenger buildings open to the public, unmanned by RFI personnel and only equipped with regional/metropolitan services. RFI mostly manages these stations or, at times, management is assigned to institutional bodies or non-profit associations based on free loan agreements;
- bronze:** includes small low or very low-traffic stations/stops (generally over 500 average users per day), with no passenger buildings open to the public, unmanned by RFI personnel and only equipped with regional/metropolitan services. They are managed directly by RFI or, at times, management is assigned to institutional bodies or non-profit associations based on free loan agreements.

The classification parameters were recently updated to consider the outcome of the UIC Station Managers Global working group and the shared interest in a single trans-national classification system for public railway stations. The most important changes comprise, inter alia, the extension of the classification criteria to include an assessment of the station's interchange capacity, i.e., the ability of a railway station to connect, interact and operate in an integrated way with other public transport systems.



## Busitalia - Sita Nord

The indicators that the Umbria regional division of Busitalia - Sita Nord uses to monitor the service quality that it delivers are given below.

### PUNCTUALITY AND REGULARITY

100% of trains ran according to schedule, excluding the effects of strikes and force majeure.

Type of service		2016 result	2016 target	2015 result	2016 vs 2015 (%)
LPT urban road service	On-time journeys	95.50%	95.6%	95.6%	-0.10
	Journeys with delays of >5' to <=10'	4.35%	4.3%	4.3%	0.05
	for internal reasons	0.01%	0.0%	0.0%	0.01
	Journeys with delays of >10'	0.15%	0.1%	0.1%	0.05
	for internal reasons	0.01%	0.0%	0.0%	0.01
LPT suburban road service*	On-time journeys	96.50%	96.6%	96.6%	-0.10
	Journeys with delays of >5' to <=10'	3.30%	3.2%	3.2%	0.10
	for internal reasons	0.01%	0.0%	0.0%	0.01
	Journeys with delays of >10'	0.20%	0.2%	0.2%	0.00
	for internal reasons	0.01%	0.0%	0.0%	0.01
Railway service	On-time journeys	37.6%	34.7%	34.7%	2.90
	Journeys with delays of >1' to <=5'	30.2%	35.78%	35.8%	-5.60%
	Journeys with delays of >5' to <=15'	24.6%	24.8%	24.8%	-0.20%
	Journeys with delays of >15'	7.6%	4.7%	4.7%	2.90%
	Km travelled / Km scheduled	99.90%	100%	100%	-0.10%
Waterway service	% journeys arriving on time (0'-5') during peak times	99.20%	97.8%	97.8%	1.40%
	% of journeys arriving on time (0'-5') at other hours	99.99%	100%	100%	-0.01%
	% of actual journeys out of scheduled journeys	100%	100%	100%	0.00%

(\* The slight decrease (-0.1%) in the "on-time journeys" indicator for LPT urban and suburban road transport is substantially due to the greater traffic congestion resulting from non-routine maintenance on the Perugia-A1 motorway connector.

The current performance of railway service punctuality indicators, with particular reference to journeys with delays of more than 15 minutes, is due to limitations arising from the use of the railway infrastruc-

ture that arose in 2015 and 2016<sup>1</sup>. The punctuality data relate to the total railway service, including portions operated using replacement buses.

<sup>1</sup> The interruption of the Umbertide - Città di Castello route from September 2015 to date; the unavailability of tracks at the Perugia Ponte San Giovanni station (since 2015); the introduction of

mitigation measures imposed by ANSF since September 2016 (maximum speed of 70 km/h, stops at railroad crossings without barriers).

### EXTENSION OF THE SALES NETWORK

Type of service		2016 result	2016 target	2015 result
LPT road service*	Resales	1,105	1,146	1,146
	Resales/km network	0.49	0.5	0.5
	Resales/towns served	10.94	11.4	11.4
	Buses with on-board ticket sales with surcharge	100%	100%	100%
Railway service	Resales	57	58	58
	Resales/km network	0.38	0.4	0.4
	Resales/towns served	4.07	4.1	4.1
	Trains with on-board ticket sales with surcharge	100%	100%	100%
Waterway service	Resales	4**	4**	4**
	Resales/berths	1	1	1

(\* Resales are adequately covered locally in relation to network kilometres and municipalities served, although there has been a drop in the absolute number of resales mainly due to the discontinuance of news agent resales in 2016.

(\*\*) including one permanent resale office and three peak season offices; during the peak season, one ticket office is open for each berth.

### ACCIDENT RATE\*

Type of service	2016 result	2016 target	2015 result
LPT road service Accidents suffered	1 per every 84,931 km travelled	1 per every 90,000 km travelled	1 per every 85,078 km travelled
Railway service Accidents suffered	1 per every 570,015 km travelled	1 per every 690,000 km travelled	1 per every 608,222 km travelled
Waterway service Accidents suffered	0	0	0
Alternative mobility Accidents suffered	1 per every 72,877 km equivalent travelled	1 per every 32,000 km equivalent travelled	1 per every 31,776 km equivalent travelled

(\* With respect to the rate of accidents, claims received are substantially due to passengers slipping and falling. Changes in this figure are due to slight increases/decreases in the number of these accidents (+1 in the railway segment, +7 in LPT road transport and -13 in alternative mobility).

### FOCUS ON THE ENVIRONMENT

Type of service	2016 result	2016 target	2015 result
LPT urban road service Vehicle with Euro 2 or higher engines	98.4%	98.1%	98.1%
LPT suburban road service Vehicles with Euro 2 or higher engines	87.9%	87.2%	87.2%
Railway service Electrical traction vehicle combinations	8.2%	8.2%	8.2%

## Suppliers

### Purchase sustainability

The criteria used by various Group companies to select suppliers are described below.

#### FERSERVIZI

Ferservizi uses environmental criteria as rewarding factors in selecting operators to supply goods and services. Following the awarding of the contract, such criteria become contractual clauses to all intents and purposes. The purpose of such environmental criteria is to ensure sustainable use of resources. For example, in 2016, they related to the following:

- / product certification (e.g., Ecolabel and product compliance with ISO 14024 environmental standards);
- / reducing energy consumption (e.g., reducing energy consumption in electric equipment compared to the threshold amount -Energy Star 5.0 certification);
- / noise levels.

#### RFI

Based on the negotiation plan, RFI manages the order procedures with specific tenders, vetting suppliers by verifying that they meet the necessary requirements, or using the "qualification systems" set up pursuant to article 134 of Legislative Decree no. 50/2016, with the aim of identifying operators that meet specific moral, technical and financial requirements, and which are certified in accordance with ISO 9001 standards. Since 2011, RFI has established another supplier qualification requirement, i.e., companies registered with the SQ007 "Control services for vegetation infesting railway areas" system operate with an environmental management system (EMS) that is certified in accordance with UNI EN ISO 14001 standards.

Since 2014, EMS certification has been mandatory for companies/suppliers that have obtained the certification under the following systems:

- / SQ001 "Work on electrical traction and power systems";
- / SQ004 "Work on the railway superstructure".

In general, the standard format for work contracts includes clauses requiring that the contractor, when the project is being approved or during the work, comply with current legislation on the environment and meet the requirements of environmental bodies.

As for the electronic assignment of contracts for work, services and supplies, RFI has continued the expansion of e-procurement system functions "RFI Purchase Portal" to enable online registration with qualification systems and help reduce production and transmission of paper documentation.

For purchases of stone chippings, RFI mainly focuses on increasing the number of mines that have received specific approval from the appointed Technical Department in accordance with the criteria in the technical specifications issued in June 2012, in order to improve the environmental impact.

Furthermore, suppliers of wood sleepers must have obtained FSC® certification.

#### TRENITALIA

Some time ago, Trenitalia introduced specific green procurement policies and initiatives. The "Operating instructions for the management of negotiations" define the criteria for managing environmental aspects in procurement procedures. Furthermore, the Purchase Portal includes a section devoted to green procurement.

Where possible, Trenitalia has included environmental criteria in its supplier vetting procedure, which consist of mandatory requirements and offer evaluation requirements. The latter are given percentage weights that range from a minimum of 0.7% to a maximum of 25%.

A few examples of environmental requirements in tenders:

#### TYPE OF TENDER

#### REQUIREMENTS

Rolling stock cleaning

- / ISO 14001 and OHSAS 18001 certification
- / Priority requirements: use of low environmental-impact products and materials; use of energy-efficient machinery, preparation of environmental and occupational health and safety reports; provision of technical/professional training

Demolition of railway carriages and sale of resulting metal scraps

- / ISO 14001 or EMAS certification

Supply of medium- and high-capacity EMU (Electrical Multiple Units) trains

- / Priority requirements: energy efficiency, soundless and efficient air conditioning

Electrical/electronic re-engineering of high-frequency trains

- / Priority requirements: energy efficiency, ISO 14001 and OHSAS 18001 certification



**ITALFERR**

In contracts in which Group companies are the customer, in addition to the standard contractual clauses, Italferr requires external contractors implement quality, environmental and safety management systems. In particular, Italferr requires that the companies that are assigned the construction works design and implement, for the entire duration of the works, an environmental management system for site activities that provides the company and environmental protection bodies evidence of the environmental control performed during work by the contractor's qualified personnel. These systems provide that, before starting the work, the contractor company prepares, as an extension of the environmental project for setting up the site, an environmental analysis of site activities to identify the material environmental aspects to be managed during the work and to define how to correctly manage environmental surveillance of the site in line with the applicable legislative requirements.

Italferr has applied quality requirements since 1994, environmental management system requirements since 2001 and health and safety management system requirements since 2010. In 2016, Italferr's contractual specifications were revised following the implementation of the changes introduced by the new versions of ISO 14001 and ISO 9001.

**BUSITALIA GROUP**

As part of the assignment of contracts for the supply and maintenance of buses, Busitalia Group has established technical environmental sustainability requirements that must be met as a minimum and, as such, are considered explicit prerequisites for the admissibility of bids, and technical environmental sustainability characteristics that are assessed and scored, accounting for approximately 10% of the maximum points that can be given to a bid.



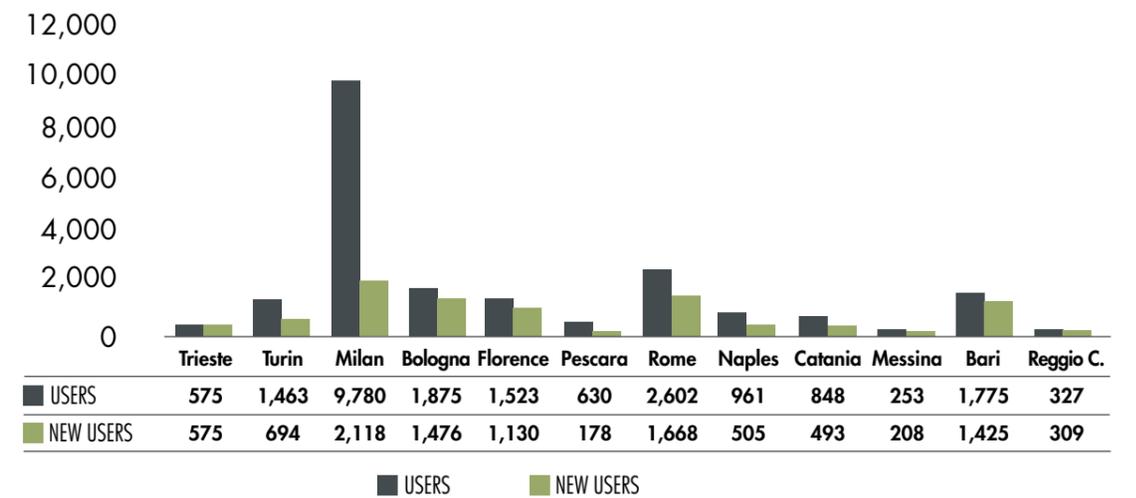
**OUR ROLE IN THE COMMUNITY**

**Solidarity initiatives**

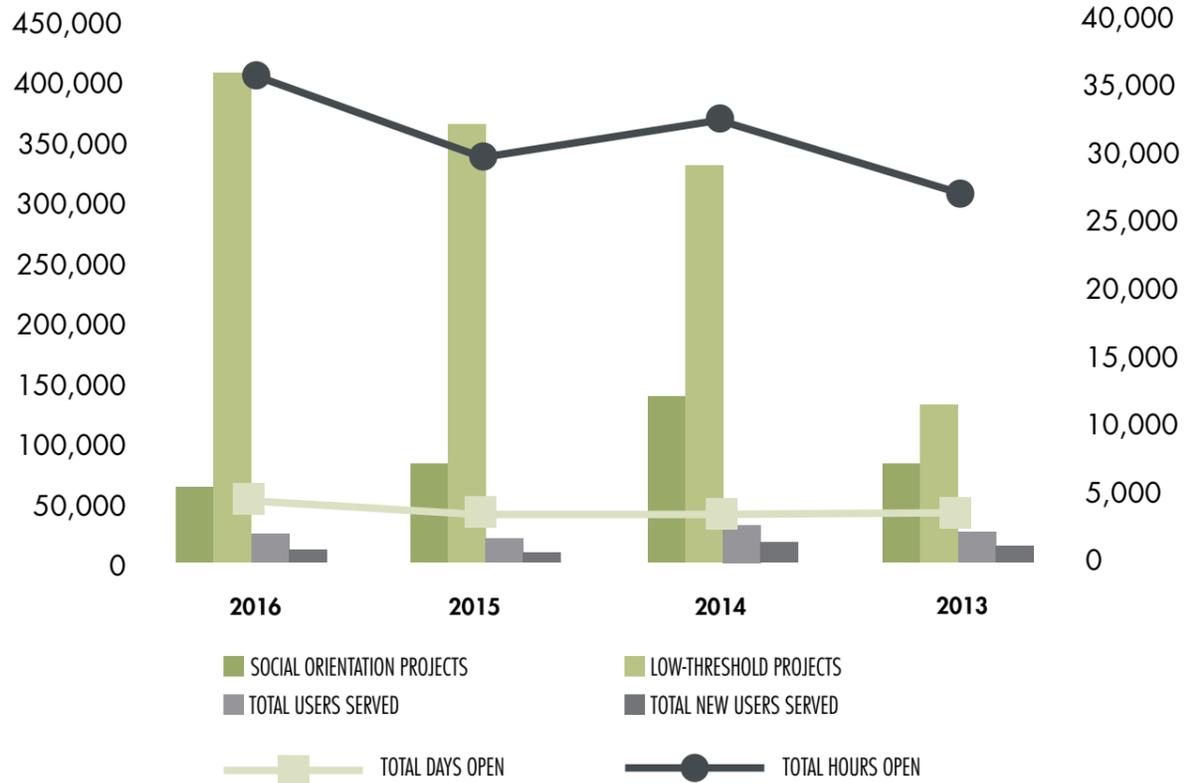
**Help Centers and shelters**

The following charts illustrate the results and most significant analyses of Help Center operations.

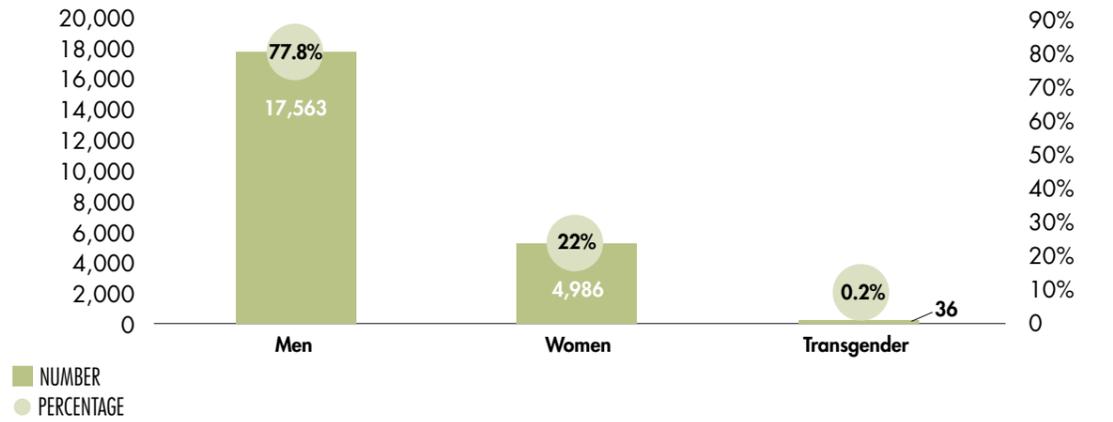
TOTAL REGISTERED ONDS NETWORK CENTRE USERS AND NEW USERS IN 2016



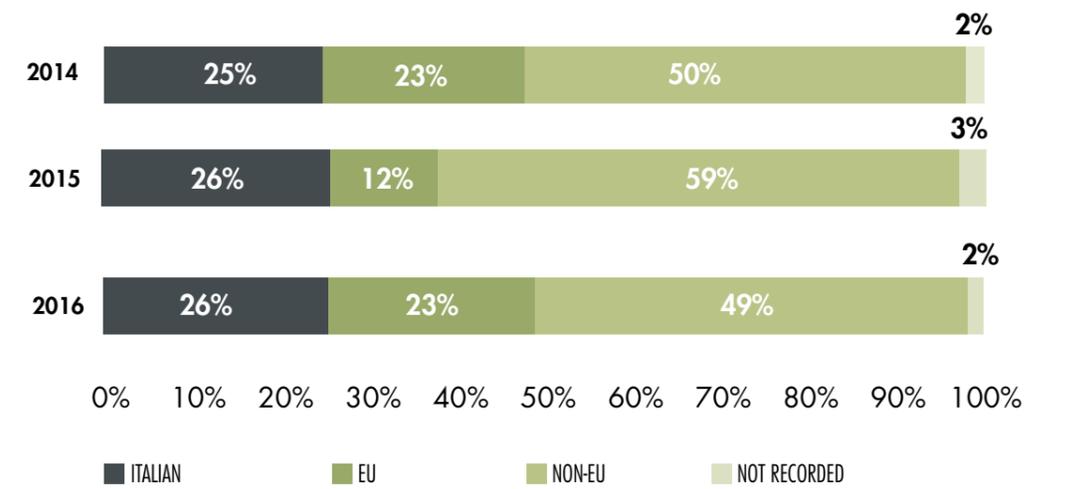
2013-2016 ONDS DATA



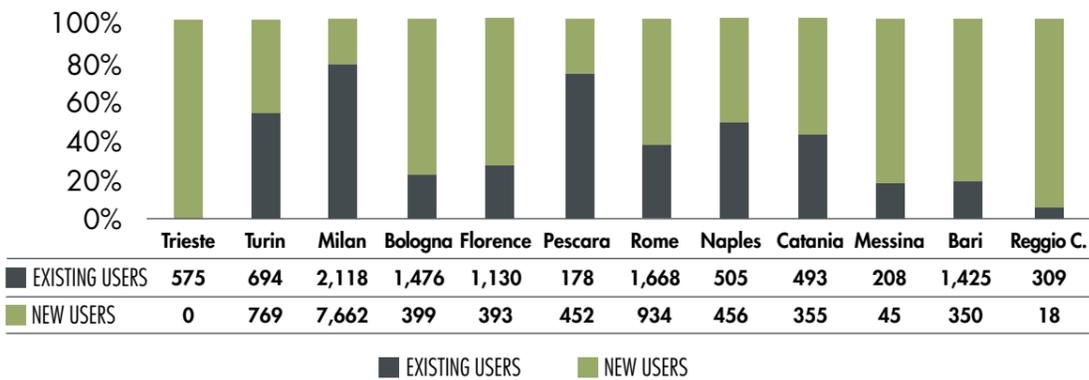
GENDER BREAKDOWN OF ONDS USERS SERVED IN 2016



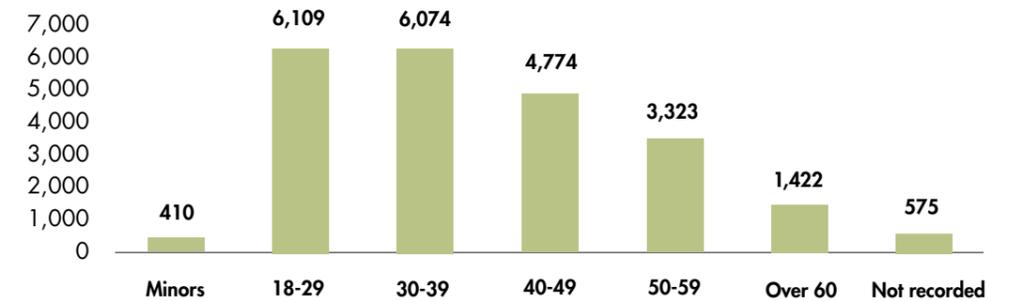
BREAKDOWN OF ONDS USERS SERVED BY NATIONALITY



PERCENTAGE OF EXISTING ONDS USERS AND NEW USERS IN 2016



AGE BREAKDOWN OF ONDS USERS SERVED IN 2016



### Reuse of idle real estate assets and railway lines

Visit the following for an overview of the reuse of areas for social use:

[http://www.fsitaliane.it/cms-file/allegati/fsitaliane/Impegno/Ricerca\\_stazioni\\_impresenziate.pdf](http://www.fsitaliane.it/cms-file/allegati/fsitaliane/Impegno/Ricerca_stazioni_impresenziate.pdf). Furthermore, the following initiatives fall within this scope:

- / **protocol signed with Legambiente:** the Group granted premises at the Potenza Superiore, Pescara Centrale, Brenna-Alzate (Como) and Santo Stino di Livenza (Venice) stations on free loan as part of the Green Station project<sup>1</sup>;
- / **agreement with AIG, the Italian association of youth hostels:** the redevelopment of real estate assets for social purposes and the reuse of idle buildings and areas for tourism, particularly for young people by creating youth hostels<sup>2</sup>.

There are many different ways to use idle lines for social purposes to benefit the local areas and municipalities. Typical examples are the conversion of railway tracks into bike paths or, more

generally, greenways. There have been many cases in which idle lines have been transformed into bike paths (for a total distance of around 160 km) by third parties, after having been transferred to them by FS Italiane Group.

To benefit local mobility in large urban areas, FS Italiane Group has also identified portions of track on residual railway areas, some running alongside operational track, which could be used for bike paths. As they connect urban areas and railway stations, they stand to provide a valid contribution to improving urban mobility. In particular, preliminary studies on two railway hubs in Rome and Milan have shown potential for around 18 km of bike paths in railway areas. Another initiative to use the Group's railway assets for the purposes of tourism has involved dedicating railway routes that are still operational into lines for historic/tourist trains journeys, which benefit the areas they pass through. This reuse preserves the infrastructure's function as a railway and the role of secondary lines, which no longer benefit from significant demand for commercial transport.

<sup>1</sup> The objective of the Green Station project, the result of the protocol of understanding signed by Ferrovie dello Stato Italiane and Legambiente, is to reuse idle areas in railway stations as centres for environmental sustainability, tourism and innovative mobility.

<sup>2</sup> AIG endorses railway transport as the top choice for its members' mobility, offering, inter alia, special tourism packages, "train plus hostel", for schools, families and groups with a special focus on travellers with disabilities.

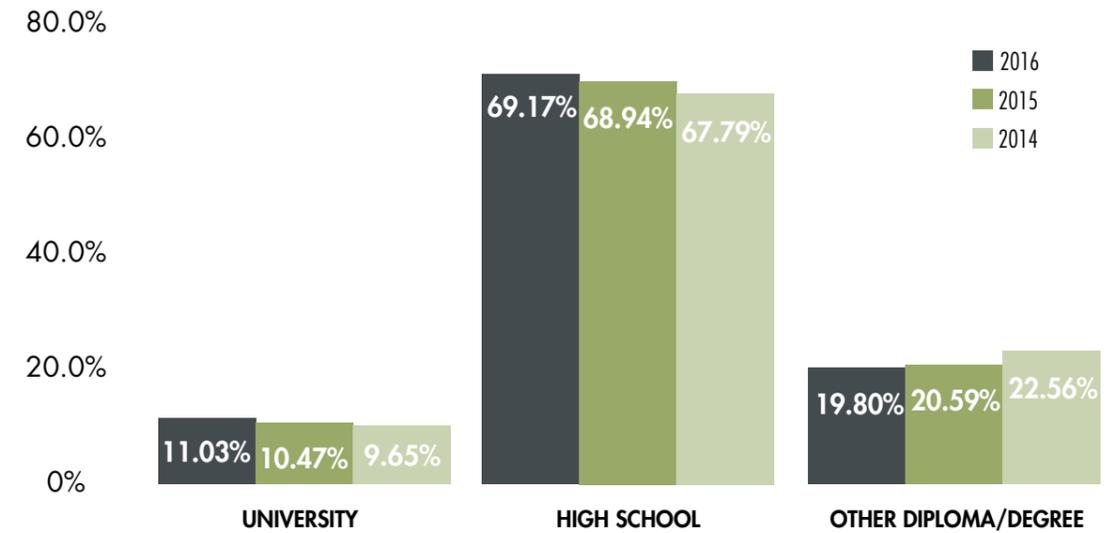


## OUR PEOPLE

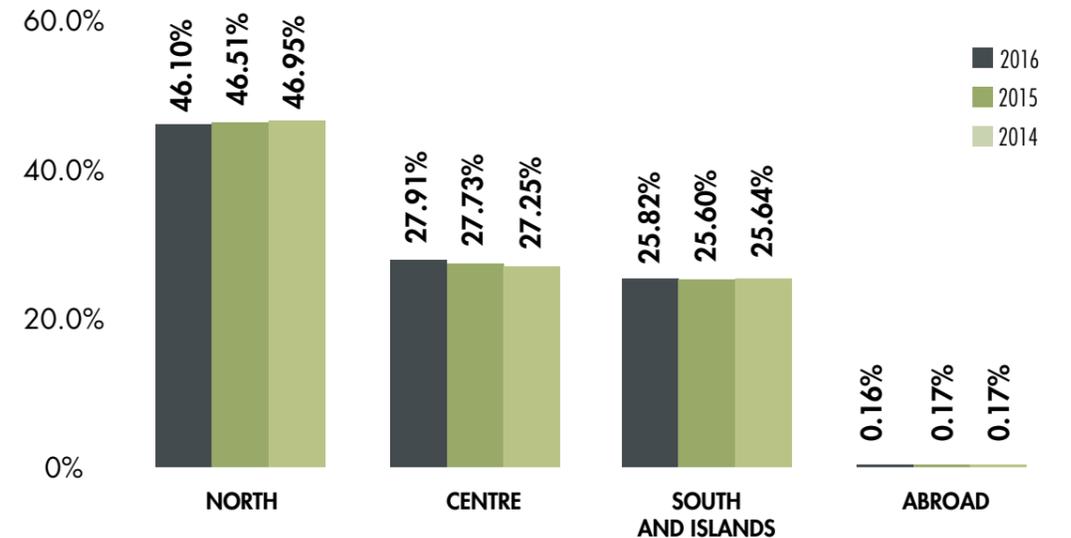
### Workforce breakdown

Additional graphical analyses of workforce breakdown and turnover are provided below.

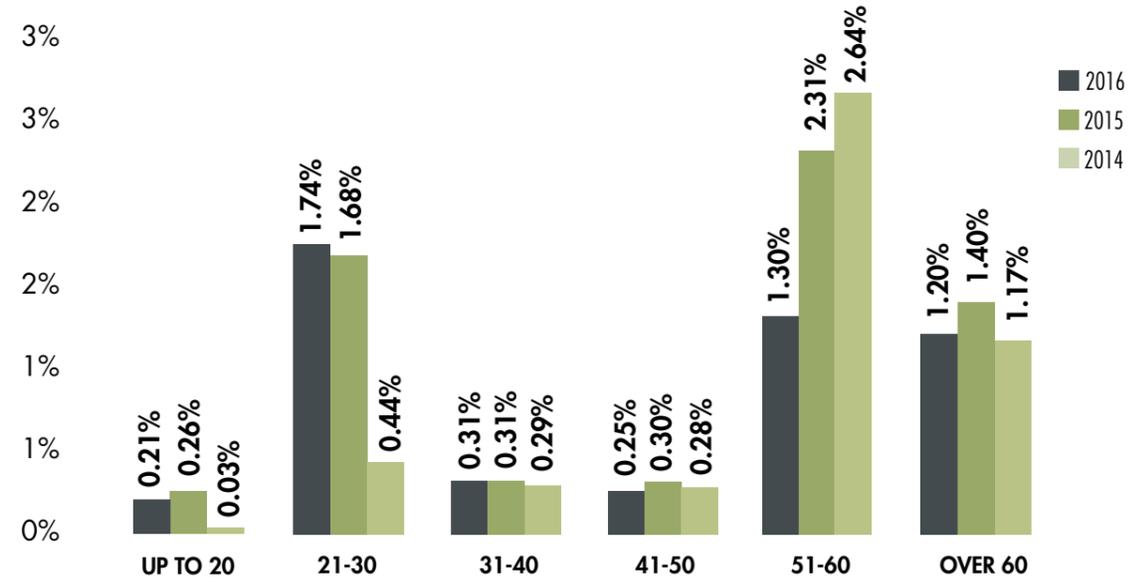
#### BREAKDOWN OF PERSONNEL BY EDUCATION



#### GEOGRAPHICAL BREAKDOWN OF PERSONNEL



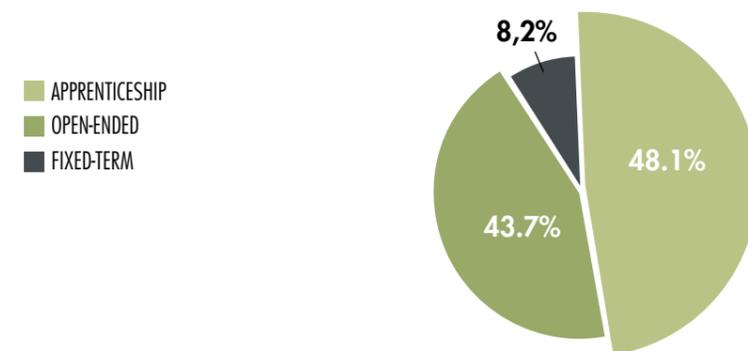
TURNOVER BY AGE GROUP



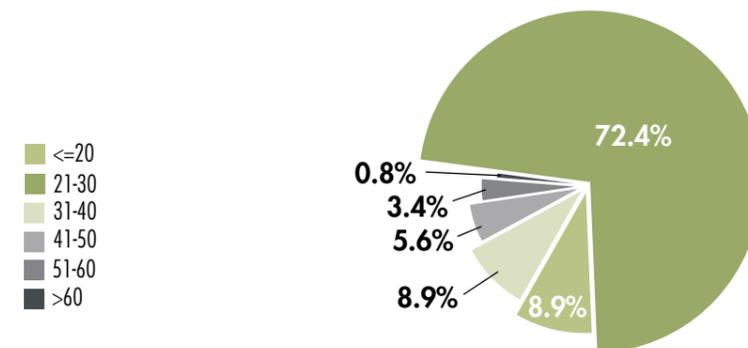
INCOMING/OUTGOING EMPLOYEES BY GENDER IN 2016



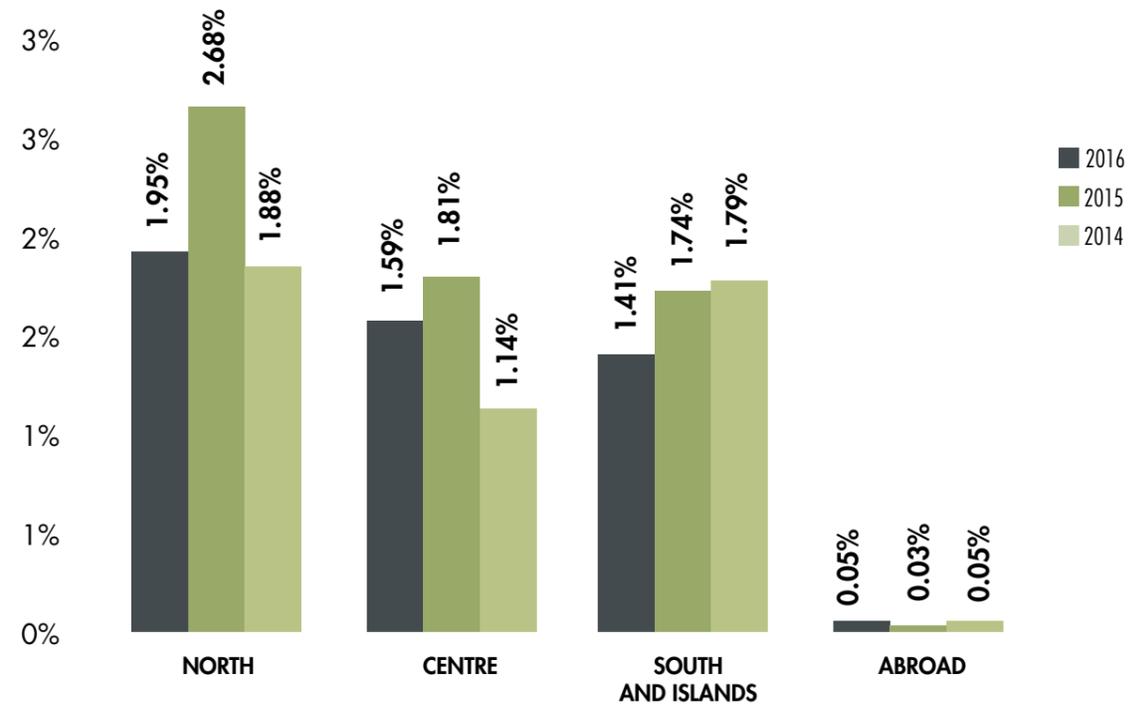
NEW HIRES BY TYPE OF CONTRACT - 2016



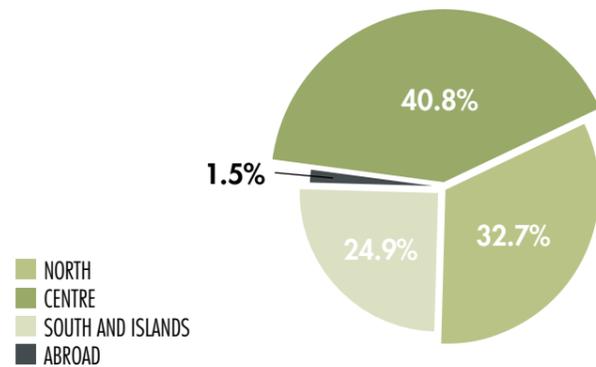
NEW HIRES BY AGE GROUP - 2016



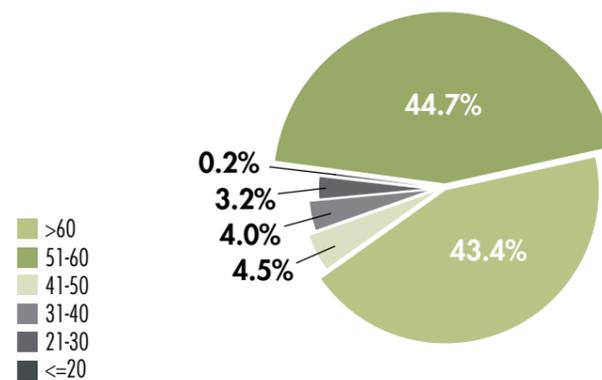
EMPLOYEE TURNOVER BY GEOGRAPHICAL AREA



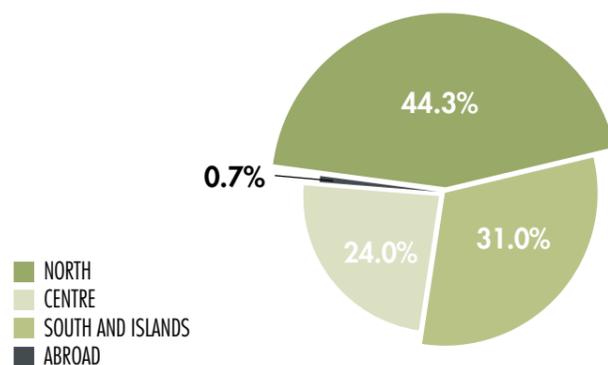
NEW HIRES BY GEOGRAPHICAL AREA – 2016



RESIGNATIONS/DISMISSALS BY AGE GROUP – 2016



RESIGNATIONS/DISMISSALS BY GEOGRAPHICAL AREA – 2016



Human capital

The main training activities performed in 2016 are detailed as follows.

Corporate training

Projects continue for fresh graduates and experts: the induction programme involved approximately 200 young people with training provided in the classroom, site visits - to encourage an understanding of the Group's context and main operating processes - and innovative teaching techniques like learning games - to help young railway workers grow through fun activities - and gamification - in which teams of young people compete in business plan issues.

As in previous years, within the scope of diversity training, training for women returning from maternity leave and their direct supervisors continued to develop a balance between professional and family life (50 women were involved). Furthermore, the year saw the completion of workshops to spread awareness about women's talent, which began in 2015, with another two modules in Rome.

Managerial training

Training for junior managers heading micro-structures continued (100 junior managers were involved in seven training days). The aim was to train them in and develop human resource management aspects with respect to the objective evaluation of people, training and leading work groups, managing motivation, establishing targets and managing feedback with a view to employee development and support.

Management training included participation in workshops and seminars for discussion with external parties, such as institutions and premier

spokespeople on the economic, social and managerial scenario, and the start of training projects on effective communications and leadership with managerial skill training workshops.

Technical/professional training

Technical/professional training, with roughly 320,000 man-days of training provided, focused on imparting and updating specialised know-how for the main professional families.

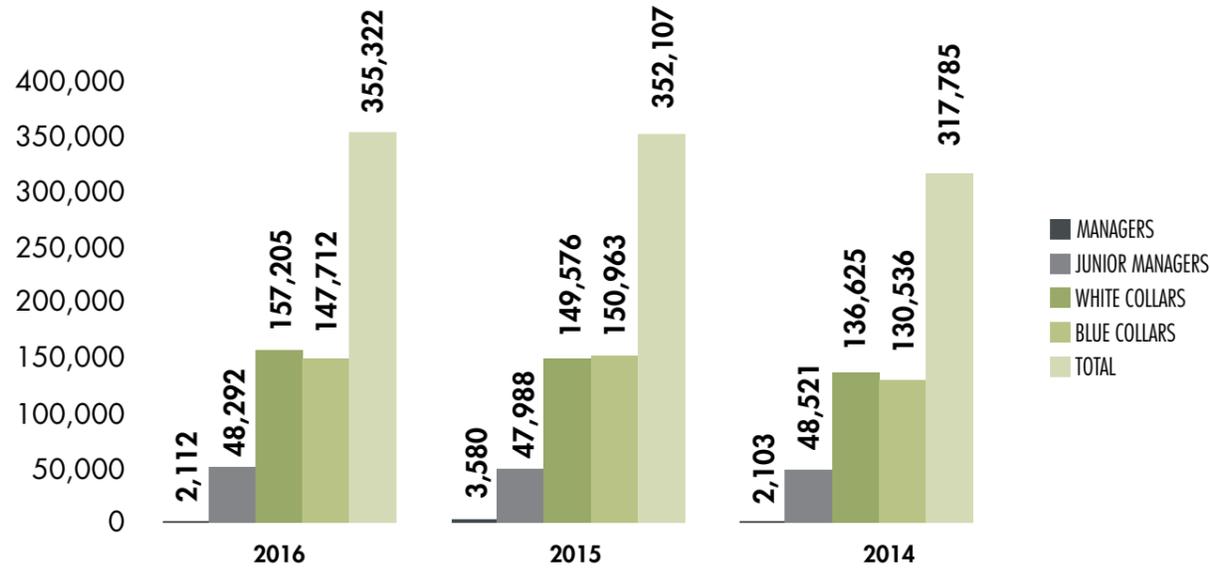
The parent also involved over 500 employees in training and specialised technical refresher courses on administration and financial statements, auditing, sustainability and training for human resources.

The operating companies have focused their training on supporting their respective businesses. As in previous years, technical courses for operating, maintenance and specialisation certification were extremely important. In addition, specific attention was devoted to occupational health and safety with respect to both legislative requirements and conduct and awareness. The project to draw attention to "The Customer" continued, involving about 8,000 trainees. Finally, the Group's engineering company focused on the B.I.M. (Building Information Modeling) project to provide the strategic and operational fundamentals of this methodology, integrated with training on IT tools and international projects, as well as international training (Ethiopian Railways Corporation).

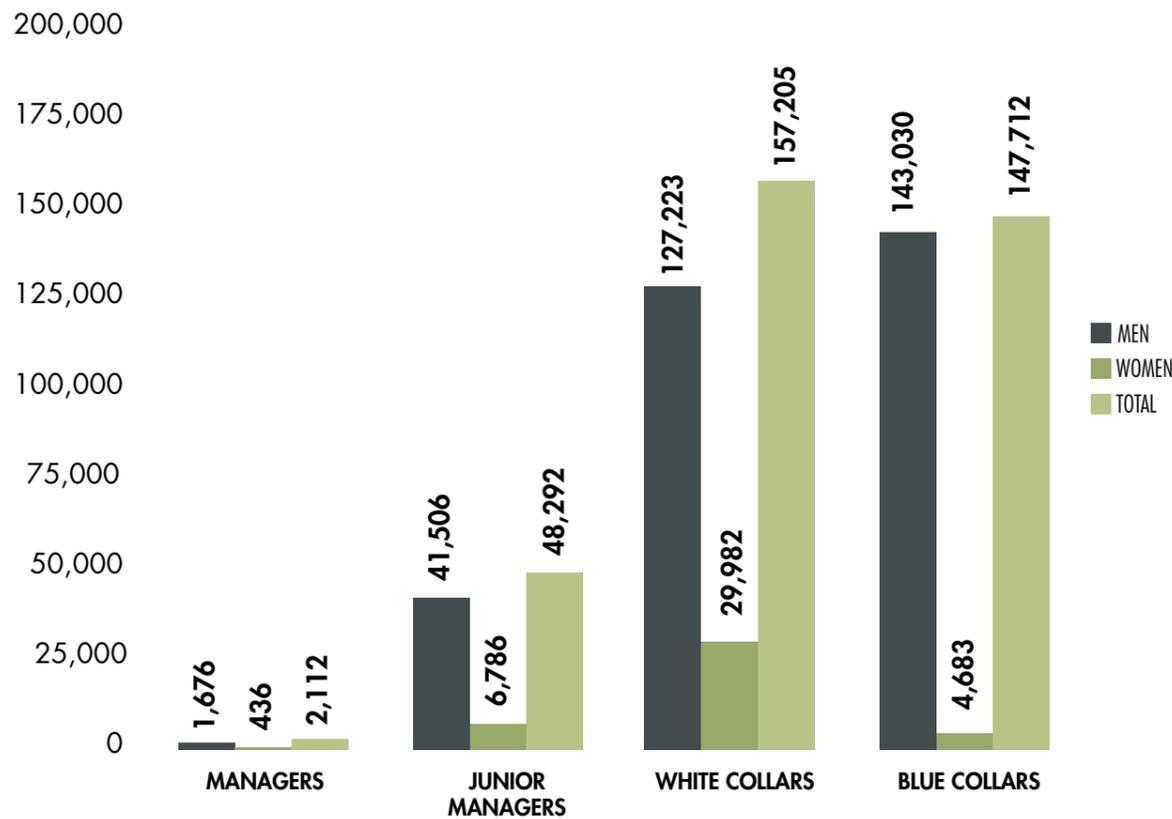
Cross training

Language training increased by 30% on 2015 with substantial growth in both group and individual courses and full-immersion programmes, in line with the internationalisation underway.

TREND IN MAN-DAYS OF TRAINING



MAN-DAYS OF TRAINING BY PROFESSIONAL POSITION



CONTENT INDEX

G4-EC8 G4-32

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Strategy and analysis</b>			
G4-1	✓	✓	Letter to the stakeholders Strategy and objectives Our approach to sustainability Respecting and protecting the environment - our approach 2016 Annual Report ("Macroeconomic context", "Main events of the year", "Notes to the consolidated financial statements - Events after the reporting date")
G4-2	✓	✓	Letter to the stakeholders The Group's sustainability in short Methodology Strategy and objectives Our approach to sustainability The internal control and risk management system Results of operations - highlights Customers – highlights Suppliers – highlights Our role in the community - highlights Our people – highlights Respecting and protecting the environment - our approach Environmental performance – highlights Environmental performance – the Group's main environmental issues Annexes: Individual company attachments 2016 Annual Report ("Risk factors")



GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Organisation</b>			
<b>G4-3</b>	✓		Methodology
<b>G4-4</b>	✓		The business model The transport segment and the reference market
<b>G4-5</b>			The parent, "Ferrovie dello Stato Italiane" (or "FS S.p.A."), is based at Piazza della Croce Rossa, 1, Rome
<b>G4-6</b>	✓		The transport segment and the reference market
<b>G4-7</b>	✓	✓	The business model The governance system 2016 Annual Report ("Notes to the consolidated financial statements - Equity investments"; "Annexes-Scope of consolidation and the Group's equity investments")
<b>G4-8</b>	✓	✓	The transport segment and the reference market Transport: mobility services Infrastructure sector: mobility services 2016 Annual Report ("Market performance and focus on FS Italiane Group")
<b>G4-9</b>	✓	✓	The business model The Group's sustainability in short 2016 Annual Report ("The Group's financial position and performance")
<b>G4-10</b>	✓		Workforce People Care
<b>G4-11</b>	✓		Remuneration and pensions Relationships with trade unions
<b>G4-12</b>	✓		Suppliers' profile and assessment
<b>G4-13</b>	✓	✓	Methodology The business model Suppliers' profile and assessment 2016 Annual Report ("Main events of the year")
<b>G4-14</b>	✓		Land development and protection  The Group applies the precautionary principle in the assessment and management of economic, environmental and social risks
<b>G4-15</b>	✓		Management systems Our approach to sustainability Service quality Travel safety Relationships with trade unions
<b>G4-16</b>	✓		Stakeholders

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Significant aspects and scope</b>			
<b>G4-17</b>	✓	✓	The business model The transport segment and the reference market 2016 Annual Report ("Annexes-Scope of consolidation and Group's equity investments")
<b>G4-18</b>	✓		Methodology
<b>G4-19</b>	✓		Methodology
<b>G4-20</b>	✓		Methodology
<b>G4-21</b>	✓		Methodology
<b>G4-22</b>			Methodology  Any restatements/reclassifications are individually indicated in this document
<b>G4-23</b>	✓		Methodology  Any restatements/reclassifications are individually indicated in this document
<b>Stakeholder engagement</b>			
<b>G4-24</b>			Stakeholders
<b>G4-25</b>	✓		
<b>G4-26</b>			The criteria used to identify stakeholders are as follows: responsibility, influence, proximity, representation, strategy
<b>G4-27</b>			

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Report profile</b>			
<b>G4-28</b>	✓		The reporting period is 2016
<b>G4-29</b>	✓		Methodology
<b>G4-30</b>	✓		Sustainability reports are annual
<b>G4-31</b>	✓		Evaluation survey Email: <a href="mailto:rapportostenibilita@fsitaliane.it">rapportostenibilita@fsitaliane.it</a> Fax: +39 06 644102077
<b>G4-32</b>	✓		Methodology Content index Independent auditors' report  The report was prepared using the "in accordance – Comprehensive" option
<b>G4-33</b>	✓		Methodology Independent auditors' report
<b>Governance</b>			
<b>G4-34</b>	✓		The governance system The internal control and risk management system
<b>G4-35, G4-36</b>	✓		The governance system  Ferrovie dello Stato Italiane SpA establishes and coordinates the Group operating companies' policies and business strategies. It also ensures governance processes made up of divisions to define strategic lines and promote consensus on decisions. Specifically, the Central Strategies, Planning and Sustainability Department is responsible for developing and updating the Group companies' Environmental Management Systems Governance Model and preparing the Sustainability Report. The "Central Brand Strategy and Communication Department" is responsible for social and cultural initiatives, in collaboration with the "Central Strategies, Planning and Sustainability Department"
<b>G4-37</b>			FS SpA manages institutional affairs with the government, considered in the broadest sense (central government, ministries, regions and public administrations in general).  In accordance with current corporate legislation and considering the ownership structure, there are no specific mechanisms available to employees to provide direct recommendations or suggestions to the highest governance body.

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>G4-38</b>	✓	✓	The governance system The internal control and risk management system 2016 Annual Report ("Report on corporate governance and ownership structure - Board of Directors of FS S.p.A.")
<b>G4-39</b>		✓	2016 Annual Report ("Report on corporate governance and ownership structure - Board of Directors of FS S.p.A.")
<b>G4-40</b>	✓	✓	The governance system 2016 Annual Report ("Report on corporate governance and ownership structure - Board of Directors of FS S.p.A.")
<b>G4-41</b>	✓		The governance system The internal control and risk management system In general, directors' interests are governed by article 2391 of the Italian Civil Code and the Code of Ethics of Ferrovie dello Stato Italiane Group which prevents the Group's employees, when performing their duties, and the directors of each company from taking decisions or operating against the Group's interests or breaching their official duties. Any situation in contrast with said provision shall be reported to the relevant managers or the Ethics Committee. <a href="http://www.fsitaliane.it/fsi/Chi-Siamo/Governance/Codice-Etico">http://www.fsitaliane.it/fsi/Chi-Siamo/Governance/Codice-Etico</a>
<b>G4-42</b>	✓	✓	The internal control and risk management system 2016 Annual Report ("Report on corporate governance and ownership structure") - The BoD proposes changes to the by-law's, including the business object, to the shareholders' meeting - The BoD is responsible for defining, upon proposal of the CEO, the Company's and the Group's strategic lines - By setting up the Audit, Risk Control and Corporate Governance Committee, the BoD also entrusted the latter with the responsibility for expressing an opinion on specific issues related to the identification of the main business risks, including in respect of the strategic plans and initiatives to be submitted to the BoD's proposal (e.g., strategic, business and financial plans, non-recurring transactions, etc.).
<b>G4-43</b>		✓	2016 Annual Report ("Report on corporate governance and ownership structure") Reference is made to the by-laws or the legislation that directly applies to the company with respect to the measures adopted to ensure that the highest governance body is aware of economic, environmental and social issues (e.g., reports from the CEO on the exercise of powers in the performance of duties, Group activities and atypical or unusual transactions; prior information from the CEO on all transactions that are financially strategic and/or significant; periodic reporting on the implementation of the business plan; periodic reporting, at least half yearly, by the board's committees).
<b>G4-44</b>	✓	✓	The governance system 2016 Annual Report ("Report on corporate governance and ownership structure")

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
			<p>The governance system The internal control and risk management system 2016 Annual Report ("Report on corporate governance and ownership structure")</p> <p>Projects with a significant impact on the Group's performance are brought to the Board of Directors' attention, which analyses the related risks and opportunities. Furthermore, the BoD confirmed the setting up of an Audit, Risk Control and Corporate Governance Committee responsible for supporting the board's internal control and risk management assessments, the Company's and the Group's corporate governance and social responsibility, by presenting proposals and providing advisory activities. Moreover, the BoD periodically receives a report from the Central Internal Audit Department that describes the activities carried out by all the Group's internal audit departments in relation to internal control system assessments.</p>
<b>G4-45, G4-46</b>	✓	✓	<p>With respect to the internal control and risk management system, the Board of Directors is responsible for the following duties, which it carries out subject to the Audit, Risk Control and Corporate Governance Committee's approval:</p> <ul style="list-style-type: none"> <li>- defining the guidelines for the internal control and risk management system so that the main risks related to FS S.p.A. and the companies it controls are fully identified and adequately measured, managed and monitored;</li> <li>- identifying the degree of compatibility of the above risks with business management that is in line with the company's strategic goals and financial risk appetite;</li> <li>- assessing, at least annually, the adequacy of the internal control and risk management system against business characteristics and the risk profile in force, as well as the efficiency of said system;</li> <li>- approving, at least annually, the work plan prepared by the head of the Internal Audit Department, after consulting the Board of Statutory Auditors;</li> <li>- assessing, after consulting the Board of Statutory Auditors, the results as described by the independent auditors in the management letter, if any, and the report on the main issues that arose during the legally-required audit.</li> </ul>
<b>G4-47</b>			<p>The following is noted in addition to the information reported in the G4-43, G4-44, G4-45 and G4-46 indicators:</p> <ul style="list-style-type: none"> <li>- the Internal Audit, Risk Control and Corporate Governance Committee reports at least twice a year on its activities and on the adequacy of the internal control and risk management system;</li> <li>- FS S.p.A.'s Supervisory Body reports to the BoD and the Board of Statutory Auditors twice yearly on activities performed during the reporting period;</li> <li>- FS S.p.A.'s Supervisory Body reports to the BoD Chairwoman and the CEO on any violations of the organisational model pursuant to legislative decree no. 231/01 that have been identified or that could make it advisable to take urgent measures.</li> </ul>
<b>G4-48</b>	✓		<p>Methodology The BoD approves the Sustainability Report</p>

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>G4-49</b>			<p>The head of the Internal Audit Department is responsible for reporting any critical issues to the highest governance body. Accordingly, the head of the Internal Audit Department periodically reports on the progress of operational activities carried out by all internal audit functions and indicates any findings requiring immediate attention. Furthermore, internal procedures also provide for urgently "reporting critical concerns" to the highest governance body concerning facts and circumstances identified during internal audit activities which require immediate action prior to the issue of the final report. FS S.p.A.'s Supervisory Body pursuant to Legislative decree no. 231/2001 also reports to the highest governance body. Finally, at the end of 2016, a project was launched to identify the best organisational and functional structure for the Group's Internal Audit Department. This project is slated for completion in the first half of 2017.</p>
<b>G4-50</b>			<p>The audit activities completed in 2016 did not indicate any facts or circumstances that would entail the need to report in advance any "critical concerns" to the highest governance body. In any event, in the performance of the internal audit activities completed in 2016, there were 383 internal audit findings requiring an improvement action plan. The improvement action plans were defined by the relevant managers and include indication of those responsible for implementing them and the schedules for their completion. Some of these internal audit findings can be classified as structural weaknesses of the internal control system (ICS*); while others - constituting most of the findings - can be classified as individual episodes of non-compliance or inappropriate conduct. Approximately 60% of the corrective action identified for the above findings had been completed by year end, while around 40% at the same date was still underway. The progress of corrective action is constantly monitored and reported to the highest governance body as part of routine reports to that body.</p> <p>A project was launched at the end of 2016 to improve the organisational and functional structure of the Group's internal audit department. It will be completed within the first half of 2017.</p> <p>*The ICS is the set of tools available to the highest governance body to carry out governance activities. The current procedures define the ICS as the "organised, systemic system of resources, internal rules and operating procedures to achieve company objectives, ensuring the effectiveness and efficiency of operations and compliance with laws, regulations and contracts".</p>

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>G4-51</b> <b>G4-52</b>	✓	✓	Remuneration and pensions 2016 Annual Report ("Report on corporate governance and ownership - Board of Directors of FS S.p.A. - Directors' remuneration")
<b>G4-53</b>			To date, no stakeholder involvement mechanism is in place with respect to remuneration policies
<b>G4-54</b>			The ratio of the annual remuneration of the person with the highest pay compared to the median annual remuneration of all employees is 20.69
<b>G4-55</b>			The year-on-year percentage change in the annual remuneration of the highest-paid individual was -0.36%; The year-on-year percentage change in the median annual remuneration of other personnel was +0.11%
<b>Ethics and integrity</b>			
<b>G4-56</b>	✓	✓	Our approach to sustainability The governance system 2016 Annual Report ("Report on corporate governance and ownership structure-Profile and values")  <a href="http://www.fsitaliane.it/content/fsitaliane/en/about-us/governance/code-of-ethics.html">http://www.fsitaliane.it/content/fsitaliane/en/about-us/governance/code-of-ethics.html</a>  Although the recommendations of the code of conduct which listed companies adopts on a voluntary basis do not apply to the company, it applied the provisions of said code to some governance aspects, specifically, setting up the two FS board committees: the Audit, Risk Control and Corporate Governance Committee and the Remuneration and Appointment Committee
<b>G4-57</b>			As reported in the Group's Code of Ethics, "The Group is committed to replying to suggestions and complaints from customers and consumer associations, using suitable and timely communication systems (post, e-mail, fax, call centre and the website). To this end, specific structures are devoted to this type of communication and provide explanations or resolve problems as the need arises with individual customers". Furthermore, the Code of Ethics establishes that "Personnel is also required to: - [...]; - report to their supervisors or the Ethics Committee for any necessary clarifications on how to interpret or implement the clauses of the Code; - [...]."  *An update to the Group's Code of Ethics began in 2016. In particular, with Group measure no. 215/AD of 29 November 2016, the CEO and General Manager of FS S.p.A. set up a work Group to support Ferrovie dello Stato Italiane's Ethics Committee in reviewing the current Code of Ethics and, if appropriate, updating it to strengthen its anti-corruption controls where necessary.

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>G4-58</b>			Under the Code of Ethics, anyone (employees, customers, suppliers and freelancers) who become aware of unlawful conduct or violations of the Code by any of the parties with which the Group operates, is required to inform - in writing and not anonymously - the Ethics Committee of their respective company or the parent's Ethics Committee. The confidentiality of the reporting party is ensured, without prejudice to legal obligations. With respect to whistle blowing, the confidentiality of the whistleblower is ensured and management is committed to preventing any type of retaliation against the whistleblower.  Additional whistleblowing obligations are those in place with the Supervisory Body pursuant to Legislative decree no. 231/2001 set forth in the Group companies' organisational models. In particular, the organisational models include indication of the email addresses (which concurrently forward the information to all members of the body) and the physical addresses to use when sending the relevant bodies complaints and reports of violations of the models or suspected crimes covered by Legislative decree no. 231/2001. Senders of these types of reports are also protected against any form of retaliation, discrimination or penalisation and their confidentiality is guaranteed, except where disclosure is required by legal obligation or to protect the rights of the company or the people involved.



## GRI INDICATORS

SUSTAINABILITY  
REPORTANNUAL  
REPORT

## REFERENCE/COMMENTS

## Financial aspects

## G4-DMA

Letter to the stakeholders  
The business model

The planning and management control system ensures consistency with the strategic guidelines and goals set by the Board of Directors. For additional information, reference should be made to the paragraph "The internal control and risk management system".

Through a Group measure, the parent defined the principles and the criteria that each company must comply with to ensure consistent and common processes within the Group in relation to capital expenditure and the divestment of property, plant and equipment which are no longer useful. Specifically, it defines the guidelines for the processes concerning the approval of the Investment and Divestment Plan, the authorisation, control, re-authorisation, if any, and termination of investment/divestment programmes/projects.

The investment and divestment management process focuses on the company's explicit and independent authorisation of each programme/project. Consequently, the approval of the Investment and divestment plan does not require the authorisation of individual programmes/projects. In this respect, the Plan coincides with the strategic consolidation of investment/divestment strategies, at both company and Group level.

The parent is responsible for defining and checking the correct application of the rules governing the approval, authorisation and control processes, including by monitoring the correct execution of the approved investment/divestment programmes/projects.

Responsibility for the authorisation and re-authorisation processes of individual investment/divestment programmes/processes rests with individual companies. When the programmes/projects cover the Group, as detailed below, the parent's preliminary approval is necessary.

The Group's Investment Committee approves the strategic, economic and financial aspects of the Group's Investment and Divestment Plan/Budget and validates the list of the Group's significant investment/divestment programmes/plans, previously identified by the Central Strategies, Planning and Systems Department (CSPSD), as well as the parameters necessary for the financial evaluation of each company's initiatives.

The process that the Group began in 2015 to analyse and subsequently improve the sustainability performance of its supply chain continued in 2016 with the distribution of a self-assessment questionnaire to the companies' strategic suppliers and the beginning of initial audit activities.

Procurement policies  
Suppliers' profile and assessment

Methodology - Materiality matrix

## Economic performance

G4-EC1	✓		Economic highlights Solidarity initiatives
G4-EC2		✓	2016 Annual Report ("Risk factors") To date, Group management has not estimated the possible financial impact of climate change.
G4-EC3	✓	✓	Remuneration and pensions 2016 Annual Report ("Notes to the consolidated financial statements - Post-employment benefits and other employee benefits")
G4-EC4	✓	✓	Investments 2016 Annual Report ("Main events of the year")

## GRI INDICATORS

SUSTAINABILITY  
REPORTANNUAL  
REPORT

## REFERENCE/COMMENTS

## Market presence

## G4-EC5

✓

Remuneration and pensions

## G4-EC6

✓

Workforce

As the Group is mainly active in Italy, this indicator is of little significance.

## Indirect economic impacts

## G4-EC7

✓

Investments  
Solidarity initiatives

## G4-EC8

✓

Our approach to sustainability  
Solidarity initiatives

## Supplies

## G4-EC9

✓

Suppliers' profile and assessment

## Environment

## G4-DMA

Respecting and protecting the environment - our approach  
Management systems

The Group's commitment to managing environmental aspects is described in the Environmental policy:  
<http://www.fsitaliane.it/content/fsitaliane/en/commitment/environmental-commitment/environmental-policy.html>

Methodology - Materiality matrix

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Materials</b>			
G4-EN1	✓		Land development and protection At present, the percentage of non-renewable resources used cannot be identified.
G4-EN2	✓		Land development and protection At present, the percentage of materials used that are recycled input materials cannot be identified.
<b>Energy</b>			
G4-EN3	✓		Energy Land development and protection The Group companies' owned photovoltaic plants generate and transmit to the electrical grid roughly 1,200 GJ of energy.
G4-EN4	✓		Energy Land development and protection
G4-EN5	✓		Energy
G4-EN6	✓		Energy
G4-EN7	✓		Energy
<b>Water</b>			
G4-EN8	✓		Other impacts Land development and protection
G4-EN9	✓		Other impacts Land development and protection
G4-EN10	✓		Other impacts
<b>Emissions</b>			
G4-EN15	✓		Emissions
G4-EN16	✓		Emissions
G4-EN17	✓		Emissions
G4-EN18	✓		Emissions
G4-EN19	✓		Emissions
G4-EN20	✓		Emissions
G4-EN21	✓		Emissions

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Waste and discharges</b>			
G4-EN22	✓		Land development and protection Other impacts
G4-EN23	✓		Land development and protection Waste management
G4-EN24	✓		Land development and protection Other impacts There were no significant spills in 2016.
G4-EN25	✓		Land development and protection Waste management
G4-EN26	✓		Land development and protection Other impacts There are no discharges in protected areas.
<b>Products and services</b>			
G4-EN27	✓		Environmental performance
<b>Compliance</b>			
G4-EN29	✓		Compliance In 2016, no significant administrative or legal fines were imposed for violation of environmental regulations or laws.
<b>Transport</b>			
G4-EN30	✓		Emissions
<b>Overall</b>			
G4-EN31	✓		Land development and protection Environmental performance – the Group's main environmental issues Noise Other impacts
<b>Supplier environmental assessment</b>			
G4-EN32	✓		Procurement policies Suppliers' profile and assessment Sustainable purchases
G4-EN33	✓		Suppliers' profile and assessment In 2016, there were no significant negative events caused by real or potential environmental impacts related to the Group's supply chain.

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Environmental complaints mechanisms</b>			
<b>G4-EN34</b>			The Group received 492 complaints in 2016, all of which were considered by the Group companies, and 458 of which were resolved in the reporting period. 48 complaints received before the reporting period were resolved in 2016.
<b>Social</b>			
<b>Employment practices and adequate working conditions</b>			
<b>G4-DMA</b>			<p>The Group manages and organises human resources in full compliance with the rights established by the law and the Code of Ethics which it adopted and which expressly states: "human resources are the Group's main assets". Through the Code of Ethics, Ferrovie dello Stato Italiane Group formally and substantially commits to operate without any distinction whatsoever on grounds of gender, race, language, religion, political opinion, personal or social origin. Furthermore, thanks to the Equal Opportunities Committee, the Group also undertakes to promote actions that provide female workers with more favourable conditions and greater opportunities.</p> <p>The Group constantly spreads, strengthens and updates prevention measures in accordance with ruling legislation, promotes responsible behaviour by all personnel and regularly introduces new training and best practice tools. Furthermore, the Group's main companies implemented OHSAS 18001-certified management systems.</p> <p>The Group is constantly committed to supporting the professional growth of its resources. As the parent, Ferrovie dello Stato Italiane plans and provides Group companies with cross training. Furthermore, each Group company ensures the professional growth and updating of its resources by offering specific business courses.</p> <p>Our approach to sustainability</p> <p>Management systems  <a href="http://www.fsitaliane.it/content/fsitaliane/en/about-us/governance/code-of-ethics.html">http://www.fsitaliane.it/content/fsitaliane/en/about-us/governance/code-of-ethics.html</a>            Methodology - Materiality matrix</p>
<b>Workforce</b>			
<b>G4-LA1</b>	✓		Workforce
<b>G4-LA2</b>	✓		Remuneration and pensions
<b>G4-LA3</b>	✓		Relationships with trade unions There is a 100% rate of return to work after parental leave. There is a 100% retention rate after parental leave except for voluntary resignation.
<b>Relationships with trade unions</b>			
<b>G4-LA4</b>	✓		Relationships with trade unions

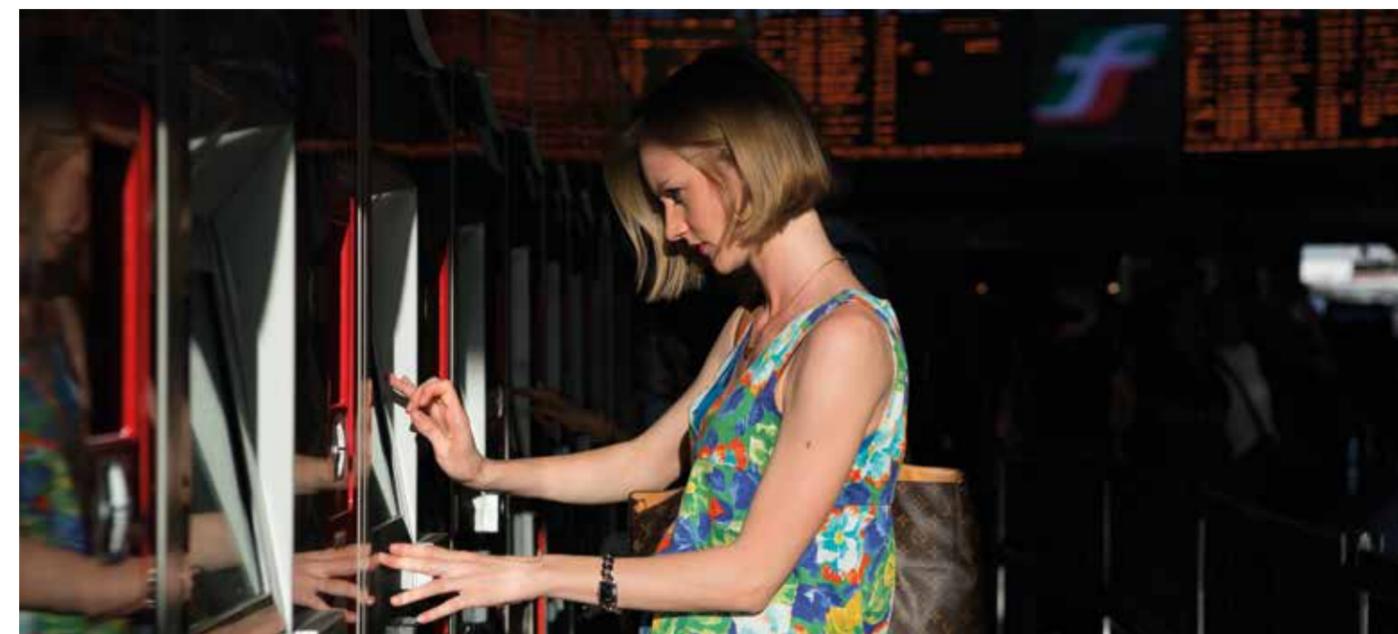
GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Occupational health and safety</b>			
<b>G4-LA5</b>			A Health and Safety Committee has not yet been set up.
<b>G4-LA6</b>	✓		Health and safety Relationships with trade unions  All data refer to INAIL statistics which, to calculate the days lost due to injury, consider that compensation is paid for all calendar days from the third day of absence. INAIL's seriousness index does not provide for a breakdown of data by gender.  In 2015, the last year of available data, the frequency of occupational diseases reported (i.e. mp = number of occupational diseases reported/average workforce x 1000) was 2.7 (scope: RFI, Trenitalia, Italferr, Ferservizi, FS, Italcertifer and FS Logistica). Disease prevention measures include an important scheme of regular health monitoring by Group doctors in accordance with the occupational health and safety and train traffic safety legislation. Specifically, in 2016, 50,312 employees underwent at least one medical check-up.
<b>G4-LA7</b>	✓		Health and safety
<b>G4-LA8</b>	✓		Relationships with trade unions
<b>Training and education</b>			
<b>G4-LA9</b>	✓		Human capital
<b>G4-LA10</b>	✓		Workforce Human capital Remuneration and pensions
<b>G4-LA11</b>	✓		Human capital
<b>Diversity and equal opportunities</b>			
<b>G4-LA12</b>	✓		The governance system Workforce People care  57% of the members of FS S.p.A.'s BoD are women and are over 50 years of age, while the remaining 43% are men aged 30 to 50.  The Group is compliant with current regulations regarding protected groups of people.
<b>Equal remuneration for women and men</b>			
<b>G4-LA13</b>	✓		Remuneration and pensions

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Supplier assessment for labour practices</b>			
<b>G4-LA14</b>	✓		Suppliers' profile and assessment FS Italiane Group includes compliance with current labour laws as part of its supplier vetting process.
<b>G4-LA15</b>	✓		Suppliers' profile and assessment In 2016, there were no significant negative events caused by real or potential impacts related to employment policies concerning the Group's supply chain.
<b>Labour practices grievance mechanisms</b>			
<b>G4-LA16</b>			In 2016, 1,172 letters of formal notice were received in connection with labour law claims from the employees of the Group companies, their former employees or contractors' employees. Almost all complaints become legal disputes.
<b>Human rights</b>			
<b>G4-DMA</b>			
The Code of Ethics is a charter of fundamental rights and responsibilities whereby Ferrovie dello Stato Italiane Group establishes and clarifies its responsibilities and commitments to internal and external stakeholders. Our approach to sustainability <a href="http://www.fsitaliane.it/content/fsitaliane/en/about-us/governance/code-of-ethics.html">http://www.fsitaliane.it/content/fsitaliane/en/about-us/governance/code-of-ethics.html</a>			
<b>Investments</b>			
<b>G4-HR1</b>			FS Italiane Group makes its purchases in accordance with EU Directives, as implemented by the Contracting Code, and its own "Regulation for Negotiations with Group companies", issued on 27 March 2012. 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 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. As reported in the Code of Ethics, the FS Group safeguards and promotes human rights in all areas of operation, creating equal opportunities for its people and fair treatment for all, regardless of race, nationality, political opinions, religion, gender, age, ability, sexual orientation and personal or social conditions.
<b>G4-HR2</b>			No specific training is provided in relation to human rights.

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Non-discrimination</b>			
<b>G4-HR3</b>			During the year, there were no incidents of discrimination (related to race, nationality, political opinions, religion, gender, age, ability, sexual orientation and personal or social conditions) involving internal and/or external stakeholders.
<b>Freedom of association and bargaining</b>			
<b>G4-HR4</b>			All Group contracts require the full acceptance of the Code of Ethics. There are no suppliers or activities in which the freedom of association and collective bargaining is exposed to significant risk.
<b>Child labour</b>			
<b>G4-HR5</b>			All Group contracts require the full acceptance of the Code of Ethics. There are no suppliers or activities with significant risk of child labour.
<b>Forced labour</b>			
<b>G4-HR6</b>			All Group contracts require the full acceptance of the Code of Ethics. There are no suppliers or activities with significant risk of forced labour.
<b>Safety practices</b>			
<b>G4-HR7</b>			No specific training is provided about 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.
<b>Rights of indigenous people</b>			
<b>G4-HR8</b>			There were no violations of the rights of indigenous people.
<b>Assessment</b>			
<b>G4-HR9</b>			To date, no human rights assessments have been conducted.
<b>Supplier assessment based on human rights</b>			
<b>G4-HR10</b>			All Group contracts require the full acceptance of the Code of Ethics. In 2016, no contracts were entered into with suppliers, contractors and other partners that provided for the inclusion of provisions on human rights or that were subject to specific actions following the assessment of human rights.
<b>G4-HR11</b>			There were no real or potential impacts related to the Group's supply chain in respect of human rights.
<b>Company</b>			
<b>G4-DMA</b>			
Our approach to sustainability The governance system The internal control and risk management system			

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Local communities</b>			
G4-SO1	✓		Stakeholders Land development and protection Solidarity initiatives
G4-SO2	✓		Land development and protection
<b>Anti-corruption</b>			
			The internal control and risk management system
			The Group measure no. 172/AD "Guidelines for the prevention of corruption between private parties in the FS Italiane Group" was issued in 2014.
			In RFI's specific case, on 26 February 2016, it agreed a "collaborative oversight protocol" with ANAC to prevent bribery in railway contracts for the infrastructural and technological strengthening of the network.
			At all Group companies, although to varying depths depending on the thrust of the analyses, certain of the internal auditors' activities make it possible to monitor service risks of corruption and to identify the related dynamics, with specific regard to supervisory activities, such as:
			- a risk assessment to define and update the management and organisational models pursuant to Legislative decree no. 231/2001;
			- supervisory activities carried out upon the request of the Supervisory Bodies pursuant to Legislative decree no. 231/2001;
			- the management of reports received about events in violation of the principles of the Code of Ethics and the regulations referred to in the management and organisational models pursuant to Legislative decree no. 231/2001;
			- internal audits by resources with the necessary training to identify signs of fraud (knowledge of professional standards, CIA, CCSA and CFE certification). Additional activities performed by the internal auditors upon the request of the Supervisory Bodies pursuant to Legislative decree no. 231/2001 or top management, in order to mitigate the risk of corruption are:
			- training/information sessions on the risks of corruption pursuant to Legislative decree no. 231/2001;
			- workshops dealing with – inter alia – the risks of corruption.
			Furthermore, in November 2016, FS S.p.A.'s BoD approved the voluntary introduction of a corruption prevention model at FS S.p.A.
			The Group measure no. 178/AD of 6 October 2014 "Risk management Group model" includes a risk glossary, which comprises the "Integrity risk" (wrongful acts against the company) category. In accordance with the Group measure, during risk assessment meetings, the Process Owners may identify, where present, specific risks attributable to this category. Again, based on the Group measure, of the 20 macro-processes identified at Group level, 11 (55%) are potentially exposed to the integrity risk.
G4-SO3	✓		
G4-SO4	✓		The internal control and risk management system
G4-SO5	✓		The internal control and risk management system Compliance

GRI INDICATORS	SUSTAINABILITY REPORT	ANNUAL REPORT	REFERENCE/COMMENTS
<b>Public policy</b>			
			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. Relationships with political parties, movements, committees and political and trade unions organisations are managed exclusively by formally designated company departments.
			<a href="http://www.fsitaliane.it/content/fsitaliane/en/about-us/governance/code-of-ethics.html">http://www.fsitaliane.it/content/fsitaliane/en/about-us/governance/code-of-ethics.html</a>
<b>G4-SO6</b>			
<b>Unfair competition</b>			
G4-SO7	✓	✓	Compliance 2016 Annual Report ("Other information - Litigation and disputes")
<b>Compliance</b>			
G4-SO8	✓	✓	Compliance Disputes with employees 2016 Annual ("Other information - Litigation and disputes")
<b>Suppliers' assessment based on company impacts</b>			
G4-SO10	✓		Suppliers' profile and assessment Land development and protection



GRI INDICATORS

SUSTAINABILITY REPORT

ANNUAL REPORT

REFERENCE/COMMENTS

Product liability

G4-DMA

The Group companies are constantly committed to ensuring the utmost level of safety for customers, the community or employees, focusing, in particular, on a culture of risk prevention and involving all parties.

Travel safety is one of railways' advantages over other means of transport and is an example of excellence for Ferrovie dello Stato Italiane Group, which shows results in line with those of the top European sector companies. In Italy, the legislative system governing regulations and assessments for train traffic safety has always been based on safeguarding human life.

RFI and Trenitalia manage railway traffic safety in connection with train operation each to the extent that it is concerned.

Each Group company devotes significant attention to offering passengers quality services.

The travel conditions and Service Charters of Group companies are given below:

- Trenitalia's general terms of passenger transport - <http://www.trenitalia.com/tcom/Information/Condizioni-Generali-di-transport/Condizioni-Generali-di-transport>
- Long-haul passenger Service Charter - <http://www.trenitalia.com/tcom/Information/Carta-dei-servizi>
- Regional Service Charter - the "Regional Service Charter" for the regional train passengers of each region, available in the "La tua Regione" section of the area dedicated to each region (<http://www.trenitalia.com/tcom/Treni-Regionali>)
- RFI's Service Charter - <http://www.rfi.it/rfi/NOTIZIE-E-DOCUMENTI/La-Carta-dei-Servizi-2017>
- Busitalia-Sita Nord's Service Charter - <http://www.fsbusitalia.it/fsb/Customers/Carta-dei-servizi>
- ATAF's Service Charter - <http://www.ataf.net/it/servizio-customers/carta-dei-servizi.aspx?idC=70&LN=iHT>
- Busitalia veneto's Service Charter - <http://www.fsbusitaliaveneto.it/index.php/customers/carta-dei-servizi>
- Travel guide - <http://www.trenitalia.com/tcom/Information/La-guida-del-viaggiatore/La-guida-del-viaggiatore>

The Group operates in full compliance with legislation governing the protection of passengers' and stakeholders' privacy.

Our approach to sustainability

<http://www.fsitaliane.it/content/fsitaliane/en/aboutus/governance/code-of-ethics.html>

Methodology - Materiality matrix

Consumer health and safety

<b>G4-PR1</b>	✓	Management systems Service quality Travel safety Emissions Land development and protection Other impacts
<b>G4-PR2</b>	✓	Travel safety
<b>Product and service labelling</b>		
<b>G4-PR4</b>	✓	Service quality
<b>G4-PR5</b>	✓	Service quality
<b>Marketing</b>		
<b>G4-PR7</b>	✓	Stakeholders

GRI INDICATORS

SUSTAINABILITY REPORT

ANNUAL REPORT

REFERENCE/COMMENTS

Protection of privacy

G4-PR8

✓

Service quality

In 2016, no complaints were received for alleged violation of customers' privacy.

Compliance

G4-PR9

✓

Compliance  
Service quality

No significant administrative or legal sanctions were imposed in 2016 for non-compliance with laws or regulations concerning the supply/use of products/services.



# INDEPENDENT AUDITORS' REPORT

G4-33



KPMG S.p.A.  
Revisione e organizzazione contabile  
Via Ettore Petrolini, 2  
00197 ROMA RM  
Telefono +39 06 80961.1  
Email it-fmauditaly@kpmg.it  
PEC kpmgspa@pec.kpmg.it

(Translation from the Italian original which remains the definitive version)

## Independent auditors' report on the sustainability report

To the board of directors of  
Ferrovie dello Stato Italiane S.p.A.

We have performed a limited assurance engagement of the 2016 sustainability report of the Ferrovie dello Stato Italiane Group (the "Group").

### Directors' responsibility for the sustainability report

The Parent's directors are responsible for the preparation of the sustainability report in accordance with the "G4 Sustainability Reporting Guidelines", issued in 2013 by GRI – Global Reporting Initiative, that are detailed in the "Methodology" section of the sustainability report, as well as for that part of internal controls that they consider necessary for the preparation of a sustainability report that is free from material misstatement, including due to fraud or unintentional conduct or events. They are also responsible for defining the Group's objectives regarding its sustainability performance, the reporting of the achieved results and the identification of the stakeholders and the significant matters to report.

### Auditors' independence and quality control

We have complied with the independence and all other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

KPMG S.p.A. applies International Standard on Quality Control 1 (ISQC (Italia) 1) and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Independent auditors' responsibility

Our responsibility is to express a conclusion on the sustainability report based on our procedures. We carried out our work in accordance with the criteria established by "International Standard on Assurance Engagements 3000 (revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE

KPMG S.p.A. è una società per azioni di diritto italiano e fa parte del network KPMG di entità indipendenti affiliate a KPMG International Cooperative ("KPMG International"), entità di diritto svizzero.

Ancora Aosta Bari Bergamo  
Bologna Bolzano Brescia  
Catenia Como Firenze Genova  
Lecce Milano Napoli Novara  
Padova Palermo Parma Perugia  
Pescara Roma Torino Treviso  
Trieste Varese Verona

Società per azioni  
Capitale sociale  
Euro 10.150.950,00 i.v.  
Registro Imprese Milano e  
Codice Fiscale N. 00709600159  
R.E.A. Milano N. 512867  
Partita IVA 00709600159  
VAT number IT00709600159  
Sede legale: Via Vittor Pisani, 25  
20124 Milano MI ITALIA



**Ferrovie dello Stato Italiane Group**  
Independent auditors' report on the sustainability report  
31 December 2016

3000)", issued by the International Auditing and Assurance Standards Board (IAASB) applicable to limited assurance engagements. This standard requires that we comply with applicable ethical requirements, including independence requirements, and that we plan and perform the engagement to obtain limited assurance about whether the report is free from material misstatement.

The procedures we performed are based on our professional judgment and include inquiries, primarily of persons responsible for the preparation of the sustainability report, documental analyses, recalculations, comparisons and other evidence gathering procedures, as appropriate.

These procedures aimed at checking that its content and quality complied with the "G4 Sustainability Reporting Guidelines" and may be summarised as follows:

- comparing the information and data presented in the "Economic highlights" section of the sustainability report to the corresponding financial information and data included in the Group's consolidated financial statements as at and for the year ended 31 December 2016, on which we issued our report dated 15 May 2017 pursuant to articles 14 and 16 of Legislative decree no. 39 of 27 January 2010;
- holding interviews aimed at analysing the governance system and the process for managing the sustainable development issues relating to the Group's strategy and activities;
- analysing the reporting of significant matters process, specifically how these matters are identified and prioritised for each stakeholder category and how the process outcome is validated internally;
- analysing how the processes underlying the generation, recording and management of quantitative data included in the sustainability report operate. In particular, we have performed the following:
  - interviews and discussions with management personnel of Ferrovie dello Stato Italiane S.p.A. and personnel of ATAF Gestioni S.r.l., Autobus Sippel GmbH, Italferr S.p.A., Rete Ferroviaria Italiana - RFI S.p.A. and Trenitalia S.p.A, to gather information on the IT, accounting and reporting systems used in preparing the sustainability report, and on the processes and internal control procedures used to gather, combine, process and transmit data and information to the office that prepares the sustainability report;
  - sample-based analysis of documentation supporting the preparation of the sustainability report to confirm the existence and adequacy of processes and that the internal controls correctly manage data and information in relation to the objectives described in the sustainability report;
- analysing the compliance and overall consistency of the qualitative information included in the sustainability report with the guidelines referred to herein in the "Directors' responsibility for the sustainability report" paragraph;
- analysing the stakeholder involvement process, in terms of methods used, by reading the minutes of the meetings or any other information available about the salient features identified;
- obtaining the representation letter signed by the legal representative of Ferrovie dello Stato Italiane S.p.A. on the compliance of the sustainability report with the guidelines indicated in the "Directors' responsibility for the sustainability report" paragraph and on the reliability and completeness of the information and data contained therein.

2



**Ferrovie dello Stato Italiane Group**  
Independent auditors' report on the sustainability report  
31 December 2016

As required by the "G4 Sustainability Reporting Guidelines", the data and information covered by our procedures are set out in the "GRI Content Index" table of the sustainability report.

A limited assurance engagement is less in scope than a reasonable assurance engagement carried out in accordance with ISAE 3000 (Revised), and, therefore, it does not offer assurance that we have become aware of all significant matters and events that would be identified during a reasonable assurance engagement.

#### Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the 2016 sustainability report of the Ferrovie dello Stato Italiane Group has not been prepared, in all material aspects, in accordance with the "G4 Sustainability Reporting Guidelines", issued in 2013 by GRI – Global Reporting Initiative, that are detailed in the "Methodology" section of the sustainability report.

Rome, 27 June 2017

KPMG S.p.A.

(signed on the original)

Marco Maffei  
Director of Audit

3

## ASSESSMENT QUESTIONNAIRE

Dear readers,  
this is the tenth edition of Ferrovie dello Stato Italiane Group's Sustainability report. We have improved the report each year, and it has grown increasingly comprehensive, thanks to our stakeholders, who have contributed with their ideas and opinions. To this end, we ask that you please fill out the online questionnaire, which you will find at

[fsitaliane.it](http://fsitaliane.it)

in the Sustainability section.  
Requests for information on the 2016 Sustainability Report can be sent by e-mail to

[rappertosostenibilita@fsitaliane.it](mailto:rappertosostenibilita@fsitaliane.it)

### Ferrovie dello Stato Italiane **GRI 2.4**

Piazza della Croce Rossa, 1  
00161 Rome

## ATTACHMENTS: COMPANY INFORMATION

**G4-2**

## FERROVIE DELLO STATO ITALIANE

### OUR APPROACH

The company intends to incorporate the protection of the environment into the strategies and activities of the entire Group by promoting and developing sustainable mass mobility built around rail transport.

Ferrovie dello Stato Italiane considers it essential to establish, carry out and maintain objectives which require the rational use of resources, the prevention and reduction of pollution and environmental risks, research into energy efficiency,

and the promotion of renewable energy sources with the aim of gradually reducing the Group's carbon footprint.

The environmental policy and environmental management system governance model guide the processes and actions towards continuous improvement, carefully and continuously developing natural capital by spreading awareness of environmental matters and actively supporting the monitoring of environmental impacts.

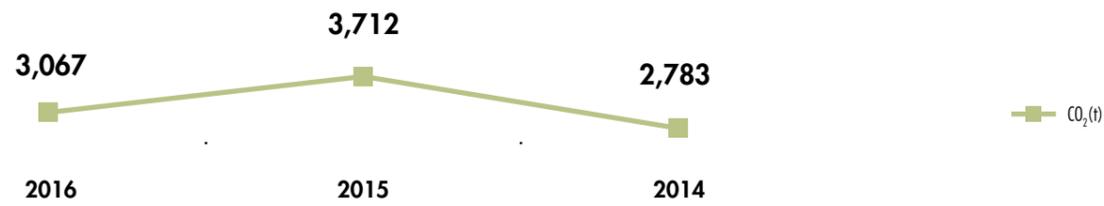
### FINAL ENERGY CONSUMPTION

		2016	2015	2014
Electricity	MWh	6,397	6,579	6,176
Natural gas	Sm <sup>3</sup>	291,046	318,502	275,760

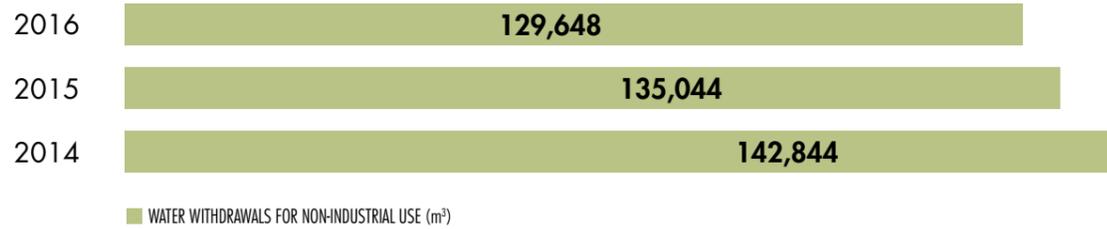
#### Comments on the trend

Energy consumption relates mainly to the management of the building housing the central headquarters in Villa Patrizi, Rome. The trend in consumption is impacted by weather conditions and, accordingly, the varying needs for air conditioning.

TOTAL CO<sub>2</sub> EMISSIONS



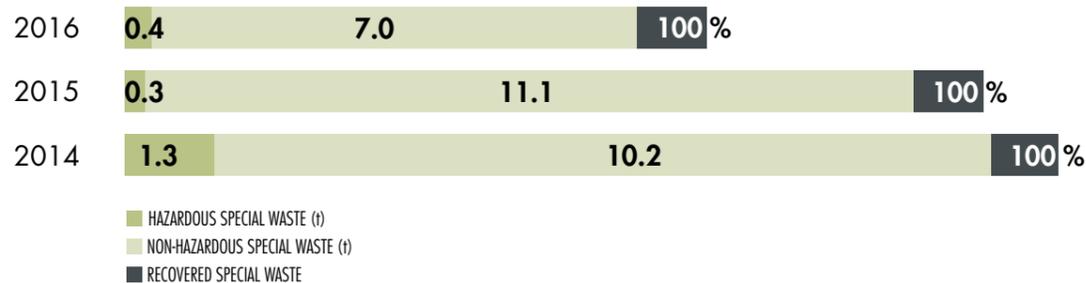
WATER



Comments on the trend

The figures in the table mainly refer to withdrawals for Villa Patrizi in Rome and are steady given the type of office activities carried out at that site. The decreasing trend that began in 2014 is due to a leak detected in that year and resolved in 2015.

WASTE



Comments on the trend

The figures in the table refer to special waste produced by the Villa Patrizi site in Rome. The data reflect a nearly steady trend due to the type of office activities that are carried out at the site, which entails a constant production of waste (IT equipment, furnishings and air conditioners). Non-hazardous special waste decreased as the replacement of furnishings in areas occupied by personnel was completed.



COMMITMENTS MADE

The EMS and the governance model will be updated in order to include the rules of the new ISO standard 14001 and to reinforce the parent's role regarding guidance and coordination

Second-party audit activities on owned assets throughout Italy will continue and new tools will be used to support the local implementation of the respective environmental management plans, including audits coordinated by the parent

To ensure that the sustainability issues are an integral part of the Group's strategy, a sustainability committee will be established and a vision will be defined, identifying the commitments and targets for each of the three areas of analysis (economic, social and environmental)



Renovation work on Villa Patrizi, including, among other things, the replacement of around 2,000 air conditioners with a centralised air conditioning system was postponed until 2016

WHAT WE HAVE ACCOMPLISHED

A process began to develop new governance tools and will lead to the transformation of the current environmental management system governance model into a business model that ensures a balance of the economic, social and environmental aspects of Group activities

Second-party audit activities were carried out on the different types of assets

FS Italiane Group has translated its long-term vision into the new 2017-2026 business plan, with which it has renewed and intensified its ambition of creating long-lasting value for the community by redefining the business through intermodal transport. Furthermore, in July 2016, a Sustainability Committee was set up. It is an advisory body consisting of the top management of the Group's main companies

WHAT WE AIM TO DO

The sustainability governance model will be issued, an organisational tool to ensure the integrated management of the three sustainability aspects (economic, social and environmental)

Based on the Corporate Shared Value approach, pilot projects will be kicked off with the aim of creating a methodology that provides for a multi-dimensional assessment of activities

The environmental management system and guidelines will be updated in compliance with the new UNI EN ISO 14001:2015 standard

Second-party audit activities on owned assets will continue

ASPECTS



Continuous improvement



Raw materials cycle



Water cycle



Energy and emissions



Land

# RFI

## OUR APPROACH

RFI's environmental and social commitment is a strategic part of its industrial mission, which covers all the company's productive activities and those of its subsidiaries. Not only does it aim to protect the environment, but also to create shared value with a view to corporate responsibility and focus on the quality of life of the community. RFI manages the rail network according to the principle of continuous improvement regarding efficiency, safety and accessibility, which means that it is contributing to a modal shift towards an increasingly integrated sustainable transport system.

In every day life, this means:

- producing goods and services and developing the management, maintenance, planning and construction of the infrastructure, lines and stations, with increased attention to the reduc-

tion of environmental and social impacts, and pursuing the rational use of resources and land;

- working "on-site", in contact with the various areas that the railway passes through, with a constant focus on making the most of the vocations and the natural, social, urban and historical-archaeological heritage of the area, in close collaboration with the institutional bodies and the other stakeholders.

In order to do this, RFI bases all its work on the principals and values listed in its environmental policy, implementing them with the involvement of the entire organisation and its suppliers within the scope defined by the environmental management system, included within the integrated safety management system.

## FINAL ENERGY CONSUMPTION

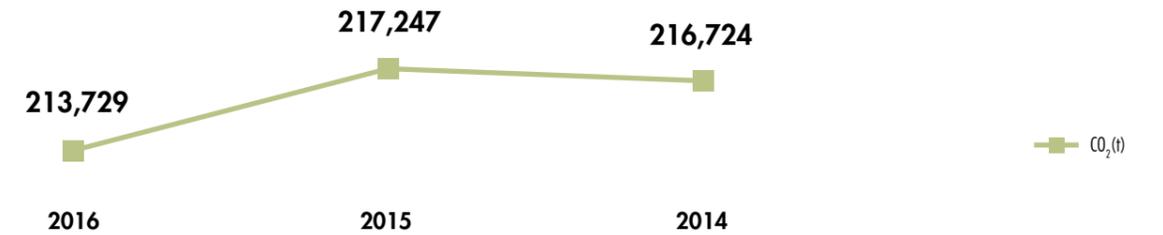
		2016	2015	2014
Diesel	t	14,652	16,204	16,745
Electricity*	MWh	414,113	416,764	399,696
Natural gas	Sm <sup>3</sup>	8,992,544	8,913,116	8,029,684

\*Including the electricity produced and consumed by solar power systems. Excluding high voltage electricity absorbed by the railway companies' trains operating on the national network.

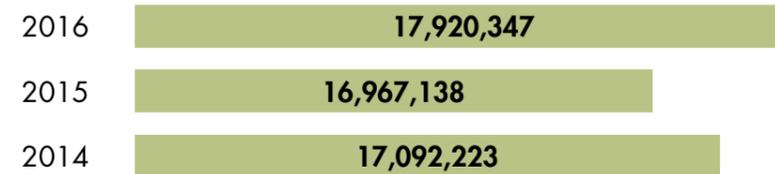
### Comments on the trend

An analysis of the overall three-year trend shows a substantial stability in electricity consumption. In 2016, despite the inclusion in the scope of the new national superstructure workshop at the Bari steel mill, whose production type and volumes require significant amounts of energy, electricity consumption is in line with that recorded in 2015, when new railway traffic safety equipment and systems were rolled out. Natural gas consumption also remained substantially steady due to the combined effect of the rationalisation of individual utilities accounts and improvements in supply management, with an increase in the use of natural gas in heating plants stations in place of less energy efficient diesel. The significant drop in diesel consumption in 2016 is mainly due to the replacement of plants and, to a lesser extent, to the reduced requirement due to the favourable climatic conditions and the decrease in commercial traffic on the Messina Strait.

## TOTAL CO<sub>2</sub> EMISSIONS



## WATER

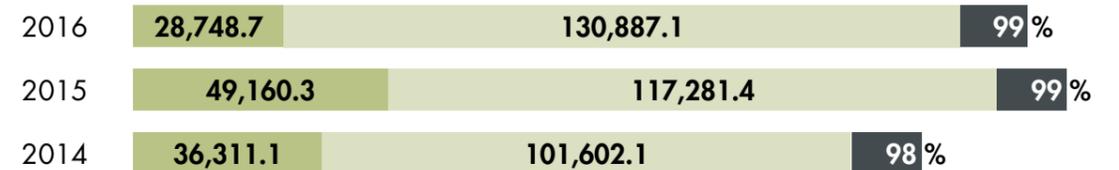


■ WATER WITHDRAWALS FOR NON-INDUSTRIAL USE (m<sup>3</sup>)

### Comments on the trend

Fluctuations in water consumption over the three-year period reflect the water withdrawn from aqueducts and, in 2016, are due to the trend in maintenance activities and the acquisition of new plants (e.g., washing platforms).

## WASTE



■ HAZARDOUS SPECIAL WASTE (t)  
 ■ NON-HAZARDOUS SPECIAL WASTE (t)  
 ■ RECOVERED SPECIAL WASTE

### Commento al trend

While total waste produced in 2016 decreased slightly on 2015 (-4%), there was a limited increase in non-hazardous waste (which accounts for 82% of total waste) and a considerable drop in hazardous waste, particularly in the amount of hazardous waste sent for disposal. The change is related to the cyclical trend in maintenance activities and has kept the total volume of waste sent for recycling steady.

COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
 <p>Activities will continue in connection with energy diagnoses pursuant to legislative decree no. 102/2014 in order to prepare the related reports and improvement plans via inspections, analyses and specific measurements at 23 RFI sites identified on the basis of the functional analyses conducted in 2015</p> <p>Education and training programmes focusing on the RFI's energy management will be provided for the local energy managers, and operators will be selected for the expert in energy management certification training</p> <p>The European call for bids will be held to assign the supply of over 100,000 new LED lighting systems to be installed at stations and offices</p> <p>A technical illumination study will be launched at the four RFI workshops, aimed at implementing a complete re-lamping</p>	<p>The energy diagnosis was completed at 23 sites, including workshops, stations, traffic operation plants and operating rooms considered material for the definition of aspects that could be made more efficient for the various types of RFI's core plants</p> <p>-----</p> <p>An energy management course will be organised for the expert in energy management certification</p> <p>-----</p> <p>The European call for bids was held with assignment scheduled for the first half of 2017</p> <p>-----</p> <p>The technical illumination study was completed</p> <p>-----</p> <p>Approximately 13,000 low shunting signals with traditional light bulbs were replaced with low signals with LED technology, bringing implementation of this initiative to roughly 1/3</p> <p>-----</p> <p>As part of renewable energies, a letter of intent was signed with Terna for the development of a project to create photovoltaic plants that will meet RFI's electricity requirements with clean energy</p> <p>-----</p> <p>Many energy efficiency activities/studies/testing began in the technological fields of signalling, telecommunications and electrical traction, such as: study for the photovoltaic powering of line control booths, use of LED signals for computer-based interlocking systems, technical solutions for 3kVcc electrical substations, the development temperature gauges on the axle boxes and brakes (RTB and RTF), reduction of the GSM-R network elements, use of energy efficient devices, etc.</p> <p>-----</p> <p>Activities continued to define a company procedure for mobility management. Meetings will be held for discussion and alignment between RFI's Mobility Managers during the workshops organised by the parent. Home/work commuting plans were coordinated and presented for Naples, Florence, Genoa, Messina, Turin, Palermo and Bari and collaboration in preparing the commuting plans for other cities</p>	<p>The project will continue with the obtaining of expert in energy management certification for at least three RFI Energy Managers</p> <p>An energy management system will be implemented within RFI's environmental management system. The system will cover all local divisions and related Energy Managers</p> <p>The "LED call for bids" will be awarded and LED project implementation activities will begin</p> <p>-----</p> <p>Activities will begin on the relamping of workshops with the new lighting systems as they become available following the "LED call for bids"</p> <p>-----</p> <p>The technological updating of low shunting signals will continue (replacement of another 800 signals with LED technology)</p> <p>-----</p> <p>Inspections and analyses will be conducted to identify sites where the construction of photovoltaic plants meets the technical/cost effectiveness parameters</p> <p>-----</p> <p>Work will begin as planned in the new project to install meters and replace old-generation transformers in electrical substations</p> <p>-----</p> <p>An agreement will be signed with a research body to create two prototypes to recover and transform kinetic energy produced by train braking into electricity</p> <p>-----</p> <p>A supply agreement will be signed for energy from renewable sources for uses other than railway traction</p>
 <p>The Atlantide information system for the electronic management of forms and registers about the loading and unloading of special waste and for the transfer of information regarding hazardous waste using SISTRI will be completed</p>	<p>The implementation of the "Atlantide" information system was completed and training began to be planned for operators to roll out the system</p>	<p>The training session will be completed and the "Atlantide" information system will be rolled out, which is useful for, inter alia, the single environmental report to the government</p>

COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
 <p>Training sessions about the safeguarding of protected areas and biodiversity also aimed at guaranteeing the application of the new procedure issued in 2015 will be provided for local unit personnel</p> <p>-----</p> <p>The environmental data base will be updated with all the information on assets with environmental aspects</p> <p>-----</p> <p>The central divisions' scope of environmental certification will be widened, launching the activities necessary for ensuring compliance with the new ISO 14001:2015 standard</p>	<p>Training sessions for local production division personnel were held about the safeguarding of protected areas and biodiversity, and a central figure was appointed to ensure the consistent application of the new procedure in this respect</p> <p>-----</p> <p>The new "Environmental assessment of investments" procedure was issued to support the management environmental aspects by RFI in the analysis, planning and execution of works</p> <p>-----</p> <p>The implementation of the environmental data base continued and a tool was developed for the automatic classification of the "environmental risk level" of surveyed assets</p>	<p>A specific water management project will begin to optimise and reduce water consumption through:</p> <ul style="list-style-type: none"> <li>/ structural repairs to eliminate leaks</li> <li>/ implementation of a monitoring system for the 700 main water plants in the network (including stations, cargo hubs and washing platforms) including the installation of remote metering systems</li> <li>/ check and update of water contracts for alignment with "large user" parameters</li> <li>/ separation of RFI's promiscuous utilities accounts where possible; alternatively, meters could be installed that separate/recharge costs to the related third parties</li> </ul> <p>-----</p> <p>The environmental indicators provided for by the "Environmental assessment of investments" procedure in the analysis, planning and execution of investments will be monitored</p> <p>-----</p> <p>With respect to the environmental database, the tool for the automatic classification of the "environmental risk level" will be rolled out and the electronic storage of environmental management documentation will be developed (e.g., authorisation, permits, plans, etc.)</p>
 <p>The environmental management system will be updated to the new version of the ISO 14001:2015 standard and environmental criteria will be included in the assessment factors for awarding cleaning service contracts for stations in the network</p>	<p>OHSAS 18001 certification will be extended to the entire company.</p>	

ASPECTS



# RFI'S SUBSIDIARIES

## FINAL ENERGY CONSUMPTION

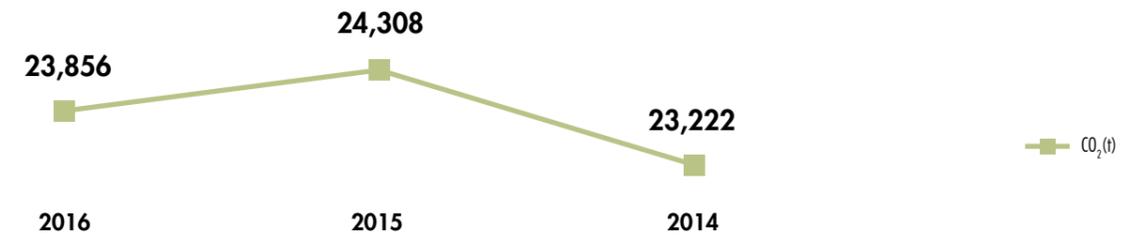
		2016	2015	2014
Diesel	t	6,952	7,116	6,803
Electricity	MWh	2,807	2,611	2,296

### Comments on the trend

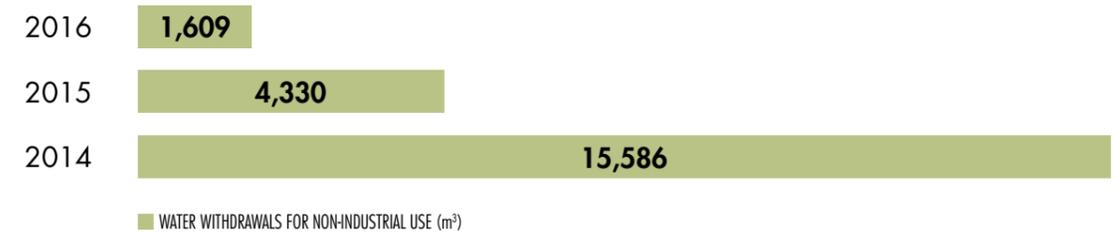
Diesel consumption did not undergo any significant changes either for Blufferies, whose operating schedule remained substantially the same (routes and number of journeys), or for Terminali Italia, which, while diesel consumption rose for railway shunting, saw a decrease in diesel consumption for mobile cranes due to the replacement of the fleet with vehicles presenting a lower environmental impact. Changes in electricity consumption relate to the trend in Terminali Italia's commercial activities, particularly in the amount of handling using mobile cranes at the Verona terminal.



## TOTAL CO<sub>2</sub> EMISSIONS



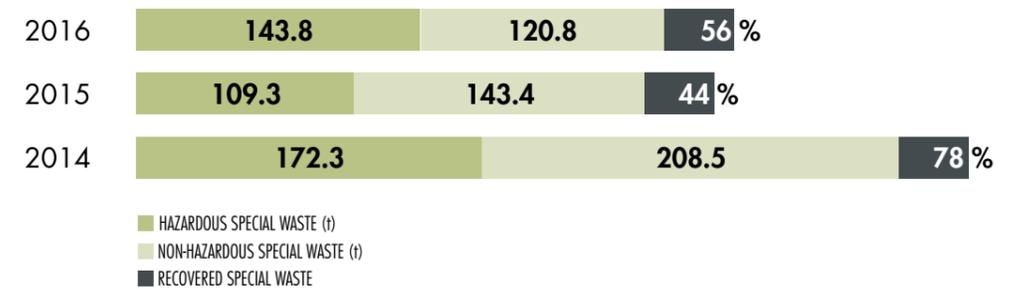
## WATER



### Comments on the trend

The subsidiaries use utilities under contracts in RFI's name, except for two, which are in the name of Terminali Italia for plants not owned by RFI, the third Verona module and the Milan shunting hub. The trend reflecting a considerable decrease is due to the resolution in the second quarter of 2015 of a fault in the pipes which led to irregular withdrawals in previous years.

## WASTE



### Comments on the trend

The overall volume of the subsidiaries' waste production was substantially the same as in 2015 and the significant increase in the percentage of waste sent for recycling is up significantly for Blufferies and down for Terminali Italia. In particular, Blufferies, which carried out maintenance on vessels in the shipyard in 2016 according to a previously established schedule, presented a considerable increase in hazardous waste – however, there was a decrease in the amount sent for disposal - and a far larger increase in non-hazardous waste. At the same time, Terminali Italia presented a significant decrease in non-hazardous waste due the closure of the Milan Certosa terminal as part of the long-term trend with dramatic fluctuations, mainly due to non-routine maintenance on yards and vehicles.

The figures refer to the environmental aspects managed directly by the company or on behalf of other Group companies.

COMMITMENTS MADE

WHAT WE HAVE ACCOMPLISHED

WHAT WE AIM TO DO

Terminali Italia



A contract will be signed with a specialised firm to ensure rapid response in the event of emergencies caused by accidental spills of hazardous or polluting substances

A contract was signed for 2016 with a specialised firm for rapid ecological clean-up

An advanced environmental emergency response course will be provided to certain members of the emergency team

Training sessions about dangerous goods and crisis management will be provided for all personnel

The training sessions about dangerous goods and crisis management for all personnel were completed

Preliminary activities will begin for ISO 14001 certification

In collaboration with RFI, the new fire prevention system will be activated at the Segrate terminal and the relocation of the diesel pump to the Catania terminal will be completed to improve internal roadways and obstacle management

The integration of the Bologna terminal into the integrated logistics platform will be pursued

Activities continued to integrate the Bologna Interport terminal into the integrated logistics platform to optimise and simplify information flows between parties the intermodal logistics chain



Six new-generation mobile cranes with better safety feature and lower environmental impact were purchased for the Verona and Segrate terminals

At the Verona terminal, in collaboration with RFI, approximately 140 old-generation light bulbs were replaced with new LED technology light towers, generating energy savings of over 50%



In collaboration with RFI, work began to design a new rainwater treatment plant at the Verona terminal

COMMITMENTS MADE

WHAT WE HAVE ACCOMPLISHED

WHAT WE AIM TO DO

Bluferries



In order to strengthen the crew's awareness of the continuous monitoring and improvement of environmental performance, training sessions about the safety management system and environmental compliance will be provided

The annual training and information sessions required by the new version of the safety management system issued in July 2016 were provided to the crew

Annual training and information sessions will be provided as provided for by the safety management system



The new waste water treatment system will be installed and certified for high-speed craft as prescribed by the most recent legislation issued by the Maritime Authority

New waste water treatment systems were installed and certified on two high-speed craft



Production began on a new ferry to replace one of older vessels in the fleet. The new engine - which is EIAPP (Engine International Air Pollution Prevention) certified - will generate fuel savings and cut down on emissions, noise and vibrations



The ISO 14001 certification procedure for the environmental management system began with the issue of the materiality assessment document in December 2016

The process to obtain ISO 14001 certification will be completed

ASPECTS



Continuous improvement



Raw materials cycle



Water cycle



Energy and emissions



Land



# TRENITALIA

## OUR APPROACH

Trenitalia considers the quality of services provided, the protection of the environment, the safeguarding of the health and safety of its workers and energy efficiency as strategic elements in its business. Trenitalia has therefore defined an integrated policy (quality, environment, occupational health and safety and energy) that generally orients and guides the company in achieving its mission and gaining a competitive edge, which uses the environmental benefits of railway transport as leverage to create incentive for sustainable mobility.

This is why Trenitalia has implemented a management system in accordance with the requirements of OHSAS 18001, ISO 14001 and ISO 9001

standards. As for energy efficiency, Trenitalia is furthering a broad energy diagnosis campaign at its industrial plants to progressively improve the energy performance of its maintenance activities, through investments in the installation of LED lighting systems and the redevelopment of the energy supplies for compressed air and heating systems and the production of renewable energy from photovoltaic plants. Also with respect to the purchase of new rolling stock, Trenitalia is making efforts to include a series of clauses entailing significant progress in the energy efficiency of vehicles, as in the call for bids for the contract for 450 regional trains awarded in 2016.

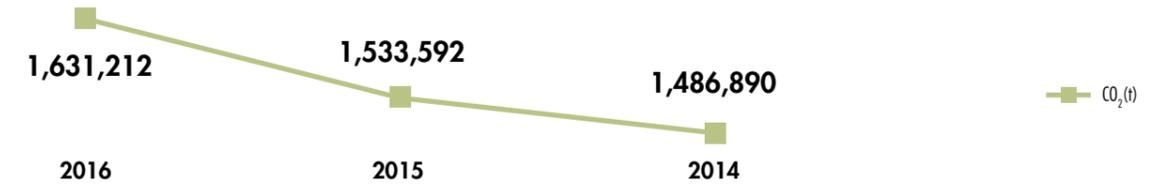
## FINAL ENERGY CONSUMPTION

		2016	2015	2014
Diesel	t	46,034	47,611	46,460
Total electricity	MWh	4,300,109	4,030,149	3,746,274
for railway traction	MWh	4,220,639	3,957,506	3,670,262
for other uses	MWh	79,470	72,643	76,012
Natural gas	Sm <sup>3</sup>	19,204,129	17,889,855	16,011,033

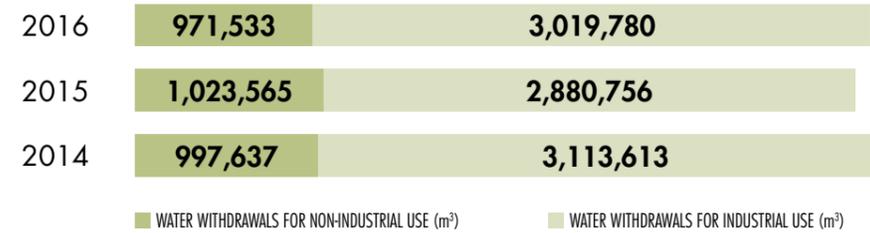
### Comments on the trend

The increase in electricity consumption for railway traction is substantially due to the increase in high speed services as the new fleet of Frecciarossa 1000 trains was progressively rolled out during the year. The increase in electricity consumption for uses other than railway traction between 2015 and 2016 is due to the new utilities accounts opened between the end of 2015 and 2016, some of which are for plants that run on massive amounts of energy. The rise in natural gas consumption is mostly due to improvements in how these data are recorded since late 2015.

## TOTAL CO<sub>2</sub> EMISSIONS



## WATER



### Comments on the trend

The trend in water consumption – which has been substantially steady over the past three years, but shows an overall decrease compared to the past – is the result of projects to make processes more efficient and to control leaks in the same three-year period. The decrease is significant considering the fact that, in the past three years, production, measured in train-km, grew.

## WASTE



### Comments on the trend

While the production of hazardous special waste remained substantially steady, the trend in the production of non-hazardous special waste was heavily influenced by periodic demolition campaigns for rolling stock no longer suitable for service.

COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
 <p>The construction of two new solar power systems will commence at the Roma San Lorenzo and Napoli Santa Maria La Bruna sites and another system will be installed at the Milano Martesana workshop, for a total of approximately 4,000 kWp</p>	<p>Construction of photovoltaic roof for the Firenze Osmannoro plant (53 kWp with plant start-up slated for 2017)</p> <p>The start of construction work on the Roma San Lorenzo and Napoli S.M.La Bruna plants underwent a delay due to critical difficulties in obtaining urban and environmental permits. Technical difficulties arose delaying the start of installation work at Milano Martesana as well. At all three sites, work is slated to begin by 2017</p>	<p>There will be additional investments to produce energy from renewable sources and to achieve energy efficiency, with particular reference to the installation of LED lights and radiant strip heading systems, improvements in systems to produce and distribute compressed air at the Rome, Milan, Naples, Rimini and Foligno plants, with the aim of cutting electricity consumption by 50% and natural gas consumption for heating by 30% at plants or in plant components included in the scope of the work</p> <p>The energy diagnosis campaign initiated in 2015 and continued in 2016 (for a total of 18 diagnoses already completed) will continue further, with another nine diagnoses at company industrial plants</p> <p>In collaboration with Ferservizi, a new system to monitor energy consumption by Trenitalia will be created, based on a digital flow of data from suppliers</p>
<p>The energy diagnosis campaign initiated in 2015 will continue at another ten company industrial plants</p>	<p>Energy diagnoses at the 10 sites identified were carried out</p>	
<p>All natural gas supplies under company utilities contracts will be subject to calls for bids with the aim of unifying all supply with one supplier, as for electricity</p>	<p>A single supplier was identified via tender for the approximately 120 natural gas utilities accounts</p>	
<p>The electricity consumption measurement system for the Frecciarossa 1000 train will be fully implemented</p>	<p>A system to measure the amount of electricity consumed by the Frecciarossa 1000 was implemented</p>	
<p>New trains will be selected for the regional transport service and purchased in forthcoming years, considering specific energy efficiency requirements</p>	<p>The call for bids was completed for the supply of 450 new high energy efficiency trains for regional transport</p>	
<p>Two more energy training modules will be provided to keep approximately 40 local energy nominees up to date</p>	<p>Two training modules were taught to update personnel responsible for energy management at plants</p>	
	<p>"Enjoy", the car sharing service managed by Eni in partnership with Trenitalia and Fiat, was extended to Catania. Furthermore, in Rome, the scooter sharing service created through the partnership between Eni, Trenitalia and Piaggio Group was launched</p>	
	<p>The agreement between Trenitalia and Clear Channel to promote bike sharing in Milan and Verona was renewed. Thanks to the partnership with Bicincittà, regional transport customers received discounts on annual bike sharing passes in Turin and other Italian cities and, thanks to the agreement signed with FIAB, they also received discounts at bike friendly hotels in the Albergabici network</p>	

COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
	<p>Activities continued to increase awareness among employees and suppliers about managing raw materials and waste to ensure a more scrupulous use of materials, improve waste and hazardous substance storage management, reduce the risks of environmental contamination and increase sorted waste and the amount of waste sent for recycling</p>	<p>The quantity of purchased recycled paper will be increased, with a concurrent decrease in paper consumption by adopting and completing paperless projects</p> <p>Additional targets will be set to reduce waste production</p> <p>Work will be carried out to improve the areas set up for waste storage (current maintenance plant in Milan)</p>
	<p>Work began and was carried out to restore underground water networks and separate drains (Puglia Regional Division, Marche Regional Division, Rome current maintenance plant and Naples and Reggio Calabria current maintenance plants for the Long Haul Passenger Transport Division), specific meters and time-controlled dispensers were installed, old nozzles susceptible to malfunctioning at the washing platforms were replaced (Veneto Regional Division and Campania Regional Division, Milan and Turin current maintenance plants in the Long Haul Passenger Transport Division). Modern treatment systems were installed for waste water classified as domestic waste water (Milan current maintenance plant) and rainwater after the first flush (Bari current maintenance plant)</p>	<p>Operational/technological solutions will be identified to minimise water consumption for non-industrial and industrial use and projects will be individuated defined to reduce water consumption at the sites with the most critical issues. In certain cases, structural improvements will be planned to restore water networks (Marche and Abruzzo Regional Divisions)</p> <p>Specific meters and time-controlled dispensers will be installed (Puglia, Sicily, Tuscany, Campania, Liguria and Piedmont Regional Divisions and the Bari current maintenance plant for the Long Haul Passenger Division)</p> <p>Already commenced/planned work will be completed to revamp the water networks (Long Haul Passenger Division: Naples and Milan current maintenance plants and the Sardinia Regional Division)</p> <p>The purification of water intended for human consumption using ozone will be tested (Friuli Venezia Giulia Regional Division)</p>
	<p>The assessment of industrial activities carried out near protected areas, special preserves or astronomy observatories to prevent negative impacts on biodiversity and natural habitats</p>	<p>With the support of the Director of the Campocatino Astronomy Observatory (Union of Italian Astronomists), a seminar will be designed and held on the light pollution caused by running exterior lighting systems at night in large industrial areas and railway yards and their environmental impact (involving 50 resources)</p>
		<p>A project will be completed to manage the transition to the ISO 14001:2015 standard and an integrated IT platform will be implemented for the management and intelligent querying of data in Trenitalia's management system</p>

ASPECTS

 <p>Continuous improvement</p>	 <p>Raw materials cycle</p>	 <p>Water cycle</p>	 <p>Energy and emissions</p>	 <p>Land</p>
---	--	--	---	---

# TRENITALIA'S SUBSIDIARIES

## FINAL ENERGY CONSUMPTION

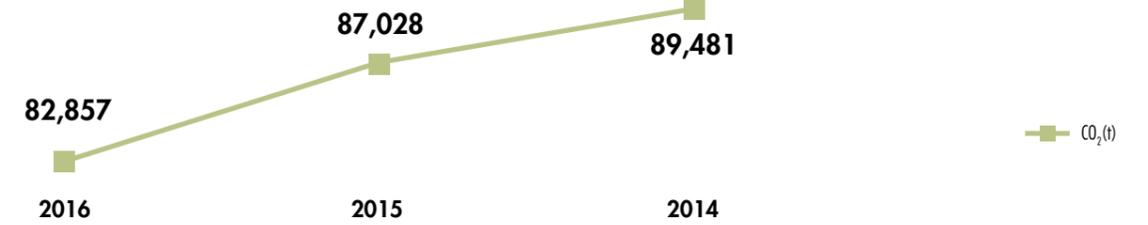
		2016	2015	2014
Diesel	t	2,213	2,185	2,126
Total electricity	MWh	160,672	171,034	175,596
for electrical traction	MWh	159,644	170,050	175,004
for other uses	MWh	1,029	984	592

### Comments on the trend

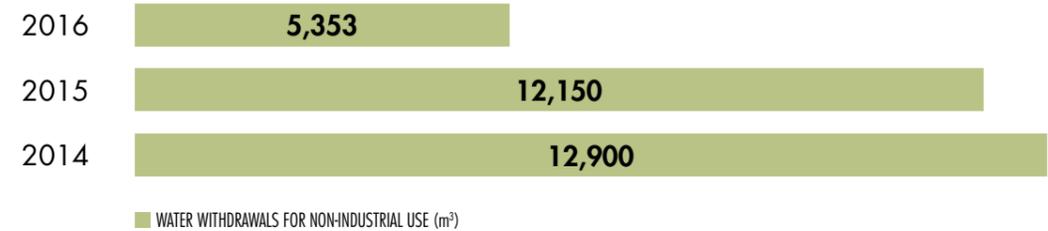
In 2016, diesel consumption was substantially steady on the previous year. The change in electricity consumption in the past two years is due to the decrease in the portion of electricity used for railway traction by both the subsidiary Serfer - which decreased its traction activities in the year - and TX Logistik.



## TOTAL CO<sub>2</sub> EMISSIONS



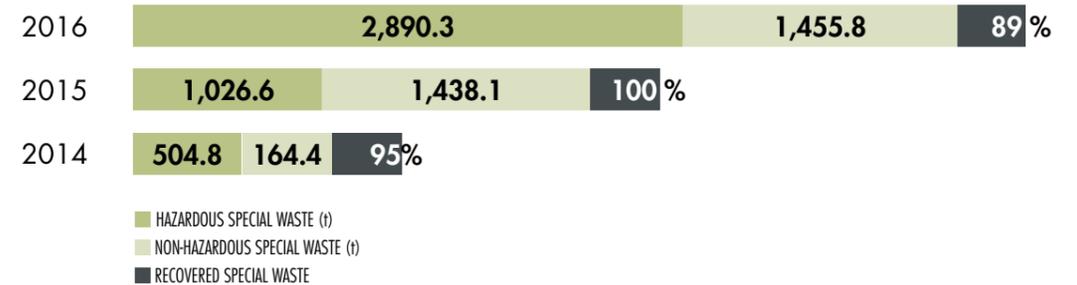
## WATER



### Comments on the trend

The decrease in water consumption in 2016 is mainly due to the subsidiary Serfer as a result of the closure of utilities accounts and the fact that third party offices and changing rooms are predominantly used at shunting sites.

## WASTE



### Comments on the trend

The increase in waste in 2016 on 2015 is due to Serfer's greater production of hazardous special waste because of the significant rise in works on the railway superstructure managed by the Construction Division.

The figures refer to the environmental aspects managed directly by the company or on behalf of other Group companies.

	COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO	
 <p><b>Serfer</b></p> <p>Revamping works will be carried out on the owned vehicles, also aimed at reducing pollutant emissions</p>	<p>Lighting in the workshop will be replaced with LED systems</p>	<p>The owned vehicle fleet was assessed to identify which machines need to be re-conditioned and which should be sold, also considering the acquisition of shunting machines (D245 model)</p>	<p>Service efficiency will be monitored once the data have been consolidated using INFOPMS software, which monitors the numbers of faults per machine and the number of days when machines are in-operative</p>	
	<p>Works to improve energy efficiency will begin, including, for example, the installation of LED lighting systems at the headquarters, the replacement of obsolete locomotives with more modern traction rented vehicles, the monitoring of energy consumption at work sites and energy awareness campaigns for personnel.</p>	<p>The cost effectiveness of replacing lighting systems at the workshop is being assessed</p>	<p>Current situation:</p> <p>Revamping of two V100 locomotives with another two under processing</p>	<p>With respect to emissions, V100 locomotive exhaust emissions are being analysed to gain benchmark values</p>
	<p>Within the scope of non-routine maintenance to the vehicle fleet, catalytic transmissions will be installed on about 15 vehicles to replace the current transmissions, thereby cutting atmospheric emissions</p>	<p>The relocation of the administrative offices to office space owned by third parties prevented the replacement of lighting systems</p>	<p>Revamping of MAK C764 with two under processing</p>	
		<p>28 locomotives were scrapped and replaced with 15 D245 models</p>	<p>Changing transmissions was deemed to be too costly based on a cost/benefit analysis</p>	

ASPECTS

				
Continuous improvement	Raw materials cycle	Water cycle	Energy and emissions	Land



# ITALFERR

## OUR APPROACH

In line with the FS Group's strategies, Italferr's design decisions are in line with the principles of environment prevention and protection under EU regulations and sustainable development strategies, developing an integrated quality, environment and safety management system in line with ISO 9001, ISO 14001 and BS OHSAS 18001 standards to ensure the efficiency and effectiveness of production processes, improve its environmental performance and supply products and services in line with the applicable legislative requirements.

In Italy and abroad, Italferr develops design solutions focused on the principles of sustainability through the adoption of innovative methodologies that ensure a holistic approach to designing and building infrastructure. Carrying out works with a local focus, stakeholder engagement, the integrated assessment of environmental, economic and social objectives, environmental and social monitoring and communication tools are key elements for sustainable development.

Environmental planning plays a crucial role for improving the way the works interact with the local area and people concerned. The company carries out specialised studies to check the projects' impacts on the environment and landscape and, more in general, for the assessment of direct and indirect effects that the construction of infrastructures could have. Furthermore, Italferr develops specific plans to identify material aspects related to processing at sites, mitigation measures and monitoring to ensure proper control over the construction of works.

As part of environmentally sustainable projects, solutions and projects are designed specifically to promote an increasingly rational use of the resources used, through greater reuse of exca-

vation materials and using landscaping to help works blend into the surrounding area.

Furthermore, work is carried out to improve and redevelop the areas that are passed through, with surveys and reclamation of contaminated sites where the infrastructure is built, an awareness of the way the area was historically used and inhabited and the consequent development of archaeological sites through preventive archaeology, highlighting the benefits of building the infrastructure.

With respect to land use, Italferr pursues design solutions focused on the compatibility of works with the condition of locations with a view to the most effective placement of the works. Over the past decade, Italferr has ramped up its architectural designs and urban planning, refining an accurate and original design process in all stages, from local planning to the design of individual works, to the final design applied to the constructive solutions. Based on the careful preparation of the functional plan, which implements the requests of customers and stakeholders and the input arising from the transport study, the company prepares the architectural concept, i.e., the formal and formative idea that transforms all the functions and suggestions, as well as the adjustments required by the location, into an architectural structure. Through the engineering of structures and plants, this process is completed with the components that ensure technical/cost feasibility and buildability.

Most of the control tools used during construction are monitoring all environmental components that are potentially affected by processing to verify the actual occurrence of expected impacts, assess the effectiveness of systems to mitigate, record and manage any irregular situations in a timely manner.

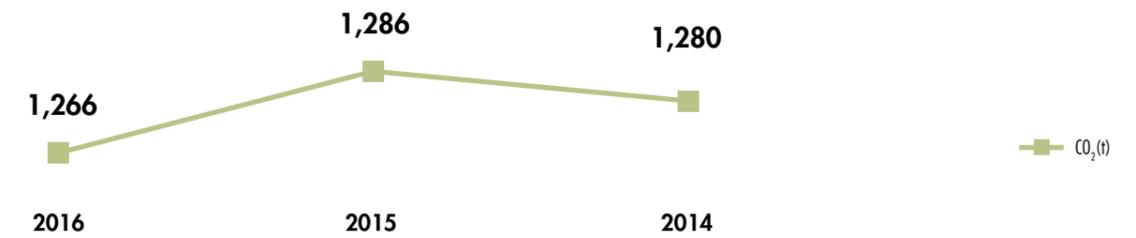
## FINAL ENERGY CONSUMPTION

		2016	2015	2014
Diesel	t	113	117	125
Electricity	MWh	2,251	2,290	2,113
Natural gas	Sm <sup>3</sup>	33,355	39,276	42,151

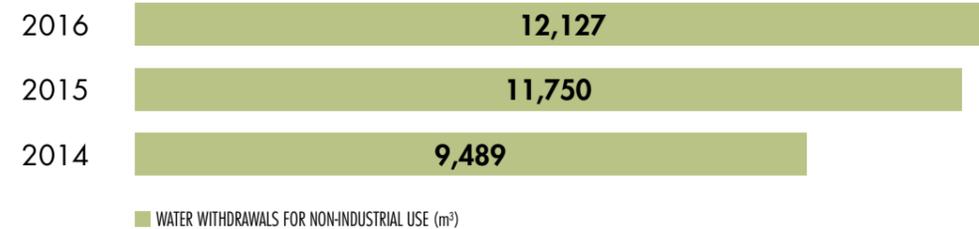
### Comments on the trend

In 2016, the company's diesel consumption for road vehicle traction decreased by 4% compared to 2015, due to the reduction in company vehicles (-4 on 2015) and the procedure updating usage methods with a particular focus on daily distances. Electricity consumption shows a steady trend and, for the Rome and Turin sites, an estimated overall decrease in consumption for heating (natural gas) of 15%.

## TOTAL CO<sub>2</sub> EMISSIONS



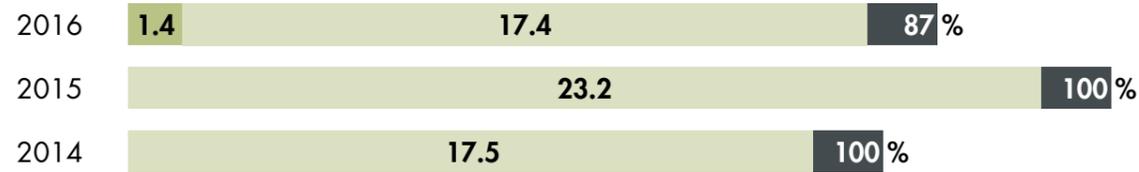
## WATER



### Comments on the trend

In 2016, total water withdrawal at sites was 12,127 m<sup>3</sup>, slightly up on 2015. To this end, the change in water consumption is due to the fluctuating trend in the number of resources at offices.

WASTE



■ HAZARDOUS SPECIAL WASTE (t)  
 ■ NON-HAZARDOUS SPECIAL WASTE (t)  
 ■ RECOVERED SPECIAL WASTE

Comments on the trend

With respect to the production of special waste, there was a reduction in the amounts produced (more than -19% on 2015). Of the 18.8 tonnes of special waste produced in 2016, 1.4 tonnes were hazardous waste (electric and electronic devices, lead batteries and excess paint). The nearly steady trend shows slight variations due to the closure and/or relocation of local branches in the past three years.

ASPECTS

Continuous improvement    Raw materials cycle    Water cycle    Energy and emissions    Land



	COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
	New rationalisation actions regarding energy consumption at the sites will be assessed	Various initiatives were carried out at the Rome site to reduce energy consumption. They related to the following, specifically:	In 2017, the rationalisation of energy consumption at sites continued, guiding the decisions to transfer certain local company offices to buildings with better energy performance or to FS Italiane Group buildings to take advantage of energy saving initiatives.
	Following the analyses and suggestions that came from the energy audit carried out at the Via Galati 71 site in Rome, it has been decided that the study of two projects will continue:	<ul style="list-style-type: none"> <li>the inversion of the cooling system, in order to take advantage of the various performance coefficients;</li> <li>the balancing of thermal plant collectors to optimise water heater yield.</li> </ul>	Maintenance of UNI ISO 14064-1:2012, UNI EN ISO 9001:2008, UNI EN ISO 14001:2004 and OHSAS 18001:2007 certification
	<ul style="list-style-type: none"> <li>the upgrading of the walls to improve the efficiency of the air conditioning and reduce consumption;</li> <li>the inversion of the cooling system, in order to take advantage of the various performance coefficients</li> </ul>		The company will monitor the inclusion of requirements in construction contracts for reducing greenhouse gases. The aim of this initiative is to encourage contractors to implement actions and conduct to support the environmental sustainability of works while they are being built and, more specifically, reduce their greenhouse gas emissions
	The opportunity to apply a bidirectional inverter to modulate the start-up current in order to recover the energy produced and inject it into the building's network will also be assessed		In 2016, whether to carry out this project was assessed through a cost/benefit analysis which highlighted the lack of benefits that would be achieved in proportion to the investment needed for implementation
	A report will be issued about the application of the climatic footprint calculation, which is currently being applied, with the involvement of the contractors, to projects in the realisation phase	SGS (Società Generale de Surveillance) completed an audit for the company to maintain UNI ISO 14064-1:2012 certification of the "methodology to quantify and report, on a design basis, the emissions (removals) of greenhouse gases generated by the design and construction of transport infrastructure"	
	The next contracts worth more than €30 million will be subject to contractual agreements for the reduction of greenhouse gas emissions during the development phases	Requirements to reduce greenhouse gases were applied to construction contracts worth more than €30 million to encourage contractors to take steps to improve the environmental characteristics of works under construction and, more specifically, to reduce the greenhouse gases emitted by the production and transport of construction materials (cement and steel)	
			Guidelines will be prepared for the application of the "Envision" sustainability protocol to railway infrastructures
			New services will be developed for the enhancement of cultural assets and the reporting of archaeological activities
			Building Information Modelling (B.I.M.) will be applied to land analyses with respect to the presence of environmental, landscape and archaeological restrictions
	A work Group is being coordinated to develop the guidelines for the application of the EMS regulations in work contracts by Group's companies	The work Group's project was completed with the issue of the "Environmental requirements in construction contracts"	

# FERSERVIZI

## OUR APPROACH

In accordance with the guidelines in FS Italiane Group's environmental policy and its occupational health and safety guidelines and objectives and furthering its commitment to the integrated management of the requirements in major international standards, Ferservizi considers the quality of its services, the protection of the environment and the protection of occupational health and safety strategic elements in developing its business.

As part its goal of continuous improvement, Ferservizi is committed to pursuing:

- / customer satisfaction by meeting agreed requirements, which it verifies through the appropriate monitoring and recording of feedback on customer satisfaction with services provided;
- / the engagement, awareness and information of people through training and internal communication, to raise their awareness of the contribution that each can give;
- / the definition of measurable objectives in line with company strategies, using the necessary means and resources for their pursuit;
- / full compliance with the applicable legislation and, where possible, exceeding it by invest-

- ing in people and protecting environmental resources;
- / the involvement of the concerned parties so that they efficiently implement policies capable of spreading awareness among all workers;
- / constant focus on the procurement chain, considering compliance with adequate technical and organisational requirements on occupation health and safety and their adequacy over time, in accordance with established standards and requirements, as necessary conditions for continuing the contractual relationship;
- / the consolidation of a risk prevention culture to create healthy and safe work environments and promote responsible conduct, partly to pursue the Group's objective of constantly reducing accidents;
- / the rational and efficient use of natural resources and raw materials by reducing consumption and energy use, promoting the use of energies from renewable sources, the optimisation of the waste cycle and the prevention and reduction of pollution for the entire life cycle.

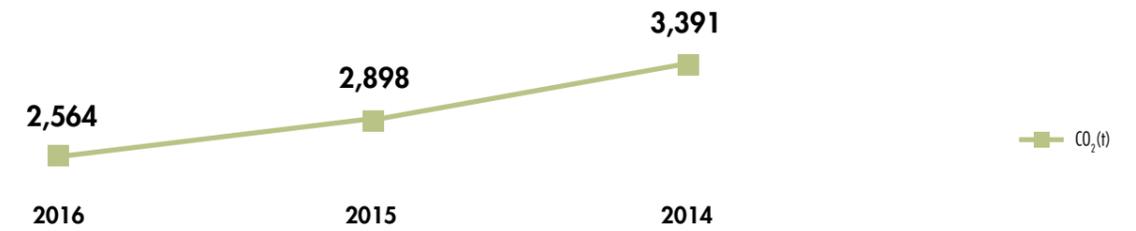
## FINAL ENERGY CONSUMPTION

		2016	2015	2014
Diesel	t	163	169	243
Electricity	MWh	3,375	4,206	4,585
Natural gas	Sm <sup>3</sup>	362,789	379,417	467,754

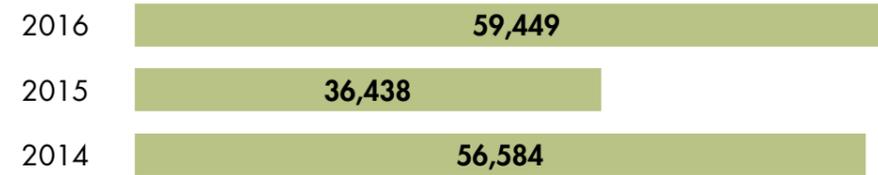
### Comments on the trend

The decrease in energy consumption, which was less noticeable for diesel and natural gas and much more significant for electricity, is mainly due to the rationalisation of utilities and the optimisation of existing plants.

## TOTAL CO<sub>2</sub> EMISSIONS



## WATER

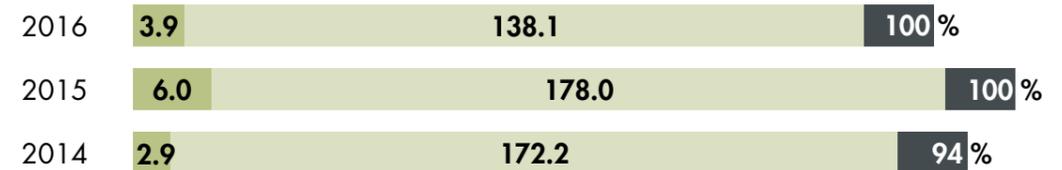


■ WATER WITHDRAWALS FOR NON-INDUSTRIAL USE (m<sup>3</sup>)

### Comments on the trend

The increase in the trend in 2016 is mainly due to the leak that was identified and resolved in the same year, estimated to approximate 22,500 m<sup>3</sup>.

## WASTE



■ HAZARDOUS SPECIAL WASTE (t)  
 ■ NON-HAZARDOUS SPECIAL WASTE (t)  
 ■ RECOVERED SPECIAL WASTE

### Comments on the trend

The decrease in hazardous and non-hazardous special waste is essentially due to the demolition of certain buildings (e.g. Ferrotel and the relocation of the Trieste and Genoa sites). In 2015, the company took advantage of these events to send obsolete furniture and IT material for recycling. Activities also continued to make personnel increasingly knowledgeable about sorted waste.



COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
Activation of a solar power system at the Genoa site and submission of the preliminary project for a new system at the Verona site	The Genoa plant was inspected and the preliminary project for a new photovoltaic system at the Verona site was submitted	Activation of the photovoltaic plant at the Genoa site  Completion of the executive plan for the plant and assignment of work for the construction of the photovoltaic plant at the Verona site. Consumption is expected to decrease by roughly 30MWh per annum  Utilities accounts at the Bari site will be separated to monitor actual energy consumption and take steps to reduce energy consumption. The utilities are currently shared with other companies and the accounts are in their names, limiting the initiatives that can be taken for a more rational consumption of energy resources  Energy diagnosis plan on at least three buildings with utilities accounts
Conversion of the thermal plant at the Venice Ferrotel from diesel to gas	The gas conversion project submitted for the Venice Ferrotel was approved. It is the last step in the conversion of plants from diesel to natural gas. The overall conversion plan excludes the following Ferrotels: Chiusi, Como and Ancona	Conversion of the Venice Ferrotel. Consumption is expected to decrease by 20%
Approval of the efficiency project for the lighting system at the Foligno site archives	Approval of the project to modernise the exterior lighting systems at the Foligno archives with LED technology  Preparation of a project to convert the common areas of the Rome site in Via Tripolitania to LED lighting systems  A new heat-pump air conditioning system was installed with the closure of the diesel-powered thermal power plant  A new thermal condensation power plant was installed to serve the Turin Ferrotel (via Nizza)	Exterior lighting system project for the Foligno document archive. Energy consumption is expected to decrease by 3MWh per annum  Project to replace lighting systems in common areas at the via Tripolitania site with LED technology; energy savings of approximately 50MWh per annum are expected
A new tender will be launched for company car leases, including environmental requirements aimed at reducing CO <sub>2</sub> emissions	The tender was awarded for the rental of company cars, including environmental requirements to reduce CO <sub>2</sub> emissions  In coordination with the Group companies' Mobility Manager, the agreement was renewed with ATAC S.p.A. for the purchase of Metrebus Rome and Lazio passes at special rates  Bike rack installed at the Rome site (via Tripolitania) to encourage the use of clean means of transport for their commute	



COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
Throughout Italy, agreements were started with the non-profit organisations for the recovery and reuse of obsolete materials such as computers and furnishings	A study was launched to verify the type of assets, volume of materials that could be donated and the implications that donations might have in terms of legislation and management  The project for the procurement of recycled paper only for office activities, which Ferservizi launched on an experimental basis, and which was subsequently extended to the largest paper users among customer companies, achieved the following results: <ul style="list-style-type: none"> <li>3,106 trees saved</li> <li>90,270,000 litres of water saved</li> <li>1,400,000 KWh saved</li> <li>269,000 kg less CO<sub>2</sub> emitted into the atmosphere</li> </ul>	A guideline will be defined for the management of donations of hardware and furniture to public bodies, recognised associations and foundations whose exclusive purpose is to provide assistance, charity, education, training, studies or scientific research and non-profit organisations. The resulting decisions will be aligned with the parent's guidelines  The campaign to increase personnel's awareness of the importance of properly sorting waste will continue  The project for the procurement of recycled paper only for office activities following the testing launched in 2014 will be extended to all Group companies

ASPECTS

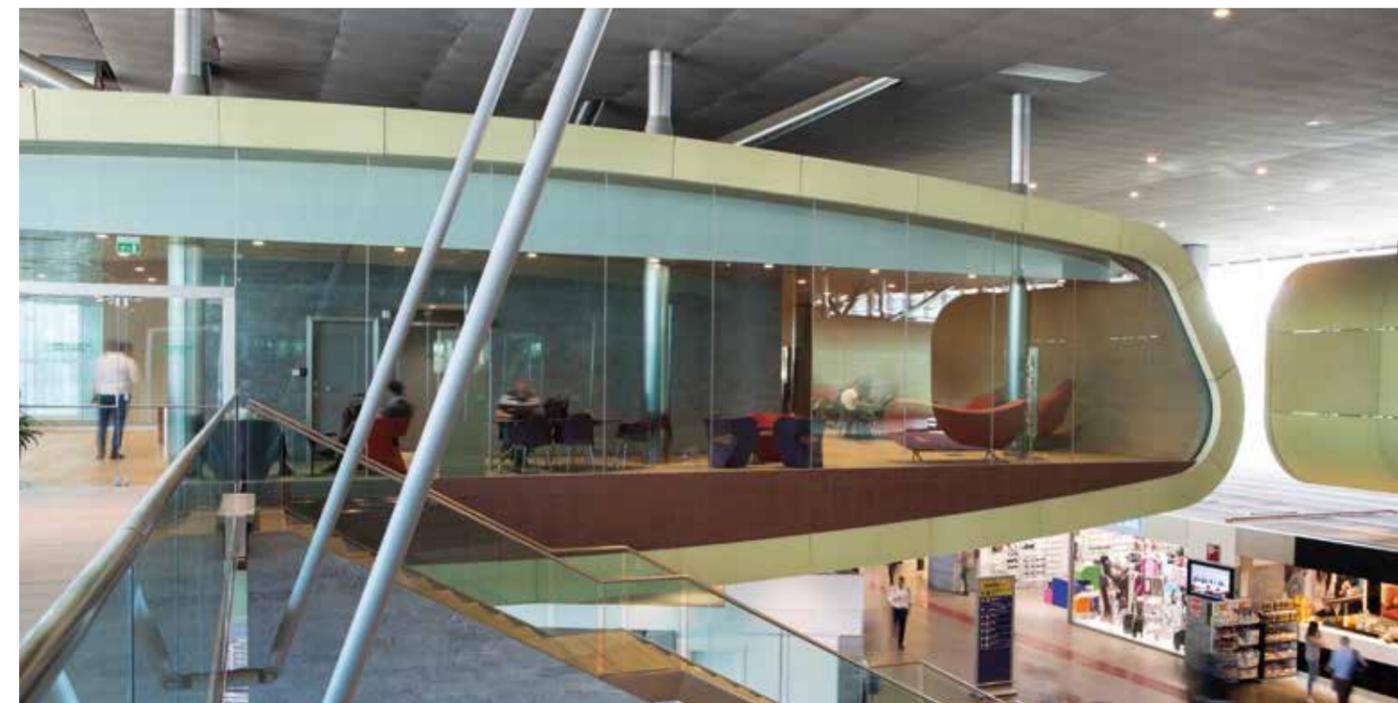
Continuous improvement

Raw materials cycle

Water cycle

Energy and emissions

Land



# GRANDI STAZIONI RAIL

## OUR APPROACH

Grandi Stazioni Rail manages the real estate complexes of major Italian railway stations and developing management and logistics areas and car parks, in accordance with FS Italiane Group's environmental policies. The company considers environmental sustainability is a strategic element of the integrated management of maintenance and cleaning, development, design and construction services.

Grandi Stazioni is committed to:

- / improving energy efficiency;
- / reducing its environmental impact, in terms of water resources and greenhouse gas emissions, noise pollution and electromagnetic emissions it releases into the atmosphere, the soil and water;

- / guaranteeing the proper management of waste, promoting sorted waste collection and recycling;
- / implementing its own environmental management system and striving to continuously improve its environmental performance;
- / complying with and, where possible, exceeding the legal requirements governing safety and environmental protection;
- / helping raise stakeholders' environmental awareness.

The above commitments of Grandi Stazioni Rail will be transformed into measurable objectives to be periodically assessed.

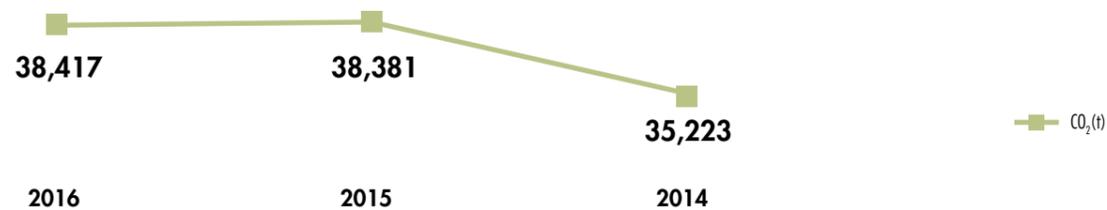
## FINAL ENERGY CONSUMPTION

		2016	2015	2014
Diesel	t	50	66	135
Fuel oil	t	188	182	171
Electricity	MWh	78,127	74,043	66,126
District heating	MWht	2,969	2,318	2,143
Natural gas	Sm <sup>3</sup>	8,339,271	7,892,085	7,077,786

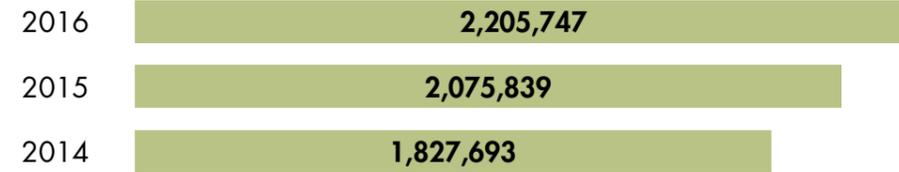
### Comments on the trend

The general increase in consumption is mainly due to the new openings at stations, such as the utilities hook-ups for car parks, redeveloped shopping areas and office leases.

## TOTAL CO<sub>2</sub> EMISSIONS



## WATER

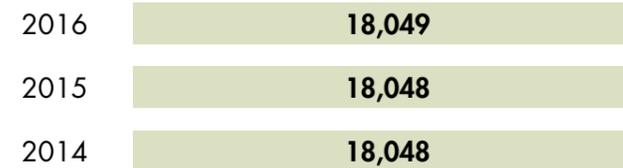


■ WATER WITHDRAWALS FOR NON-INDUSTRIAL USE (m<sup>3</sup>)

### Comments on the trend

The increase in consumption is mainly due to the new store openings, especially at Roma Termini.

## WASTE



■ URBAN WASTE (t)

### Comments on the trend

Waste production has not changed significantly over the years and the same estimation methods followed since 2013 are still in use.

The figures refer to the environmental aspects managed directly by the company on its own behalf or on behalf of other Group companies. This includes consumption by station customers.



COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
 <p>Carry out the energy diagnostics pursuant to legislative decree no. 102/2014 for the Roma Termini and Napoli Centrale stations</p> <p>Research into the reduction of energy consumption and the increase of comfort at the Milanp Centrale station</p>	<p>Energy diagnostics were carried out pursuant to legislative decree no. 102/2014 for the Milano Centrale, Venezia Santa Lucia, Venezia Mestre and Torino Porta Nuova stations in compliance with the clusterisation plan pursuant to regulations applicable to multi-site companies</p> <p>Energy sustainability surveys have commenced for the Milano Centrale and Roma Tiburtina stations</p>	<p>Completion of checks concerning the obligations pursuant to legislative decree no. 102/2014</p> <p>The energy rationalisation process at the Milano Centrale and Roma Tiburtina station real estate complexes will continue with specific work on the exterior and plants. At the Roma Tiburtina station, this work will entail energy savings equal to roughly 15% of current consumption and compliance with the project's comfort targets.</p> <p>A reduction of around 2,300 tCO<sub>2</sub> is expected at the Milano Centrale station as a result of the thermal plant rationalisation work.</p> <p>New electricity supply accounts will be assigned for all network stations, and they will require that at least 30% of the electricity supplied comes from renewable sources.</p> <p>Beginning of the process of separation of the utilities accounts for the new companies GS Retail and GS Immobiliare.</p>
 <p>Outfitting/restructuring of waste collection areas at the station complexes and updating of the waste management methods with new integrated environmental service contractors and local utilities companies</p>	<p>In agreement with the local utilities companies, the waste collection areas in the Milano Centrale, Napoli Centrale and Venezia Santa Lucia stations were upgraded. At the same time, a call for bids was carried out for the assignment of a cleaning service contract for the stations. The call required that bids included a specific project to increase the percentage of sorted waste</p>	<p>The waste collection areas at the Roma Termini, Roma Tiburtina, Bologna Centrale and Bari Centrale stations will be upgraded</p>
 <p>Implementation and improvement in the environmental management system by reviewing the procedures, operating instructions and environmental analyses and by providing training sessions for the personnel involved in maintaining the EMS</p> <p>ISO 14001 certification for the real estate complexes in Roma Termini, Milano Centrale and Venezia Santa Lucia</p>	<p>Environmental management system implementation and improvement activities continued</p> <p>This was postponed after the organisational changes in 2016 and work on assets in view of certification</p>	<p>New ISO 14001:2015 standard certification will be obtained for the real estate complexes in Roma Termini, Milano Centrale and Venezia Santa Lucia</p>

ASPECTS



Continuous improvement



Raw materials cycle



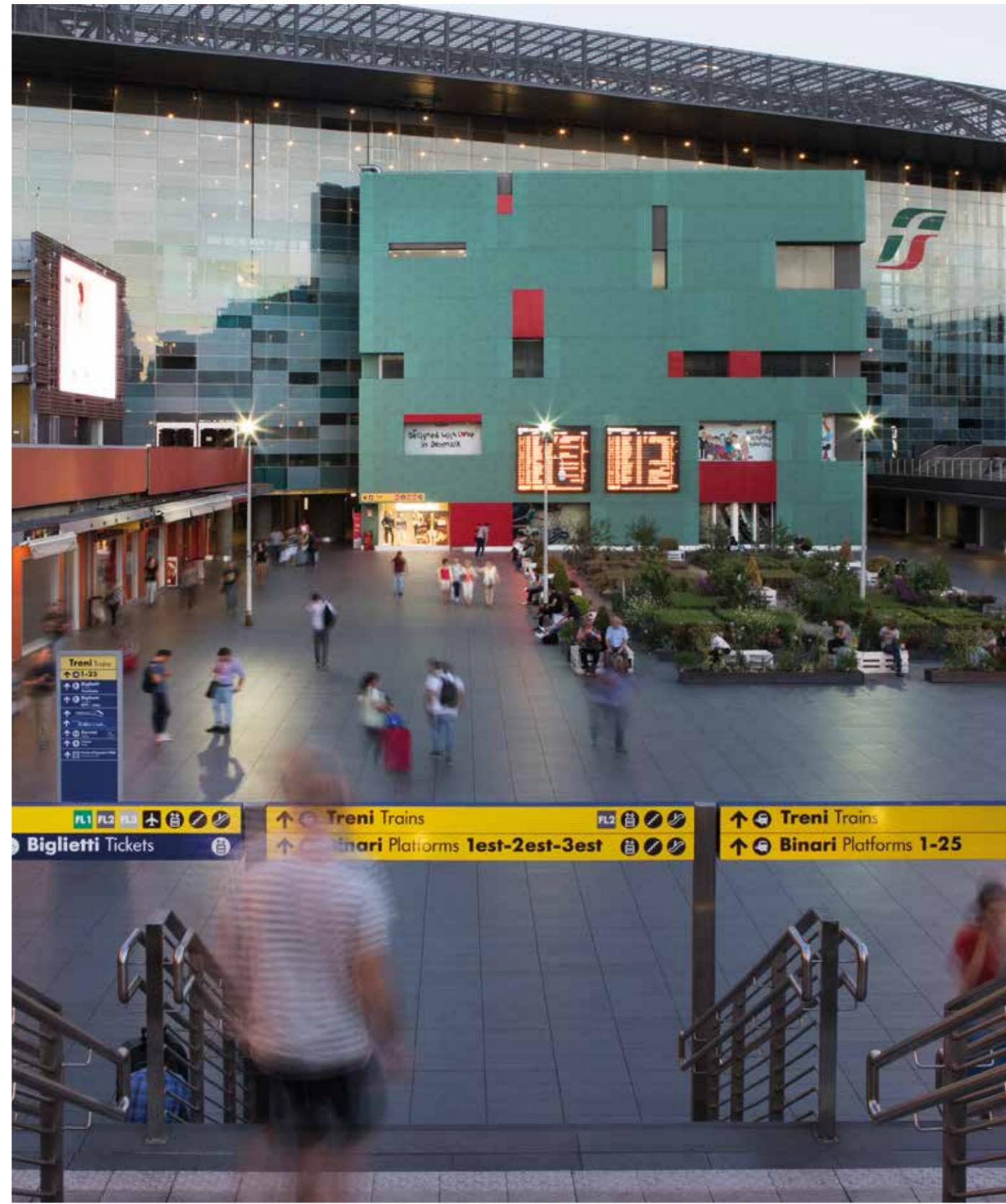
Water cycle



Energy and emissions



Land



# CENTOSTAZIONI

## OUR APPROACH

In line with FS Italiane Group's policies, Centostazioni is taking genuine steps to develop a new railway station concept, making it smart and more functional. These steps include sustainable, integrated mobility projects and offering travel-related services that meet users' needs.

The company's environmental policy is based on two main principles:

- / maximising the environmental benefits of the development, maintenance and management of stations and related support services;
- / minimising negative environmental impacts as a tangible form of corporate responsibility.

In the management of activities already focused on achieving the absolute highest service levels in terms of environmental sustainability, safety, punctuality and comfort, the company is committed to:

- / performing environmental analyses to identify the environmental aspects that could have a

significant impact and implementing specific monitoring programmes that minimise their effects;

- / updating the stations to the energy management and sophisticated diagnosis model through the SEM (Smart Energy Management) project developed by Rete Ferroviaria Italiana;
- / adopting innovative technologies, purchasing energy from renewable sources and keeping plants running efficiently to optimise and rationalise consumption;
- / designing operating solutions aimed at making buildings more energy efficient;
- / selecting suppliers whose work takes ethical, environmental and safety matters into account, with a view to continuous improvement.

The management of environmental aspects regarding the processes and activities performed is guaranteed by the integrated quality, safety and environmental management system, certified according to the international standards ISO 9001, ISO 14001 and OHSAS 18001.

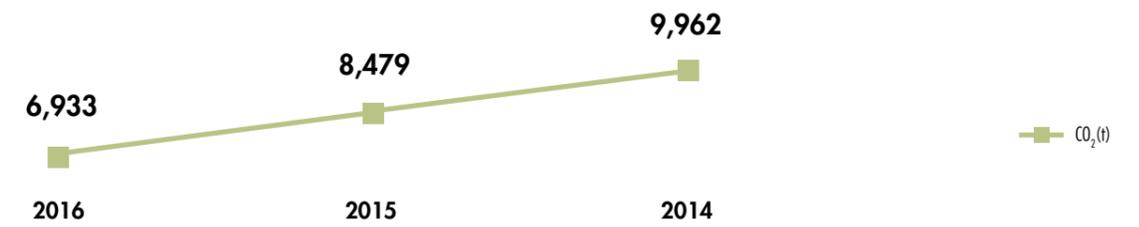
## FINAL ENERGY CONSUMPTION

		2016	2015	2014
Diesel	t	195	256	296
Electricity	MWh	12,126	14,120	15,931
Natural gas	Sm <sup>3</sup>	1,520,387	1,773,356	1,541,512

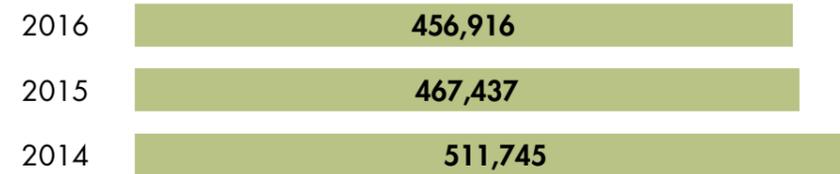
### Comments on the trend

The overall decrease in energy consumption is due to the steps taken to rationalise and optimise electric and thermal plants. The use of smart correction boards and flow optimisers significantly contributed to reducing electricity consumption.

## TOTAL CO<sub>2</sub> EMISSIONS



## WATER

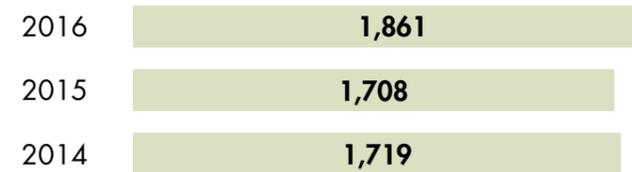


WATER WITHDRAWALS FOR NON-INDUSTRIAL USE (m<sup>3</sup>)

### Comments on the trend

The company continues to report a positive trend in the reduction of water consumption thanks to the efficiency of the monitoring systems it uses, which enable it to detect any irregular consumption in real time and take action on the network to limit waste. Work was done to rationalise the system by eliminating continuous flow devices (e.g., fountains, etc.).

## WASTE



URBAN WASTE (t)

### Comments on the trend

The upwards trend is due to the high level of waste contamination in public areas, as not all station users properly dispose of their waste.

The figures refer to the environmental aspects managed directly by the company on its own behalf or on behalf of other Group companies. This includes consumption by station customers.

	COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
	<p>The company will continue to sign supply agreements requiring that at least 30% of the electricity supplied comes from certified renewable sources. In addition, as part of the integrated maintenance service at the network stations, other energy diagnosis activities and the mapping of computer graphics for the electric circuits to help monitor usage will begin</p> <p>The plan for the monitoring of output and emissions from all the thermal power stations will be launched, also installing at least 30 room-temperature probes, connected to the company's information system at each of the network stations</p>	<p>30% of the electricity purchased in 2016 came from renewable sources and, furthermore, energy efficiency measures were completed to reduce electricity consumption by more than 10%</p> <p>The plan for the monitoring of output and emissions from all thermal power stations was implemented</p> <p>The initiatives planned for 2016 concerning the installation of room temperature sensors were deferred due to the postponement of the assignment of the facility management contract (integrated cleaning and environmental hygiene services, integrated routine and non-routine maintenance services and energy service at real estate complexes in the stations)</p>	<p>Steps will begin to optimise and rationalise the energy performance of buildings through:</p> <ul style="list-style-type: none"> <li>energy diagnoses on 10 stations</li> <li>installation of LED lighting in public areas at 10 stations in order to make the electricity consumption of lighting systems more efficient</li> <li>creation of an accurate monitoring and consumption oversight system for electrical power stations (70% of buildings) and thermal power stations (66% of buildings) by installing network gauges and heat sensors</li> </ul>
	<p>In relation to sorted waste collection, a daily process for the systematic monitoring of data will be launched at the headquarters and all network stations</p>	<p>The initiatives planned for 2016 concerning the finalisation of optimisation systems for sorted waste collection were deferred due to the postponement of the assignment of the facility management contract</p>	<p>A systematic data collection process and the related reporting on volumes of sorted waste collection will be launched for all network stations</p>
	<p>The mapping of computer graphics for the water circuits at the stations will begin</p>	<p>The initiatives planned for 2016 concerning the mapping of station water circuits were deferred due to the postponement of the assignment of the facility management contract</p>	<p>A monitoring and oversight system will be developed to read water consumption via the installation of specific water gauges. This will enable the company to process and manage consumption parameters and use them in planning improvements to the plants it manages</p>
	<p>The following actions will be taken within the scope of the "Operational station control" management model:</p> <ul style="list-style-type: none"> <li>training and awareness building on environmental issues will be provided to all personnel</li> <li>206 internal audits at the offices and network stations</li> <li>environmental analyses in accordance with the requirements of the ISO 14001 standard for the 103 network stations</li> </ul> <p>The extension of the environmental management system certification will continue at six network stations: Roma Ostiense, Padova, Milano Porta Garibaldi, Napoli Mergellina, Novara and Modena</p>	<p>Work was completed on all activities provided for by the "Operational station control" management model, with the extension of environmental management system certification to the Roma Ostiense, Padova, Milano Porta Garibaldi, Napoli Mergellina, Novara and Modena stations</p>	<p>A revision process will begin on the environmental management system to update it to the new UNI EN ISO 14001:2015 standard</p>

ASPECTS



Continuous improvement



Raw materials cycle



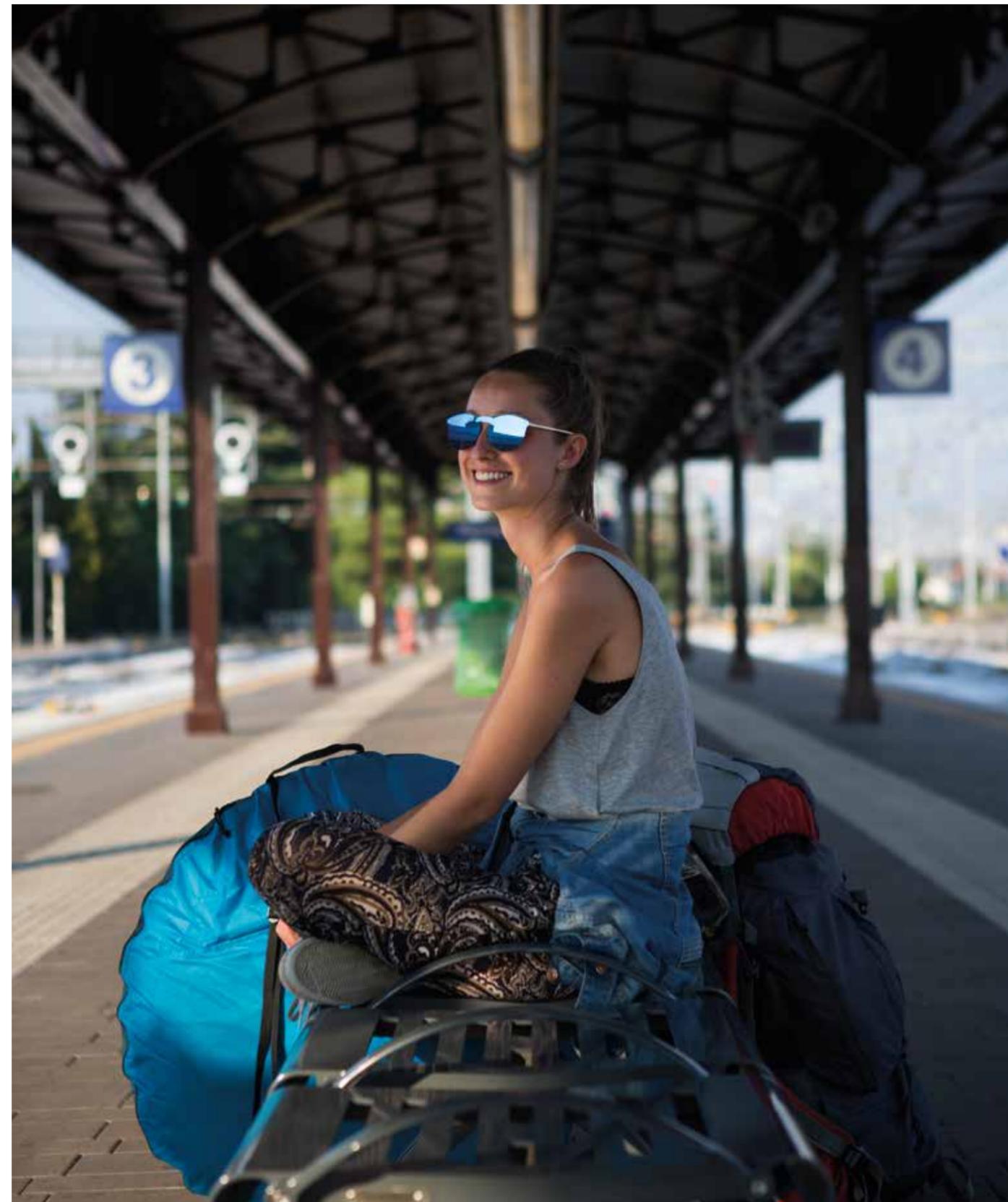
Water cycle



Energy and emissions



Land



## BUSITALIA - SITA NORD

### OUR APPROACH

Busitalia-Sita Nord's company policy resolves to adopt a management system that extends throughout all operating sites (of the company and its subsidiaries) that allows for optimum service effectiveness and efficiency and continuous improvement, including in terms of environmental performance, in line with the changing needs of the customer, the evolving rules and regulations, FS Italiane Group's strategies and, in general, to keep up to date with the transformations within the social, cultural and economic context of Busitalia-Sita Nord and its subsidiaries.

The company promotes the development of innovative infrastructures and technologies in order to improve services in terms of their sustainable life cycle.

The company carries out continuous market analyses and research, aimed at making the most of development opportunities for integrated and sustainable mobility, also with plans discussed with stakeholders.

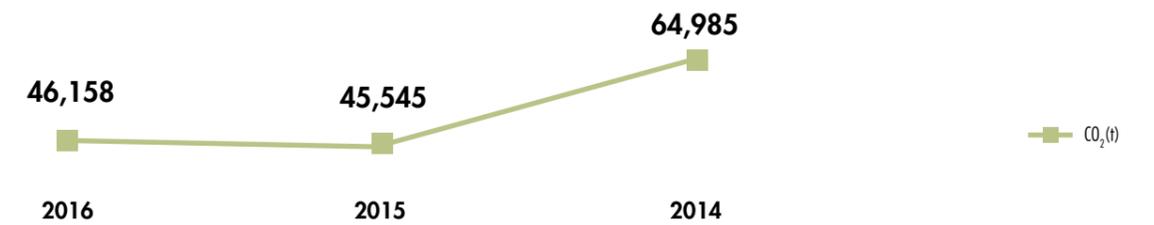
### FINAL ENERGY CONSUMPTION

		2016	2015	2014
Diesel	t	11,306	10,984	17,251
Electricity	MWh	4,710	7,414	5,540
Natural gas	Sm <sup>3</sup>	4,118,692	4,219,186	4,454,667

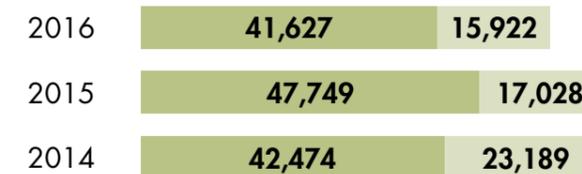
#### Comments on the trend

The 2015 and 2016 trends in diesel and natural gas consumption are substantially the same. The 2016 reduction in electricity consumption is due to the division of duties between the Umbria regional division and Umbria TPL e Mobilità S.p.A., which owns the assets and from which Busitalia - Sita Nord acquired management of local public transport rail and road operations and the waterway service on the Trasimeno Lake, along with other mobility-related activities.

### TOTAL CO<sub>2</sub> EMISSIONS



### WATER

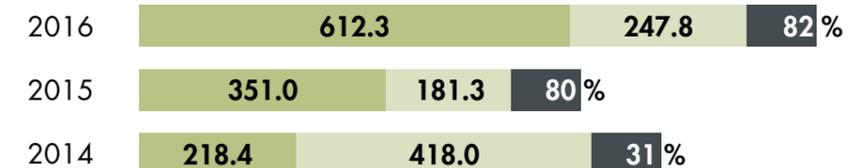


■ WATER WITHDRAWALS FOR NON-INDUSTRIAL USE (m<sup>3</sup>)  
■ WATER WITHDRAWALS FOR INDUSTRIAL USE (m<sup>3</sup>)

#### Comments on the trend

The reduction in the consumption of water withdrawn for non-industrial use between 2015 and 2016 is mainly due to non-routine maintenance on the water network at an Umbria Regional Division site. The trend in water consumption for industrial use between in 2015 and 2016 is substantially steady.

### WASTE



■ HAZARDOUS SPECIAL WASTE (t)  
■ NON-HAZARDOUS SPECIAL WASTE (t)  
■ RECOVERED SPECIAL WASTE

#### Comments on the trend

The significant increase in hazardous special waste in 2016 on the previous year is due to the scrapping of many buses. The increase in non-hazardous special waste between 2015 and 2016 is due to non-routine cleaning activities at the Umbria Regional Department.

The figures refer to the environmental aspects managed directly by the company or on behalf of other Group companies. 2015 and 2014 data include the amounts reported by Umbria Mobilità Esercizio, which became Busitalia - Sita Nord's Umbria Regional Department in 2016. Furthermore the 2014 data include the amounts reported by the Veneto operating site, which in 2015 became a newco controlled by Busitalia - Sita Nord.

	COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
	The company plans to purchase 37 Euro 6 buses to replace old generation Euro 0/Euro 2 vehicles	25 new Euro 6 buses boasting construction technologies and devices that reduce consumption joined the fleet	71 new Euro 6 motorised buses will be purchased to replace the same number of old generation vehicles (Euro 0/Euro 1/Euro 2), which will lead to a reduction in consumption and a decrease in emitted particulates, nitrogen oxide and CO <sub>2</sub>
	The plan to progressively install new electronic monitoring systems in the fleet will be activated	The new electronic monitoring system was launched on an experimental basis for the fleet of latest generation vehicles, making it possible to constantly track drivers' performance and pinpoint areas for improvement through individual training to improve personal performance and consequently reduce consumption	A lighting system that uses energy efficient light bulbs will be built for the Perugia depot office building  The old air conditioning systems in the offices will be replaced with new latest generation systems in 2017 as well
	In the offices, old air conditioning systems will continue to be replaced with the latest generation systems	Replacement of the heat generator for the Terni office building with the new latest generation condensation water heater and replacement of the water heater furnace in the Perugia depot offices with a new higher-performance device: these projects reduced consumption and emissions  In the Florence offices, old R22 air conditioning units were replaced with new R410a refrigerant gas units	
	In the new Euro 6 vehicles, higher-performing lubricating liquids will be used for the drive-train, which will increase service intervals, consequently reducing the amount of waste being disposed of	In the new Euro 6 vehicles, higher-performing lubricating liquids were used for the drive-train, which increased the amount of time before the need for replacement and, therefore, led to a reduction in the amount of waste disposed of. Furthermore, as the mechanical components are better protected, the life cycle is expected to be longer	The implementation of devices restricting the use of printers/copiers to authenticated users only (use of company badge) will continue at all company sites to accurately monitor the consumption of toner and paper
	At the Florence depot, a system will be activated that allows for the recovery of industrial water to be treated and for it to be reused to wash the buses, in order to reduce the amount of water withdrawn from wells	The project for the closed-cycle reverse osmosis system was completed, making it possible to reuse the treated water from the washing plant and consequently reduce the withdrawal of well water for industrial use	The closed-cycle reverse osmosis system to recycle industrial water subject to treatment to be reused to wash buses in order to reduce the withdrawal of well water will become operative in 2017

ASPECTS



Continuous improvement



Raw materials cycle



Water cycle



Energy and emissions



Land



## BUSITALIA – SITA NORD'S SUBSIDIARIES

### FINAL ENERGY CONSUMPTION

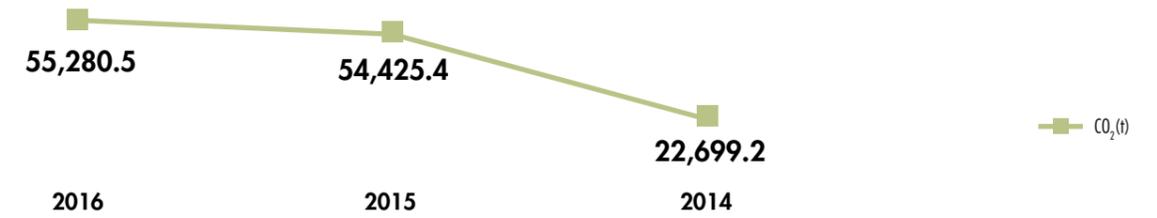
		2016	2015	2014
Diesel	t	12,559	12,383	4,731
Electricity	MWh	5,677	5,684	2,754
Natural gas	Sm <sup>3</sup>	6,160,571	6,839,746	3,491,681

#### Comments on the trend

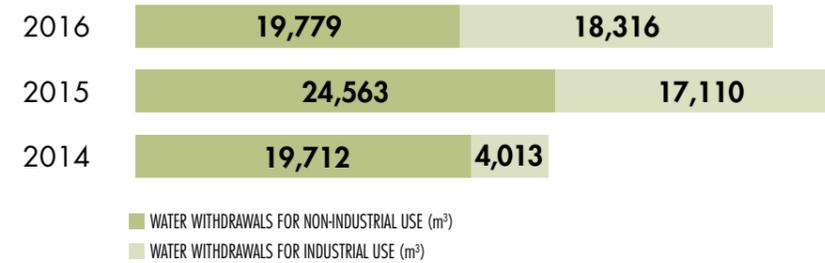
Diesel and electricity consumption recorded in 2015 and 2016 is substantially unchanged. The 2016 decrease in the consumption of natural gas is due to the shorter distances travelled by buses running on natural gas.



### TOTAL CO<sub>2</sub> EMISSIONS



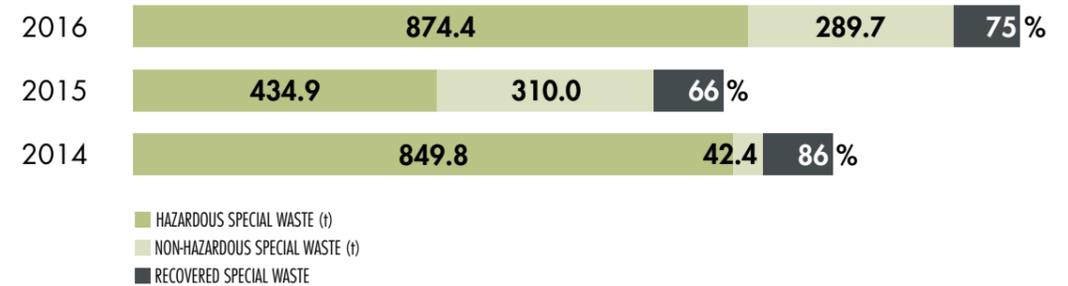
### WATER



#### Comments on the trend

The 2016 decrease in the consumption of water withdrawn for non-industrial use is substantially due to non-routine maintenance work performed in 2015 on the water network used by Ataf Gestioni.

### WASTE



#### Comments on the trend

The significant increase in hazardous special waste in 2016 is due to the substantial scrapping of buses, which also led to a percentage increase in special waste sent for recycling.

The figures refer to the environmental aspects managed directly by the company or on behalf of other Group companies. The data include the amounts reported by the subsidiary Ataf Gestioni, included in the reporting scope since 2014, and the amounts reported by Busitalia Veneto, included in the reporting scope since 2015.

COMMITMENTS MADE

WHAT WE HAVE ACCOMPLISHED

WHAT WE AIM TO DO

Busitalia Veneto



The roll-out of 20 new Euro 6 buses for public use in the municipalities and provinces of Padua and Rovigo is expected

Activities will continue to update the fleet to EU environmental standards, with concurrent investments in technological innovation

The transport service in Padua will be streamlined to limit the overlap between the urban and suburban transport services, reducing production costs and generating benefits in terms of energy consumption and environmental impact

28 low-emission Euro 6 urban and suburban buses replaced old generation buses (Euro 0 – Euro 2), and feature construction technologies and devices to reduce consumption (four buses run on biodiesel fuel)

The Padua transport service streamlining process was launched. By making the maintenance process more efficient, the company was able to reduce the total number of buses to six without losing any transport service quality.

Ten new Euro 6 diesel buses for urban transport will be rolled out as part of the Padua and Rovigo public transport service lines.

At the Padua trolley depot, a photovoltaic covering will be built to protect rolling stock from atmospheric agents

The analysis will continue to replace interior lighting systems on board trolleys with LED technology



Work was completed on the first flush rainwater treatment plants at the Padua and Rovigo plants

New plants were built for the treatment of first flush rainwater and to wash buses, which will generate benefits in terms of energy consumption and environmental impact

ASPECTS



Continuous improvement



Raw materials cycle



Water cycle



Energy and emissions



Land



COMMITMENTS MADE

WHAT WE HAVE ACCOMPLISHED

WHAT WE AIM TO DO

Ataf Gestioni



The plan to renew the company fleet with another 39 new Euro 6 diesel buses and the related training for drivers to equip them with all the tools needed for efficient driving

Training was provided to line drivers and workshop and shunting personnel and 39 new Euro 6 motorised diesel buses were purchased

Another 34 new Euro 6 buses will be rolled out to replace the same number of old generation buses, and the plan to renew the company car fleet will continue

Another 11 Euro 1 and 2 petrol-fuelled cars were replaced with more modern Euro 5 diesel vehicles

An electric car recharging station was created and two electric cars (ZEV - Zero Emission Vehicle) were rented under long-term rental agreements



The acquisition of new bio-oxidation treatment systems will be completed and the sustainability policy in the procurement and use of products and materials will continue

The new bio-oxidation treatment plant began operating

New industrial waste water plants and a new closed-cycle reverse osmosis system will be built for the reuse of water from the washing plant



# MERCITALIA LOGISTICS

## OUR APPROACH

In accordance with the guidelines of FS Italiane Group's environmental policy and its occupational health and safety action areas and furthering its commitment to the integrated management of the requirements of major international standards, Mercitalia Logistics considers the quality of its services, the protection of the environment and the protection of occupational health and safety strategic elements in developing its business, in the pursuit of continuous improvement in logistics and the enhancement of its assets.

The company's commitment to the environment is evidenced by the use of rails as the preferred mode of transport in its provision of integrated logistics services, thereby gaining an advantage in terms of sustainable mobility and reducing emissions. It confirmed this sensitivity to environmental issues in the installation - right back in 2007 - of a photovoltaic power station at the Roma San Lorenzo site, which actively contributes to preventing pollution by preventing CO<sub>2</sub> emissions into the atmosphere.

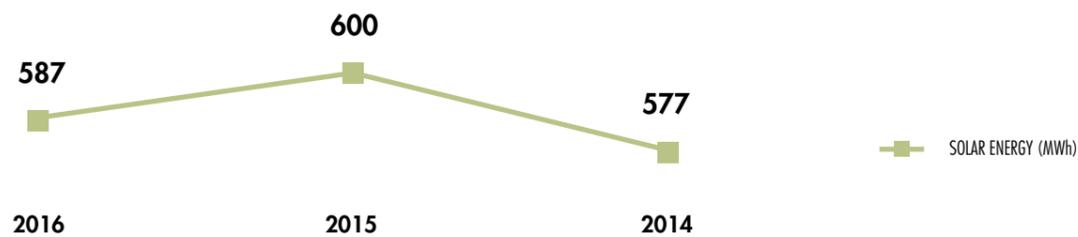
## FINAL ENERGY CONSUMPTION

		2016	2015	2014
Diesel	t	13	23	28
Electricity	MW	2,961	2,291	2,576

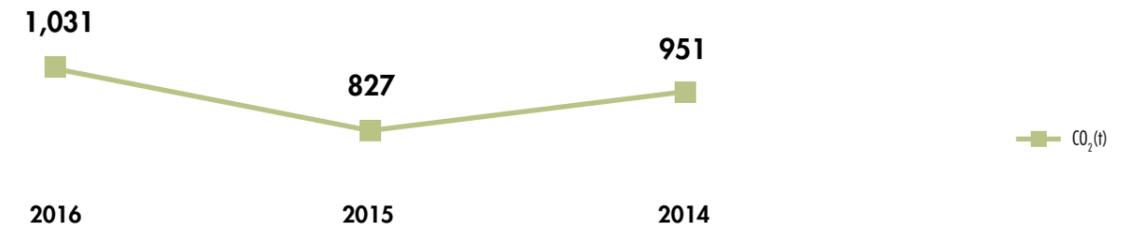
### Comments on the trend

The trend in the consumption of diesel shows a decrease in 2016 following the creation of a fancoil heating system and the consequent retirement of three diesel-powered water heaters. The increase in the consumption of electricity is due to the acquisition of three new utilities accounts.

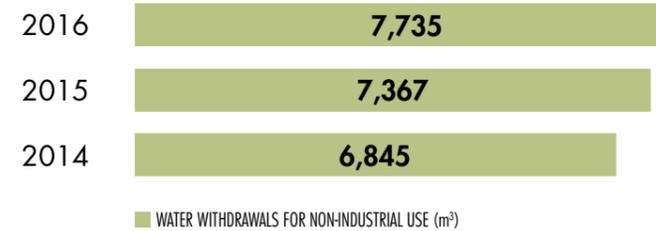
## PRODUCTION OF ENERGY FROM RENEWABLE SOURCES



## TOTAL CO<sub>2</sub> EMISSIONS



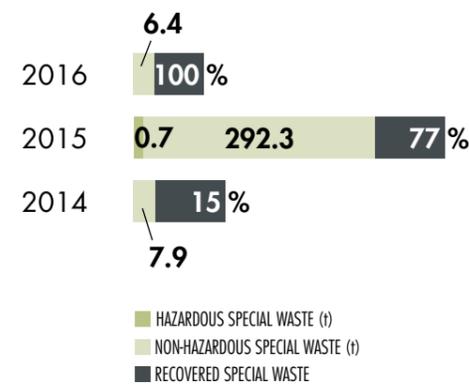
## WATER



### Comments on the trend

Water withdrawals for non-industrial use mainly refer to consumption for the Roma San Lorenzo site. The data indicate a nearly steady trend.

## WASTE



### Comments on the trend

Following the contractual changes identifying the companies that perform maintenance activities as producers of special waste, Mercitalia Logistics is no longer a producer of waste in 2016. The quantity of hazardous and non-hazardous special waste produced in 2015 was due to non-routine cleaning at local sites.

COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
 <p>Environmental training courses will be provided to company personnel, particularly regarding regulatory updates for the management of hazardous special waste</p>	<p>In 2016, one course on regulatory updates was held for the management of hazardous special waste. The main issues covered were:</p> <ul style="list-style-type: none"> <li>/ new methods for identifying the hazardous characteristics of waste</li> <li>/ management of particular types of waste</li> <li>/ administrative management of waste SISTRI</li> </ul>	<p>In 2017, the following environmental training courses will be provided:</p> <ul style="list-style-type: none"> <li>/ information on the new environmental management system within the company following the adoption of the new UNI EN ISO 14001:2015 format</li> <li>/ ADR/RID 2017 hazardous cargo - environmental impacts</li> <li>/ environmental crimes and changes to the current organisational model pursuant to legislative decree no. 231/01</li> </ul>
		<p>A technical and economic feasibility analysis will be performed on the replacement of traditional lighting with LED technology in hubs equipped with light towers</p>
 <p>The company will continue extending the integrated management system (safety, environment and quality) to other sites throughout Italy. Specifically, it expects to obtain ISO 14001 certification for the Pomezia and Verona Porta Nuova sites.</p>	<p>The company updated its certification to the new UNI EN ISO 14001:2015 standard and extended the certification scope to the Pomezia S. Palomba and Verona Porta Nuova sites.</p>	<p>In accordance with the parent's instructions, Mercitalia Logistics S.p.A. will extend the scope of application of its environmental management system to coordination and control processes as well, as the Mercitalia Hub became a sub-holding company on 1 January 2017.</p>

**ASPECTS**



Continuous improvement



Raw materials cycle



Water cycle



Energy and emissions



Land

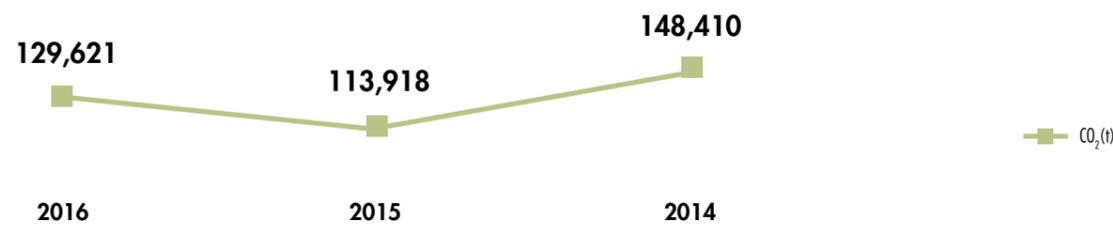


# NETINERA GROUP

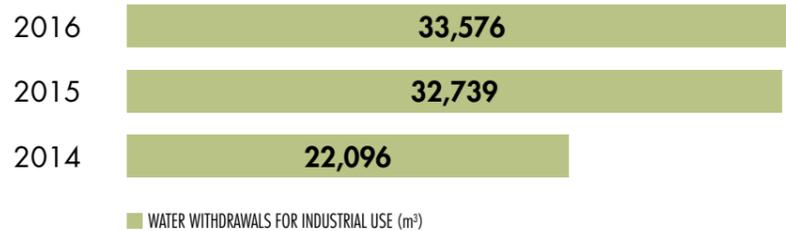
## FINAL ENERGY CONSUMPTION

		2016	2015	2014
Diesel	t	35,856	34,256	22,212
Total electricity	MWh	177,648	136,725	153,900
for railway traction	MWh	166,622	130,900	144,750
for other uses	MWh	11,026	5,825	9,150
Natural gas	Sm <sup>3</sup>	1,116,568	919,592	1,600,850

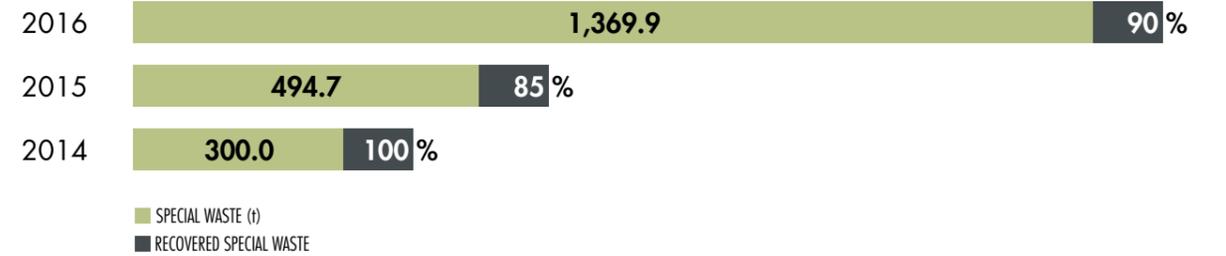
## TOTAL CO<sub>2</sub> EMISSIONS



## WATER



## WASTE



### COMMITMENTS MADE

Greater environmental awareness will be promoted at the Netinera Group companies, through the planning of workshops, employee awareness activities and the preparation of an implementation plan for an environmental management system

### WHAT WE HAVE ACCOMPLISHED

The process to promote environmental sustainability within the organisation continued, with a specific focus on the management of the Group companies' supply chain.

### WHAT WE AIM TO DO

The process to harmonise the Group companies' supply chain will continue, with the commencement of centralised management of the supply chain and the evaluation of whether sustainability criteria should be included in the vetting requirements for suppliers of goods and/or providers of services.

A plan will be prepared to implement an environmental management system in compliance with UNI EN ISO 14001:2015.

At each of the subsidiaries that fall within the reporting scope of the Sustainability Report, a "process owner" will be identified and will be made responsible for all the sustainability data, using a two-level reporting approach in order to make the most of the opportunities that the company information systems can provide.

The reporting process was further developed with the identification of managers within each Group company.

## ASPECTS



Continuous improvement



Raw materials cycle



Water cycle



Energy and emissions



Land

# FS SISTEMI URBANI

## OUR APPROACH

FS Sistemi Urbani is responsible for developing the Group's assets which are not functional to railway operations and providing integrated urban services with a business-oriented approach, as well as streamlining and improving the functioning and service offered to the public.

The company's "mission" is, therefore, attentive to environmental matters, managing potentially critical environmental aspects through the transformation and redevelopment of land from an inter-modal and urban-planning point of view.

	COMMITMENTS MADE	WHAT WE HAVE ACCOMPLISHED	WHAT WE AIM TO DO
	The monitoring of the company's assets will continue, and a plan will be drawn up to resolve the irregularities identified in the survey of the parking areas.	Real estate asset monitoring activities continued throughout Italy, with over 100 inspections to prevent any irregular situations, in collaboration with RFI.	Company asset monitoring activities will continue and a plan to remedy irregularities in the parking areas will be implemented.
	A detailed environmental survey will be carried out on some of the most complex company assets, in order to identify cases that can be used in the future to extend the analyses to include all assets	The remedial plan proposed by the subsidiary Metropark following a specific survey of each area zoned for parking was approved.	
	The ISO 14001 environmental certification will be extended to all company processes.	The ISO 14001 environmental certification was extended to all the company's operating and management processes.	Activities will begin to ensure compliance with the new ISO 14001:2015 standard. Activities have begun to certify an asset in Italy.

### ASPECTS



Continuous improvement



Raw materials cycle



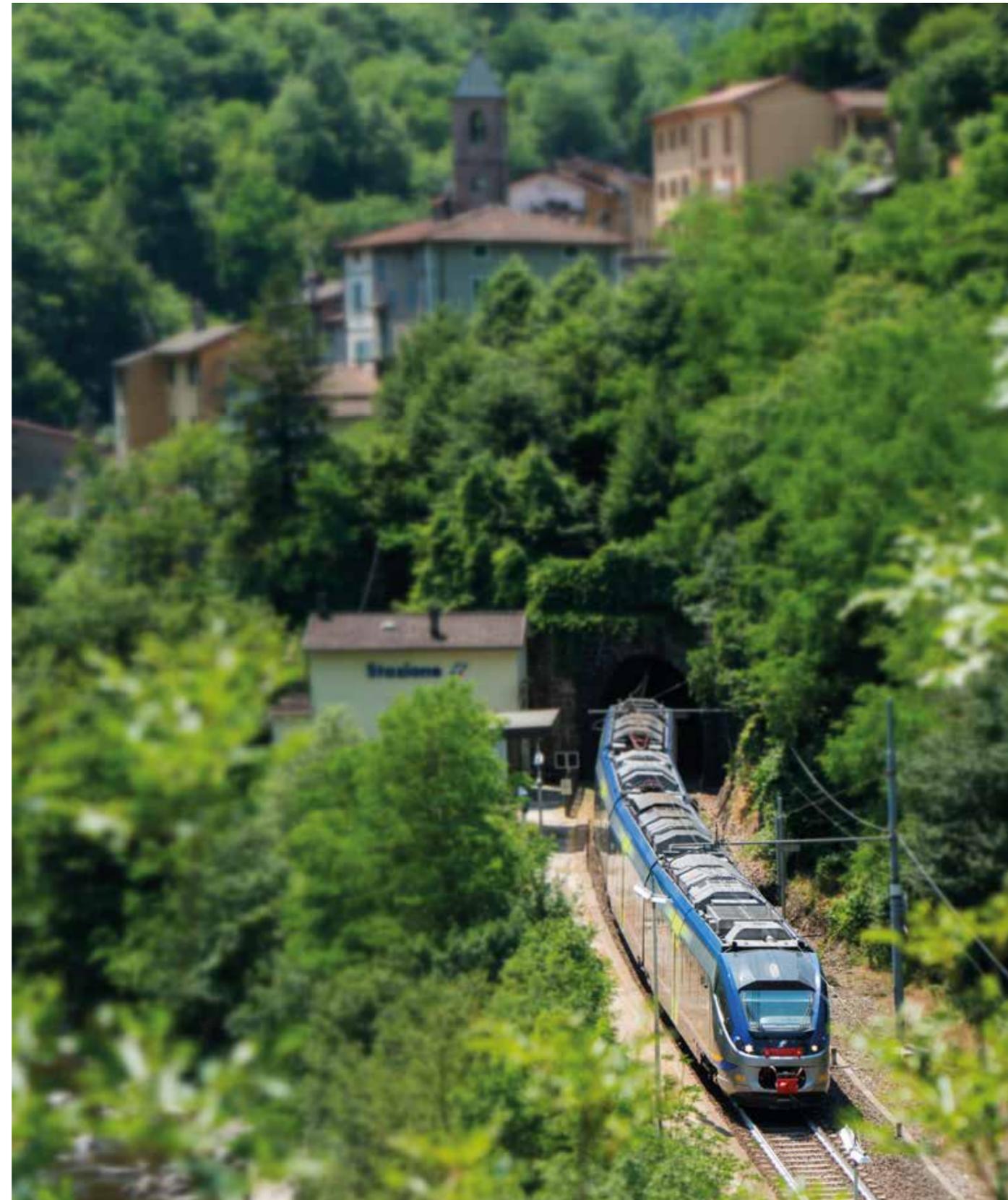
Water cycle



Energy and emissions



Land







Central Strategies, Planning and Sustainability Department

Central Brand Strategy and Communication Department

Piazza della Croce Rossa, 1 - 00161 Rome  
fsitaliane.it

Photos  
FS Group Photo Archive  
Studio Almaphotos

Production and graphic project by  
Interno Otto  
Piazza Istria, 2 - 00198 Rome

Finished in July 2017  
Grafiche Nappa - Industria Poligrafica  
Via A. Gramsci, 19 - 81031 Aversa (CE)



[fsitaliane.it](http://fsitaliane.it)

---