

2018 SUSTAINABILITY REPORT

The journey goes on

ATTACHMENT - **COMPANY HIGHLIGHTS** - THE ENVIRONMENT



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01

Company Highlights



FERROVIE DELLO STATO ITALIANE

OUR APPROACH

Ferrovie dello Stato Italiane 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.

In order to pursue this objective, it considers it essential to establish, carry out and monitor objectives which require the rational use of resources, the prevention and reduction of environmental risks, research into energy efficiency,

and the promotion of renewable energy sources with the aim of gradually reducing the Group's carbon footprint.

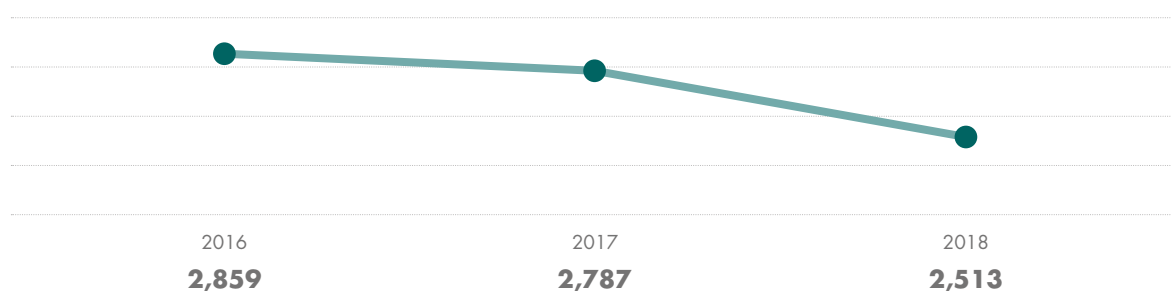
The environmental policy and environmental management system governance model guide the processes and actions towards continuous improvement, carefully and continuously developing natural capital by spreading awareness of environmental matters and actively supporting the monitoring of environmental impacts.

Final energy consumption		2018	2017	2016
Electricity	MWh	5,670	6,103	6,397
with guarantee of origin or self-produced using photovoltaic technologies	%	100	0	0
Diesel	l	31,550	77,462	83,481
Natural gas	Sm ³	306,921	283,645	291,046

Comments on the trend

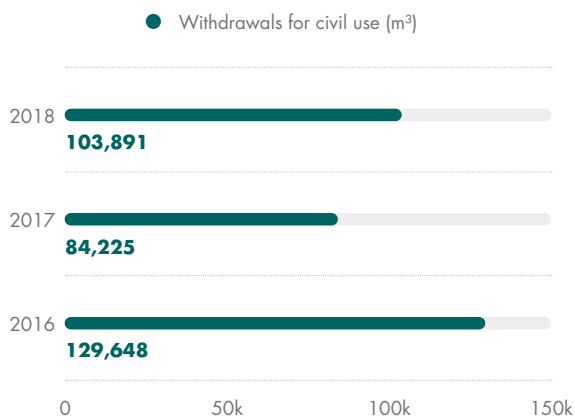
Energy consumption relates mainly to the management of the building housing the central headquarters in Villa Patrizi, Rome. The volume of natural gas consumed has remained essentially stable over the years, changing only in response to atmospheric conditions. The reduction in diesel consumption was due to the retirement of the diesel-powered thermal power plant in Trieste.

TOTAL CO₂ EMISSIONS (tCO₂)





WATER

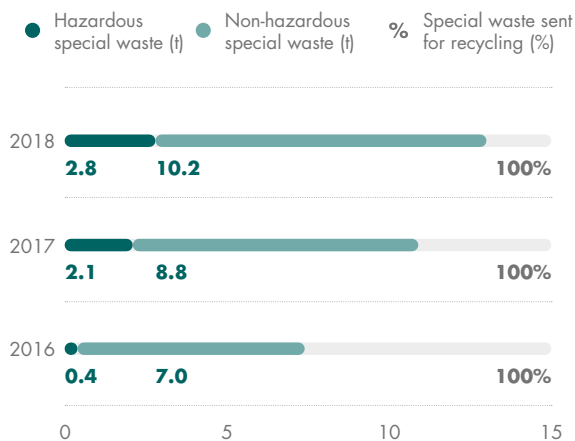


Comments on the trend

The figures in the table mainly refer to withdrawals for Villa Patrizi in Rome and are substantially steady given the type of activities (administrative) carried out at that site.

Consumption increased in 2018 as more people now work at the site and more well water was withdrawn from the well to water landscaped areas and for sanitary services.

WASTE



Comments on the trend

The figures in the table refer to special waste produced by the Villa Patrizi site in Rome.

The data show a trend that is nearly stable because office activities are carried out at this site, entailing a steady rate of waste production (IT devices, furniture and air conditioners).

Commitments made...

...what we have accomplished

...what we aim to do...



Formalise the sustainability governance model and apply it at all Group organisational levels

 in progress/rescheduled

A draft of the sustainability governance model was prepared and shared with all internal company units

An induction process on sustainability issues was commenced to raise awareness at all organisational levels, from the members of the Board of Directors to all employees

Define long-term environmental targets

 completed

The fifth Group stakeholders' panel defined long-term goals for 2030-2050 in line with the process launched by the Group's Sustainability Committee

The Group will evaluate whether to implement its strategic commitment in its business by including sustainability targets in remuneration policies, such as reductions in greenhouse gas emissions

Define a model to assess external economic, social and environmental issues to be applied to the Group's main projects will be defined

 in progress/rescheduled

In 2018, a pilot project was completed to measure the direct, indirect and induced social, environmental and economic impacts of the Freccialink service (Milan – Matera route). This project is a preliminary step in the definition of an assessment model that is applicable to all investments/Group activities

Discussions will be held with the main Group companies to define an external factor assessment model applicable to all key projects

Issue updated guidelines and provide cross training to the main Group companies

 in progress/rescheduled

The environmental sustainability guidelines were shared with the Group companies and are being issued. The roles and responsibilities of the sustainability and environment professional group are being updated

Begin a project to integrate environmental and social considerations during the procurement stage and to analyse and subsequently improve the sustainability performance of the Group's supply chain

 in progress/rescheduled

A preliminary plan was prepared and presented to the main Group companies while collaboration with RAILSRESPONSIBLE began to extend RFI's involvement to the rest of the Group

A task force will be formed to implement the project and promote the integration of environmental and social considerations in procurement

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



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 integrating sustainability in the business and focusing 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 everyday 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 reduction 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 operates in compliance with 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		2018	2017	2016
Electricity*	MWh	473,608	446,390	413,813
with guarantee of origin or self-produced using photovoltaic technologies	%	0	0	0
Diesel	l	16,737,158	17,693,463	17,367,409
Natural gas	Sm ³	9,131,584	8,509,108	8,392,092

* Including the consumption of self-produced photovoltaic energy. Excluding high voltage electricity absorbed by the railway companies' trains operating on the network operated by RFI.

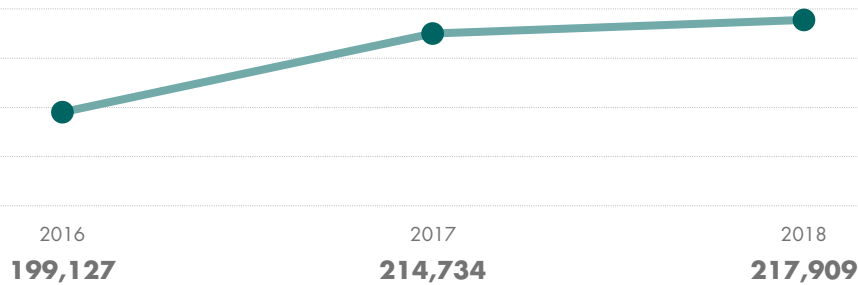
Comments on the trend

Electricity consumption for uses other than traction in 2018 increased by roughly 6% on 2017, due, on one hand, to the commissioning of new central computerised devices and the transformation of diesel and natural gas heating systems into heat pump systems and, on the other hand, to the inclusion of Centostazioni in the scope of RFI, with its consumption of approximately 11,000 MWh, equal to around 2% of RFI's total consumption.

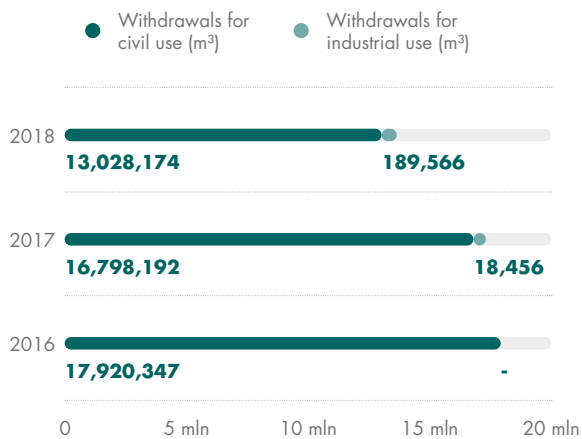
Diesel consumption decreased by some 5% on 2017, the net effect of two contrasting trends: while consumption of

railway transport and heating systems decreased (-15% and -23%, respectively), consumption for network maintenance work and shunting vehicles and consumption to power road and work vehicles increased (+14% and +4%, respectively).

Consumption of natural gas grew by a total of approximately 7% on 2017, with 85% of this growth due to the inclusion of Centostazioni in RFI's scope.

TOTAL CO₂ EMISSIONS (tCO₂)

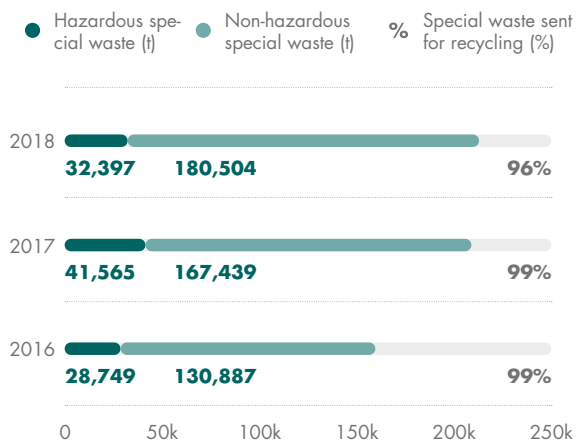
WATER



Comments on the trend

Water withdrawals decreased by roughly 20% on the previous year due not only to physiological changes resulting from the type and volume of production activities, the closure/retirement of several wells and additional water management optimisation and efficiency measures.

WASTE



Comments on the trend

RFI's production of waste is closely tied to railway network maintenance. In 2018, the total quantity of waste produced was in line with the previous year, although the breakdown of hazardous and non-hazardous waste changed significantly. The percentage of hazardous waste dropped by 22% as there were fewer replacements of sleepers with CAP sleepers or eco-friendly treated sleepers, which were mainly carried out in 2017, while the percentage of non-hazardous waste grew by 8% in connection with the updating of tracks.

The total share of waste sent for recycling fell by 3% due to the growth in the percentage of hazardous waste sent for disposal.

Commitments made...

...what we have accomplished

...what we aim to do...



Relamping at 50 stations and audit activities to assess the lighting system before and after the project and to become eligible for the Conto Termico 2.0 subsidy granted by the Italian government

 **completed**

The replacement of fluorescent lighting systems with LED lighting systems and the installation of remote control/management systems at 50 stations were completed. Over 100 lighting system audits were conducted in preparation for the replacement and requests for Conto Termico 2.0 subsidies

LED lighting systems will be installed in another 200 stations

400 low lightbulb signals were replaced with low LED signals as part of the long-term replacement plan for all low lightbulb signals (approximately 13,000) with low LED signals

 **in progress/rescheduled**

The replacement of 400 low signals was planned for 2018, bringing the total progress of the long-term plan to 42% (approximately 5,400 low signals replaced)

Share the framework for the "Green Power for Rail" project for the self-production of photovoltaic energy

 **completed**

A technical/economic/regulatory feasibility analysis was completed for the project

Start the experimental innovative electrical substation (four-year project) to regulate the tension and energy accumulated by train braking

 **completed**

The experimental project was launched with a tender procedure to build the prototypes

The experimental project to recovery energy from train braking will continue

A virtual energy consumption gauge for trains was developed based on the type of train, the characteristics of the line and the season. During the year, the DCS (Data Collection System) prototyping was completed

The DCS system prototype will be delivered

An analysis was conducted on the company car fleet, along with a technical/economic feasibility study for its progressive replacement with electric cars

The use of electric cars began with testing for managers of the local units



Commitments made...

...what we have accomplished

...what we aim to do...



Roll out the customised "Atlantide" information system to automatically fill out waste loading and unloading ledgers

"Atlantide" began operating for some of the company units involved in the waste management process

The use of Atlantide will be extended to all units involved in the waste management process

 completed

At the Bari steel mill, which specialises in the production of manganese steel "frogs" (the foundation for railway exchanges), a project began to expand the regeneration of foundry sand to prepare moulds, reducing their disposal and instead reusing them in the production cycle

The project will continue for the reuse of foundry sand

Experimental production began on eco-ballasts using blast foundry slag to create stone chippings for the ballast. During the year, an operating section of the infrastructure was identified for the testing and agreements were reached for on-site testing of the new material

On-site testing will begin on the new eco-ballast material and synthetic sleepers



Continue designing and implementing a process for the measurement and monitoring of corporate water consumption, using the meters for RFI's most significant water utilities (which represent 75% of annual costs, based on 2016 expenditure), in order to launch a virtuous process to save water.

Begin technical and project studies for:

- › acquiring/renewing/reviewing authorisations related to water management;
- › mapping water networks and procurement points.

Conduct a survey for the retirement or transferability of current wells and springs

The water consumption monitoring and measurement process began in the area, with the reading of meters, and the initial technical and project studies were completed as part of the long-term water management project for the optimisation/efficiency of water according to consistent criteria for the entire country.

The activities included:

- › the survey of wells and springs on the entire network was performed and a schedule was prepared for their disposal;
- › technical and project studies were completed for the optimisation/efficiency of the local Milan, Turin and Naples systems

The water management project will continue with the design of pilot systems to recover water at two depots' washing platforms and reuse it to wash work vehicles

 completed

Commitments made...

...what we have accomplished

...what we aim to do...



Update the PAI (plan regulating the more urgent aspects of the hydrogeological structure) mapping data and integrate them with the PGRA (flood risk management plan) data for infrastructural sections at hydrogeological risk

 completed

The PGRA was prepared for infrastructural sections subject to hydrogeological risk and integrated in the updated PAI mapping.

In collaboration with CERI - research centre for geological risk prediction, prevention and control - of the "La Sapienza" University in Rome, monitoring/alert systems were created and rolled out for five pilot systems to protect railway tracks from rapidly falling objects



Extend the use of suppliers' sustainability to calculate their score for the awarding of contracts, using the monitoring platform developed by EcoVadis, for all tenders

 completed

The use of suppliers' sustainability to calculate their score for the awarding of contracts based on the most cost-effective bids was extended to all tenders

The use of suppliers' sustainability to calculate their score for the awarding of contracts based on the most cost-effective bids was extended to all tenders

Begin participating in round tables promoted by Railsponsible

 completed

Participation in the round tables promoted by Railsponsible began

The round tables promoted by Railsponsible will be extended to all group companies under FS S.p.A.'s coordination

Maintain OHSAS 18001 certification

 completed

OHSAS 18001 certification of the worker health and safety management system was confirmed

Activities will begin to make the system compliant with ISO 45001:2018 requirements

The Green Academy was launched, a training initiative to raise environmental awareness

Local Green Academies will be established

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



RFI'S SUBSIDIARIES

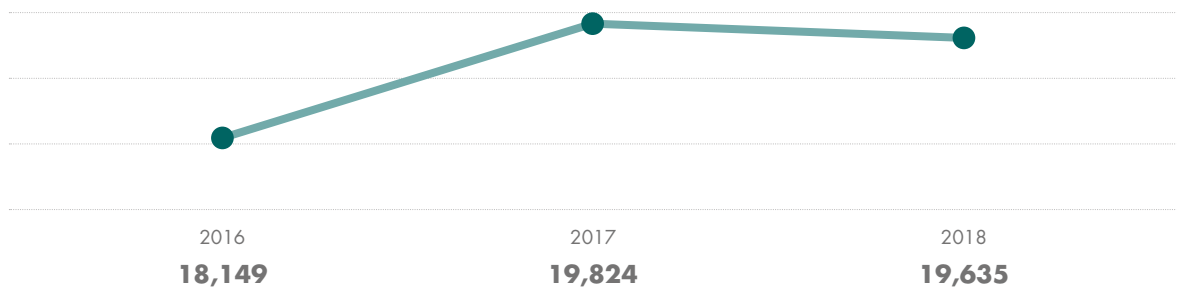
BLUFERRIES

Final energy consumption		2018	2017	2016
Diesel		6,924,716	7,032,824	6,471,146

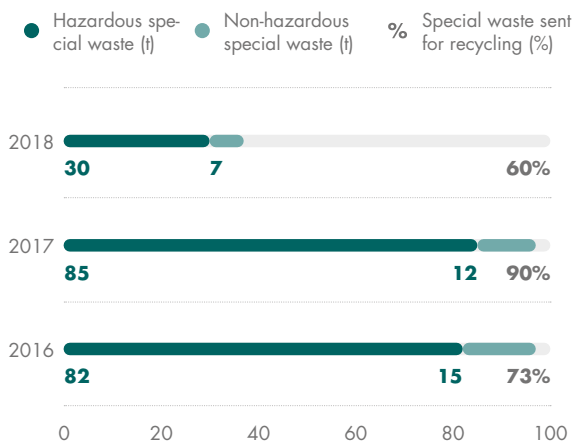
Comments on the trend

Diesel consumption was slightly down on the previous year (-1.6%) despite the increase in the number of journeys in the fourth quarter of 2018 due to the launch of more energy-efficient HSC (high-speed craft).

TOTAL CO₂ EMISSIONS (tCO₂)



WASTE



Comments on the trend

Due to the particular non-routine maintenance performed on ships, the production of hazardous and non-hazardous waste decreased in 2018.

Commitments made...

...what we have accomplished

...what we aim to do...



Continue the personnel training programme with refresher courses on legislative changes affecting activities

Training sessions were provided on board ships to update on-board crew on the transport of dangerous freight

 completed



Assess the feasibility of extending the desalination to other means of water transport will be assessed, also based on the data collected on the Enotria ship and the monitoring of water consumption on board

The extension of desalinators to other ships was considered feasible after verifying that the desalinator installed on the Enotria is fully effective and reduced external water supplies (by roughly -70%)

Desalinators will also be installed on the fleet's new units

 completed



Complete the construction of the new ferry with EIAPP-certified (*Engine International Air Pollution Prevention*) engines and begin construction on the second unit

The new Trinacria ship was delivered in Messina, with the installation of four main engines and three EIAPP-certified generators, consuming roughly 6% less diesel than other ships in the fleet

A new ship will be built for use beginning in the first half of 2020

 completed



The process to update ISO 14001:2015 certification and to obtain OHSAS 18001 certification began

The environmental audits required by ISO 14001:2015 were conducted on board water and land vehicles and the technical and economic feasibility was assessed for ISO 45001:2018 certification (the next step in OHSAS 18001)

The ISO 45001:2018 certification process will begin

 in progress/rescheduled

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land

RFI'S SUBSIDIARIES

TERMINALI ITALIA

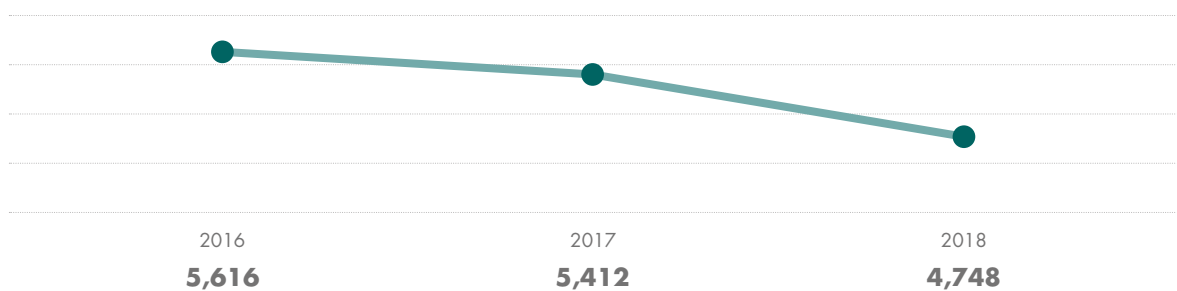
Final energy consumption		2018	2017	2016
Electricity	MWh	2,371	2,519	2,807
with guarantee of origin or self-produced using photovoltaic technologies	%	66	0	0
Diesel	l	1,498,000	1,719,181	1,766,282

Comments on the trend

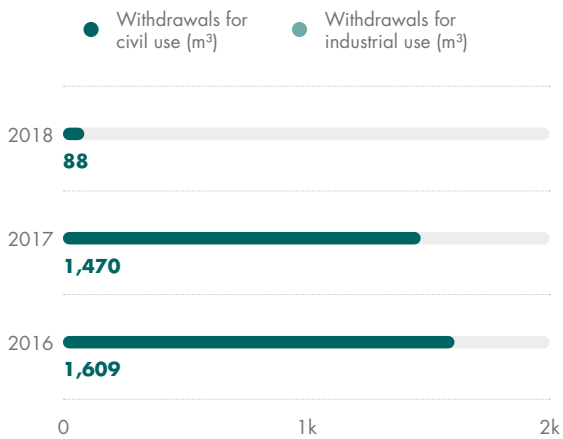
Electricity consumption continued to fall (-6%) as in 2017 following the replacement of traditional lightbulbs with LED lights in light towers and the bridge crane lights at the Verona Quadrante Europa. 66% of energy consumed in 2018 was from renewable sources, for which the company has signed a specific contract within the scope of the Group framework agreement.

The drop in diesel consumption (-31%) also continued in line with the crane fleet updating and replacement plan – now completed - and the plan to update the shunting vehicle fleet for the Verona Quadrante Europa and Bari terminals.

TOTAL CO₂ EMISSIONS (tCO₂)



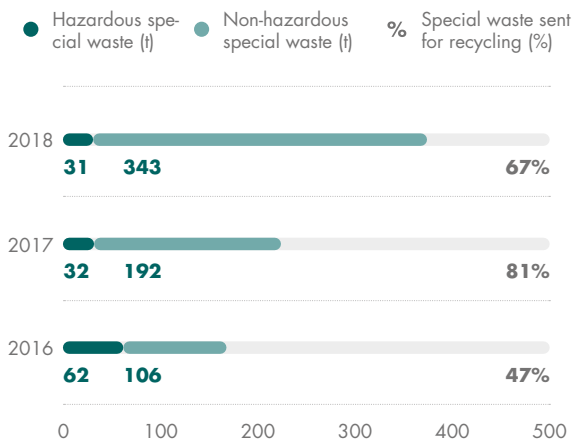
WATER



Comments on the trend

The reduction in water consumption in 2018 should be considered in the light of the discontinued management of the Milan shunting terminal. Consumption now only refers to the water for the Verona Terzo Modulo terminal.

WASTE



Comments on the trend

More non-hazardous waste was produced in the year, specifically due to non-routine maintenance to clean sludge tanks and drains at the Verona Quadrante Europa terminal and the smaller percentage of non-hazardous special waste sent for recycling.

The decrease in the amount of hazardous special waste produced continued in 2018 due to the decrease in maintenance on the new mobile cranes.

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



Commitments made...

...what we have accomplished

...what we aim to do...



An advanced environmental emergency response course was provided to certain members of the emergency team



completed

Following additional assessments, to better protect its workers' health and safety and prevent any additional exposure to the risk of accidents, the company outsourced the emergency response service to a specialised company

Obtain ISO 14001:2004 certification for the environmental management system and begin preliminary activities for ISO 14001:2015



completed

ISO 14001:2015 environmental management system certification was obtained for the Verona, Bologna and Bari sites

Preliminary activities will begin to implement the UNI ISO 45001:2018-compliant occupational health and safety management system for certification by an accredited independent body



Continue revamping the port cranes. Two more new-generation mobile cranes with lower environmental impact in terms of energy efficiency and emissions were purchased for the Verona and Segrate terminals



completed

The last step in the crane updating plan was the purchase of two new-generation mobile cranes, which will reduce consumption by approximately 100,000 litres of diesel per year

Five new locomotives with maximum-power fuel consumption that is significantly lower than former models will be leased. The new locomotives will be fitted with modern safety systems and will be used for railway shunting at the Verona and Bari terminals



completed

Five new locomotives were leased, cutting diesel consumption by roughly 25% compared to the old-generation locomotives



Roll out the new rainwater treatment plant at the Verona terminal



in progress/rescheduled

The construction work on the new treatment system is being completed



Monitoring campaigns will be kicked off for the various environmental matrices (electromagnetic fields, atmospheric emissions, etc.)





TRENITALIA

OUR APPROACH

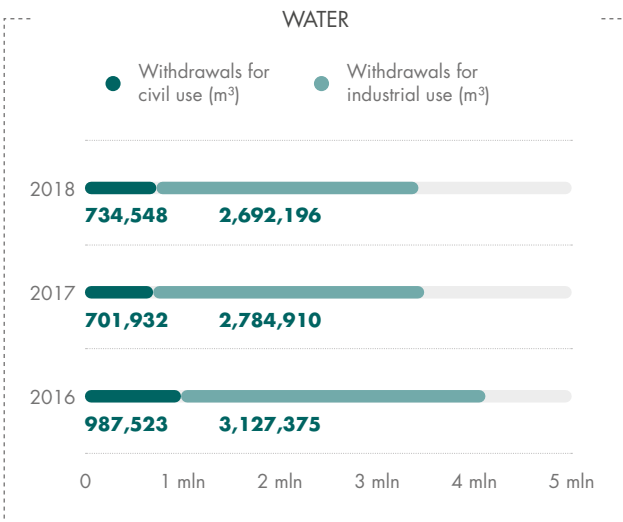
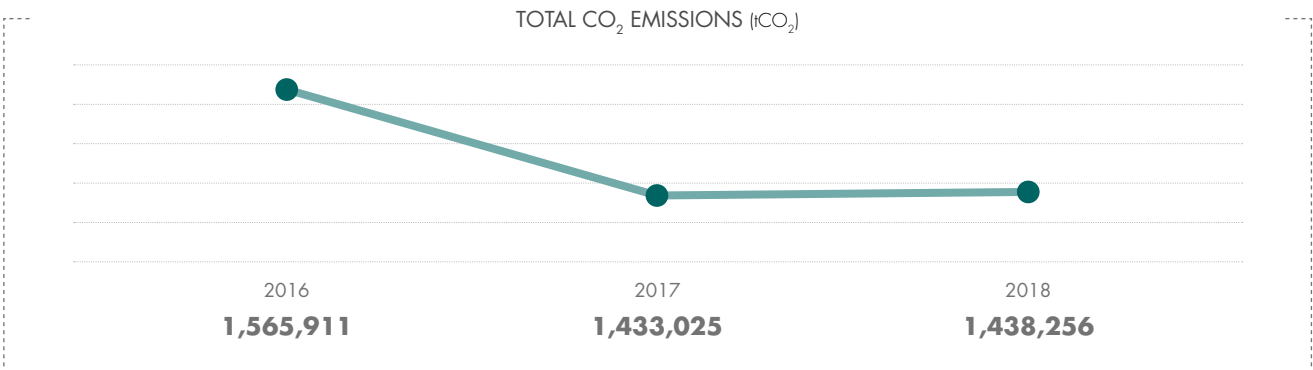
Trenitalia considers the safety of railway operations, the quality of services provided, the protection of the environment, the safeguarding of the health and safety of its workers and energy efficiency as strategic elements in its business. Trenitalia has therefore formalised an integrated policy (quality, environment, occupational health and safety and energy) that generally directs and guides the company towards achieving its mission and gaining a competitive edge, which uses the environmental benefits of railway transport as leverage to create incentives for sustainable mobility. For these reasons, Trenitalia has adopted a certified management system that conforms to the requirements of the OHSAS 18001, ISO 14001, ISO 9001 standards.

As for energy efficiency, Trenitalia is promoting 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 previous calls for bids for the contract for over 500 regional electric and diesel trains awarded previously. To protect water resources, the company has initiated a virtuous cycle at maintenance sites to streamline and contain water consumption.

Final energy consumption		2018	2017	2016
Electricity for railway traction	MWh	3,867,783	3,727,662	4,220,639
Electricity for other uses	MWh	78,624	76,483	79,470
with guarantee of origin or self-produced using photovoltaic technologies	%	100	100	100
Diesel	l	49,264,725	49,514,340	51,510,480
Natural gas	Sm ³	19,549,256	19,809,346	19,206,374

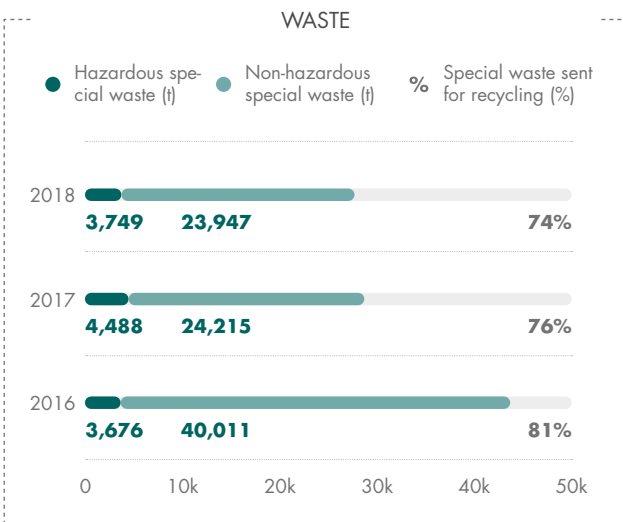
Comments on the trend

The consumption reported above shows substantially steady trends.



Comments on the trend

In the past two years, Trenitalia's water withdrawals decreased partly due to the change in the consolidation scope following the spin-off of the Cargo Division and partly due to water consumption rationalisation and containment measures at production sites, combined with management solutions and improvement technologies. This decrease is even more significant considering the growth in production measured in train-km.



Comments on the trend

The trend in waste production is affected by the annual demolition of rolling stock no longer suitable for operations. The amount of hazardous and non-hazardous waste produced decreased in 2018.

The amount of waste produced in 2017 and 2018 decreased on 2016, partly due to the change in the scope following the spin-off of the Cargo Division.



Commitments made...

...what we have accomplished

...what we aim to do...



Complete the construction work on photovoltaic plants at the HS current maintenance plant in Rome, the Naples S.M. La Bruna ordinary maintenance workshop and the ordinary maintenance workshop in Vicenza



in progress/rescheduled

The installation of photovoltaic plants at the Rome HS and Naples Centrale current maintenance plants and at the Vicenza ordinary maintenance workshop was completed for annual production of approximately 2 GWh. The installation of photovoltaic plants began at the Naples Santa Maria La Bruna ordinary maintenance workshop and at the Milan and Naples HS current maintenance plants for annual photovoltaic energy production of roughly 5.7 GWh

The photovoltaic plants at the Vicenza ordinary maintenance workshop and at the Rome S. Lorenzo HS and Naples Centrale current maintenance plants will begin for annual production of roughly 1.7 GWh.

The installation of the photovoltaic plants will be completed at the Milan and Naples HS current maintenance plants and at the Naples Santa Maria La Bruna ordinary maintenance workshop

The solar thermal plant was rolled out at the Foggia ordinary maintenance workshop



in progress/rescheduled

A thermal solar plant will be completed at the Rimini ordinary maintenance workshop and at the Naples Centrale current maintenance plant

Solar thermal plants will begin operating at the Rimini ordinary maintenance workshop and at the Naples Centrale current maintenance plant

Assignment of the works to install photovoltaic plants at the Florence Osmanoro ordinary maintenance workshops, expanding those rolled out in 2017 at the Foligno and Verona ordinary maintenance plants and works to improve the efficiency of the maintenance hub of the LHPD in Milan



completed

Negotiations for the assignment of the work began

Make further investments in energy efficiency and photovoltaic systems at the Mestre current maintenance plant, the Naples HS current maintenance plant, the ordinary maintenance workshops in Voghera and Rimini and the current maintenance plants in Florence Osmanoro, Ancona and Palermo



completed

Investments have begun

Make further investments to improve the energy efficiency and photovoltaic energy production for the following sites: Milan HS current maintenance plant, Milan current maintenance plant, Florence Osmanoro ordinary maintenance workshop, Foligno ordinary maintenance workshop, Verona ordinary maintenance workshop, Mestre current maintenance plant, Naples HS current maintenance plant, Voghera ordinary maintenance workshop, Turin current maintenance plant and Ancona current maintenance plant

Implementation of "sleeping" mode for stops on most Jazz trains to reduce noise and absorb energy while trains are stopped

Carry out structural works on old-generation thermal plants in service at the production sites to reduce CO₂ emissions



completed

Three thermal power stations were transitioned from diesel to natural gas

Start activities to replace obsolete thermal power stations with more efficient power plants

Commitments made...

...what we have accomplished

...what we aim to do...



Focus on improving sorted waste on board trains.
Complete improvements to the areas set up for waste storage (current maintenance plant in Milan)

The waste management procedure was updated and a series of meetings was held with division representatives

 completed

Complete the testing of ozone treatment to disinfect water for human consumption (Friuli Venezia Giulia Regional Division)

Work continued to improve the site

The improvements planned for the Milan current maintenance plant will be completed

 in progress/rescheduled



Finalise the process to monitor consumption and the maintenance on the water networks, through other restorative structural works, retirement or replacement of old sections, defining further targets for reduced consumption, through both management projects and plant improvements

The survey of water contracts was updated and quarterly monitoring of industrial use was implemented with a revision of the existing procedures and plans to prepare the water report for the site; improvements and maintenance were carried out on water networks

Projects were carried out to optimise the water cycle, planning new structural work to rehaul the water networks and reuse industrial wastewater and/or rainwater at the sites that consume the most water

 completed

Complete the testing of ozone treatment to disinfect water for human consumption (Friuli Venezia Giulia Regional Division)

Testing conducted



Launch the project for the planting of trees at the maintenance plant in Florence in an attempt to mitigate the impact on the landscape of the plant

The project has been completed

 completed



Obtain certification for the integrated management system with respect to the new ISO 14001 and ISO 9001

The new standard certification has been obtained

 completed

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



TRENITALIA'S SUBSIDIARIES

TRENITALIA C2C ¹

Final energy consumption		2018	2017
Electricity for railway traction	MWh	90,313	83,709
Electricity for other uses	MWh	7,099	6,608
with guarantee of origin or self-produced using photovoltaic technologies	%	0	0
Natural gas	t	156,559	188,140

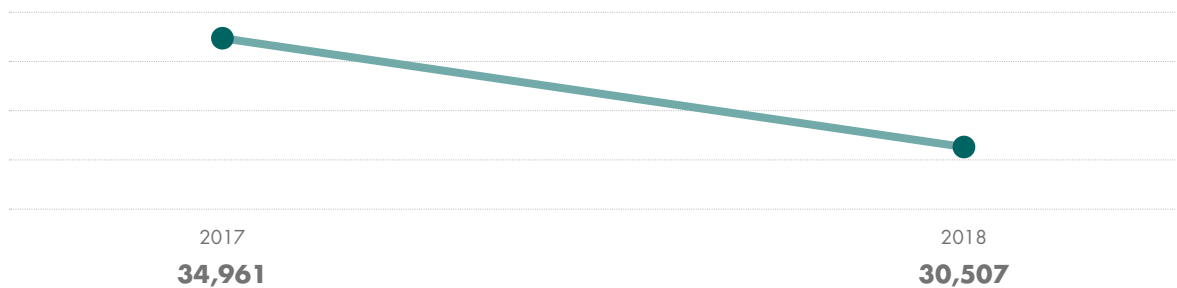
Comments on the trend

In 2018, Trenitalia C2C offered a larger number of services, which explains the growing trend in indicators.

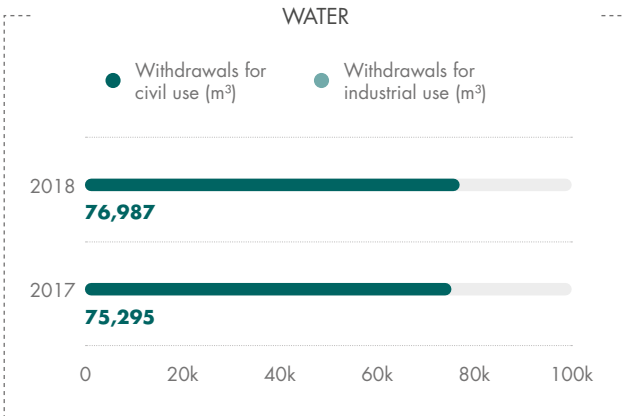
The heating systems of certain buildings were converted from gas to electric.

In addition, the consumption of natural gas at one of the railway depots was excessively high in 2017 (an irregularity that was resolved).

TOTAL CO₂ EMISSIONS (tCO₂)



¹The data and information refer to 2017 and 2018, as the company was included in the scope of the Sustainability Report in 2017.



Comments on the trend

The increase in water consumption is consistent with the larger number of services offered by Trenitalia C2C.

In 2018, the train fleet's toilet tank sanitation cycles were increased to offer passengers a better service.

Commitments made...

...what we have accomplished

...what we aim to do...



The photovoltaic panel installation plan at the Pitsea Station sites will begin in February 2019

 **completed**

The stations have LED lighting

22 stations will undergo an eco-friendly restyling using low-environmental impact insulation materials that, together with the LED lighting systems, will cut energy consumption by roughly 28% per year

The project was approved for the upgrading of air conditioning systems on board trains to improve service quality with better system control and lower energy consumption

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



ITALFERR

OUR APPROACH

In line with 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.

Environmental planning plays a crucial role for improving the way the works interact with the local area and people. The company carries out specialised studies to check the projects' impacts on the environment and landscape and, more in general, to assess the 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.

The innovative approach to land issues and the inclusion of extraordinarily complex engineering works have led Italferr to define ways of integrating sustainability in the design of railway infrastructure or, rather, a railway system, in its various stages, so as to analyse the entire life cycle of the work and identify the actual budget, also highlighting the benefits generated by the infrastructure.

The carbon footprint calculation method for the projects and the Envision protocol are those of a continuously changing engineering company aware that infrastructural development must be based on the continuous search for innovative solutions capable of promoting a fruitful balance between business opportunities and quality of life, the production of wealth and environmental conservation, economic interests and social issues.

The methodology used to measure greenhouse gas emissions, developed in compliance with UNI ISO 14064 and certified by an independent body, is a tangible tool for performing an energy assessment

while the infrastructural works are being designed and during their construction, as a way of promoting the most sustainable choices in the procurement and transport of construction materials by the construction companies, based on specific contractual requirements.

When integrating sustainability in design, a life cycle assessment completes the analysis of the "railway system", providing a specific assessment of the energy and environmental loads, including end-of-life impacts.

The location of the infrastructure, stakeholder engagement and the integrated assessment of environmental, economic and social objectives, environmental and social monitoring and communication tools are the primary elements of sustainable development. Moreover, steps were identified to improve and redevelop the land passed through by surveying and reclaiming interfering contaminating sites and drawing on knowledge of previous ways in which the land has been used and visited and archaeological sites consequently developed, through prior archaeological studies. This has highlighted the benefits of constructing the infrastructure as per the project.

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.

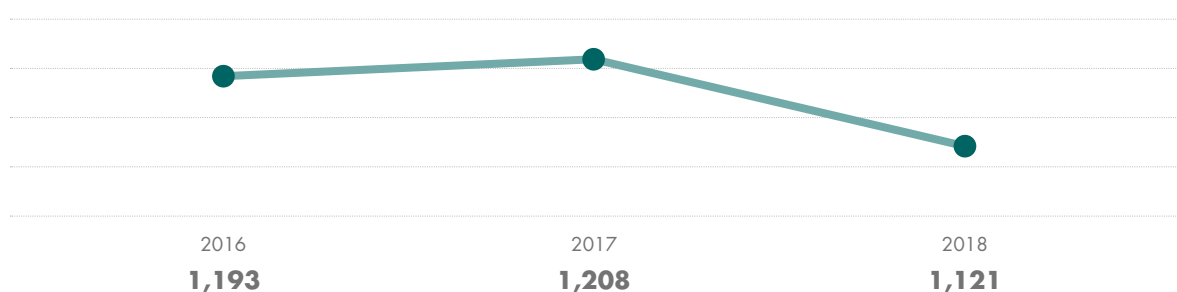
Final energy consumption		2018	2017	2016
Electricity	MWh	2,311	2,238	2,251
with guarantee of origin or self-produced using photovoltaic technologies	%	0	0	0
Diesel	l	123,471	142,468	133,902
Natural gas	Sm ³	25,607	21,197	33,355

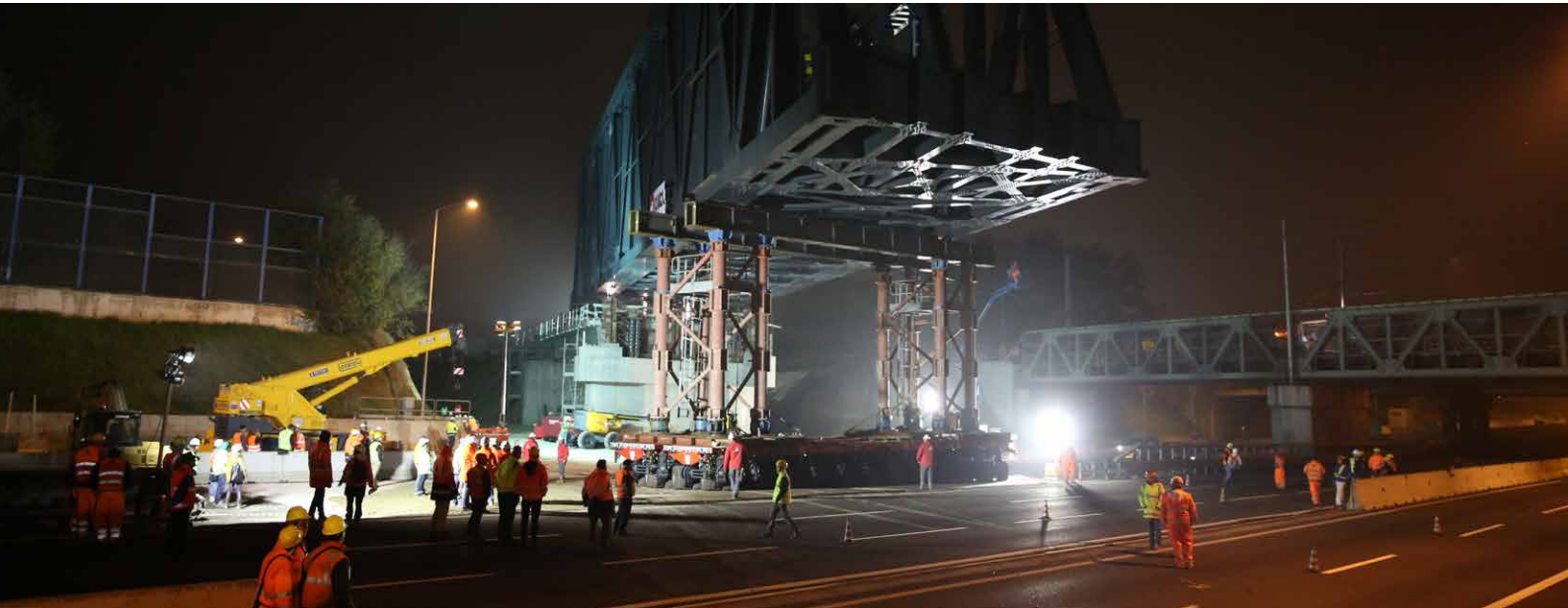
Comments on the trend

The analysis of energy consumption confirms the trend of the previous two years for electricity, while the 13.3% decrease in diesel consumption is partly due to greater optimisation of travel by company car.

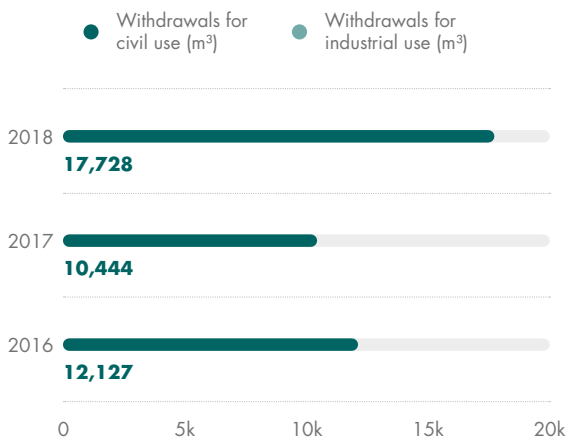
On the other hand, natural gas consumption is estimated to increase by 20.8% on 2017 due to cooler than average seasonable temperatures, which lengthened the period of time in which the boiler was used.

TOTAL CO₂ EMISSIONS (tCO₂)





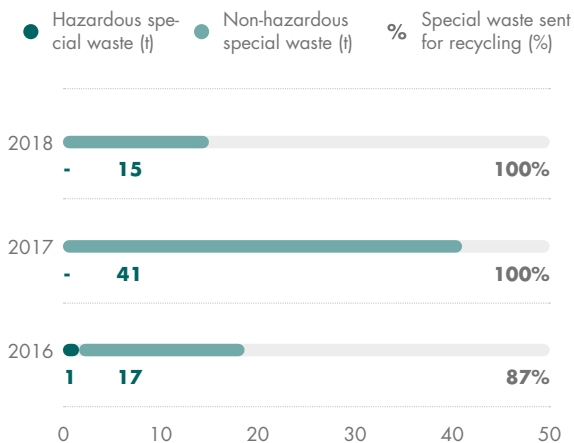
WATER



Comments on the trend

Total water consumption was greater in 2018 because it includes the consumption of not only the central site, but the local sites as well, unlike in previous years.

WASTE



Comments on the trend

No hazardous special waste was produced in 2018. Furthermore, the amount of non-hazardous special waste was reduced, considering the greater amounts produced in 2017 due to the relocation of certain local offices.



Commitments made...

...what we have accomplished

...what we aim to do...



A monitoring system to measure the main energy vectors used by the Group will be analysed

 completed

A meter was installed at the Rome site in 2018 to measure the thermal energy yield of the air conditioning system with a view to improving the measurement of energy factors, which will be included in the next energy diagnosis pursuant to Legislative decree no. 102/2014

The initiatives planned for 2019 are meant to:

1. improve the energy consumption monitoring system at the Milan and Rome sites;
2. improve the efficiency of the existing lighting systems at the Rome site;
3. spread recommendations and good practices for a sustainable office

An urban vegetable garden is being created on the roof of the Rome site, which will save energy used for air conditioning as it will better insulate the roof

Completion of the urban vegetable garden at the Rome site

An electric car will be made available at the Rome site for employee travel, with the installation of a charging station

A special agreement has been reached for discounts on the purchase of bicycles

Application of contractual requirements to reduce greenhouse gas emissions for four work contracts worth more than €30 million



All findings of the environmental assessments conducted in the design activities throughout the country were included and systematised in the SIGMAP database, creating a complete analysis of the land to integrate prior knowledge gained through bibliographical research on a vast scale and more rationally set up the analyses to be conducted on new projects being planned

Prepare guidelines for a complete sustainability analysis of the infrastructural work, taking into consideration its life cycle and the context of the surrounding area

The guidelines for the application of the life cycle assessment to railway infrastructure projects were completed. They are an objective tool to create a long-term view of all stages in the infrastructure's life, calculating its carbon footprint by assessing energy and environmental loads.

Operating guidelines will be defined, which, by identifying a methodology for the management and enhancement of stakeholder engagement, constitute a single tool for planning and managing dialogue with the local area through all stages in the infrastructure's life cycle



 completed

The guidelines for the application of the Envision Sustainability Protocol to railway infrastructures for environmental sustainability assessments were validated

Commitments made...

...what we have accomplished

...what we aim to do...

Develop new services for the enhancement of cultural assets and the reporting of archaeological activities, in addition to the activities already underway.

Specifically, in the context of archaeological activities carried out on the Cancellotto-Frasso line, plan the restoration and museum display of the painted tomb (fourth century B.C.) found in the Maddaloni municipality; for the Potenza-Foggia line, plan the renovation and screening of archaeological material, along with the writing of a publication with the results of the excavations; for the Apice-Hirpinia line, consider the publication of scientific data related to the excavation

 in progress/rescheduled

As part of the archaeological activities along the Cancellotto-Frasso line, the renovation was completed and the project to display the Campania painted tomb found in Maddaloni (fourth century B.C.) in a museum is being drafted.

The renovation and indexing of the archaeological material found along the Potenza-Foggia line were completed and panels are being prepared for a small exhibition in the Ortona Museum.

Archaeological investigations are being conducted on the Hirpinia – Orsara line. The reporting cannot be planned until these activities are complete

Obtain the certification in accordance with ISO 9001:2015 and ISO 14001:2015.

 completed

The certification was obtained.

Obtain BIM (Building Information Modelling) certification from an independent body in accordance with a nationally-recognised framework

 completed

ICMQ, one of the premier Italian certification bodies in the engineering and construction sector, granted BIM certification for the design, procurement and works oversight

Maintenance of BIM (Building Information Modelling) certification

Aspects



Continuous improvement



Raw materials cycle



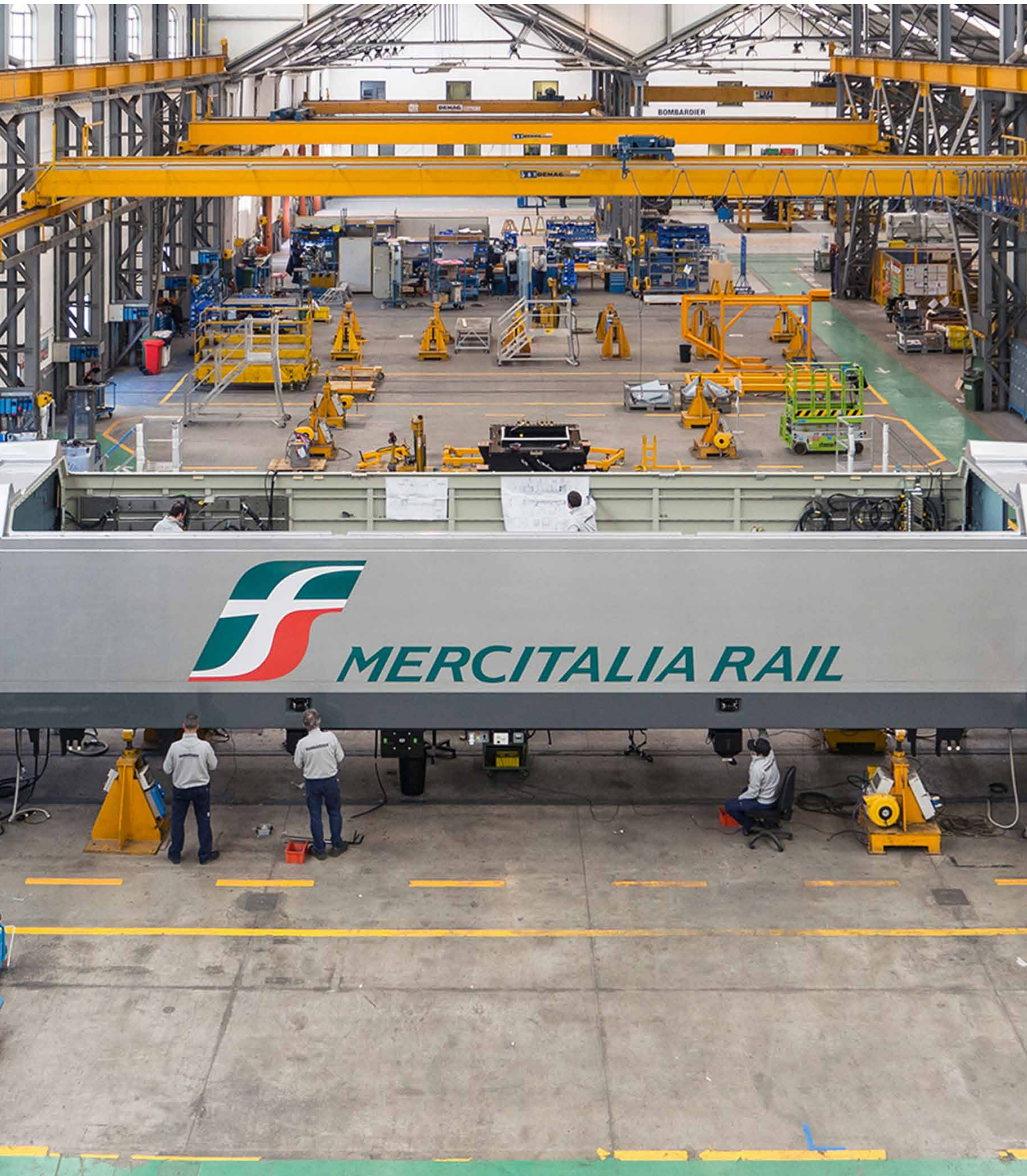
Energy and emissions



Water cycle



Land



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 can be seen through 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 - back in 2007 – of a photovoltaic power station at the Rome San Lorenzo site, which contributes to achieving the pollution prevention goal by limiting CO₂ emissions into the atmosphere.

In 2018, as sub-holding company, Mercitalia Logistics S.p.A. launched the preparation and subsequent issue of the first process guidelines for its management and coordination model of Mercitalia hub’s subsidiaries.

In particular, the sub-holding company issued the safety, environment and quality process guidelines and the related operating procedures to promote the complete integration of workers’ health and safety, integrated management systems, quality, the environment and sustainability in the fields of business management and the Mercitalia hub.

The purpose of the process guidelines is to define management and coordination guidelines for the staff safety, environment and quality processes by assigning responsibilities to Mercitalia Logistics and its subsidiaries and Business Units (BU) and regulating information flows to and from FS S.p.A.

Final energy consumption		2018	2017	2016
Electricity	MWh	2,956	2,764	2,998
with guarantee of origin or self-produced using photovoltaic technologies	%	78	12	9
Diesel	l	4,556	7,205	15,451
Natural gas	Sm ³	14,412	15,116	17,382

Comments on the trend

Electricity – The changes in the trend over the three years were due to transfers of registration and new supply contracts. The nearly 7% increase from 2017 to 2018, are especially due to the hiring of new resources throughout the country, including the arrival of Mercitalia Rail employees at the S. Lorenzo hub, resulting in the need to redevelop or create new work environments. Mercitalia Logistics' workforce grew from 58 resources (including ten under temporary employment contracts) in 2017 to the current total of 88 resources (including seven under temporary employment contracts) at 31 December 2018.

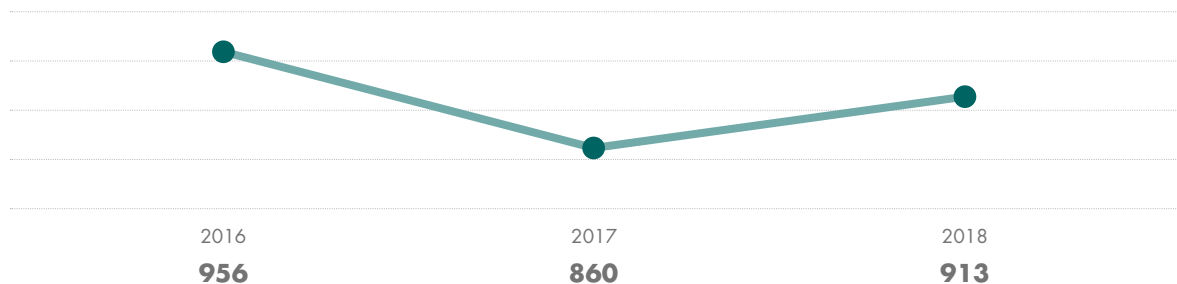
Mercitalia Logistics signed a master agreement for 2018

for the procurement of electricity generated by renewable sources (guarantee of origin) which covers approximately 70% of the company's consumption.

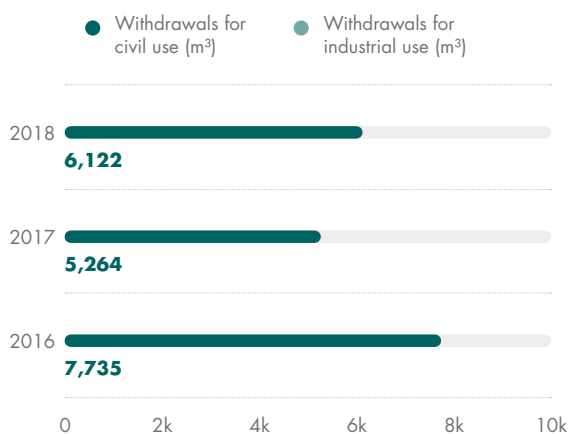
Diesel – The decrease in total diesel consumption is mainly due to the retirement of boilers at the Segrate and Pomezia complexes in 2017. Only the diesel fuel used for company cars was considered in 2018 and did not undergo any significant changes.

Natural gas – The reduction in consumption from 2016 to 2017 continued in 2018, as the concerned offices consumed less of this energy type (Bologna Interport and Genoa Pieragostini).

TOTAL CO₂ EMISSIONS (tCO₂)

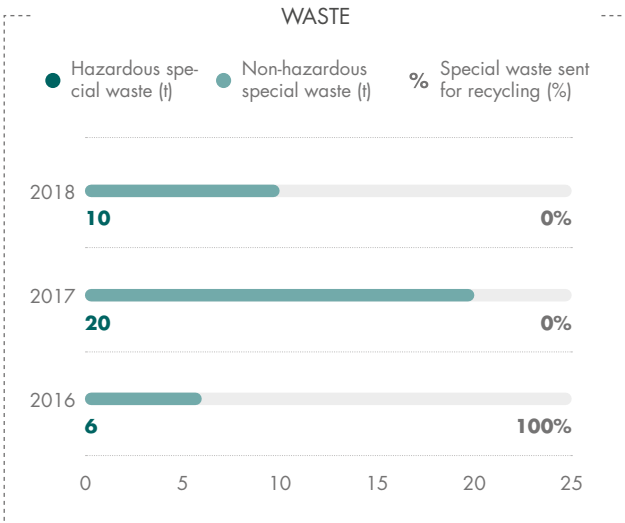


WATER



Comments on the trend

Consumption increased on 2017 due to the new Genoa and Pioltello utilities and the hiring of new resources throughout the country, including the arrival of Mercitalia Rail employees at the S. Lorenzo hub.



Comments on the trend

The trend in waste production and management in the 2016-2018 three-year period is due to non-routine cleaning of certain warehouses in 2017. The waste produced by the cleaning of the Orbassano (Turin) septic tanks in 2018 was treated as come non-hazardous special waste.

Commitments made...

...what we have accomplished

...what we aim to do...



Develop a methodology to show customers the relationship between the service offered and environmental advantages, with particular focus on the carbon footprint, and social advantages related to the entire service offered by the company and its subsidiaries (logistics, transport, movement and other relevant services)

In 2018, a methodology was developed to assess the sustainability of services consisting of the definition of the methods to calculate external environmental, economic and social sustainability factors. This methodology was then applied to the new FAST Service

Application of the service sustainability assessment methodology, tested with the FAST project and other services that the hub offers

 completed



The scope of the integrated management system will be extended to the new FAST Service

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



MERCITALIA LOGISTICS' SUBSIDIARIES

MERCITALIA RAIL²

Final energy consumption		2018	2017
Electricity for railway traction	MWh	408,963	494,409
Electricity for other uses	MWh	3,005	3,251
with guarantee of origin or self-produced using photovoltaic technologies	%	100	100
Diesel	l	2,753,624	2,603,702
Natural gas	Sm ³	1,067,305	1,139,668

Comments on the trend

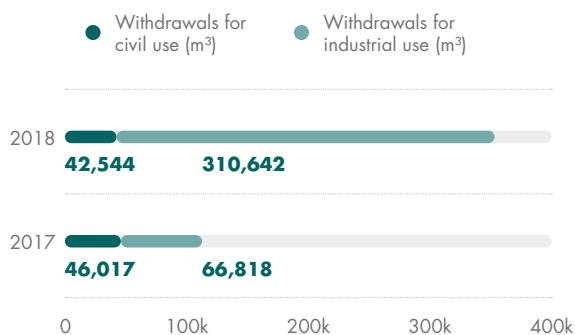
Consumption is in line with production requirements and the energy consumption needs of fixed plant.

TOTAL CO₂ EMISSIONS (tCO₂)

2017
174,277

2018
141,854

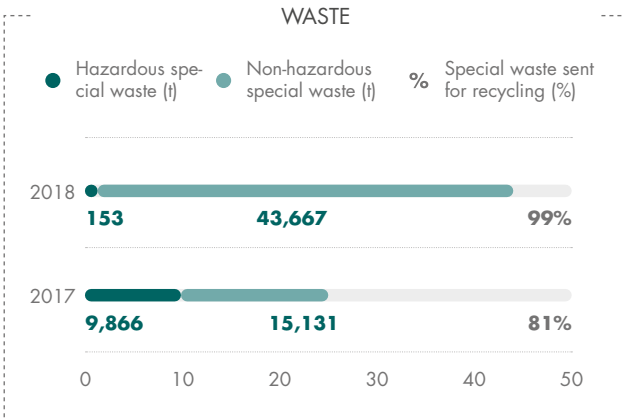
WATER



Comments on the trend

The increase in 2018 is due to the reporting of water withdrawn from the Verona site well for industrial use (Trenitalia previously reported all this consumption).

²The data and information refer to 2017 and 2018, as the company was established in 2017 following the demerger of Trenitalia's Cargo Division.



Comments on the trend

The increase in the production of non-hazardous waste is due to the demolition of old train carriages. The reduction in hazardous waste is due to the greater use of outsourcing for maintenance services compared to 2017.

Commitments made...

...what we have accomplished

...what we aim to do...



New electric locomotives were rolled out, making transport more efficient and environmentally sustainable

Increase the number of new locomotives and carriages in use



Provide tablets to all personnel to eliminate the use of paper

All personnel involved in production activities (train conducting, inspections, train formation and shunting) were given tablets

Increase the percentage of low-environmental impact products used

 in progress/rescheduled



Replace old-generation taps with mixer taps with filters

This is in progress

Prepare partial meters to detect any leaks along the maintenance lines at plants

 in progress/rescheduled

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



MERCITALIA LOGISTICS' SUBSIDIARIES

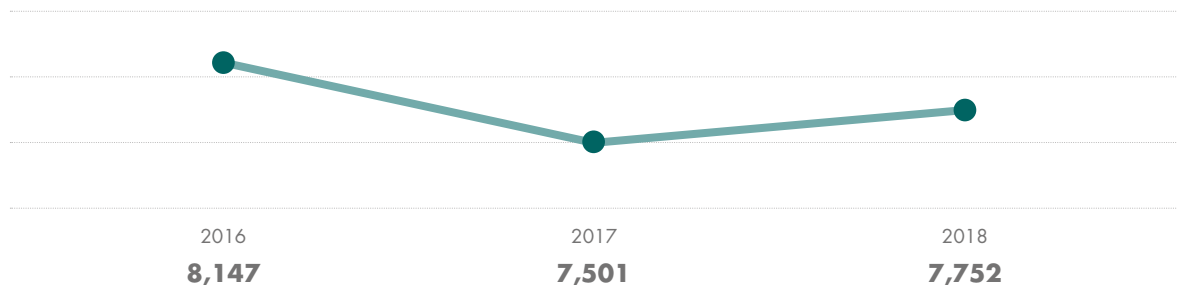
MERCITALIA SHUNTING & TERMINAL

Final energy consumption		2018	2017	2016
Electricity for electrical traction	MWh	1,013	2,588	3,781
Electricity for other uses	MWh	407	402	345
with guarantee of origin or self-produced using photovoltaic technologies	%	10	10	9
Diesel	l	2,717,948	2,427,279	2,509,242

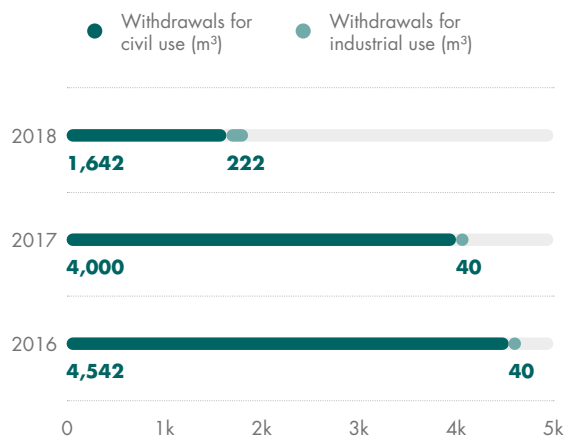
Comments on the trend

Electric vehicle service was discontinued in 2017 and transferred to other Mercitalia network companies.

TOTAL CO₂ EMISSIONS (tCO₂)



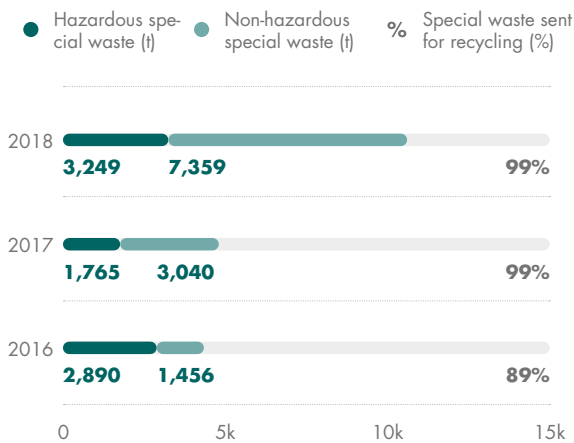
WATER



Comments on the trend

Personnel awareness initiatives continue and have also been extended to the Terminal business unit.

WASTE



Comments on the trend

The increase in maintenance work on the railway superstructure generated an overall increase in the amount of waste produced, while the commitment to recycling waste material remains steady.

Commitments made...

...what we have accomplished

...what we aim to do...



Continue raising the awareness of newly hired personnel about the environmental policy, energy savings in the use of IT resources and heating/air conditioning.

Continue updating shunting vehicle engines and features in accordance with ANSF decree no. 1/2015

 completed

The shunting vehicle engines and equipment were updated after the assets were transferred

In 2019, the engines and equipment will continue to be updated, and routine maintenance will be carried out



Continue activities to improve the conditions of the temporary storage of waste produced on shunting plants with the purchase of waste collection centres and anti-spillage kits for hazardous liquids; expansion of these activities to the Terminal Business Unit

 completed

Paper, plastic, toner and batteries were sorted for collection at the Genoa site.

Temporary waste storage conditions were improved at the shunting and terminal work sites by purchasing waste collection centres. The environmental risk assessment document was issued on 31 July 2018

Extend the commitments assumed considering the recently acquired BUs (Terminal and Transport & Services).

Update of the environmental risk assessment document

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land

MERCITALIA LOGISTICS' SUBSIDIARIES

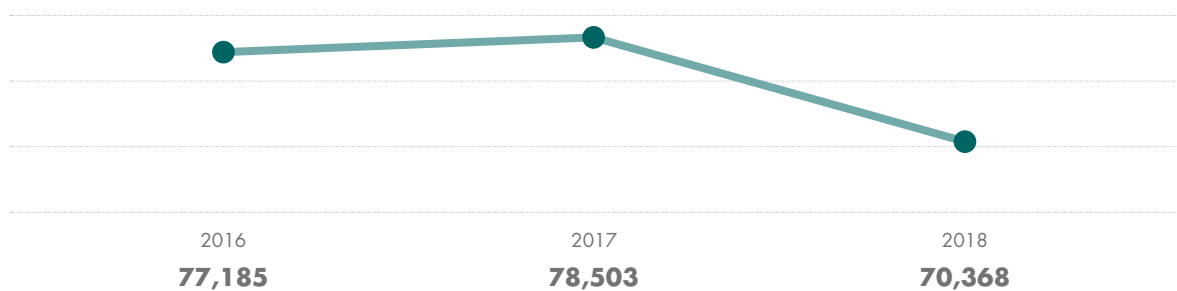
TX LOGISTIK

Final energy consumption		2018	2017	2016
Electricity for electrical traction	MWh	147,239	160,887	155,863
Electricity for other uses	MWh	720	712	684
with guarantee of origin or self-produced using photovoltaic technologies	%	0	0	0
Diesel	l	135,630	133,921	113,618

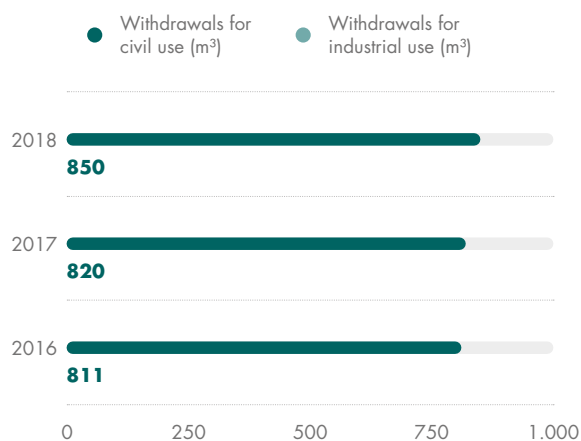
Comments on the trend

The reduction in electricity consumption for traction is due to the drop in traffic volumes, while the changes in electricity consumption for other uses are mainly due to weather trends. The consumption of diesel increased in relation to the larger car fleet.

TOTAL CO₂ EMISSIONS (tCO₂)



WATER



Comments on the trend

The trend is substantially steady.





GRANDI STAZIONI RAIL

OUR APPROACH

Grandi Stazioni Rail manages the real estate complexes of major Italian railway stations and the developing management and logistics areas and car parks, in accordance with FS Italiane Group's environmental policies. The company considers environmental sustainability as a strategic element of the integrated management of maintenance and cleaning, development, design and construction services.

Grandi Stazioni is committed to:

- › improving the energy efficiency of its real estate complexes;
- › 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 have been transformed into measurable objectives that are periodically assessed.

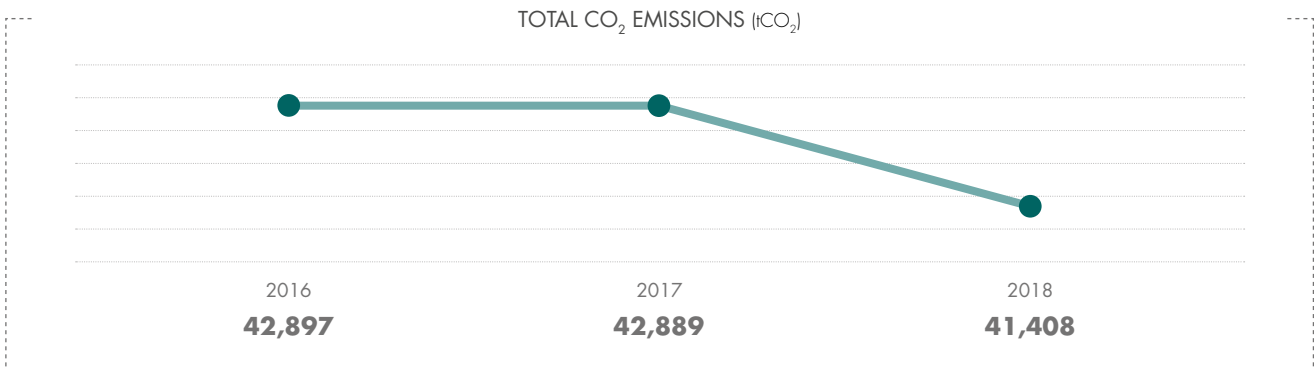
Final energy consumption		2018	2017	2016
Electricity	MWh	74,592	74,631	78,127
with guarantee of origin or self-produced using photovoltaic technologies	%	30	30	30
Diesel	l	129,500	48,892	60,004
Natural gas	Sm ³	7,796,146	8,125,343	8,341,323

Comments on the trend

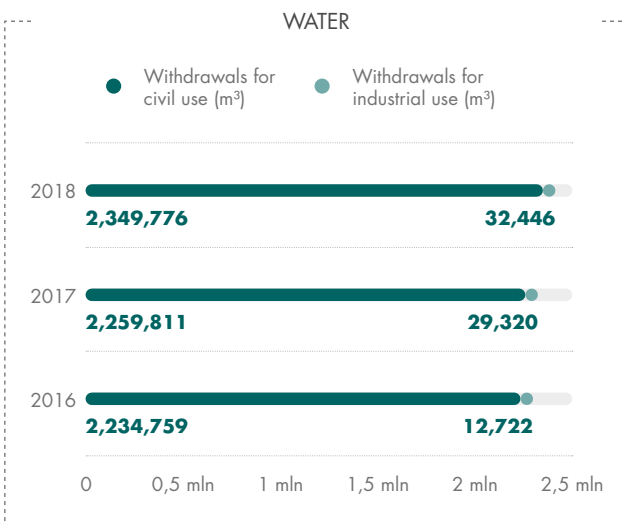
There are no changes in electricity consumption on the previous year to be reported.

The increase in diesel consumption is due to the conversion of the Genoa Principe thermal power plant from fuel oil to diesel.

The decrease in natural gas consumption is due to the reduction in winter daytime temperatures, especially in the second half of 2018 and at the Milan Centrale, Turin Porta Nuova and Florence Santa Maria Novella sites.



The figures refer to the environmental aspects managed directly or on behalf of the company or the Group companies. They include the consumption of station customers.

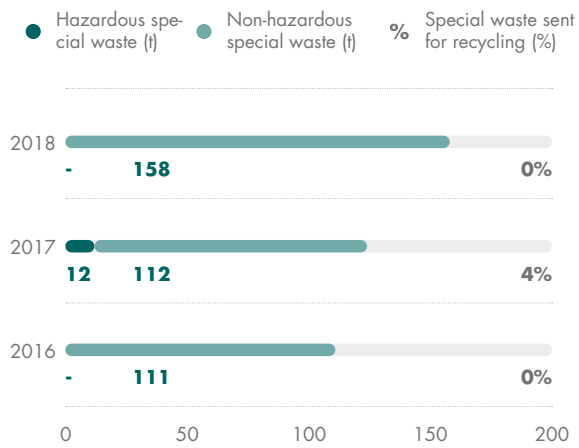


Comments on the trend

Water consumption for civil use decreased in 2018 (especially at the Naples Centrale and Milan Centrale stations). There were water leaks in the Genoa Brignole station water system (repairs were already carried out in the year).



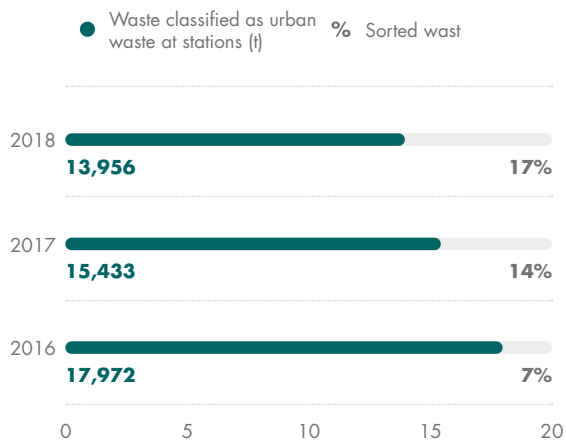
WASTE



Comments on the trend

The data refer to sludge produced by treatment units at the Venice Santa Lucia station. The increase on the previous year is due to new store openings.

WASTE



Comments on the trend

While quantities were estimated in the past, the actual amount of waste produced in 2018 and the percentage of this waste that is sorted can be more accurately calculated since the start of new contracts for integrated environmental services and the involvement of local municipal utility companies.

Commitments made...

...what we have accomplished

...what we aim to do...



Begin designing and implementing energy efficiency measures at the Rome Tiburtina station

 in progress/rescheduled

In preparation for the executive design, discussions began with RFI, owner of the asset, to plan work compatible with the station layout modifications being studied and considering the authorisation restrictions applicable to the property

Define the station layout with RFI and, consequently, begin the executive design and the planned work to make Rome Tiburtina more energy efficient

Based on the executive design of the new thermal power plant at Milan Centrale, identify how to finance the work between owners and tenants, with the retirement of the current thermal power plant and the previous steam distribution system, which will be replaced with a high-efficiency heat pump system by 2019

 in progress/rescheduled

The executive design was prepared and approved for the rationalisation of the thermal power plant

Define an agreement with the lessors and tenants of commercial properties on how to finance the work, based on the approved executive design and assign the work contract

Conduct a survey for the production of photovoltaic energy at Rome Termini, with photovoltaic panels installed on the roof of the new parking area (above the tracks) for total installed capacity of approximately 1 MWp

 in progress/rescheduled

The technical and economic feasibility of this project is being evaluated

Define the technical and economic feasibility and how to finance the work

Conduct energy diagnoses for the Rome Termini, Naples Centrale, Florence Santa Maria Novella, Bari Centrale, Bologna Centrale and Verona Porta Nuova stations

 completed

Conduct energy diagnoses at the Rome Termini, Naples Centrale, Florence Santa Maria Novella, Bari Centrale, Bologna Centrale and Verona Porta Nuova stations

Conduct energy diagnoses for the Turin Porta Nuova, Milan Centrale, Venice Santa Lucia, Venice Mestre, Genoa Piazza Principe and Genoa Brignole stations

The thermal power plant at the Genoa Piazza Principe station has been converted from fuel oil to diesel

Begin converting the thermal power plant at the Genoa Piazza Principe station from diesel to natural gas (estimated energy savings of -22% tonnes of oil equivalents compared to 2017)

A non-routine maintenance project was planned for the Turin Porta Nuova station, with work on the old thermal power plant and that serving the commercial operations at the station to bring them up to standards and improve their energy efficiency

Retire one of the three generators in the historic power plant at the Turin Porta Nuova station and replace the other two with greater-energy yield generators. Retire the thermal power plant serving the stores. (Estimated energy savings of -5% tonnes of oil equivalents compared to 2017)



Commitments made...

...what we have accomplished

...what we aim to do...

GS Rail received ARERA qualification as a closed electricity distribution system (SDC) operator for some of the stations in its network and will manage electricity network measurement and distribution of its own SDCs



Upgrade the waste collection areas at the Rome Termini, Rome Tiburtina, Bologna Centrale and Bari Centrale stations

The waste collection areas at the Rome Tiburtina, Bologna Centrale and Naples Centrale stations have been updated

Continue updating the waste collection areas at network stations, increasing the percentage of sorted waste



in progress/rescheduled



Obtain ISO 14001:2015 certification for another four network stations: Naples C.le, Turin P.N., Verona P.N., Venice Mestre

Certification was obtained or maintained for the Rome Termini, Milan C.le and Venice S. Lucia stations

Extend ISO 14001:2015 certification to another four network stations: Bologna C.le, Rome Tiburtina, Genoa Piazza Principe and Genoa Brignole



completed

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



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 of 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 investing 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.

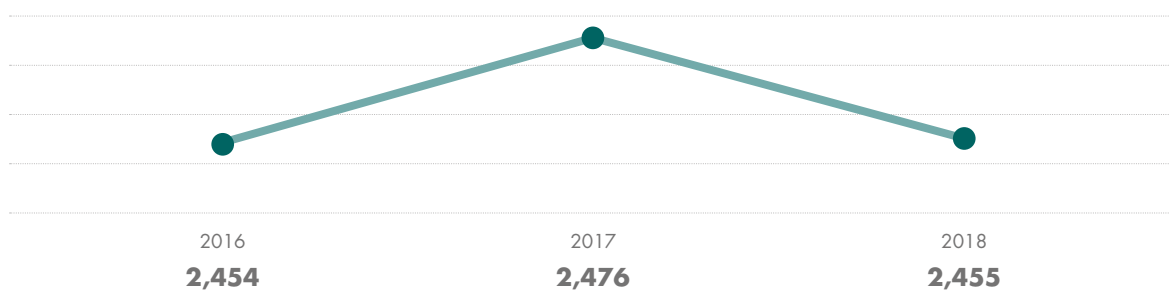
Final energy consumption		2018	2017	2016
Electricity	MWh	3,592	3,562	3,375
with guarantee of origin or self-produced using photovoltaic technologies	%	100	0	0
Diesel	l	132,752	158,755	193,432
Natural gas	Sm ³	404,215	374,708	362,789



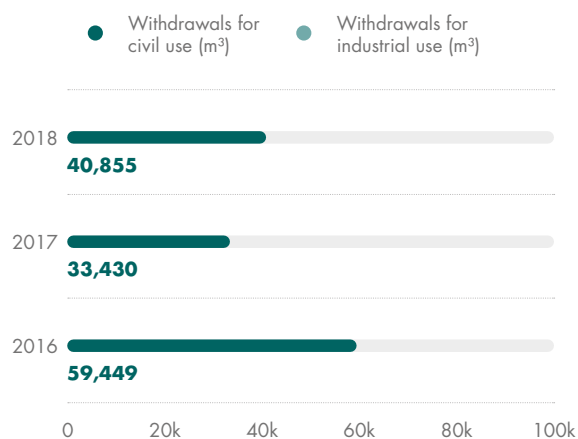
Comments on the trend

In 2018, the photovoltaic plants in Genoa and Verona began producing. The modest rise in electricity consumption (+1%), despite the larger increase in areas served (+3.2%), shows a decrease in diesel consumption and an increase in natural gas consumption, mainly due to the conversion of several thermal power plants from diesel to natural gas (Venice and Naples) which resumed production in mid-2017.

TOTAL CO₂ EMISSIONS



WATER



Comments on the trend

The 2018 increase in consumption compared to the previous year was due to the rise in overnight stays at ferrotels (approximately +3.6%) and leaks at some of the managed sites.



Comments on the trend

The waste analysed is that produced by owned assets that the company decided to dispose of. The downwards trend of the past three years is mainly due to the relative stability of sites and ferrotels, as waste production spikes when sites are closed or relocated.

Commitments made...

...what we have accomplished

...what we aim to do...



The photovoltaic plant in Genoa will self-produce electricity with peak capacity of 3kWp (saving approximately 0-70 tonnes of oil equivalents)

 completed

The ten-year plan (2018-2027) for the energy conversion of properties began with utilities contracts in Ferservizi's name and the self-production of energy of renewable sources. The plan entailed four energy diagnoses and energy efficiency measures for estimated savings of 16.4 tonnes of oil equivalents and energy self-production (photovoltaic/thermal solar power) of 9.84 tonnes of oil equivalents

The activities included in the ten-year plan will continue, including energy diagnosis at four sites and energy efficiency measures for estimated savings of 7.5 tonnes of oil equivalents and energy self-production (photovoltaic/thermal solar power) of roughly 15.6 tonnes of oil equivalents

Roll out the photovoltaic plant in Verona, which will be able to produce 30 MWh, covering 45% of the building's annual electricity use. It is expected to cut CO2 emissions by approximately 10,900 kg, corresponding with annual absorption guaranteed by 72 tall trees (saving approximately 5 tonnes of oil equivalents)

 completed

The photovoltaic plants at Verona and Genoa began operating for total production of 32.33 MWh, 7.36 MWh was sold

Conduct energy diagnoses on another four buildings (offices in Genoa, Trieste, Milan and Bari)

 completed

**Commitments made...****...what we have accomplished****...what we aim to do...**

Build a solar thermal plant at the Ferrotel in Mestre to heat water (saving approximately 0.70 tonnes of oil equivalents) and to separate the water utilities contracts

 completed

Build a solar thermal plant at the Ferrotel in Rome P.ta Maggiore to heat water (saving approximately 3 tonnes of oil equivalents)

 completed

Build an external and internal lighting system for the document archive in Foligno (saving approximately 7 tonnes of oil equivalents)

 completed



Continue the campaign to raise personnel's awareness of the importance of properly sorting waste

The campaign was carried out

 completed



An e-learning course for transition to the new ISO 14001:2015 and ISO 9001:2015 standards was offered to over 1,000 people in the companies involved in the system activities

Training will continue, including workshops, to spread a culture of environmentalism and educate the company's people about the environment

Aspects

Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land

ANAS³

OUR APPROACH

ANAS S.p.A. considers sustainable development a crucial aspect when taking decisions about how to operate the roadway and motorway network. It believes in protecting the land and landscape and striving for innovation in new methodologies for the designing, processing, recycling of materials and, in general, protecting the environment.

To develop sustainably, ANAS carefully assesses all impacts and promotes the adoption of criteria, guidelines and procedures to reduce the environmental impact of its activities by: upholding the principles of environmentalism and the responsible use of resources in the planning stages, with the design of projects that integrate environmental protection and enhancement; when setting up new work sites, controlling and monitoring the environmental impacts of its work sites and optimising the consumption of raw materials and natural resources; in operations, reducing and optimising energy consumption; adopting

the most advanced solutions to reduce noise pollution by installing noise-dampening barriers and using noise-dampening asphalt, in compliance with the national noise containment and mitigation plan.

By continuously improving its environmental performance, ANAS recognises that it achieves significant advantages, minimising all the adverse environmental impacts of its activities wherever feasible and economically sustainable.

³ The data and information refer to 2018, the year in which the company was included in the scope of the Sustainability Report.



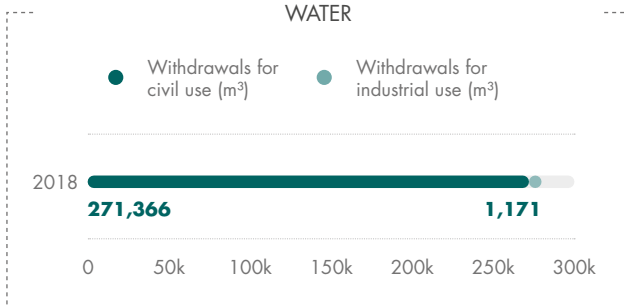


Final energy consumption and emissions

2018

Electricity to light roads and tunnels	MWh	368,079
Electricity for other uses	MWh	11,500
Self-produced solar energy	MWh	296
Diesel	l	3,732,319
Natural gas	Sm ³	344,566
Greenhouse gas emissions	tCO ₂	132,679

WATER



WASTE



...what we have accomplished



The Green Light project was launched to reduce the energy consumption of lighting in tunnels throughout the network operated by ANAS. It included replacing the existing lamps with last-generation LED lighting. The lights in around 86 tunnels have been replaced, with work on ten of these beginning in the fourth quarter of 2018

...what we aim to do...

The Green Light work plan will continue



A system will be implemented to reuse work site water, entailing specific technical and operating procedures to be attached to the specifications for calls for bids. In each area of the work site (base camp and operating sites), a rainwater collection, treatment and storage network will be prepared to recover and reuse the water for work at the site (e.g., soaking parts, washing wheels, etc.)

...what we have accomplished

...what we aim to do...



The commitment to environmental monitoring in the service areas operated under concession, by promoting environmental surveys by sub-operators, which have made it possible to identify potential contaminants in the environmental matrices

A local information system (called "A.G.A.T.A.A.") will be prepared and implemented to store, analyse and manage environmental monitoring data acquired throughout the entire domestic infrastructure network. This system will expand the existing information base (based on regional Arpa - the environmental protection agency - networks) on the quality of all environmental aspects affected by the design and construction of roads

The "DYNAMAP" project will be completed. As part of the EU's LIFE+ programme (to contribute to the conservation of nature and biodiversity, the drafting and implementation of environmental policy and legislation at EU level and the promotion of sustainable development), the aim of this project is to develop a dynamic noise mapping system that detects and represents road noise in real time

Begin mapping the work completed and/or in progress to safeguard local fauna (animal crossings, habitat compensation measures, etc.) and their conservation

Complete the design of the ANAS noise-dampening barrier prototype, also for acoustic and structural testing

Environmental and social sustainability criteria were considered when scoring contractors for the assignment of contracts, such as:

- › the installation of fast charging stations for electric cars at service stations;
- › the containment of energy consumption and environmental resources in the performance of activities;
- › the creation of collection centres for the waste produced in new service areas. These collection centres will have containers for sorted waste and tanks for used oil

Environmental sustainability criteria will also be considered in future contract assignment procedures as well



Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



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 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.

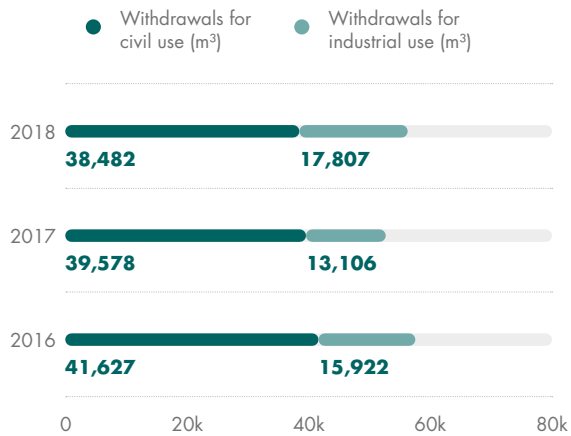
Final energy consumption		2018	2017	2016
Electricity	MWh	7,606	7,248	6,758
with guarantee of origin or self-produced using photovoltaic technologies	%	62	0	0
Diesel	l	13,062,540	13,163,937	13,397,912
Natural gas	Sm ³	3,202,030	4,160,644	4,118,692

Comments on the trend

Electricity and diesel consumption between 2018 and 2017 are substantially the same. The consumption of electricity from certified renewable sources increased because Busitalia – Sita Nord signed contracts for the supply of electricity from 100% renewable sources in 2018. In addition, the consumption of natural gas decreased considerably following the sale of many natural gas buses.

TOTAL CO₂ EMISSIONS (tCO₂)

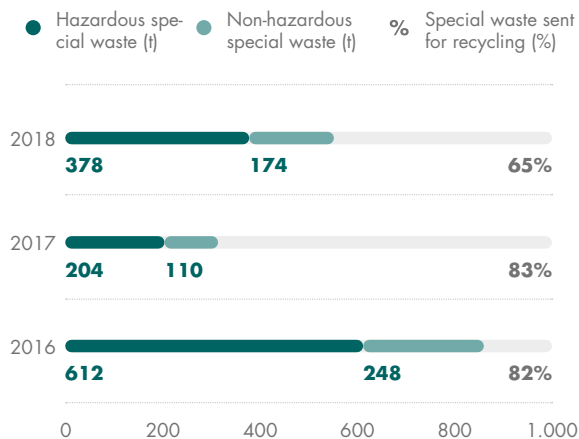
WATER



Comments on the trend

The consumption trend in water for civil use between 2018 and 2017 is substantially stable. Water withdrawn for industrial use rose in 2018 compared to the previously year mainly due to an increase in bus washing.

WASTE



Comments on the trend

The trend shows a significant increase in special waste produced in 2018 compared to 2017, mainly because of the scrapping of buses, non-routine cleaning of the deoilers and holding tanks for the waste water and sediment from the purifiers at the Umbria regional division.

Commitments made...

...what we have accomplished

...what we aim to do...



Purchase 156 Euro 6 buses, 20 of which for the Tuscany regional division and 136 for the Umbria regional division, to replace the old generation vehicles (from Euro 0 to Euro 2)

87 Euro 6 buses joined the fleet, replacing the same number of old-generation vehicles

Plans for 2019 include adding 121 new Euro 6 buses to the vehicle fleet, 44 of which for the Tuscany regional division and 77 for the Umbria regional division, to replace the same number of old-generation buses. This will reduce consumption and make 35% of the vehicles in Busitalia – Sita Nord’s fleet high-efficiency

 in progress/rescheduled

Replace the air conditioning system at the Perugia site with a low-emission heat pump

The air conditioning system was replaced with last-generation, low-emission heat pump devices

 completed

Launch a new electronic monitoring system on 15% of Busitalia group's entire bus fleet, making it possible to constantly track drivers' performance and pinpoint areas for improvement through individual training to improve personal performance and consequently reduce consumption

The new electronic monitoring system was launched on 17% of Busitalia group's fleet to improve driver performance in terms of reducing consumption and improving traffic safety

The energy efficiency project will entail training to improve driver performance in terms of reducing consumption and improving traffic safety

 completed



Replace washing units and roll out three new washing units (two at the Perugia depot and one at the Foligno depot) which will lead to a reduction in water withdrawals

The two washing units were replaced at the Perugia depot

The washing unit at the Foligno depot (Umbria regional division) will be replaced and the new unit will be rolled out, which will reduce industrial water consumption

 in progress/rescheduled

Replace the water treatment plant at the Gubbio depot and shipbuilding site in Passignano

In progress

 in progress/rescheduled

**Commitments made...**

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 be rolled out

 completed

...what we have accomplished

The closed-cycle reverse osmosis system to recycle industrial water at the Florence depot was rolled out

...what we aim to do...**Aspects**

Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



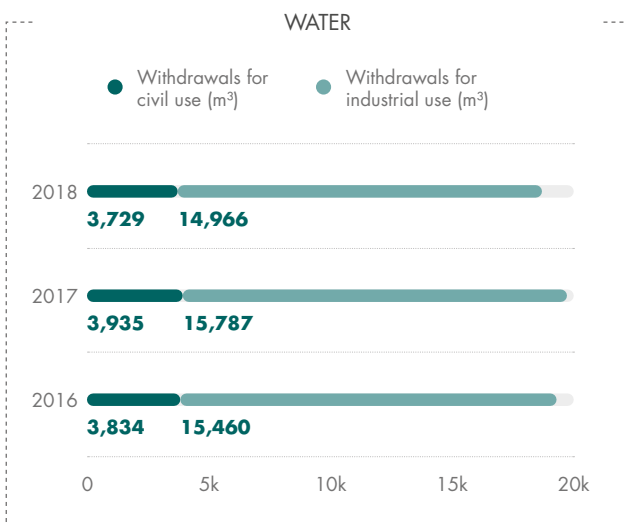
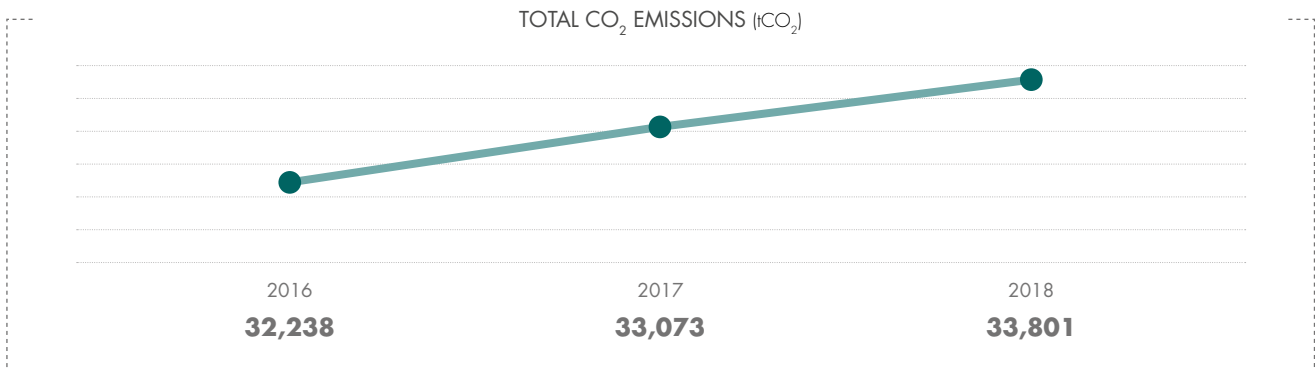
BUSITALIA – SITA NORD’S SUBSIDIARIES

BUSITALIA VENETO

Final energy consumption		2018	2017	2016
Electricity	MWh	6,896	7,246	7,190
with guarantee of origin or self-produced using photovoltaic technologies	%	0	0	0
Diesel	l	9,195,369	8,969,114	8,609,111
Natural gas	Sm ³	3,594,240	3,461,215	3,583,813

Comments on the trend

The 2017 and 2018 trends in electricity, diesel and natural gas consumption are substantially the same.

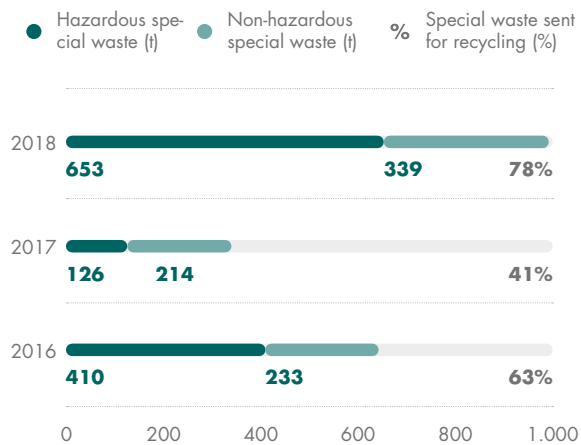


Comments on the trend

Consumption of water withdrawn for non-industrial and industrial use remained substantially stable between 2017 and 2018.



WASTE



Comments on the trend

Special waste increased significantly in 2018 compared to the previous year because more buses were scrapped and more non-routine maintenance was carried out on treatment plants. Special waste from the scrapping of buses led to an increase in the percentage of special waste sent for recycling.

Commitments made...

...what we have accomplished

...what we aim to do...



Replace 28 urban and 27 suburban Euro 1 and Euro 2 buses with motorised Euro 6 buses. Replace another four urban Euro 2 buses with the same number of electric buses

The urban and suburban buses were replaced

34 new-generation buses will be purchased, seven of which will run on natural gas and two will be electric

✓ completed



Replace the existing washing units at the Via Rismondo, Padua depot and the Viale Petrarca depot in Rovigo, which will cut back on 450/500 litres of water and between 90 and 100ml of detergent for every wash.

The washing and water treatment units at the viale Petrarca, Rovigo depot are being replaced

The washing unit at the via Rismondo, Padua depot will be replaced

Arrange for the replacement of the treatment plant at the Rovigo depot as well

🕒 in progress/rescheduled

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land

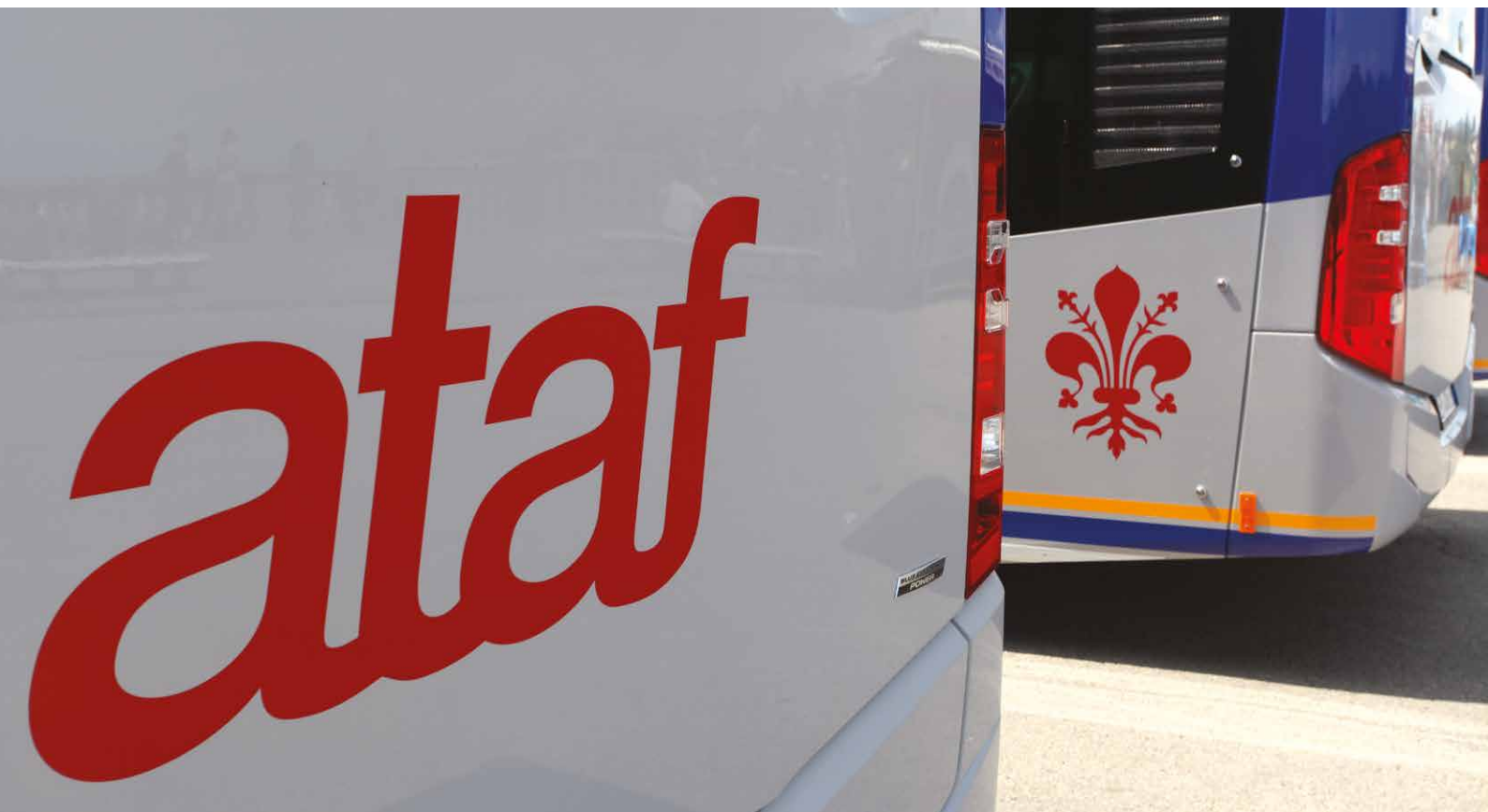
BUSITALIA – SITA NORD’S SUBSIDIARIES

ATAF GESTIONI

Final energy consumption		2018	2017	2016
Electricity	MWh	2,894	3,218	3,042
with guarantee of origin or self-produced using photovoltaic technologies	%	94	0	0
Diesel	l	6,531,063	6,280,105	6,272,701
Natural gas	Sm ³	2,308,752	2,442,302	2,576,758

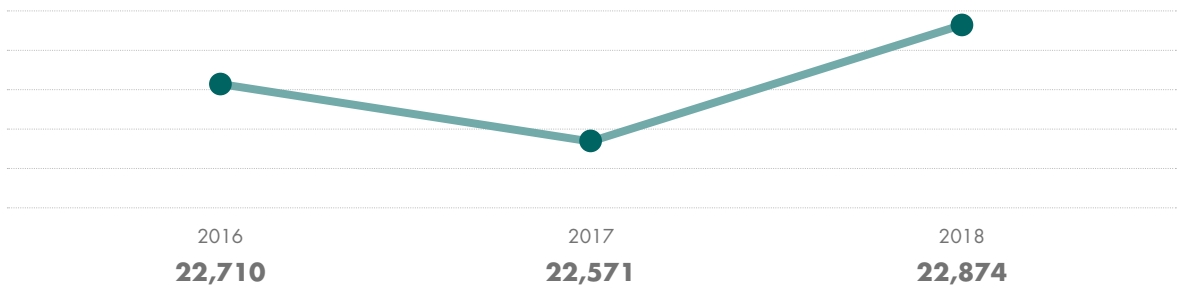
Comments on the trend

Electricity consumption decreased due to the temporary closure of certain offices at the Via Pratese depot in Florence. In addition, more electricity from certified renewable sources was consumed in the year since, in 2018, Ataf Gestioni signed contracts for the supply of electricity from 100% renewable sources. Diesel and natural gas consumption is substantially unchanged.

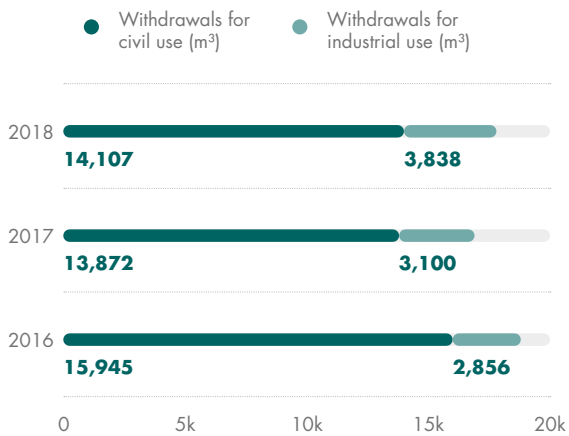




TOTAL CO₂ EMISSIONS (tCO₂)



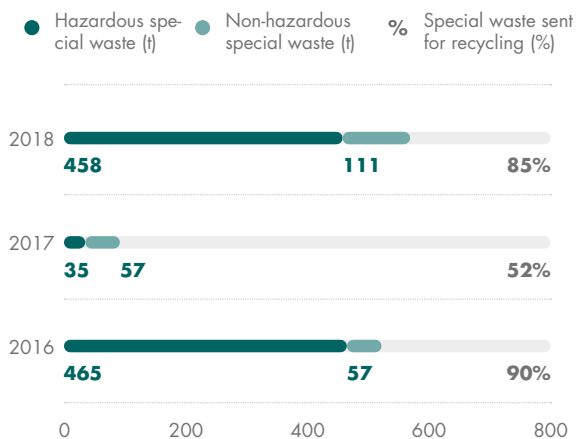
WATER



Comments on the trend

The increasing trend in the consumption of water withdrawn for industrial use is due to the intensification of bus washing. Water consumption for civil use is substantially steady.

WASTE



Comments on the trend

The substantial increase in the amount of special waste produced in 2018 compared to 2017 was due to the bus scrapping campaign, which led to a spike in special waste sent for recycling.



Commitments made...

...what we have accomplished

...what we aim to do...



In the two years 2018-2019, approximately 100 new Euro 6 vehicles will be introduced to replace Euro 3 and Euro 4 vehicles, which will guarantee reduced consumption and emissions.

Add approximately 50 hybrid Euro 6 buses to the purchase plan for 2018-2019, which will allow for a further reduction in consumption and emissions



in progress/rescheduled

37 Euro 6 buses were added to the purchase plan and a pilot project was launched for energy efficient configuration with gear software installed on 12 of the new vehicles to reduce the stage of driving that is not cost-effective and optimise the use of the accelerator

In 2019, another 42 mild-hybrid diesel buses will be added to the fleet with better environmental performance than vehicles with conventional engines



At the viale dei Mille Florence depot, create a closed-cycle reverse osmosis system for the re-use of waste water, to save water and prevent contamination from industrial waste water



completed

At the viale dei Mille Florence depot, a closed-cycle reverse osmosis washing system was built for the re-use of waste water to save water and prevent contamination from industrial waste water

Bio-oxidation treatment plants will be built at the via Pratese and via Michelacci depots in Florence

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



BUSITALIA – SITA NORD'S SUBSIDIARIES

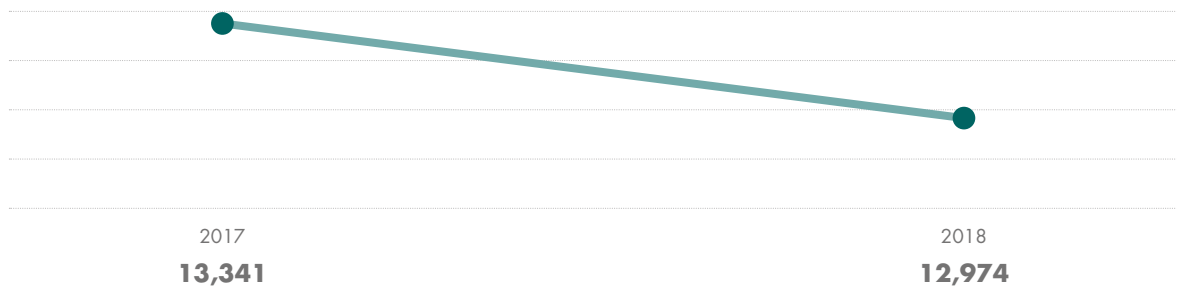
BUSITALIA CAMPANIA ⁴

Final energy consumption		2018	2017
Electricity	MWh	726	766
with guarantee of origin or self-produced using photovoltaic technologies	%	61	0
Diesel	l	4,071,485	4,372,170
Natural gas	Sm ³	967,917	744,691

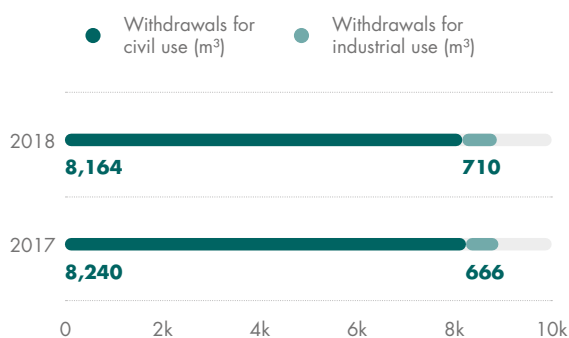
Comments on the trend

Electricity and diesel consumption are substantially the same while the consumption of electricity from certified renewable sources increased because Busitalia – Sita Nord signed contracts for the supply of 100% of electricity from renewable sources in 2018. The increase in natural gas consumption is due to the greater distances operated using natural gas buses.

TOTAL CO₂ EMISSIONS (tCO₂)



WATER



Comments on the trend

The consumption trend in water for industrial use is substantially stable.

⁴ The data and information refer to 2017 and 2018, as the company was included in the scope of the Sustainability Report in 2017.



Comments on the trend

The trend in hazardous special waste is substantially stable. The amount of non-hazardous special waste increased significantly between 2018 and 2017 because of the rise in maintenance on buses and non-routine maintenance at the via Wenner, Salerno depot's treatment plant.

Commitments made...

...what we have accomplished

...what we aim to do...



80 motorised Euro 6 buses will be purchased to replace the old generation vehicles (from Euro 0 to Euro 2) which will reduce fuel consumption and pollutant emissions

Roll-out of 15 new Euro 6 buses featuring construction technologies and devices that reduce consumption in the fleet

Purchase of 65 Euro 6 buses to replace the same number of old-generation vehicles to reduce consumption



in progress/rescheduled

Awareness raising among on-board crew by providing specific informational material on driving techniques to save fuel



Monitoring operations will begin for scrupulous control of the water cycle in the two main depots, Pagani and Fuorni (Salerno)

The water cycle was monitored at the main depots



completed

Meters to measure volumes of waste water will be restored at the two main depots and maintenance activities will be carried out on the treatment plants

A new meter was installed to measure water volumes at the via Wenner 87, Salerno depot's treatment plant. Maintenance was carried out at the treatment plants at the depots in via Wenner, Salerno and via Nazionale, Pagani



completed

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



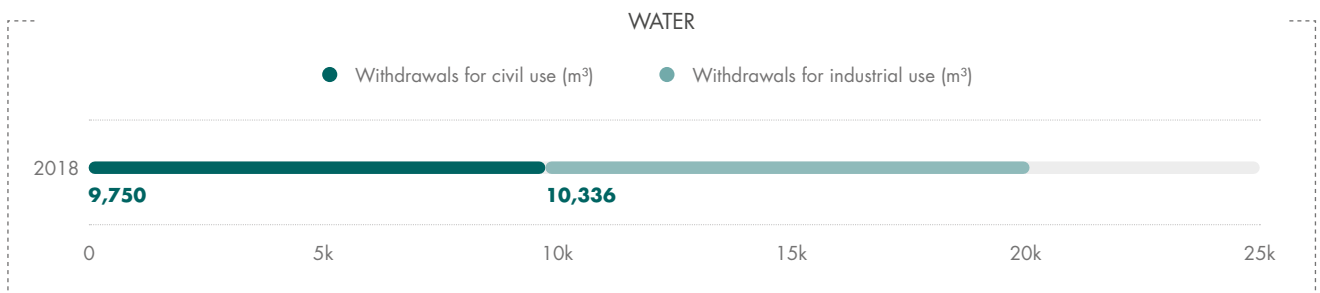
Land



BUSITALIA – SITA NORD'S SUBSIDIARIES

QBUZZ⁵

Final energy consumption and emissions		2018
Electricity	MWh	4,302
with guarantee of origin or self-produced using photovoltaic technologies	%	43
Diesel	l	9,863,166
Natural gas	Sm ³	112,250
Greenhouse gas emissions	tCO ₂	28,668



...what we have accomplished



Ten electric buses joined the Qlink Green line. They are the first e-buses to be operating in the northern region of the Netherlands. At the same time, diesel buses were replaced with e-buses in Utrecht

Hydrogen vehicles began to be rolled out as part of the High V.I.O.-City project

...what we aim to do...

Actions will continue to ensure efficient and sustainable public transport choices by implementing new, zero-emission technologies

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land

⁵ The data and information refer to 2018, the year in which the company was included in the scope of the Sustainability Report.





FERROVIE DEL SUD-EST E SERVIZI AUTOMOBILISTICI⁶

OUR APPROACH

FSE operates a railway infrastructure of over 470 km of lines on which it provides transport services. It also provides integrated road/rail transport services throughout Puglia. FSE believes it is fundamental to pursue the highest standards for local public transport by both rail and road and therefore, in its relaunch plan, FSE considers the quality of services provided, the protection of the environment, the safeguarding of the health and safety of its workers and passengers as strategic elements in its business. This is why FSE has implemented a quality

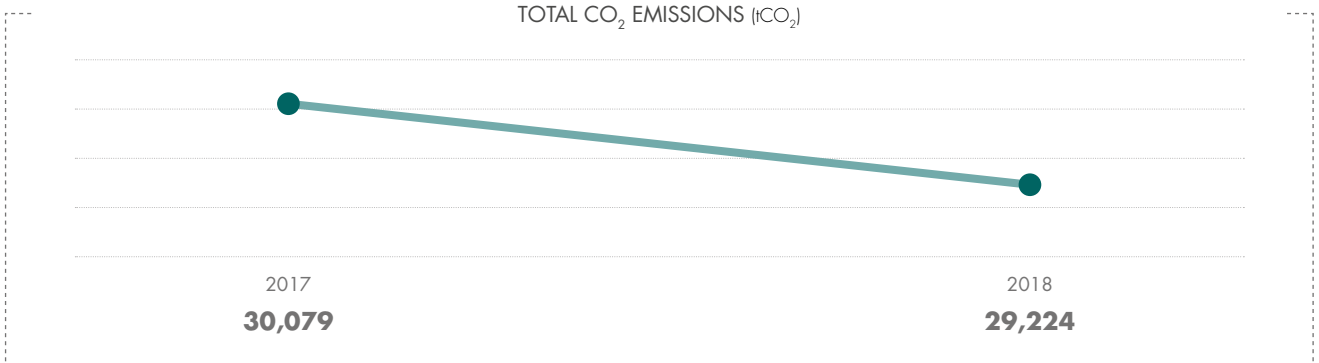
management system in accordance with the ISO 9001 standard (certified in July 2018). In addition, FSE has begun implementing an environmental management system that is compliant with the ISO 14001:2015 standard in accordance with the Group's guidelines, and an occupational health and safety management system in line with the requirements of BS OHSAS 18001.

Final energy consumption		2018	2017
Electricity	MWh	4,481	4,196
with guarantee of origin or self-produced using photovoltaic technologies	%	98	0
Diesel	l	10,385,717	10,727,275
Natural gas	Sm ³	50,114	48,053

Comments on the trend

In 2018, FSE signed new contracts for the supply of electricity from certified renewable sources (guarantee of origin) covering 100% of its consumption. Total energy and diesel consumption show no substantial changes.

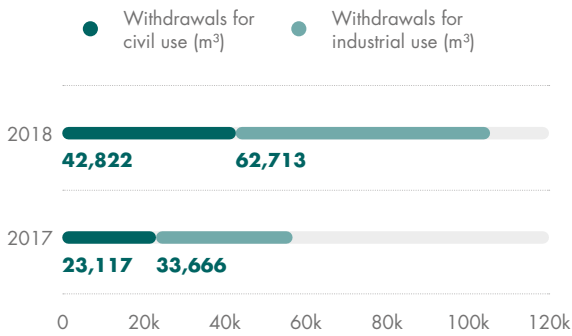
TOTAL CO₂ EMISSIONS (tCO₂)



⁶ The data and information refer to 2017 and 2018, as the company was included in the scope of the Sustainability Report in 2017.



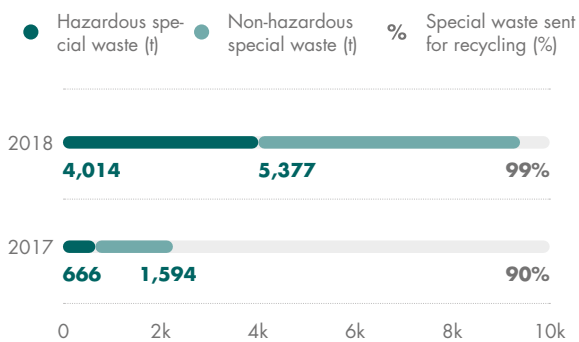
WATER



Comments on the trend

The change was due to a leak at the Bari site. The leak was found and repaired.

WASTE



Comments on the trend

The increase is due to the start of work to update the Bari-Taranto railway line which generated an increase in waste in 2018 (sleepers, tracks and fasteners, etc.).

**Commitments made...****...what we have accomplished****...what we aim to do...**

Purchase six electric trains and 68 new Euro 6 buses



completed

Five electric trains and 68 new buses were purchased

Five new electric trains began operating, with lower atmospheric emissions than diesel trains.

Another seven electric trains and 50 buses will be purchased in 2019-2021



Continue the plan to replace wood sleepers on the Bari-Taranto line with concrete sleepers



completed

Replace the wood sleepers on the Mungivacca-Putignano line (43 km) and the Alberobello-Locorotondo section of the Bari-Taranto line (8 km)

The plan to update the wood sleepers along the Bari-Taranto line on the Putignano-Martina section (26 km) will be completed



New plants for the treatment of first flush rainwater will be rolled out at the Bari, Taranto and Lecce garages



in progress/rescheduled

The rehaul of the bus washing unit at the Taranto garage was completed and the work to build the first flush rainwater treatment plant at the garage lot was contracted

Build the first flush rainwater treatment plants in Taranto (already contracted) and at the Bari and Lecce garages



Certify the management systems for quality (ISO 9001), the environment (ISO 14001) and health and safety (OHSAS 18001) will continue



in progress/rescheduled

ISO 9001:2015 certification was obtained and activities began to certify the environmental management (ISO 14001:2015) and occupational health and safety (OHSAS 18001) systems

Certify the SSL OHSAS 18001 system by 2019 and the ISO 14001 environmental management system after the first flush rainwater treatment plants are built

Aspects

Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle







Land

FS SISTEMI URBANI

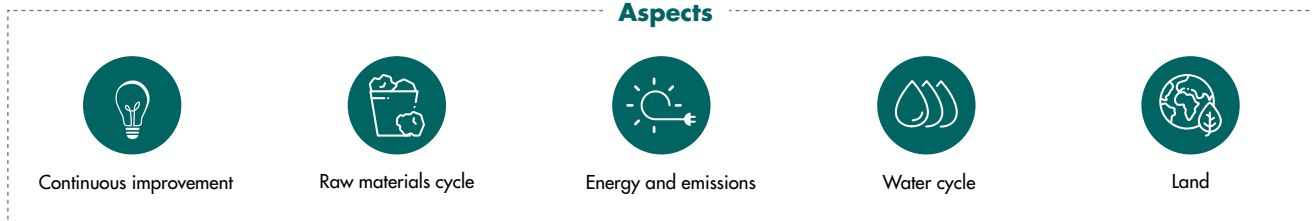
OUR APPROACH

FS Sistemi Urbani is responsible for developing the Group's assets which are not functional for 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...
 <p>Continue with the activities planned in the remedial plan for the parking areas</p> <p> completed</p>	<p>Activities completed</p>	<p>Continue ongoing monitoring of all company assets</p>
 <p>Develop a strategic tool that identifies criteria for sustainable development</p> <p> completed</p>	<p>This was carried out by issuing a procedure to sustainably manage development</p>	<p>An asset development procedure will be applied to the most significant assets</p>

Aspects





TRAI NOSE ⁷

OUR APPROACH

TRAI NOSE S.A. is currently the only provider of passenger and freight railway transport in Greece. It provides railway services on the railway network and infrastructure owned by OSE S.A. (and pays the corresponding fees to use the railway network). The rolling stock it uses belongs to the Greek government and is managed by GAIAOSE, to which TRAI NOSE pays lease instalments.

TRAI NOSE S.A.'s trains serve thousands of residents daily throughout the country and within the largest cities.

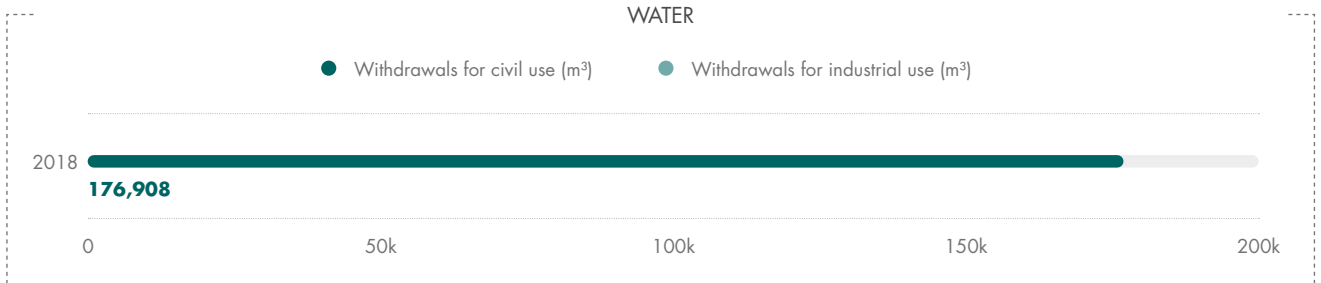
The company aims to deliver high-quality services with a focus on economic, social and environmental sustainability. This is why it intends to create an organisational structure devoted to the principles of sustainability along the entire value chain (passenger and freight transport).

Final energy consumption and emissions

2018

Electricity for railway traction	MWh	48,375
Electricity for other uses	MWh	50
with guarantee of origin or self-produced using photovoltaic technologies	%	10
Diesel	l	15,915,362
Natural gas	Sm ³	15,573,189
Greenhouse gas emissions	tCO ₂	66,092

WATER



⁷ The data and information refer to 2018, the year in which the company was included in the scope of the Sustainability Report.

...what we have accomplished

...what we aim to do...



The responsibilities of the organisational structure for quality (ISO 9001), including the management of environmental and sustainability issues, will be expanded

The responsibilities of the new Sustainability, Environment and Quality organisational structure will be formalised

Environmental awareness campaigns will be carried out for personnel

The company will begin implementing an environmental management system in line with the requirements of ISO 14001:2015

The KPI definition process began to monitor the company's environmental performance

Procedures will be formalised for the management and reporting of KPIs to monitor the company's environmental performance

Environmental requirements were included in vehicle cleaning contracts

Where applicable, environmental requirements will be included in all contracts

The company participated in the European research project named "GreenYourMove" (GYM), cofunded by the LIFE (L'Instrument Financier pour l'Environnement) programme to develop and promote inter-modal travel to minimise greenhouse gas emissions in Europe

The GYM project will be completed and the application will be used on the company's website

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



Land



NETINERA GROUP

OUR APPROACH

Netinera group operates in local rail and road public transport and also offers transborder services between Germany, France, the Czech Republic and Poland, in addition to freight services.

Netinera 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.

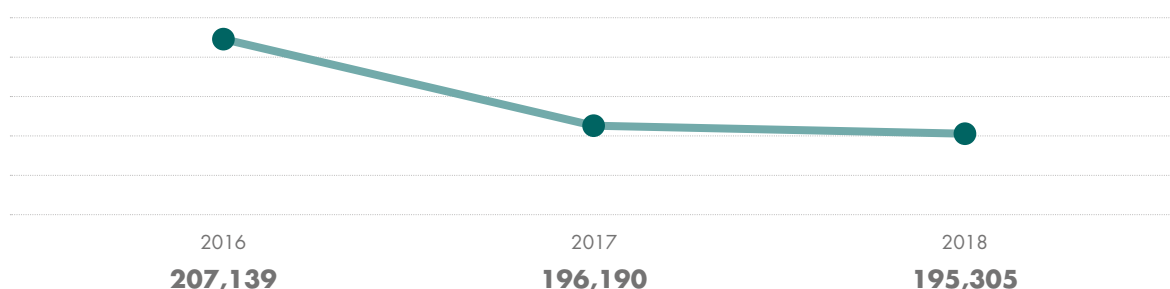
The group is constantly committed to energy efficiency and, specifically, the monitoring and reduction of electricity consumption for railway traction. This commitment is confirmed by the Group's monitoring systems and the training and awareness campaigns aimed at personnel with the goal of minimising energy consumption during the different parts of the journey (from how the train moves to how it stops).

Final energy consumption		2018	2017	2016
Electricity for traction	MWh	162,101	160,149	166,622
Electricity for other uses	MWh	10,920	10,533	11,026
with guarantee of origin or self-produced using photovoltaic technologies	%	1	0	0
Diesel	l	40,299,768	40,636,357	42,489,823
Natural gas	Sm ³	1,126,596	1,109,224	1,116,568

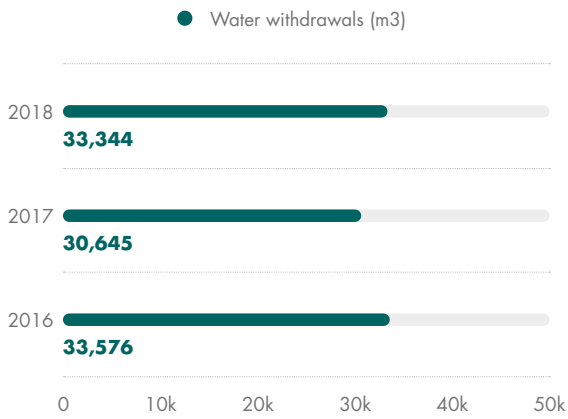
Comments on the trend

There were no significant changes in energy consumption and the most significant component was railway traction.

TOTAL CO₂ EMISSIONS (tCO₂)



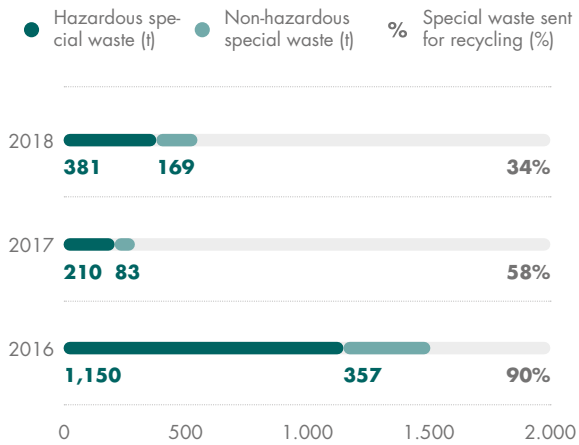
WATER



Comments on the trend

There were no significant changes.

WASTE



Comments on the trend

The increase in special waste is mainly due to the disposal of certain vehicles and maintenance on the infrastructure.



Commitments made...

...what we have accomplished

...what we aim to do...



Continue to purchase high-energy efficiency trains



in progress/rescheduled

High-energy efficiency trains are being purchased, but the transaction is subject to the authority's awarding of the contract for the transport service

Complete the purchase of high-energy efficiency trains following the awarding of the contract

Old-generation buses were replaced



Activities continued to implement an environmental management system

Obtain ISO 14001:2015 certification

Aspects



Continuous improvement



Raw materials cycle



Energy and emissions



Water cycle



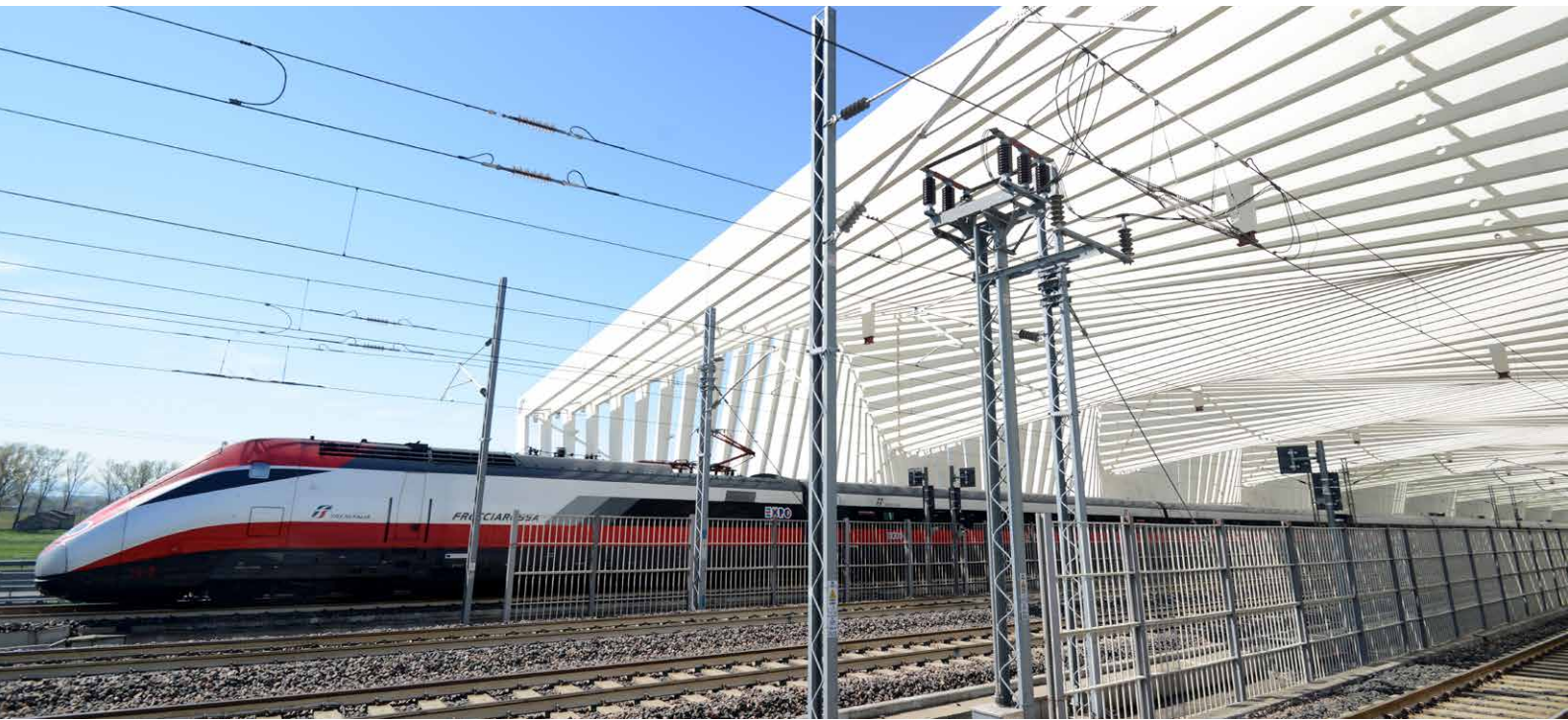
Land





Management Systems





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: -
Quality (Q) ISO 9001⁸	Central Audit Department and audit departments of Ferrovie dello Stato Italiane Group Scope: › design and provision of internal audit services to the Group companies.	
Environment (E) ISO 14001	Ferrovie dello Stato Italiane (Headquarters) 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.	

⁸ The certificate expired in September 2018 but activities are in progress to renew it, with the concurrent transition to the new ISO 9001:2015.

**RFI****Integrated systems: Q + E + S****Quality (Q)
ISO 9001****Commercial and Network Operation Department and Steering Departments**

Scope:

- › management of train traffic to ensure safe railway operation.

Production Department (PD) and Regional Production Units

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.

National Electrical Equipment Workshop - Bologna, the PD's national workshops

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.

National Superstructure Workshop - Pontassieve, the PD's national workshops

Scope:

- › maintenance to ensure safe train travel and railway operation; construction of railway super structure equipment through mechanical processing, welding, assembly and attachment of rails and railway diverters.

National Carriage Workshop - Catanzaro, the PD's national workshops

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.

**Environment (E) ISO
14001****Central Divisions**

Scope:

- › design, construction, implementation, management and maintenance of national railway infrastructure.

Steering Divisions

Scope:

- › management of train traffic to ensure safe railway operation.

Regional Production Units

Scope:

- › maintenance of the railway infrastructure to ensure safe train travel and railway operation and the performance of train travel and shunting activities.

National Electrical Equipment Workshop - Bologna, the PD's national workshops

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.

National Superstructure Workshop - Pontassieve, the PD's national workshops

Scope:

- › maintenance to ensure safe train travel and railway operation; construction of railway super structure equipment through mechanical processing, welding, assembly and attachment of rails and railway diverters.

National Carriage Workshop - Catanzaro, the PD's national workshops

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.



Occupational safety (S) OHSAS 18001 **Steering Divisions**

Scope:

- › management of train traffic to ensure safe railway operation.

Regional Production Units

Scope:

- › maintenance of the railway infrastructure to ensure safe train travel and railway operation and the performance of train travel and shunting activities.

National Electrical Equipment Workshop - Bologna, the PD's national workshops

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.

National Superstructure Workshop - Pontassieve, the PD's national workshops

Scope:

- › maintenance to ensure safe train travel and railway operation; construction of railway super structure equipment through mechanical processing, welding, assembly and attachment of rails and railway diverters.

National Carriage Workshop - Catanzaro, the PD's national workshops

Scope:

- › maintenance to ensure safe train travel and railway operation through general inspections, non-routine maintenance, five-year checks, repairs and assistance for the vehicles operating on rails.

Blufferies

Integrated systems: -

Environment (E) ISO 14001

Blufferies (Registered office, operating sites and owned ships)

Scope:

- › Maritime transport using roll-on roll-off (ro-ro) ships and high-speed craft (HSC).

Terminali Italia

Integrated systems: Q + E

Quality (Q) ISO 9001

Terminali Italia (Headquarters and operating sites)

Scope:

- › management and operation of terminals equipped for intermodal transport;
- › provision of terminal services through shunting and container handling.

Environment (E) ISO 14001

Trenitalia

Integrated systems: Q + E + S

**Quality (Q)
ISO 9001**

Trenitalia (Headquarters and operating sites)

Scope:

**Environment (E) ISO
14001**

- › design and provide integrated mobility passenger transport by rail.

**Occupational safety
(S) OHSAS 18001**

Trenitalia c2c

Integrated systems: -

**Environment (E) ISO
14001**

Trenitalia c2c

Scope:

- › management of waste, atmospheric emissions and water drains.

Busitalia - Sita Nord

Integrated systems: Q + E + S

**Quality (Q)
ISO 9001**

Busitalia-Sita Nord (Headquarters and regional divisions)

Scope:

- › design and provision of transport services using buses, trolley buses, railways and ships: local public transport. Design and provision of transport services using buses: long haul lines, rentals, replacement and integrated rail services and atypical services. Roll-out of alternative mobility services (lifts, cable railways, escalators and moving walkways). Maintenance and depot facilities for its own vehicle fleet and alternative mobility. Sea works and dredging. Management of parking areas and rest areas.

**Occupational safety
(S) ISO 14001**

Busitalia-Sita Nord (Headquarters and regional divisions)

Scope:

- › design and provision of transport services using buses and trolley buses: local public transport. Design and provision of transport services using buses: long haul lines, rentals and atypical services. Roll out of alternative mobility services (lifts, cable railways, escalators and moving walkways). Maintenance and depot facilities for its own vehicle fleet. Management of parking areas and moors.

**Occupational safety
(S) OHSAS 18001**

Busitalia-Sita Nord (Headquarters and regional divisions)

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.



Busitalia Veneto		Integrated systems: Q + E + S
Quality (Q) ISO 9001	Busitalia Veneto (Headquarters and operating sites)	
	Scope:	
	<ul style="list-style-type: none"> 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		
Busitalia Campania		Integrated systems: -
Quality (Q) ISO 9001	Busitalia Campania (Headquarters and operating sites)	
	Scope:	
	<ul style="list-style-type: none"> design and provision of transport services using buses (local public transport, long haul lines, rentals and atypical services); maintenance depot facilities for its own vehicle fleet (Sector EA: 31-35). 	
Ataf Gestioni		Integrated systems: Q + E
Quality (Q) ISO 9001	Ataf Gestioni (Headquarters and operating sites)	
	Scope:	
	<ul style="list-style-type: none"> design and provision of local public transport using buses. Maintenance and depot facilities for its fleet. 	
Environment (E) ISO 14001		
Mercitalia Logistics		Integrated systems: Q + E + S⁹
Quality (Q) ISO 9001	Mercitalia Logistics (Rome headquarters)	
	Scope:	
	<ul style="list-style-type: none"> Organisation and management of logistics services in relation to sundry freight and the provision of such services via third party coordination. Management and development of the company's real estate assets. Management and coordination of the Mercitalia hub operating companies. 	
Environment (E) ISO 14001	Mercitalia Logistics (Rome headquarters and local units in Bologna San Donato, Catania Biccocca, Turin Orbassano, Bologna Interport, Pomezia S. Palomba, Verona Porta Nuova and Marcianise)	
	Scope:	
	<ul style="list-style-type: none"> organisation and management of logistics services in relation to sundry freight and the provision of such services via third party coordination. Management and development of the company's real estate assets. Management and coordination of the Mercitalia hub operating companies. 	

⁹ La società ha effettuato il passaggio alla nuova Norma UNI EN ISO 45001:2018, anticipando i tempi di adeguamento richiesti da Accredia (11 marzo 2021).

Occupational safety (S) ISO 45001

Mercitalia Logistics (Rome headquarters and local units in Bologna Interport, Milan via Valtellina and Pomezia, via della Zoologia and Turin Orbassano)

Scope:

- › organisation and management of logistics services in relation to sundry freight and the provision of such services via third party coordination. Management and development of the company's real estate assets. Management and coordination of the Mercitalia hub operating companies.

Mercitalia Shunting&Terminal

Integrated systems: Q + E + S

Quality (Q) ISO 9001

Mercitalia Shunting&Terminal (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

Mercitalia Rail

Integrated systems: Q + E + S

Quality (Q) ISO 9001

Mercitalia Rail (Headquarters and operating sites)

Scope:

Environment (E) ISO 14001

- › design and provision of freight transport services by rail.

Occupational safety (S) OHSAS 18001

FS Sistemi Urbani

Integrated systems: -

Environment (E) ISO 14001

FS Sistemi Urbani (Headquarters)

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;
- › management control activities on the real estate compendium in Salerno used by third parties.

Grandistazioni Rail

Integrated systems: -

Environment (E) ISO 14001

Grandistazioni Rail (Rome Termini, Milan Centrale, Venice S. Lucia, Turin Porta Nuova, Naples Centrale, Venice Mestre and Verona Porta Nuova stations)

Scope:

- › management of station complexes and development support through facility and energy management services.



Ferservizi		Integrated systems: Q + E + S
Quality (Q) ISO 9001	Ferservizi (Headquarters and operating units) Scope: <ul style="list-style-type: none"> › 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, notifications and document filing. 	
Environment (E) ISO 14001	Ferservizi (Headquarters and operating units) Scope: <ul style="list-style-type: none"> › 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, maintenance and document filing. 	
Occupational safety (S) OHSAS 18001		
Italferr		Integrated systems: Q + E + S
Quality (Q) ISO 9001	Italferr (Headquarters and operating sites) Scope: <ul style="list-style-type: none"> › project management, design, contracting management, works oversight and supervision and safety coordination for transport infrastructure work and the related interferences. 	
Environment (E) ISO 14001		
Occupational safety (S) OHSAS 18001		
Netinera group¹⁰		Integrated systems: -
Quality (Q) ISO 9001	RAG (Neumark workshop) Scope: <ul style="list-style-type: none"> › light carpentry work on behalf of third parties. 	
	Netinera Werke Scope: <ul style="list-style-type: none"> › maintenance and inspection of railway vehicles in accordance with German regulations (Iron, Building and Works Regulations – EBO). 	
	OHE Headquarters and operating sites) Scope: <ul style="list-style-type: none"> › maintenance and inspection of railway vehicles in accordance with German regulations (Iron, Building and Works Regulations – EBO). 	

¹⁰The Netinera group companies that fall under the scope of the Sustainability Report have been considered.

Anas
Integrated systems: -
**Quality (Q)
ISO 9001**
ANAS (Central and Divisions and Regional Units)

Scope:

- › planning, execution, monitoring and technical, administrative, legal and financial management of the planning processes for large-scale infrastructural works, roadway works contracting and the related services, works oversight, direct operation and surveillance of the road network, research and the testing of materials and infrastructures using innovative technologies.

TrainOSE
Integrated systems: -
**Quality del servizio (Q)
UNI EN
13816/2002**
TrainOSE

Scope:

- › definition of objectives and measurement of delivered service quality.

**Safety (S) ELOT
1801-2008**
TrainOSE

Scope:

- › management company activities.

Ferrovie del Sud-Est e Servizi Automobilistici
Integrated systems: -
**Quality (Q)
ISO 9001**
Ferrovie del Sud-Est e Servizi Automobilistici (Headquarters and operating sites)

Scope:

- › design and provision of local public road transport services. design and provision of local railway transport services. Maintenance of rolling stock. Design and management (routine and non-routine maintenance) of railway infrastructures.



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