2019 SUSTAINABILITY REPORT

Fulfil Sustainability

ANNEX - **COMPANY HIGHLIGHTS**: THE ENVIRONMENT

FERROVIE DELLO STATO ITALIANE

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ANNEX - **COMPANY HIGHLIGHTS**: THE ENVIRONMENT

FERROVIE DELLO STATO ITALIANE

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Company highlights

FERROVIE DELLO STATO ITALIANE

OUR APPROACH

Ferrovie dello Stato Italiane intends to incorporate the protection of the environment into the Group's strategies and activities 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.

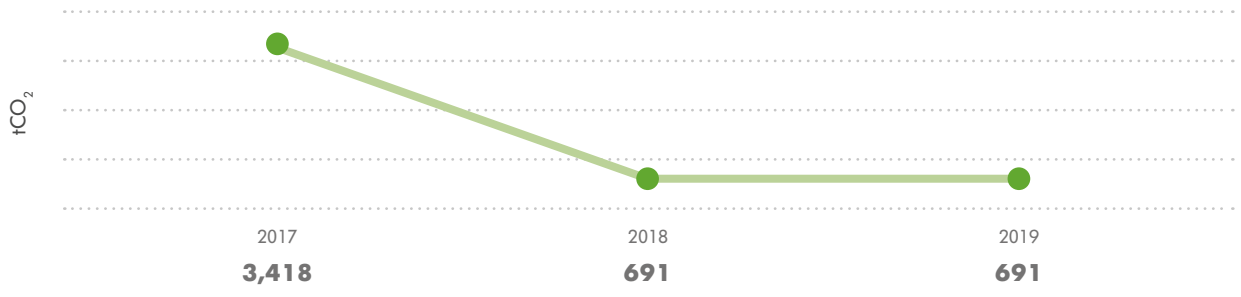
The environmental policy and environmental management system guide the processes and actions towards continuous improvement, carefully and continuously developing natural capital by spreading awareness of environmental matters and actively supporting the monitoring of environmental impacts.

Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	5,629	5,670	6,103
with guarantee of origin or self-produced using photovoltaic technologies	%	100	100	0
Diesel	l	0	31,550	77,462
Natural gas	Sm^3	349,529	306,921	283,645

COMMENTS ON THE TREND

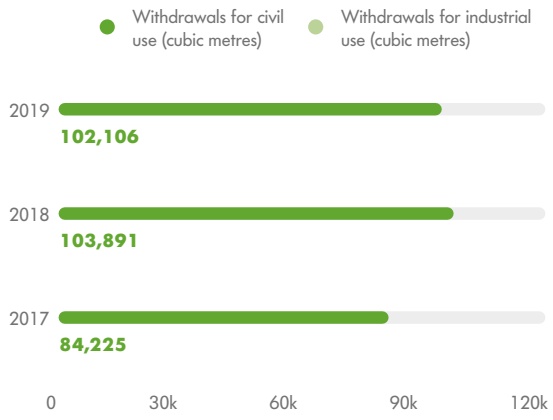
Energy consumption relates mainly to the management of the building housing the central headquarters in Villa Patrizi, Rome. The volume of natural gas consumed has remained essentially stable over the years, changing only in response to atmospheric conditions. The reduction in diesel consumption was due to the retirement of the diesel-powered thermal power plant in Trieste, which began in 2018.

TOTAL CO_2 EMISSIONS (MARKET BASED[1])



[1] The market-based approach entails the use of emissions factors defined in the contract with the electricity supplier. If there are no specific contractual agreements, where the Group companies and the electricity supplier can negotiate them (e.g., by purchasing guarantees of origin), the emission factor for the national "residual mix" of energy sources is used.

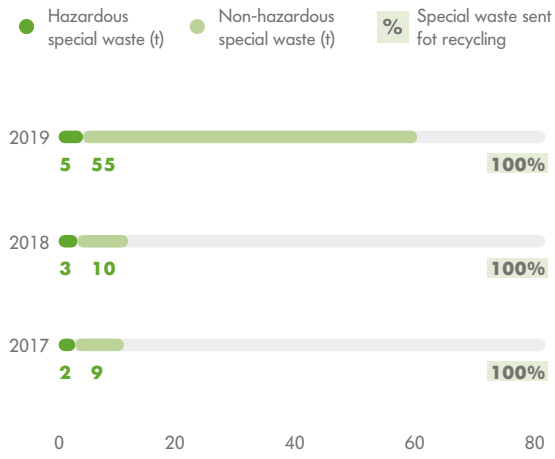
WATER



COMMENTS ON THE TREND

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

WASTE



COMMENTS ON THE TREND

The figures in the table refer to special waste produced by the Villa Patrizi site in Rome.
The type of office activities carried out at the site is such that the production of waste is steady (IT equipment, furnishings and air conditioners). However, non-hazardous special waste increased in 2019 due to the replacement of furnishings in rooms assigned to personnel.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Formalise the sustainability governance model and disseminate it throughout the Group	2019	+ commitment		The sustainability governance model was issued on 30 May 2019 together with the Group sustainability policy.
	Induction cycle on sustainability issues for management and members of the boards of directors of direct subsidiaries	2020	+ culture and awareness + awareness and commitment		The second induction cycle continued in 2019 (having commenced in 2017) for the boards of directors of the Group's main subsidiaries. The Sustainability Committee and three boards of directors (Trenitalia, Italferr and Rete Ferroviaria Italiana) participated in 2019. The induction programme was then extended to over 200 colleagues, including the CEO and senior managers of the Italian and foreign direct and indirect subsidiaries.
	Approval of the 2030-2050 goals by the parent's board of directors on the Group's three priorities: safety, energy and emissions and sustainable mobility	2019	+ value creation + commitment and responsibility + safety - CO_2		The parent's board of directors approved the long-term goals on 28 May 2019 and they were presented to the public at an event held on 18 July 2019 at the Aquario Romano.
	Cultural transformation on sustainability issues, an online course to raise awareness throughout the Group.	2020	+ culture and awareness + virtuous practices		In December 2019, the first video capsule on the relationship between businesses and sustainability and what being a sustainable business means to the Ferrovie dello Stato Group. The project will consist of four capsules for the entire group population.
	Include greenhouse gas emissions targets in top management's remuneration policies.	2020	+ commitment - CO_2		
	Define an assessment model for economic, social and environmental issues to apply to the Group's main projects	2020	+ shared value		

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Encourage the integration of environmental and social considerations in procurement.	2020	+ culture and awareness		The first set of Guidelines for the application of environmental sustainability (e.g., CAM) to products/ services requested by Group companies is being issued.
	NEW Define a control model for data on sustainability performance required for Group reporting.	2020	+ control		

* Minimal environmenatal criteria (CAM)

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

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 necessary and fundamental and therefore strategic elements for its reputation and business development. Trenitalia has therefore formalised its own specific operating safety, quality, environment, occupational health and safety policy that generally directs and guides the company towards achieving its mission and gaining a competitive edge, which uses the environmental benefits of safe railway transport as leverage to create incentives for sustainable mobility. To boost its effectiveness in this respect, Trenitalia has also adopted an integrated certified management system that conforms to the requirements of the OHSAS 18001, ISO 14001, ISO 9001 standards.

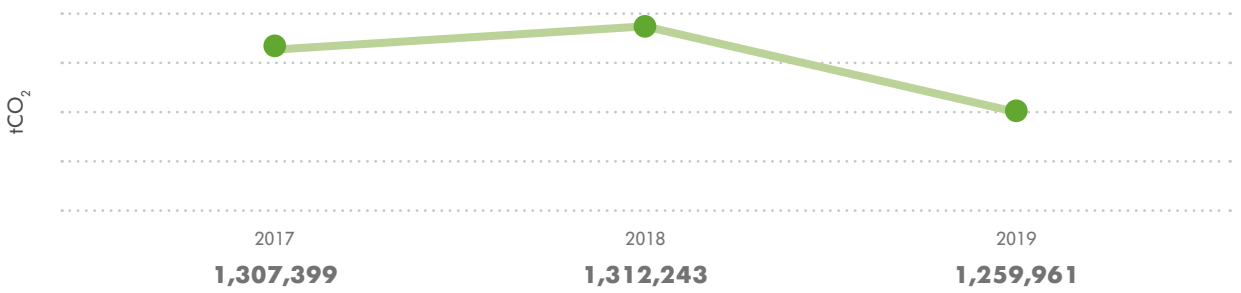
As for energy efficiency, for four years Trenitalia has been pursuing a broad energy diagnosis campaign at its industrial plants to progressively improve the energy performance of its maintenance activities, which also consists of significant investments in the installation of LED lighting systems and the redevelopment of the energy supplies for compressed air and heat production and distribution systems and the production of energy from renewable sources (e.g., photovoltaic plants, solar thermal energy, etc.). 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 600 regional electric and diesel trains awarded previously. To protect water resources, the company has initiated a virtuous, long-term cycle at maintenance sites to streamline and contain water consumption.

Final energy consumption	Unit of measure	2019	2018	2017
Electricity for railway traction	MWh	3,473,128	3,554,179	3,425,419
Electricity for other uses	MWh	77,559	78,624	76,483
with guarantee of origin or self-produced using photovoltaic technologies	%	100	100	100
Diesel	l	48,531,837	49,264,725	49,514,340
Natural gas	Sm^3	15,935,245	19,549,256	19,809,346

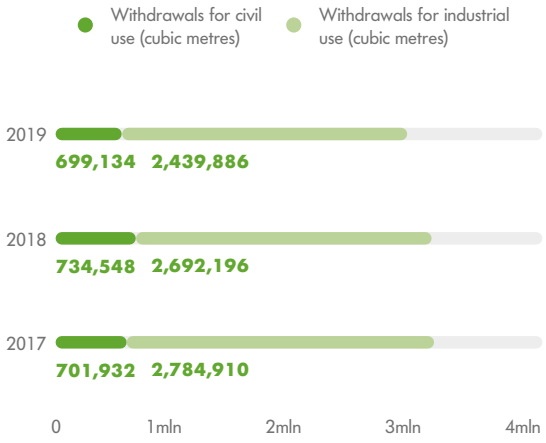
COMMENTS ON THE TREND

Electricity consumption shows a substantially steady trend. Natural gas and diesel consumption to heat industrial sites is down on the previous year due to a combination of factors: on the first hand, weather conditions were not as harsh as in 2018 (particularly in certain months when consumption is usually at its highest, such as February and March), requiring less heating, and on the other hand, technical upgrades were carried out to improve efficiency (e.g., retirement of thermal power plants, adjustments to heating lines, repairs on doors), as well as management upgrades (e.g., downsized schedule for when heaters are turned on).

TOTAL CO_2 EMISSIONS (MARKET BASED)



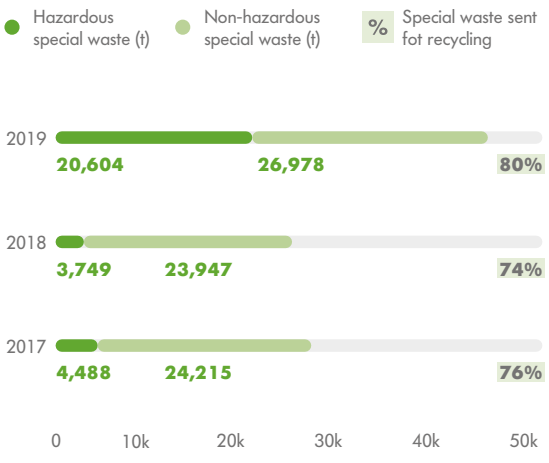
WATER



COMMENTS ON THE TREND

Water withdrawn decreased by 8% on the previous year. Water savings are mainly due to the rationalisation and improved efficiency of the water cycle, generating a decrease that is even more significant considering the growth in train-km production.

WASTE



COMMENTS ON THE TREND

The increase in special waste produced in 2019 is mainly due to the scrapping of obsolete railway vehicles, which were replaced with new, higher-performance trains, while maintaining an ongoing commitment to recovering the materials produced. This led to a 6% increase in the amounts sent for recycling.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Installation of new lighting systems on the fleet of Vivalto NCDP trains (i.e., those featuring the new double-decker carriages), TAF (trains operating the busiest routes) and the medium-haul carriages that have received face-lifts.	In progress	+ comfort - CO_2		Installation on the Vivalto NCDP fleet began at the end of 2017 and will cover 257 carriages (progress: 192 out of 257 carriages). Installation began on the medium-haul face-lifted carriages in 2019 and will cover 1,200 of them (progress: 189 out of 1,200).
	Installation of sleep-mode on Jazz trains, to reduce noise and energy absorption when trains are parked.	2019	- noise - CO_2		The sleep-mode on Jazz trains cuts noise and energy consumption when the vehicles are parked.
	The new Pop and Rock trains for regional service were purchased and rolled out.	In progress	+ comfort - CO_2		The new Pop and Rock trains have updated the rolling stock used for the regional service in Italy to the next generation, boasting more comfort, technological innovation and sustainability. Indeed, these trains consume less energy, offer integrated mobility features (e.g., space on board for bicycles and charging stations) and are made out of up to 96% recyclable materials.
	Purchase of new regional diesel/electric Blues trains designed for commuters.	In progress	+ comfort - CO_2		The new Blues trains are last-generation diesel-electric-battery hybrid trains. They may run on diesel - when operating on diesel railway lines - or electricity when using pantographs on electric lines. Equipped with batteries, they can travel a few kilometres on diesel lines - for instance when entering and leaving stations - electrically to reduce pollutant emissions in cities.
	The photovoltaic plant at the Vicenza ordinary maintenance workshop was rolled out (294 kWp).	2019	300 **MWh** 96 **tCO_2**		

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Installation and roll-out of new photovoltaic plants	2020	12,100 **MWh** 3,930 **tCO_2**		Being rolled out at the HS Rome current maintenance plant and the Napoli Centrale current maintenance plant; being installed at the S.M. La Bruna ordinary maintenance workshop, HS Naples current maintenance plant and HS Milan current maintenance plant.
	Roll-out of solar thermal plants at the Rimini ordinary maintenance workshop and the Napoli Centrale current maintenance plant.	2019	1 **tep** 2 **tCO_2**		
	Installation of new solar thermal plants at the Verona ordinary maintenance workshop, HS Milan current maintenance plant, HS Naples current maintenance plant, Bari current maintenance plant, Lecce current maintenance plant and Reggio Calabria current maintenance plant.	2023	210 **tep** 480 **tCO_2**		It was rolled out at the Rimini ordinary maintenance workshop in 2019.
	LED lighting and building automations systems in the HS Milan current maintenance plant of Long-haul Passenger Division (LHPD) and another 13 plants belonging to the LHPD, Production Department (PD) and the Technical Department (TD).	2022	6,160 **MWh** 1,986 **tCO_2**		
	Installation of radiant strip heating systems and heat pumps at the LHPD Milan hub (HS Milan current maintenance plant, Milan current maintenance plant Milan and Milano Greco current maintenance plant).	2020	670 **tep** 1,580 **tCO_2**		

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Installation of radiant strip heating systems in the Savona current maintenance plant (PD) and the Voghera ordinary maintenance workshop (TD)	2023	330 **tep** 745 **tCO_2**		
	Rationalisation of water networks for industrial plants and adoption of management, infrastructure and technological solutions to optimise water use.	2023	0.43 **litres of water/train-km** 4.2 **litres of water/hours worked**		
	Rationalisation of the collection of waste from industrial production and awareness raising for personnel and third-party firms on environmental management.	2023	**+** 2% waste sent for recycling		

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

TRENITALIA'S SUBSIDIARIES

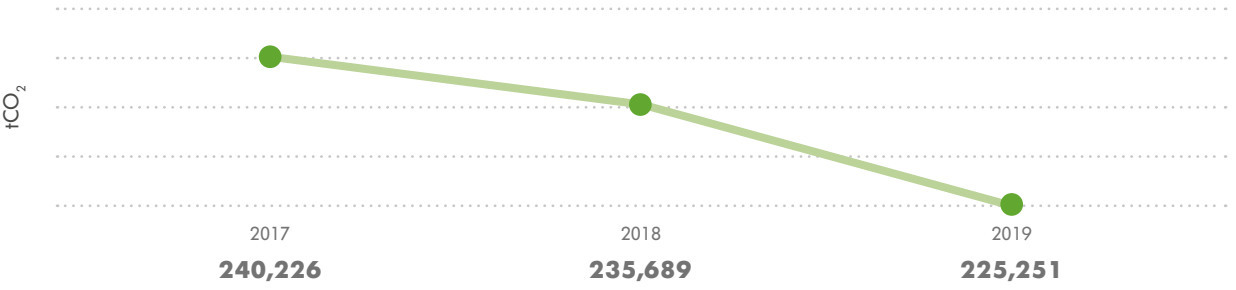
NETINERA GROUP

Final energy consumption	Unit of measure	2019	2018	2017
Electricity for railway traction	MWh	162,797	162,814	160,149
Electricity for other uses	MWh	7,676	10,207	10,533
with guarantee of origin or self-produced using photovoltaic technologies	%	2	1	0
Diesel	l	36,861,310	40,299,768	40,636,357
Natural gas	Sm^3	991,439	1,126,596	1,109,224

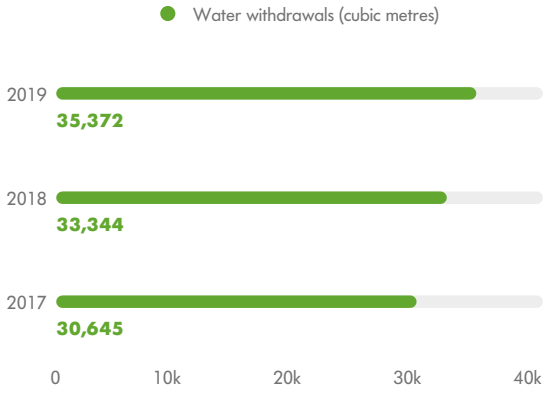
COMMENTS ON THE TREND

The reduction of energy consumption in 2019 was mainly due to the closure of the Eschede service centre and the end of a transport contract.

TOTAL CO_2 EMISSIONS (MARKET BASED)



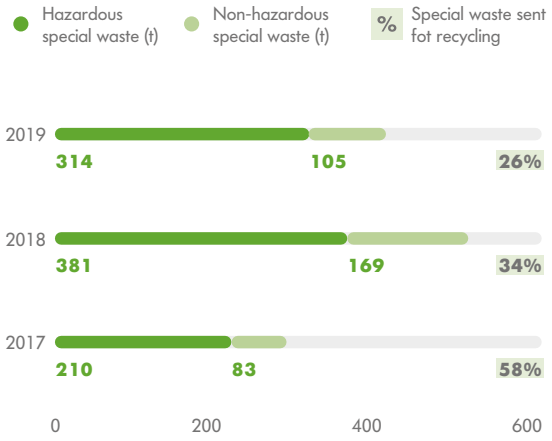
WATER



COMMENTS ON THE TREND

The data show a substantially steady trend.

WASTE



COMMENTS ON THE TREND

The significant drop in waste in 2019 compared to the previous year was due to the decrease in construction work.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Achievement of energy saving targets.	2019	500 **tep** 1,400 **tCO_2**		The electricity for railway traction budget was 169,000 MWh in 2019, while actual consumption totalled 162,797 MWh.
	Roll-out of the sleep-mode on trains. Incentive system for drivers to reduce energy consumption.	2019	**-** 5% litres (diesel/petrol)		
	UNI EN ISO 14001:2015 certification obtained for the Group's railway companies.	2019	**+** culture		

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

TRENITALIA'S SUBSIDIARIES

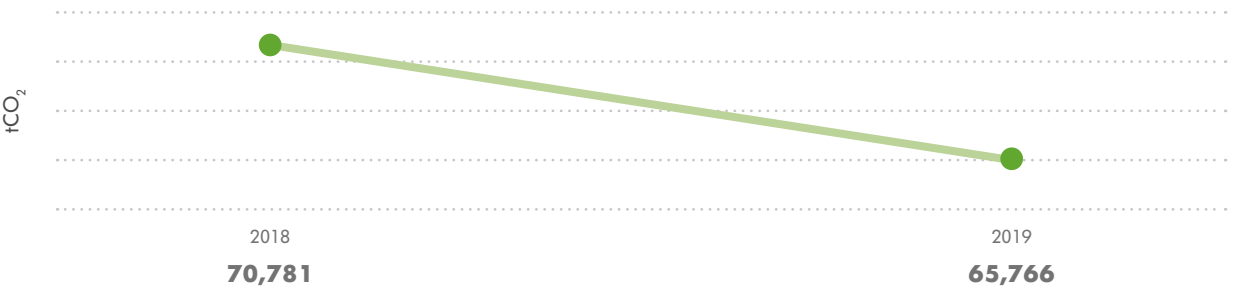
TRAINOSE[2]

Final energy consumption and emissions	Unit of measure	2019	2018
Electricity for railway traction	MWh	67,992	48,325
Electricity for other uses	MWh	5,341	50
with guarantee of origin or self-produced using photovoltaic technologies	%	30	10
Diesel	l	12,700,094	15,915,362

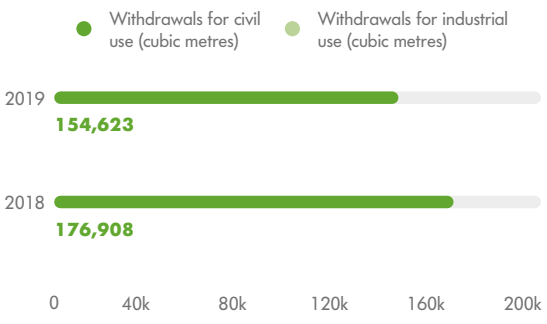
COMMENTS ON THE TREND

Diesel for traction decreased in 2019, offset by the increase in electricity consumption due to the electrification of the primary network in Greece connecting Athens with Thessaloniki.

TOTAL CO_2 EMISSIONS (MARKET BASED)



WATER

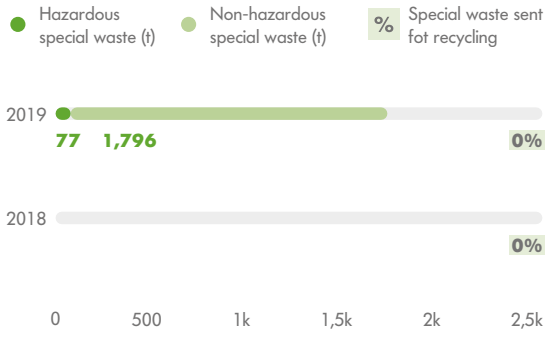


COMMENTS ON THE TREND

The reduction is mainly due to lower water consumption at depots.

[2] The company joined the scope of the Sustainability Report in 2018.

WASTE



COMMENTS ON THE TREND

The change is due to the acquisition of a rolling stock maintenance company in 2019. Reported waste is the effect of this maintenance.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	ISO 50001 certification was obtained (energy management system) and the ISO 14001 environmental management system was implemented.	2022	+ culture		

KEY

in progress

completed

Continuous improvement

Raw materials cycle

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Land

TRENITALIA'S SUBSIDIARIES

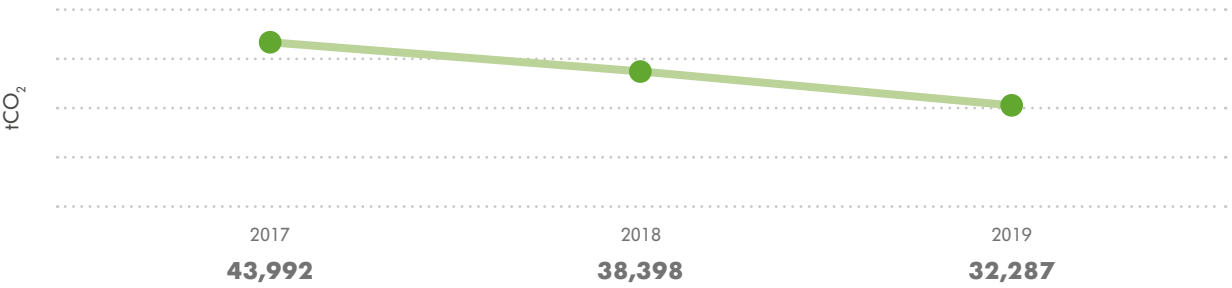
TRENITALIA C2C

Final energy consumption	Unit of measure	2019	2018	2017
Electricity for railway traction	MWh	80,401	90,313	83,709
Electricity for other uses	MWh	6,859	7,099	6,608
with guarantee of origin or self-produced using photovoltaic technologies	%	0	0	0
Natural gas	t	132,956	156,559	188,140

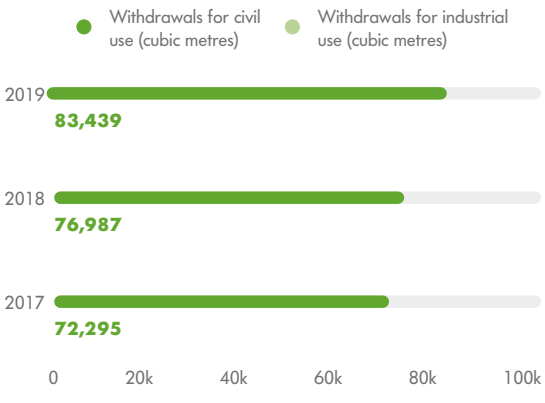
COMMENTS ON THE TREND

The reduction in electricity consumption for traction is due to the roll-out of systems to self-generate energy from braking, which were installed on the fleet. The heating systems in certain buildings were converted from gas to electric (natural gas consumption in 2017 was due to an irregularity at a railway depot that was rapidly resolved).

TOTAL CO_2 EMISSIONS (MARKET BASED)



WATER



COMMENTS ON THE TREND

The increase in water consumption is consistent with the progressive growth in services offered.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Upgrading of air conditioning systems on board trains		- CO_2 + delivered service quality		
	NEW Installation of photovoltaic panels at the Pitsea and Gray stations.	2019	- CO_2		
	NEW Plastic-free transformation of the offices at the London headquarters.	2019	- plastic cups		

KEY

 in progress

 completed

 Continuous improvement

 Raw materials cycle

 Energy and emissions

 Water cycle

 Land

RFI

OUR APPROACH

A focus on environmental and social protection and regeneration in the areas where it operates lies at the foundation of RFI's mission and is a common thread throughout all its production activities. To RFI, sustainability is not merely a criterion for the definition of specific initiatives, but is above all a systemic approach to all business aspects, to creating shared value and contributing to the achievement of sustainable development goals.

Operating the railway network efficiently, safety and accessibly means, in and of itself, contributing to a more sustainable transport system, a goal that the company also pursues through planned actions to drive the network's integration with other modes of transport, to make it more attractive to railway companies, intermodal operators and passengers and to improve its performance for them.

This means that, on the field and every day, in accordance with its integrated safety management system, RFI manages, maintains, strengthens, designs and builds lines and stations with an utmost focus on safety, impact mitigation, the rational use of resources and infrastructure control and resilience. It also means that RFI has embraced an increasingly extensive and global vision and a growing commitment to protecting, regenerating and developing the land and its assets, with the involvement of the entire organisation, the subsidiaries, suppliers and other stakeholders, in collaboration with institutions.

The company's approach centres around the definition and application of process and product innovation which, by guaranteeing higher safety and quality standards, ensure the continuous improvement of efficiency and the effectiveness of industrial activities for the creation of shared value.

Creating shared value also entails developing assets no longer used in railway operations, such as granting spaces in the station on free loan for non-profit activities or using retired lines as recreational paths and greenways.

Final energy consumption	Unit of measure	2019	2018	2017
Electricity*	MWh	476,220	473,609	446,390
with guarantee of origin or self-produced using photovoltaic technologies	%	11	0	0
Transmission of electricity for railway traction (network dissipation) **	MWh	460,530	458,108	445,135
Diesel	l	18,392,402	16,737,158	17,693,463
Natural gas	Sm^3	9,283,706	9,131,584	8,509,108

* Including the consumption of electricity generated by photovoltaic plans and conveyed to the grid. Excluding high voltage electricity absorbed by the railway companies' trains operating on the network operated by RFI.

** This is energy that dissipates along the railway transport electricity grid used to power trains travelling on tracks operated by RFI. The value is estimated following the instructions of the International Union of Railways (UIC), indicated in UIC 2008 fiche 330 "Railway specific environmental performance indicators".

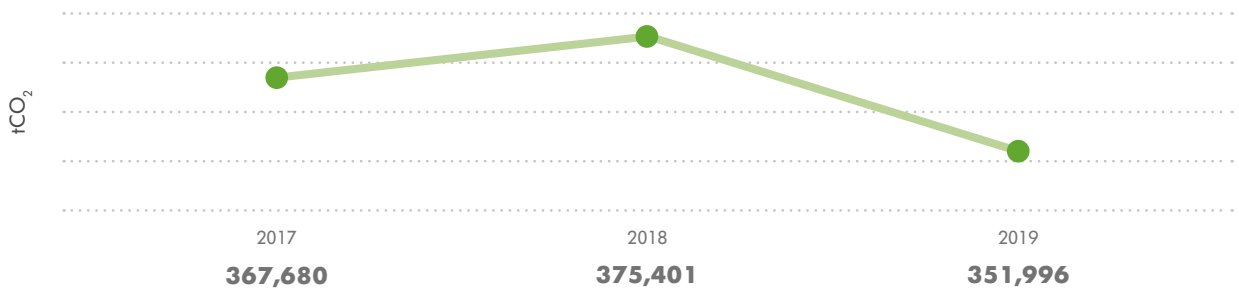
COMMENTS ON THE TREND

Electricity consumption for uses other than railway traction is substantially steady with respect to 2018, although the mix of energy sources changed in the last four months of the year due to the conversion of some of the energy supplied by Edison S.p.A. to renewable sources (55 GWh, equal to roughly 11% of all electricity for own uses);

On the other hand, diesel consumption increased by roughly 10% on the previous year, on one hand, the increase in railway ferrying (+22%) and, on the other, the decrease in consumption for heating (-8%) due to the retirement of thermal power plants and the optimisation of consumption in buildings with idle areas.

Overall natural gas consumption increased slightly (+2%). This was because the stations that Centostazioni managed for all of the first half of 2018 were added to RFI's scope following the merger of Centostazioni in July 2018; considering consumption on a like-for-like basis before the merger, total natural gas consumption decreased significantly (-14%) thanks to the optimisation of, again in this case, consumption in buildings with areas no longer used and the conversion of rail heaters to electricity.

TOTAL CO_2 EMISSIONS (MARKET BASED)



WATER

COMMENTS ON THE TREND

In correlation with the physiological changes related to the type and volume of production activities, water withdrawals show a modest increase (roughly +3%) compared to 2018.

WASTE

COMMENTS ON THE TREND

Waste production shows a 21% increase in total quantities produced compared to the previous year, due to the growth in railway infrastructure maintenance. However, the breakdown of non-hazardous waste (86%) and hazardous waste (14%) has remained substantially steady, with a 14% increase in the absolute value of the latter, mainly because efforts to replace traverse with sleepers with pre-compressed reinforced concrete sleepers were ramped up. The portion of waste sent for recycling is up to 99% (+3 p.p.), in line with 2017 levels.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Solar-powered workshops: roll-out, through a PPP (public/ private partnership), of photovoltaic plants to self-product and self-consume electricity at the national workshops in Bologna, Bari and Pontassieve.	2022	5,000 **MWh** 1,607 **tCO_2**		The design activities for the selection of the contractor is complete.
	LED Network of 600 stations: replacement of fluorescent lighting systems with LED systems and installation of remote-controlled/remote-managed systems for integration in the new "Smart Event Management" (SEM) platform at stations in the "Network of 600 Stations".	2023	8,072 **MWh** 2,594 **tCO_2**		The progressive roll-out of projects at stations covered by the Easy and Smart Station projects is under way.
	Replacement of fluorescent light bulbs with LED in about 1,200 stations not included in the "Network of 600 Stations" (including yards) and offices (work areas and equipment rooms) and the installation of remote-control and remote-management systems.	2022	30,000 **MWh** 9,640 **tCO_2**		The work is in progress.

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Recovery of energy from train braking: construction of two prototypes to use and transform kinetic energy from train braking into electricity by building innovative electric sub-stations to regulate tension and energy accumulated.	2021			The design and contract assignment is complete and work is under way on the first prototype.
	E-car fleet: Start of the conversion of some of the petrol/diesel-fuelled company car fleet with electric cars.	2023	252 **tCO_2**		The analysis was completed on the travel requirements of the car fleet of one local department used as a sample and the contractual conditions.
	E-car charging stations: pilot project to design, in a maintenance unit's territory, a network of charging stations that can meet the autonomy needs of operating personnel.	2019	23 **tCO_2**		
	Electrocution prevention device: development and adoption of a device to detect the voltage of electrostatic fields up to 3,000 V as a voltage detector to reduce the risk of electrocution, to be included in the operators' safety equipment.	2021	+ safety		The miniaturisation of the prototype was completed and the subsequent activities have begun to appoint someone for its construction.

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	SIPAC: construction of an integrated automatic work site protection system ("SIPAC") to protect workers near operating double-track lines. SIPAC is another step forward in what began as the ATWS (Automatic Track Warning System), before evolving into the ITWS (Integrated Track Warning System). Like the latter, SIPAC is based on the fact that the railway signalling system already manages all the information and actions necessary to protect the work site area. Indeed, the signalling system shows and tracks all the routes where individual trains are travelling and their position (on the track circuits) in addition to controlling traffic with signals.	2023	+ safety	✓	The definition of functional specifications is complete and design, contracting, construction and roll-out activities have begun to improve operator safety.
	Dynamic train stop to protect work sites: implementation of a system enabling maintenance workers operating on single-track lines to request trains stop using their tablet and receive the traffic control operator's confirmation in real time. The work site protection will use SIL 4 security technologies. Overcoming the need to use paper modules (M40) or telephone protocols, the system helps reduce human error.	2023	+ safety	🕒	The definition of the functional specifications has begun.
	Envision certification: the company applied the Envision protocol to the design of sustainable infrastructure, in the railway route between Frasso Telesino-San Lorenzo on the Naples-Bari HS/HC line.	2019	+ culture	✓	Platinum-level certification was obtained

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Reuse of washing platform water and testing of three water treatment plants (national industrial workshop in Carini, national work vehicle workshop in Catanzaro and local production unit in Milan - Milano Parco Centrale): this pilot programme consists of implementing waste water recovery and treatment systems in the washing platforms for RFI's work vehicles to reuse the water for vehicle washing.	2023	13,176 **m^3 of water**		The design of plants at the Carini and Catanzaro workshops was completed and design began on the Milan local production unit.
	Water - wells/sources management: optimisation of water management throughout the country through the centralised processing of analyses on the disposal or transferability of current wells and sources, to be subsequently implemented by the local production units.	2027	**-** water consumption		Technical and project studies and evaluation analyses are progressively being implemented (over 50 studies/ year until 2023).
	RESTART (Renewable Energy to SupporT Advanced Railway Technologies): projects for energy redevelopment, energy savings and the promotion of renewable sources of energy for RFI's technological assets, with the use of low enthalpy geothermal source.	2022	**+** clean energy		Being defined.

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	SANF-RFI: national alert system to predict possible landslides caused by rainfall along RFI's railway infrastructure. The system is based on a comparison of precipitation measurement and estimates and empirical pluviometric thresholds.	2020	+ safety		Implementation of the system and the test version is being validated.
	RAMSES: development of the pilot RAMSES (RAilway Meteorological SEcurity System) based on multi-sensory analyses to predict and geo-localise intense precipitation events in small areas that could involve the railway infrastructure, with the ultimate aim of improving predictions of critical weather/ climate situations.	2021	+ safety		The first release of the system in beta took place
	BLESS+: the BLESS+ (Bed LEvel Seeking System) monitoring device for bridges with bed pilings was rolled out on various water crossings to monitor the level of the bed when water levels rise and to anticipate the scouring of pilings.	2022	+ safety		Negotiations began to engineer the device and put it into use on the various crossings

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Reuse of foundry sand for the superstructure: the National Foundry Superstructure Workshop in Bari, which specialises in the production of manganese steel "frogs" (the foundation for railway exchanges), created an automated system to expand the regeneration of foundry sand used to prepare moulds, reducing the amount of sand disposed of in order to reuse it in the production cycle, improving health and safety conditions for operators at the same time.	2023	550 **t of foundry sand** **+** safety		The design is complete.
	Ecological ballast: testing of Ecoballast® (a sub-product derived from the slag resulting from the blast foundry of steel and carbon) to use as stone chippings for railway ballast.	2020	**-** raw materials and CO_2		On-site testing is under way at the test site set up on a section of the Portogruaro - Treviso line.

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

RFI'S SUBSIDIARIES

GRANDI STAZIONI RAIL

Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	73,262	74,592	74,631
with guarantee of origin or self-produced using photovoltaic technologies	%	3	30	30
Diesel	l	269,896	129,500	48,892
Natural gas	Sm^3	7,944,720	7,796,146	8,125,343

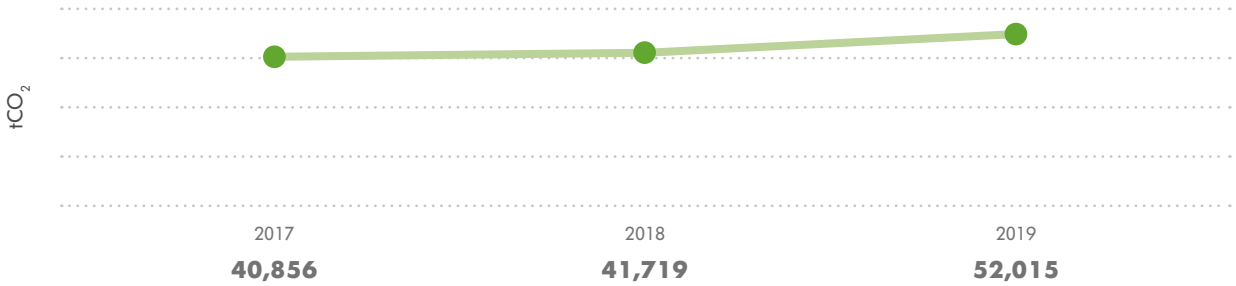
COMMENTS ON THE TREND

The consumption of electricity for uses other than railway traction decreased slightly (-2%) on 2018 due to the transfer of certain electricity contracts and disconnections due to the creation of closed distribution systems at the Roma Termini and Milano Centrale stations.

Diesel consumption increased substantially (+108%) in 2019 following the conversion of the thermal power plant at the Genova Piazza Principe station from fuel oil to diesel.

Natural gas also increased slightly (+2%) due to the roll-out of the service platform for Roma Termini station passengers in the second half of 2018.

TOTAL CO_2 EMISSIONS (MARKET BASED)



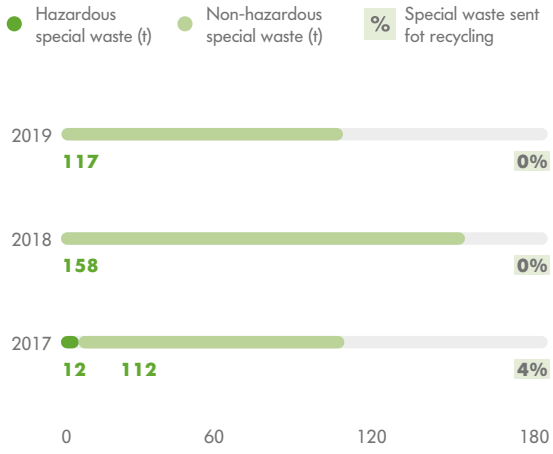
The figures refer to the environmental aspects managed directly or on behalf of the company or the Group companies. They include the consumption of station customers.

WATER

COMMENTS ON THE TREND

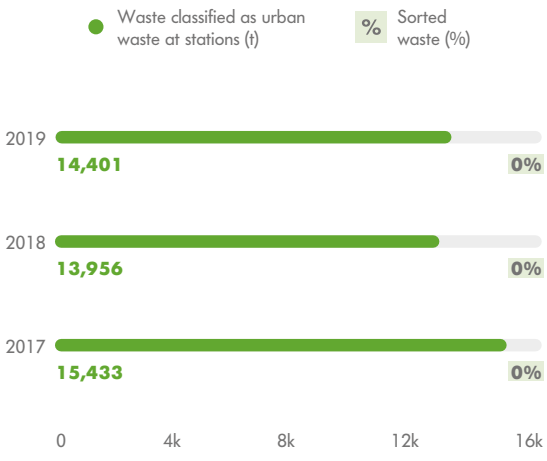
The 11% increase in water withdrawals in 2018 was mainly due to a leak that was found and readily resolved in the Napoli Centrale station's building plumbing.

WASTE



COMMENTS ON THE TREND

The production of non-hazardous special waste decreased by 26% on the previous year because of the smaller amount of sludge produced by the septic tank treatment and discharge systems.



COMMENTS ON THE TREND

In 2019, there was a slight increase (+3%) in waste classified as urban waste at stations compared to 2018. The portion of sorted waste increased (+13 pp), mainly at the Napoli Centrale, Roma Termini and Milano Centrale stations, thanks to awareness campaigns with local municipal utility companies and the rationalisation of waste collection areas.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Rationalisation of the thermal plant at Milano Centrale: retirement/downsizing of the current thermal power plant and the steam distribution system, which will be replaced with a high-efficiency heat pump system.	2021	500 **tep** 1,400 **tCO_2**		Work is slated to begin in the second quarter of 2020.
	Feasibility study for the construction of a photovoltaic farm above the new car park at the Roma Termini station.	2022	1,300 **MWh** 600 **tCO_2**		L'avvio dello studio è previsto The study is scheduled to begin in the first quarter of 2020.
	NEW Conversion of the thermal power plant serving the Genova Principe station from diesel to natural gas.	2020	50 **tep** 300 **tCO_2**		The design will be completed by the first quarter of 2020.
	Energy upgrade and rationalisation of the thermal power plant and refrigeration units at the Torino Porta Nuova station.	2021	70 **tep** 160 **tCO_2**		The project began in October 2018 and will be completed by May 2021.
	Maintain ISO 14001:2015 certification and extend it to all network stations.	2020	**+** cultura		

KEY

 in progress

 completed

 Continuous improvement

 Raw materials cycle

 Energy and emissions

 Water cycle

 Land

RFI'S SUBSIDIARIES

TERMINALI ITALIA

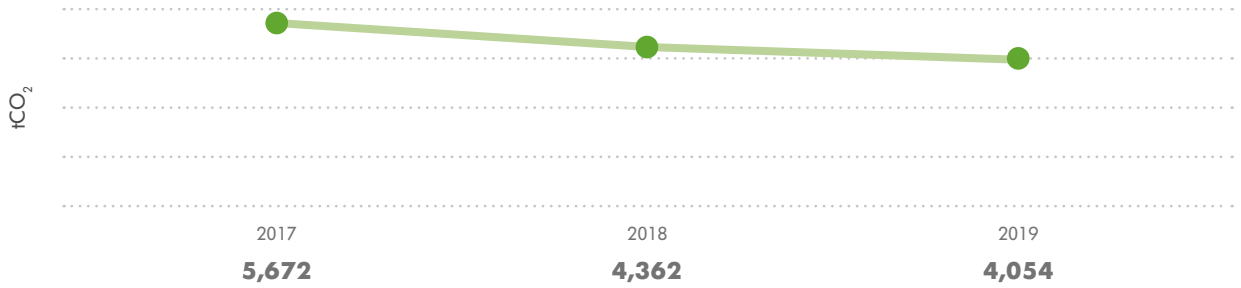
Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	2,242	2,371	2,519
with guarantee of origin or self-produced using photovoltaic technologies	%	84	66	0
Diesel	l	1,458,460	1,498,000	1,719,181

COMMENTS ON THE TREND

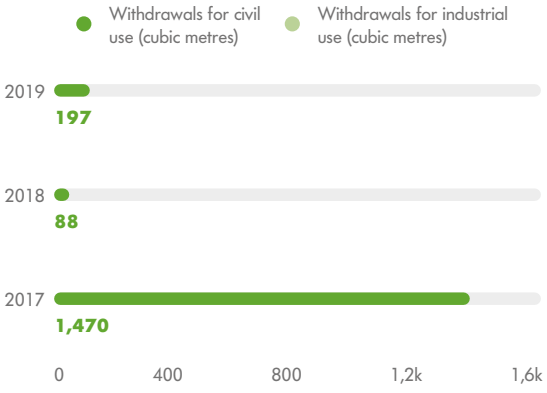
Electricity consumption for uses other than railway traction decreased by roughly 5% on 2018 and shows a different mix of energy sources after the conversion of the energy provided by CVA Trading to energy from renewable sources certified with guarantees of origin.

Diesel consumption also decreased slightly (-3%) in 2019, mainly due to the upgrade of the shunting engine fleet, with the new vehicles rolled out in mid-2018.

TOTAL CO_2 EMISSIONS (MARKET BASED)



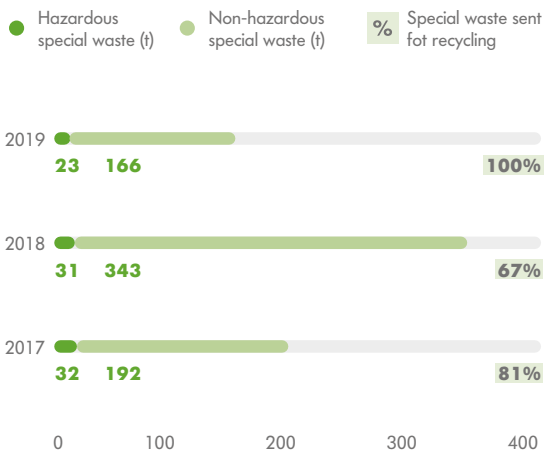
WATER



COMMENTS ON THE TREND

The 2019 increase mostly refers to the adjustment of consumption on the previous year.

WASTE



COMMENTS ON THE TREND

The decrease (-49%) in the production of waste is tied to the reduction in non-routine cleaning operations on sludge tanks, drains and yards. The portion of waste sent for recycling increased significantly.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Plan to upgrade the vehicle fleet, by purchasing 12 new-generation mobile cranes, bringing the progress of the upgrade of the overall fleet to roughly 40%.	2020	120 thousand **litres (diesel/petrol)** 327 **tCO_2**		Le nuove gru sono entrate in funzione a pieno regime ed è in corso il monitoraggio dei consumi.
	Upgrade of the shunting engine fleet in Verona and Bari, equal to 67% of the total.	2020	159 thousand **litres (diesel/petrol)** 430 **tCO_2**		The new shunting vehicles were fully rolled out and consumption monitoring is under way.

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

RFI'S SUBSIDIARIES

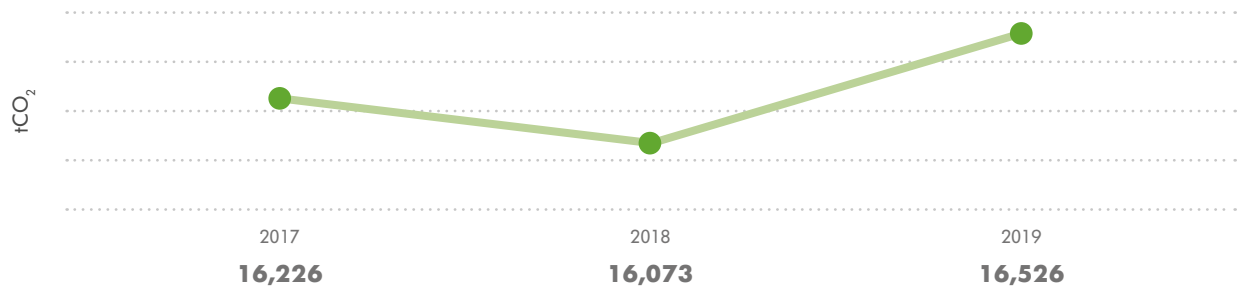
BLUFERRIES

Final energy consumption	Unit of measure	2019	2018	2017
Diesel	l	7,120,000	6,924,716	7,032,824

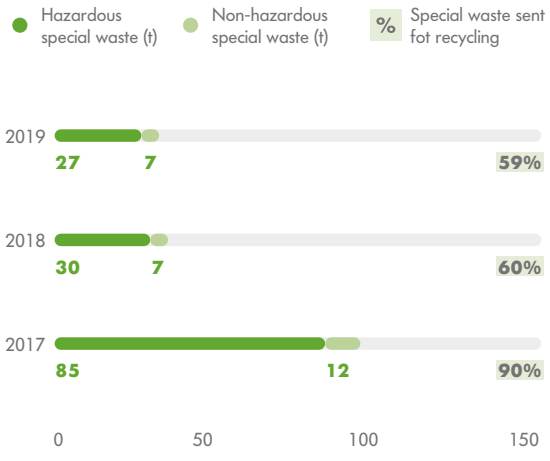
COMMENTS ON THE TREND

Diesel consumption increased slightly (+3%) on the previous year due to the use of another boat in the second half of the year, which led to an increase in the volume of miles travelled.

TOTAL CO_2 EMISSIONS (MARKET BASED)



WASTE



COMMENTS ON THE TREND

The amount of waste disposed of in 2019 decreased (-8%) on the previous year due to lower non-routine maintenance on vehicles in the area compared to 2018 and due to the new boat that was placed in service and required less routine maintenance.
The percentage of waste sent for recycling remained steady at around 60%.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Introduction of another new boat with EIAPP (Engine International Air Pollution Prevention) certified engines.	2021	365 **t (diesel/petrol)** 300 **tCO_2**		Work began to build the boat in late 2019.
	Installation of additional desalinators on board the new vessels in the fleet.	2021	700 **m^3 of water**		The installation of a new boat in the fleet was completed.

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

RFI'S SUBSIDIARIES

BLUJET[3]

Final energy consumption	Unit of measure	2019
Diesel	l	2,408,000
Total CO_2 emissions (market based)	t	5,585

WASTE

[3] The company, which began operating on 1 May 2019, was set up in August 2018, following the demerger of the Bluferries S.r.l. business unit.

FERSERVIZI

OUR APPROACH

In accordance with the guidelines in the sustainability governance model and the FS Italiane Group's occupational health and safety guidelines and objectives and furthering its commitment to the integrated management of the requirements of major international standards, Ferservizi considers the quality of its services, the protection of the environment and the protection of occupational health and safety strategic elements in developing its business.

As part its goal of continuous improvement, Ferservizi is committed to pursuing:

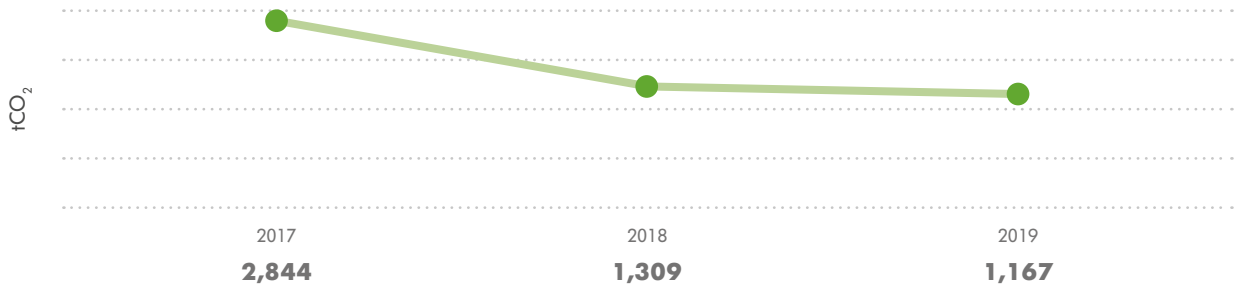
- customer satisfaction by meeting agreed requirements, which it verifies through the appropriate monitoring and recording of feedback on customer satisfaction with services provided;
- the engagement, awareness and information of people through training and internal communication, to raise their awareness of the contribution that each can give;
- the definition of measurable objectives in line with company strategies, using the necessary means and resources for their pursuit;
- full compliance with the applicable legislation and, where possible, exceeding it by 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	Unit of measure	2019	2018	2017
Electricity	MWh	3,192	3,592	3,562
with guarantee of origin or self-produced using photovoltaic technologies	%	100	100	0
Diesel	l	138,293	132,752	158,755
Natural gas	Sm^3	330,601	404,215	374,708

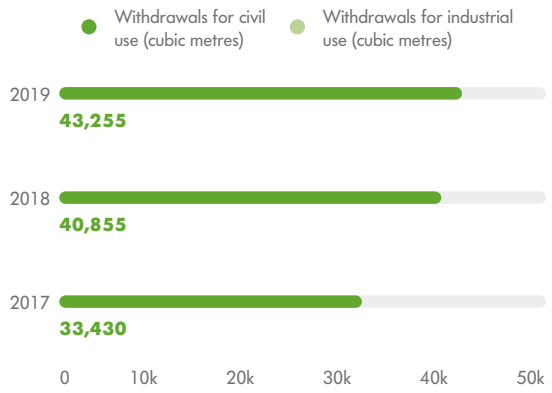
COMMENTS ON THE TREND

Overall, the balance of energy shows reduced consumption, essentially due to the closure of the Milan and Turin Ferrotels (railway hotels), the expansion of working-from-home and the energy efficiency projects in the ten-year plan. Although it is modest, the increase in diesel consumption is consistent with the increase in the number of overnight stays in the three Ferrotels which still use this type of fuel.

TOTAL CO_2 EMISSIONS (MARKET BASED)



WATER



COMMENTS ON THE TREND

Although limited, the increase (6%) is due to network leaks, which were readily identified and resolved in the year.

WASTE

COMMENTS ON THE TREND

The "environmental services" contract, which was not available in 2018, and the closure of two Ferrotels generated an increase in the amount of special waste in 2019.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Three photovoltaic plants with capacity of up to 20 kW were built at local sites and an additional three are planned.	2021	Approximately 30 **tep**		The plants were completed at the Reggio Calabria, Trieste and Naples sites.
	Supplier audit activities: extension of activities to hotels and canteens.	2020	+ quality		Installation completed on board of a fleet ship.
	Periodic information to employees on salient management system activities to explain how it functions for the consolidation of shared awareness.	2020	+ culture		
	Giving "press service" providers a self-assessment questionnaire on environmental sustainability.	2020	+ quality + culture		Pilot project by 30 September 2020.
	Creation of an e-mail account to receive complaints from customers relating to location services and Technical-Asset services and sales services/ agreements.	2020	+ customer satisfaction		

KEY

 in progress

 completed

 Continuous improvement

 Raw materials cycle

 Energy and emissions

 Water cycle

 Land

FERROVIE DEL SUD-EST E SERVIZI AUTOMOBILISTICI

OUR APPROACH

FSE operates as both infrastructure operator and railway company. It manages 474 km of railway lines in the four southern provinces of Puglia, offering a widespread integrated rail and road service in over 130 municipalities in the region of Puglia.

In line with the FS Italiane Group's strategic guidelines, FSE believes that the quality and sustainability of its services are essential to its business. It is committed to improving its quality management system (certified in July 2018), implementing and certifying the worker health and safety and environmental management system to establish the integrated management of business processes in accordance with the requirements of major international standards.

Final energy consumption	Unit of measure	2019	2018	2017
Electricity for railway traction	MWh	566	0	0
Electricity for other uses	MWh	4,416	4,481	4,196
with guarantee of origin or self-produced using photovoltaic technologies	%	100	98	0
Diesel	l	9,722,983	10,385,717	10,727,275
Natural gas	Sm^3	42,015	50,114	48,053

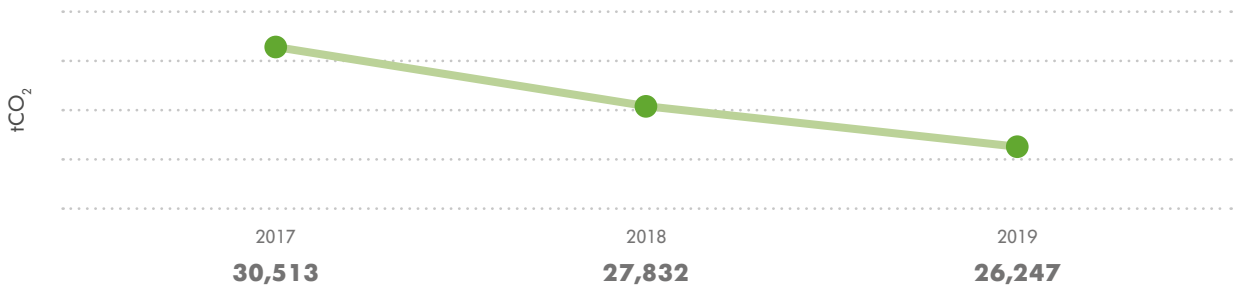
COMMENTS ON THE TREND

There were no significant changes in the consumption of electricity for uses other than railway traction compared to the previous year. The increase in overall electricity consumption is due to the resumption of electric railway traction in September 2019 on the Bari – Putignano 1bis line.

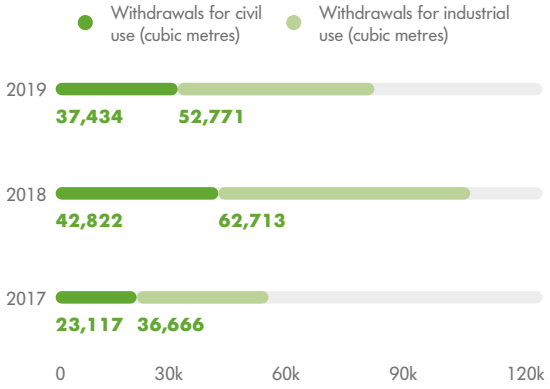
Diesel consumption decreased overall due to the reduction in railway production (the close and upgrade of the Bari Mungivacca - Putignano section on line 1), the electrification of line 1bis and the cut in the fleet of service vehicles.

The decrease in the consumption of natural gas is due to the rationalisation of utilities contracts for buildings, with the conversion to heat pumps for air conditioning.

TOTAL CO_2 EMISSIONS (MARKET BASED)



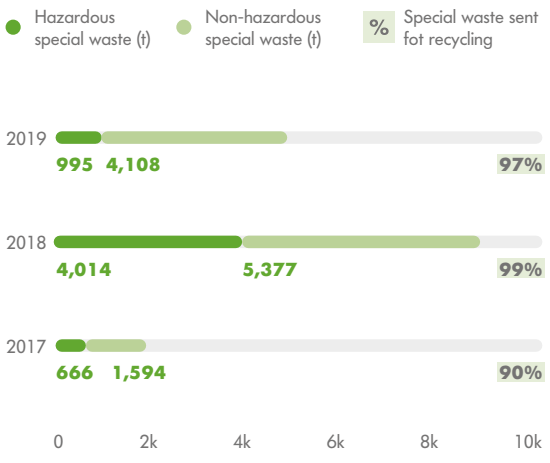
WATER



COMMENTS ON THE TREND

Water withdrawals decreased on the previous year in connection with the outsourcing of maintenance (industrial use) and the optimisation of properties not used in operations (civil use).

WASTE



COMMENTS ON THE TREND

The production of hazardous special waste is closely related to the upgrade of the railway infrastructure (removal and replacement of wood sleepers).
In 2019, much less work was carried out to upgrade the superstructure than in 2018.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	New electric trains began operating, with lower atmospheric emissions than diesel trains.	2023	1.4 **million litres (diesel/petrol)** 3,600 **tCO_2**		In September 2019, the first five ETRs began operating on the Bari-Putignano line. Another seven ETRs will be purchased in 2020 and 2021, with the roll-out of another 13 electric trains slated for 2022 and 2023.
	NEW Electrification of the following railway lines: Martina Franca - Lecce, Maglie - Otranto, Zollino - Gagliano and the Lecce – Zollino section.	2022	**-** CO_2		
	Plan to replace wood sleepers on the Bari - Taranto line with concrete sleepers.	2023	**+** safety		
	Continue with the certification of the ISO 14001 environmental management system.	2020	**+** culture		

KEY

 in progress

 completed

 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. The focus on the environment, the essence of sustainable Construction contracts for works require the contractors to adopt specific environmental management systems that meet UNI EN ISO 14001 standards.

Italferr requires that the construction companies responsible for the works design and implement, for the entire duration of the works, environmental management systems for the site activities that provide the company and appointed bodies with objective evidence of the environmental controls conducted in the course of the work performed by the contractor's qualified personnel.

In particular, these systems require that, before commencing the work, the contracting companies carry out an environmental analysis of the site activities as part of the environmental plan for the site, to identify the material environmental aspects to be managed during the work and define the operating methods to be used for the proper environmental supervision of the site in compliance with the applicable regulations. Italferr verifies that the contracting companies implement the environmental management system through ongoing site oversight.

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.

In line with the FS Italiane Group's sustainability strategies, for several years, Italferr has been committed to researching methods and protocols to incorporate sustainable choices in infrastructure projects. It has completed an important process to identify effective solutions that tangibly implement sustainability policies in the construction of infrastructure and promote innovative strategies in the construction industry.

New sustainability methods and protocols are operational tools that promote a revolutionary concept of engineering that can transform areas, driving environmental sustainability, economic compatibility and social innovation, outlining a new and more acceptable role for infrastructure as an active player in the modelling of landscape, the redevelopment of land and the creation of economic and social dynamics.

With this in mind, Italferr selected Envision™, the first rating system for the design and construction of sustainable infrastructure created by the Institute for Sustainable Infrastructure (ISI), as an objective tool to measure the sustainability of infrastructure projects.

Furthermore, aware of the decisive role that engineering can play in tangibly contributing to the reduction of CO_2 emissions, several years ago, Italferr voluntarily chose the UNI ISO 14064 standard to develop and apply a specific methodology for calculating the carbon footprint of projects, certified by an independent body. This methodology has become an effective

operating tool guiding designers to improve design solutions and to spur contractors, during the construction phase, to purchase construction materials from suppliers that formally declare the impacts of their product on the environment via internationally recognised methodologies (environmental labels compliant with ISO series 14020).

During the year, the company applied the methodology for calculating the carbon footprint of projects in the executive design of the Polcevera viaduct. This decision stemmed from the desire to emphasise not only the project's engineering and architectural significance, but its social importance as well, as it will reconnect and regenerate a severely compromised area.

The application of this methodology to the Polcevera project showed how the production of concrete and steel was responsible for nearly all CO_2 emissions generated in the construction stage of the project, confirming the priority action that this methodology indicated when previously applied on railway projects and which has led Italferr to include specific clauses in its contracts that give construction companies an incentive to procure lower-impact materials.

Moreover, as this was the first time the methodology was applied to non-railway infrastructure, it was particularly useful in verifying whether it can be applied to other fields as well. The ultimate aim is to develop and enhance the tool so that, in the medium-term, the impacts of the various FS Italiane Group companies' activities can be measured for inclusion in the definition of the group-wide strategy of achieving carbon neutrality by 2050.

As it integrates sustainability in the design of infrastructure, Italferr believes one organic tool to plan, manage and make the most of dialogue with the local area throughout the various life cycles of the infrastructure is a strategic asset. Therefore, in 2019, the company drafted Operating guidelines for the management and development of stakeholder engagement, establishing a mapping, selection and quantification process for the environmental, economic and social performance indicators that are most material in infrastructure projects. The objective is to achieve sustainability by using innovative social web monitoring solutions that foster effective dialogue with the local area and communities affected by the infrastructure, keep stakeholders informed and build widespread consensus.

The recent European Green Deal explicitly requires an innovation strategy that is rooted in the sustainable development goals (SDGs) and harnesses sustainability and innovation as the most efficient way to achieve its ambitious objectives.

Italferr endorses a sustainability approach that encompasses innovation as a crucial lever to implement a new business model capable of generating value by exploiting the opportunities of digital transformation geared towards designing and building works in an increasingly integrated, efficient and automated manner.

By using the Building Information Model (BIM), managing work contracts in real time on specific digital platforms, developing big data analytics tools and testing object detection, artificial intelligence and machine learning technologies, Italferr has embarked on a new season of infrastructure 4.0 design and development.

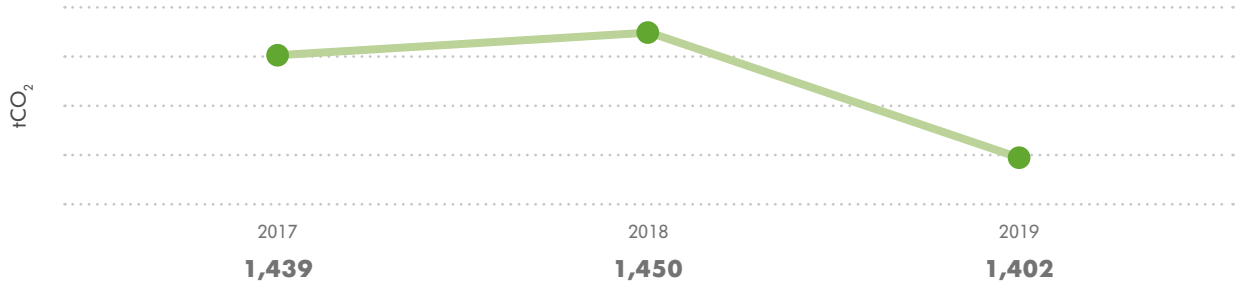
Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	2,266	2,311	2,238
with guarantee of origin or self-produced using photovoltaic technologies	%	10	0	0
Diesel	l	142,884	123,471	142,468
Natural gas	Sm^3	23,002	25,607	21,197

COMMENTS ON THE TREND

The analysis of energy consumption confirms the same trend as in the previous two years for electricity, while diesel consumption grew by roughly 16% mainly due to the larger number company cars.

On the other hand, natural gas consumption at the Rome site is estimated to have decreased by around 10% compared to 2018 because temperatures were higher than the seasonal average, which delayed when the thermal power plant was turned on.

TOTAL CO_2 EMISSIONS (MARKET BASED)

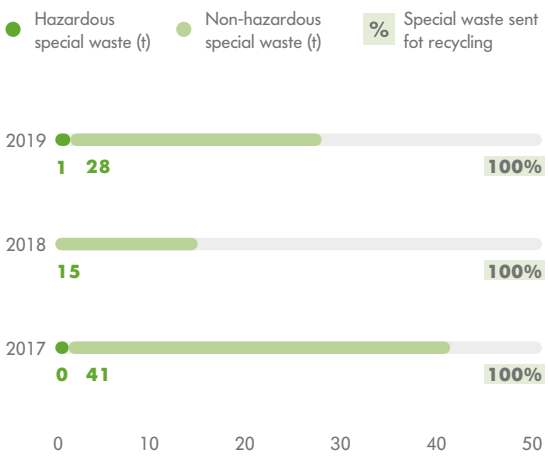


WATER

COMMENTS ON THE TREND

In 2019, consumption was reported solely for the contracts in the company's name. The savings in the past two years were due to the replacement of the primary air humidification system for the central headquarters in Rome.

WASTE



COMMENTS ON THE TREND

The production of non-hazardous special waste increased by 89.5% in 2019 due to the disposal of waste at the Bologna site.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	NEW Purchase of energy from certified 100% renewable sources for all Italferr sites.	2020	+ clean energy		
	Replacement of the refrigeration units used for air conditioning with energy-efficient machines.	2020	- CO_2		
	Installation of a thermal and electricity consumption measurement system with segregation by type of use (lighting, air conditioning, general services, etc.).	2019	+ control		
	NEW Definition of a carbon footprint methodology at organisational level to quantify and monitor greenhouse gas emissions with the aim of identifying opportunities to make the use of material and energy resources and company mobility more efficient.	2020	+ efficiency		

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	NEW Installation of water distribution machines at all operating sites.	2020	- 200 **thousand plastic bottles (0.5-litre)/year**		
	NEW Sustainability study on the project for the assessment and management of stakeholder engagement.	2020	+ control + positive external factors		
	NEW Implementation of guidelines for sustainable water management at work sites and during operations, with respect to recycling/reuse.	Oct 2019 June 2020	- consumption of water		

KEY

 in progress

 completed

 Continuous improvement

 Raw materials cycle

 Energy and emissions

 Water cycle

 Land

ANAS[4]

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.

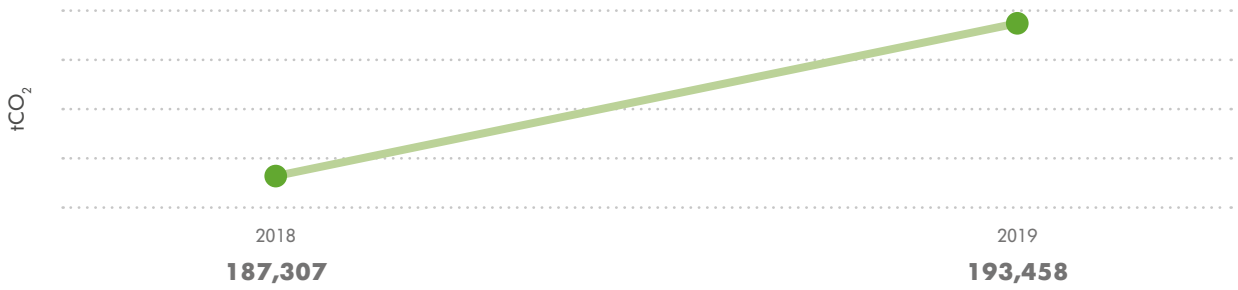
Final energy consumption and emissions	Unit of measure	2019	2018
Electricity to light roads and tunnels	MWh	366,666	367,783
Electricity for other uses	MWh	11,493	11,500
Self-produced solar energy	MWh	331	296
Diesel	l	4,512,455	3,732,318
Natural gas	Sm^3	421,025	413,245

COMMENTS ON THE TREND

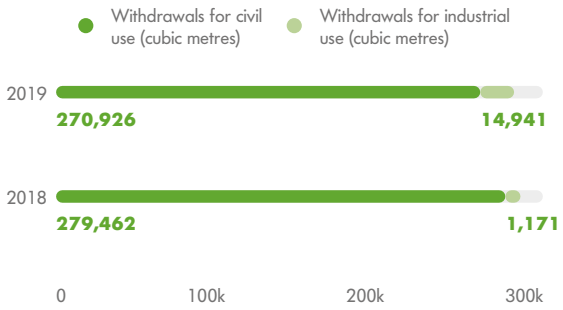
2019 data on consumption are in line with 2018. The only exception is diesel, which was used to a greater extent (roughly 20% increase), due to the larger company car fleet (approximately 320 new vehicles for operations and maintenance, which were purchased when local bodies transferred over 3,600 km to Anas).

[4] The company joined the scope of the Sustainability Report in 2018.

TOTAL CO_2 EMISSIONS (MARKET BASED)



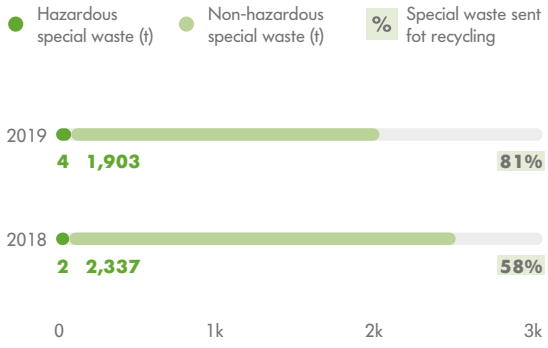
WATER



COMMENTS ON THE TREND

Water withdrawals for civil use in 2019 show a slight decrease on 2018. Conversely, the data on withdrawals for industrial use increased because of the different classification than in 2018.

WASTE



COMMENTS ON THE TREND

The cleaning of the road surface was ramped up in 2018 for certain local units. This was not continued in 2019, which led to a decrease in non-hazardous special waste. The increase in the amount of waste sent for recycling grew significantly.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/targets	Status	Notes
	The oil and food service concessions were renewed at the 10 service areas along the A90 and A91 motorways, which led the concession operators to install: › 10 photovoltaic plants at refuelling stations with capacity of 19.950 kW; › 10 solar thermal plants to heat water for the workers' toilets; › LED light bulbs for the refuelling area, the yard, the shelter and the sales room; › air conditioning system for all rooms in the buildings, powered by high-efficiency, low-energy absorption heat pumps. Furthermore, work on the existing structures is planned to obtain A to B energy classification, environmentally-friendly furniture and the complete repainting of buildings both inside and out using photocatalytic anti-smog paint.	2028	- CO_2 + clean energy + customer satisfaction		
	Green light project: maintenance of tunnel lighting systems by replacing obsolete lighting devices with last-generation LEDs.	2021	22,700 **MWh** 6,466 **tCO_2**		
	Studies for the recycling of polymer materials through the use of rubber powder from tyres no longer in use, to produce low-noise, durable floors and light plastics derived from waste bales to produce concrete mixes.	2026	- raw materials e noise		

Scope	Description	Deadline	Average annual savings/targets	Status	Notes
	Project to recycle recovered asphalt concrete (milled) to produce new concrete.	2026	- raw materials		
	"DYNAMAP" (Development of low cost sensors for real time noise mapping) project: a dynamic noise mapping system was developed to detect and display in real time, the acoustic impact of road infrastructure in two pilot areas.	July 2014 June 2019	- noise + customer satisfaction		
	"ANAS" (Anti-Noise Acoustic Screen): identification and analysis of possible acoustic, environmental and land scenarios to determine the restrictions to which noise abatement barriers are subject.	May 2016 Dec 2020	- noise + customer satisfaction		

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

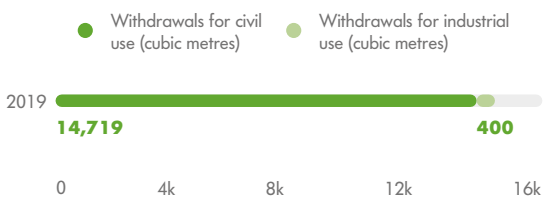
Land

ANAS' SUBSIDIARIES

SITAF GROUP[5]

Final energy consumption	Unit of measure	2019
Electricity for other uses	MWh	18,232
with guarantee of origin or self-produced using photovoltaic technologies	%	0
Diesel	l	1,664,797
Natural gas	Sm^3	127,210
Total CO_2 emissions (market based)	t	13,456

WATER



WASTE

[5] The Group was included in the scope Sustainability Report in 2019.

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.

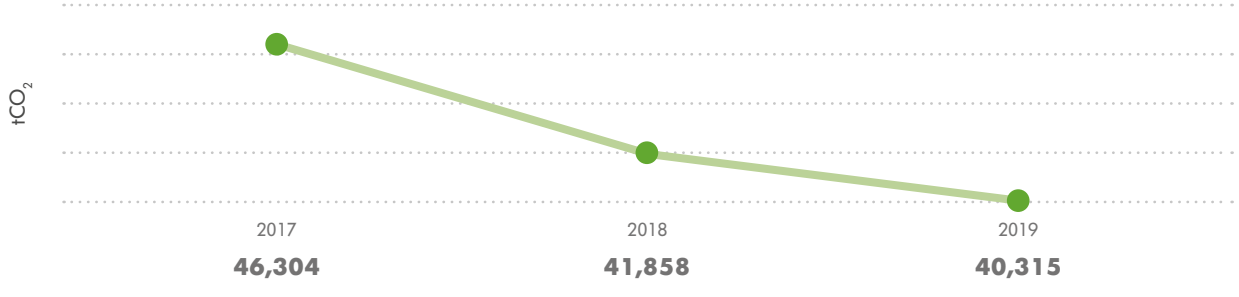
Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	6,527	7,606	7,248
with guarantee of origin or self-produced using photovoltaic technologies	%	100	87	0
Diesel	l	13,390,732	13,161,107	13,163,937
Natural gas	Sm^3	2,391,399	3,256,807	4,160,644

COMMENTS ON THE TREND

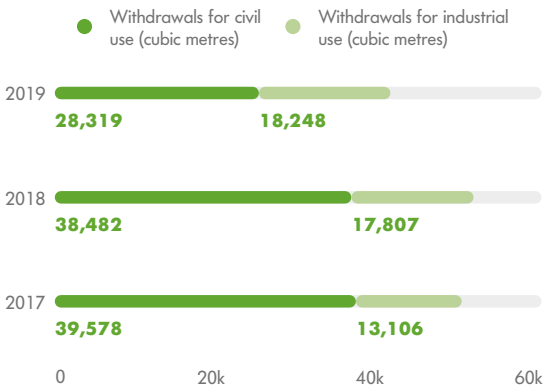
Electricity consumption decreased in 2019 compared to the previous year due to energy efficiency projects at certain company sites. All electricity was certified with guarantees of origin in 2019 since Busitalia signed a master agreement in 2018 for the supply of electricity from 100% renewable sources.

Diesel consumption was substantially steady in the three years considered, while the decrease in natural gas consumption is due to the upgrade of the Busitalia - Sita Nord fleet, which entailed the replacement of natural gas-powered, old-generation vehicles with last-generation diesel buses.

TOTAL CO_2 EMISSIONS (MARKET BASED)



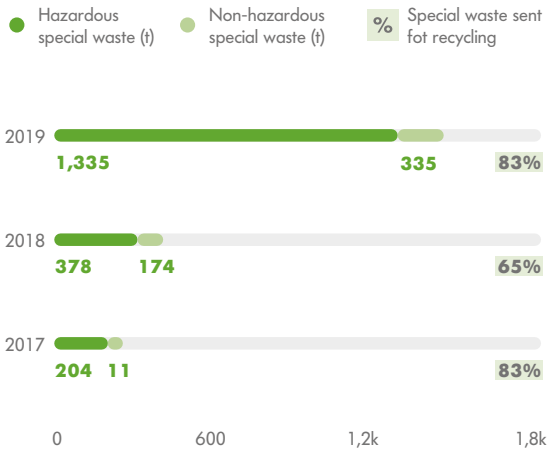
WATER



COMMENTS ON THE TREND

The decrease in the consumption of water for civil use at the Umbria regional division was mainly because of two factors: i) the repair of a leak in the water pipes; ii) the reorganisation of corporate assets. The trend in the consumption of water for industrial use between 2019 and 2018 is substantially steady.

WASTE



COMMENTS ON THE TREND

The analysis of the trend highlights a significant increase in the amount of special waste produced in 2019 compared to previous years, mainly due to the substantial scrapping of buses and cleaning and non-routine maintenance at certain company sites. The increase in the percentage of special waste sent for recycling is due to the scrapping of buses.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	77 buses with Euro 6 engines were added to the vehicle fleet, including two hybrid buses to replace the same number of old-generation vehicles. Another 90 old-generation buses will be replaced by 2020.	2020	680 **thousand sm^3 (natural gas)** 476 **thousand litres (petrol/diesel)** 2,400 **tCO$_2$**		

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Energy efficiency project on the Busitalia Group fleet to improve the driving performance of drivers using an innovative remote monitoring system.	2022	1.7 **million litres (petrol/diesel)** 4,290 **tCO_2**		The first training program was completed for 200 drivers to define the fleet energy efficiency potential that can be achieved through efficient driving.

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

BUSITALIA – SITA NORD'S SUBSIDIARIES

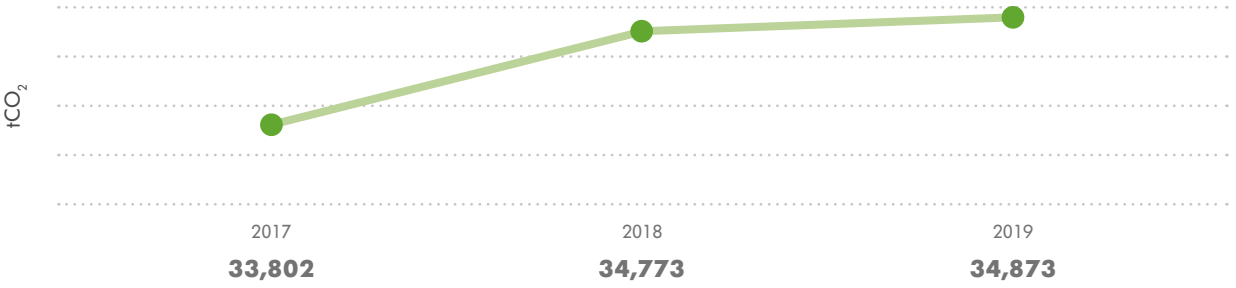
BUSITALIA VENETO

Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	7,174	6,896	7,246
with guarantee of origin or self-produced using photovoltaic technologies	%	0	0	0
Diesel	l	9,386,584	9,195,369	8,969,114
Natural gas	Sm^3	3,282,621	3,594,240	3,461,215

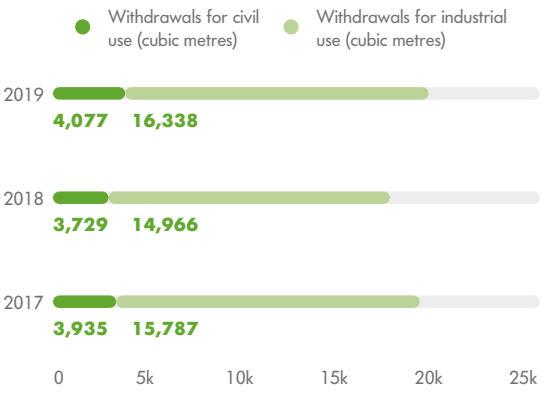
COMMENTS ON THE TREND

The consumption of electricity in the three years considered is substantially unchanged. Diesel and natural gas consumption have not undergone any substantial changes in the three years and the slight differences are due to the change in distances travelled by vehicle type.

TOTAL CO_2 EMISSIONS (MARKET BASED)



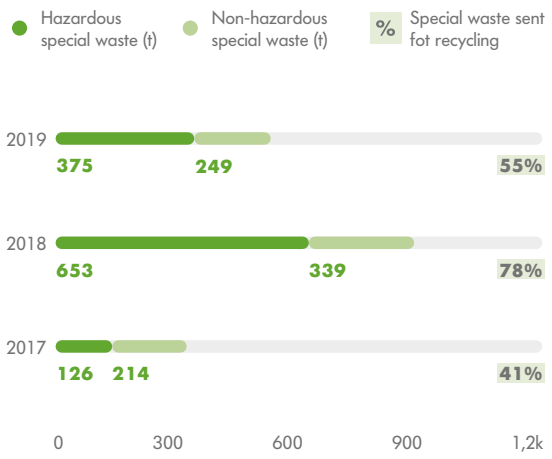
WATER



COMMENTS ON THE TREND

The trend in the consumption of water for civil use can be considered substantially stable. The higher consumption of water for industrial use in 2019 compared to 2018 was due to the intensification of washing at the Via Rismondo depot in Padua, thanks to the roll-out of a new plant.

WASTE



COMMENTS ON THE TREND

The significant decrease in special waste in 2019 compared to the previous year is due to the smaller number of scrapped buses, which also led to a lower percentage of special waste sent for recycling.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Addition of 33 new low-emissions buses - with Euro 6 (20 diesel and 12 compressed natural gas buses) or zero-emissions engines (one electric bus) – replacing the same number of Euro 2 diesel buses.	2019	0.965 **GJ** 430 **tCO_2**	✓	24 buses were sent to Padua and nine to Rovigo.

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

BUSITALIA – SITA NORD'S SUBSIDIARIES

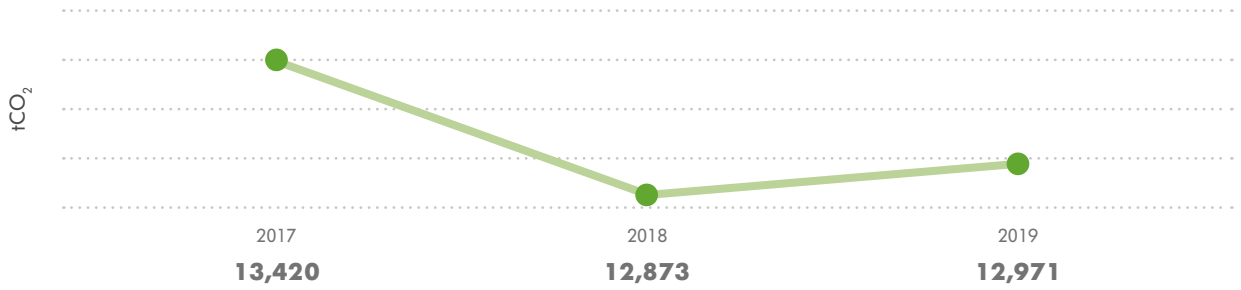
BUSITALIA CAMPANIA

Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	642	726	766
with guarantee of origin or self-produced using photovoltaic technologies	%	100	61	0
Diesel	l	4,199,715	4,071,485	4,372,170
Natural gas	Sm^3	912,055	967,917	744,691

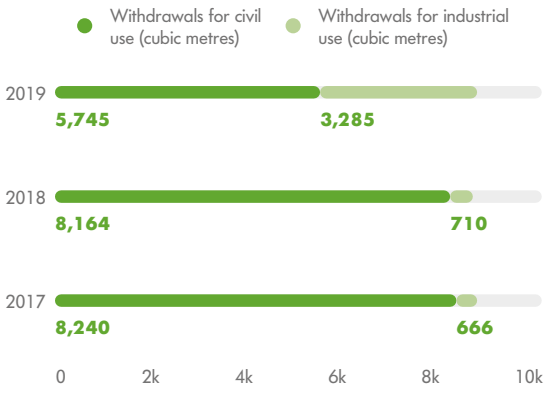
COMMENTS ON THE TREND

The decrease in electricity consumption in 2019 is due to energy efficiency projects at company depots. The consumption of electricity with guarantee of origin increased after a master agreement was signed in 2018 for the supply of electricity 100% from renewable sources. The slight increase in diesel consumption and the slight decrease in the consumption of natural gas were due to the upgrade of the bus fleet, which entailed replacing old-generation natural gas vehicles with Euro 6 diesel vehicles.

TOTAL CO_2 EMISSIONS (MARKET-BASED)



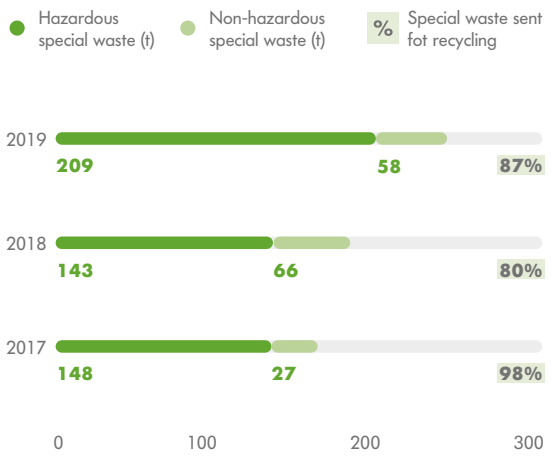
WATER



COMMENTS ON THE TREND

The decrease in the consumption of water withdrawn for civil use is due to the new criteria used to calculate the data by directly reading the metres. Water withdrawn for industrial use rose in 2019 as washing was ramped up to replace the new plant at the Via Wenner depot in Salerno.

WASTE



COMMENTS ON THE TREND

The significant increase in hazardous special waste produced in 2019 is due to the extensive scrapping of buses, which generated a similar increase in the amount of special waste sent for recycling. Non-hazardous special waste decreased in 2019 because of the non-routine disposal of tyres and ferrous materials in 2018.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Improvement in the energy efficiency of offices through the replacement of light bulbs and fluorescent tubes with LED lights and the replacement of air conditioners.	2021	- CO_2		
	Replacement of 68 buses with new, higher environmental performance models	2020	110 **thousand litres (diesel/petrol)** 330 **tCO_2**		Ten Euro 6 buses were rolled out in 2019 to replace old-generation vehicles. Another 53 Euro 6 buses and five hybrid buses (electric/diesel) will be rolled out in 2020.

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

BUSITALIA – SITA NORD'S SUBSIDIARIES

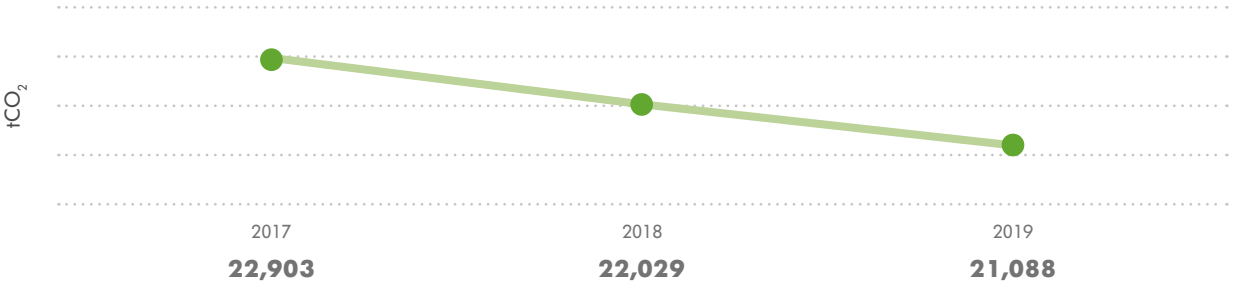
ATAF GESTIONI

Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	2,250	2,894	3,218
with guarantee of origin or self-produced using photovoltaic technologies	%	100	94	0
Diesel	l	7,162,507	6,531,063	6,280,105
Natural gas	Sm^3	1,030,492	2,308,752	2,442,302

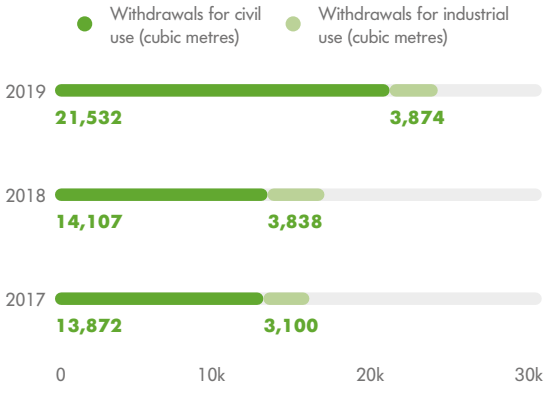
COMMENTS ON THE TREND

The consumption of electricity decreased in 2019 due to the temporary closure of certain offices. The increase in diesel consumption and the decrease in natural gas consumption are due to the upgrade of the bus fleet, whereby old-generation natural bus vehicles were replaced with Euro 6 hybrid diesel vehicles.

TOTAL CO_2 EMISSIONS (MARKET BASED)



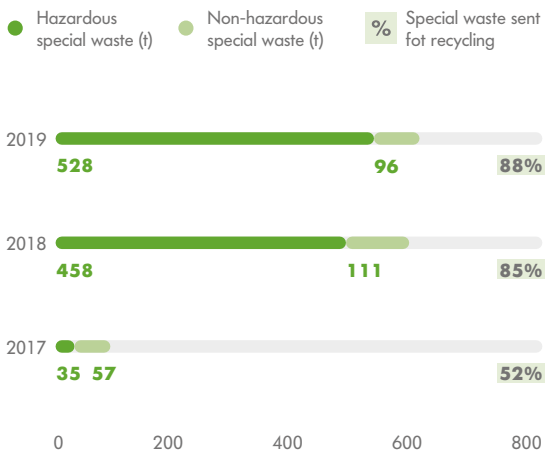
WATER



COMMENTS ON THE TREND

The increase in the consumption of water for civil use is due to a leak in the water pipes at a company site.
The trend in the consumption of water for industrial use between 2019 and 2018 is substantially steady.

WASTE



COMMENTS ON THE TREND

Hazardous special waste increased in 2019 mostly because of the larger number of scrapped buses. Non-hazardous special waste decreased due to the non-routine disposal of workshop equipment in 2018.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Replacement of 42 CNG buses with new mild-hybrid diesel vehicles (the electric engine runs only at certain times, like slow speeds and when the bus is started) that perform better than the previous vehicles.	2019	1.7 **million sm^3 (natural gas)** 1,270 **tCO_2**	✓	

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

BUSITALIA – SITA NORD'S SUBSIDIARIES

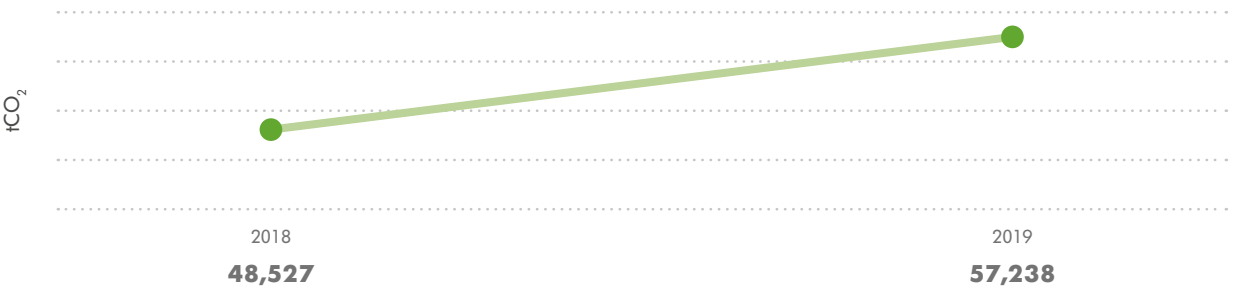
QBUZZ

Final energy consumption	Unit of measure	2019	2018
Electricity	MWh	17,358	4,032
with guarantee of origin or self-produced using photovoltaic technologies	%	100	100
Diesel	l	21,365,298	18,121,559
Natural gas	Sm^3	127,427	112,250

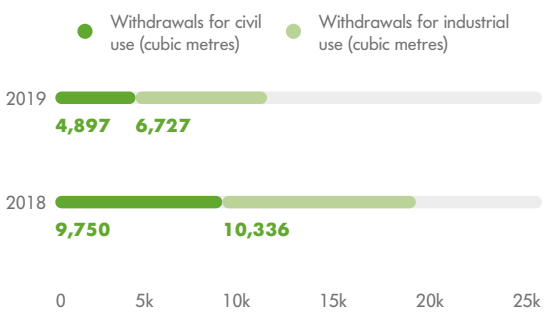
COMMENTS ON THE TREND

The significant increase in energy consumption is mainly due to the rise in passenger bus and train services in the Drechtsteden, Molenlanden and Gorinchem (DMG) area.

TOTAL CO_2 EMISSIONS (MARKET-BASED)



WATER



COMMENTS ON THE TREND

Water consumption decreased in 2019 primarily following the rationalisation of water contracts and the roll-out of projects to reduce waste.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	45 electric battery buses were put into operation on the urban lines in Dordrecht and 164 electric buses were rolled out on urban and regional lines in Groningen Drenthe.	2019	14,756 **tCO_2**		
	A programme is under way to use HVO (hydrogenated vegetable oils) as fuel for buses in Groningen and Drenthe.	2029	12,162 **tCO_2**		

KEY

 in progress

 completed

 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 sustainability 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 S.p.A. 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 CO_2 emissions into the atmosphere.

In 2018, as sub-holding company, Mercitalia Logistics S.p.A. also 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.

Final energy consumption	Unit of measure	2019	2018	2017
Electricity	MWh	2,726	2,956	2,764
with guarantee of origin or self-produced using photovoltaic technologies	%	71	78	12
Diesel	l	2,744	4,556	7,205
Natural gas	Sm^3	20,727	14,412	15,116

COMMENTS ON THE TREND

Electricity – The three-year trend varied due to transfers and new utilities contracts. Between 2017 and 2018, consumption increased by nearly 7% following new hires throughout the country and the arrival of Mercitalia Rail's workers at the S. Lorenzo terminal. This led to an increase in the number of people using electricity, with a consequent rise in consumption.

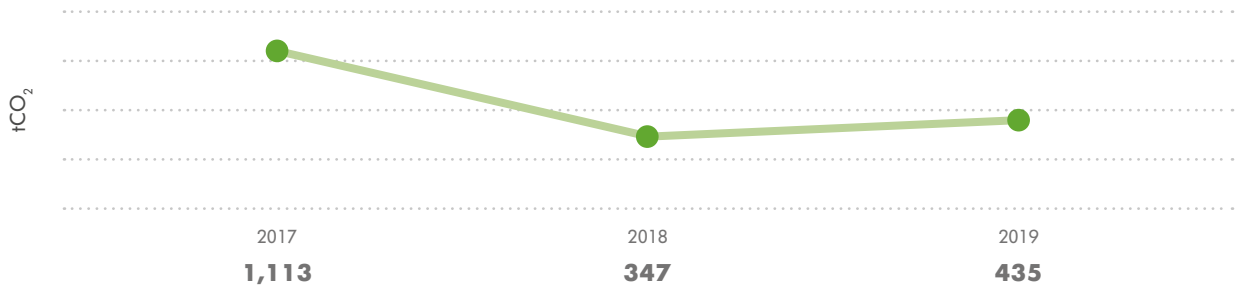
It is also important to emphasise how, since 2018, when a master agreement was signed by various FS Italiane Group companies, Mercitalia Logistics S.p.A. was able to use the electricity produced by renewable sources (guarantee of origin), covering approximately 70% of the company's needs.

Consumption decreased by nearly 7.8% in 2019 as certain utilities contracts were transferred to owned warehouses.

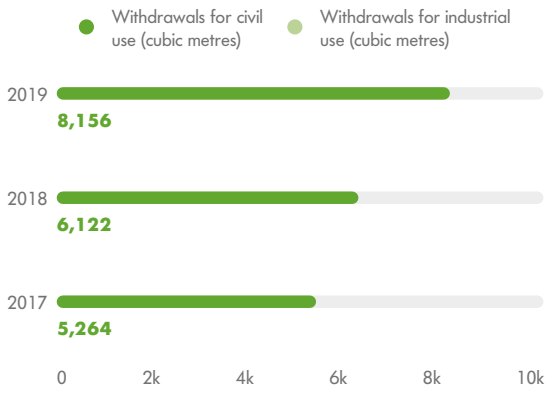
Diesel – Total consumption decreased between 2017 and 2018, mainly due to the retirement of water heaters in owned complexes. Between 2018 and 2019, the consumption diesel solely to fuel company cars decreased when the company car fleet was upgraded, replacing three diesel cars with three petrol/electric hybrid cars.

Natural gas – The significant increase in 2019 is due to the new local utilities contracts replacing diesel power plants.

TOTAL CO_2 EMISSIONS (MARKET BASED)



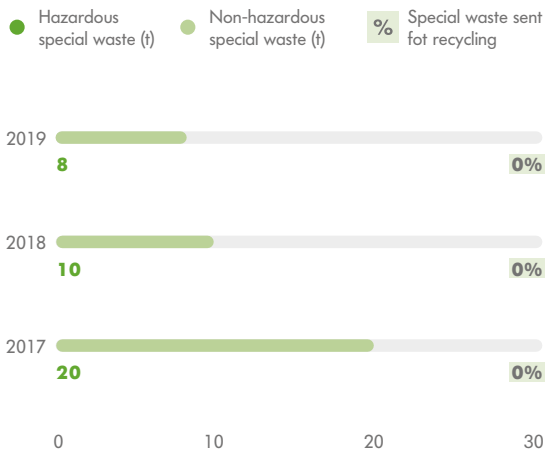
WATER



COMMENTS ON THE TREND

The increase in consumption in 2019 is mainly due to the start of new utilities contracts and the larger number of domestic employees.

WASTE



COMMENTS ON THE TREND

The trend in the production and management of waste is mainly connected with the non-routine cleaning of certain warehouses in 2017. In 2018 and 2019, the waste resulting from the cleaning of septic tanks for certain offices was classified as non-hazardous special waste.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	NEW UNI EN ISO 14064-1:2019 certification to quantify and report on greenhouse gas emissions at organisational level for the Mercitalia Fast service.	2019	+ control		
	Application of the external factors methodology to the "DOOR TO DOOR" service provided by Mercitalia Intermodal	2019	+ control		This methodology was developed in 2018 and tested on the Fast service. It shows customers the relationship between the service offered and the environmental benefits, particularly the carbon footprint, and social advantages.

KEY

 in progress

 completed

 Continuous improvement

 Raw materials cycle

 Energy and emissions

 Water cycle

 Land

MERCITALIA LOGISTICS' SUBSIDIARIES

MERCITALIA RAIL

Final energy consumption	Unit of measure	2019	2018	2017
Electricity for railway traction	MWh	369,435	375,803	454,322
Electricity for other uses	MWh	2,721	3,005	3,251
with guarantee of origin or self-produced using photovoltaic technologies	%	100	100	100
Diesel	l	2,086,894	2,753,624	2,603,702
Natural gas	Sm^3	1,341,484	1,067,305	1,139,668

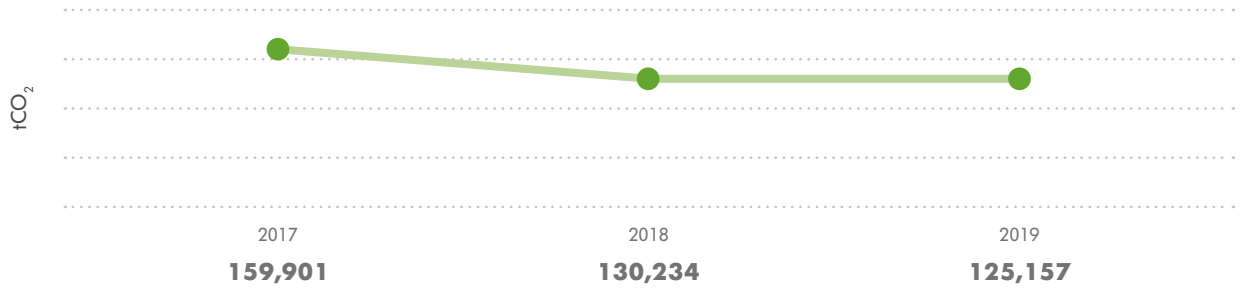
COMMENTS ON THE TREND

The consumption of natural gas increased due to the persistently cold temperatures until the end of May (which was the coldest of recent years). This led to the need to keep heating on for around 40 more days than in previous years, especially in Turin and Milan, where 350,000 Sm3 more was consumed than in 2018.

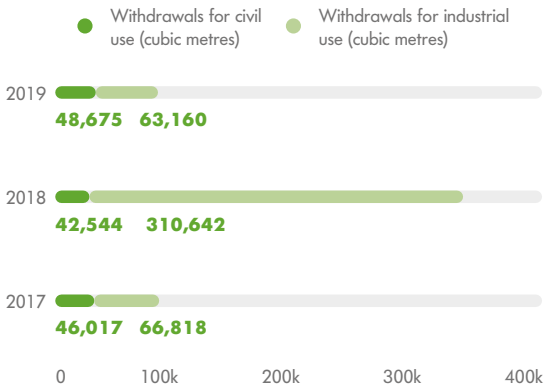
The reduced consumption of diesel was due to the small amount used for train traction (operating) and shunting:

- consumption for traction decreased due to the reduced demand for services operated using diesel;
- consumption for shunting decreased because of the lower production requirements at hubs and the increase in the efficiency of services at hubs (self-production), combined with the outsourcing of shunting at certain hubs.

TOTAL CO_2 EMISSIONS (MARKET BASED)



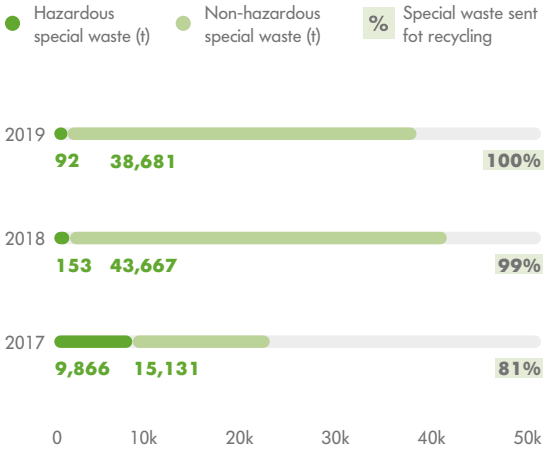
WATER



COMMENTS ON THE TREND

The 2018 figure was influenced by the industrial water consumption declaration at the Verona maintenance plant. Indeed, the plant is adjacent to a Trenitalia workshop, which declared the water consumption in 2017 and 2019, causing this irregular trend.

WASTE



COMMENTS ON THE TREND

Consumption is in line with the smaller carriage volumes.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Upgrade of the fleet with last-generation electric trains improving the efficiency and sustainability of the transport service.	Jan 2018 Dec 2020	+ quality - CO_2	✓	The purchase and roll-out of the new trains was completed

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Use of environmentally sustainable materials for maintenance plants, such as water-based paint and oils that have a smaller impact on the environment	Jan 2018 Dec 2020	**+** respect for the environment		
	Development of processes and initiatives to reduce waste production, for example by setting company targets for the % of waste sent for recycling, sorted waste, etc.	Jan 2018 Dec 2020	**-** waste produced **+2%** waste sent for recycling		
	Spreading awareness about the parsimonious use of water by attaching notices to bulletin boards about the proper use of water, reducing the number of changing rooms and the consolidation of bathrooms.	Jan 2018 Dec 2021	**-** water consumption		These are targeted projects in certain locations (e.g., Pisa Centrale, Grosseto, Livorno and Chiusi)

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

MERCITALIA LOGISTICS' SUBSIDIARIES

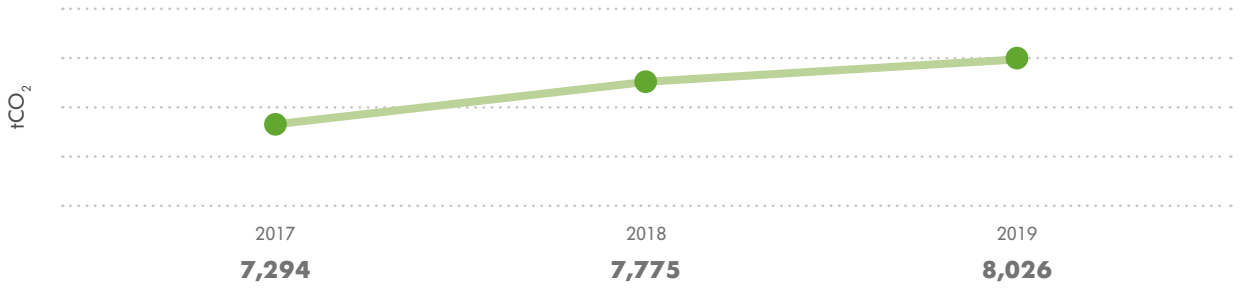
MERCITALIA SHUNTING & TERMINAL

Final energy consumption	Unit of measure	2019	2018	2017
Electricity for railway traction	MWh	1,277	1,328	2,254
Electricity for other uses	MWh	411	407	402
with guarantee of origin or self-produced using photovoltaic technologies	%	10	10	10
Diesel	l	2,800,000	2,717,948	2,427,279

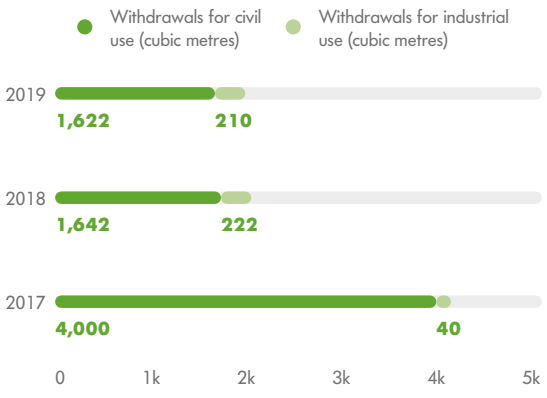
COMMENTS ON THE TREND

There was no significant change in energy consumption for railway shunting in 2019 compared to 2018. Starting in 2017, the conclusion of most contracts for line activities led to a decrease in electricity consumption for traction.

TOTAL CO_2 EMISSIONS (MARKET BASED)



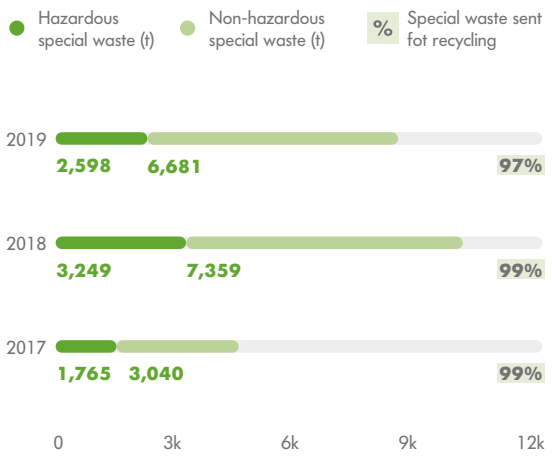
WATER



COMMENTS ON THE TREND

There were no significant changes between 2018 and 2019 in water consumption for civil use. Several water contracts were closed in 2017 and 2018.

WASTE



COMMENTS ON THE TREND

The changes in the amount of waste produced, some of which were substantial, were due to contracts and maintenance on the superstructure by the Construction Division.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	The "2.0 shunting locomotive revamping" project to revamp 25 engines.	2022	- CO_2		
	The "Docsweb" project to roll out e-signature, thereby reducing print-outs and paper consumption.	2019	- paper		

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

MERCITALIA LOGISTICS' SUBSIDIARIES

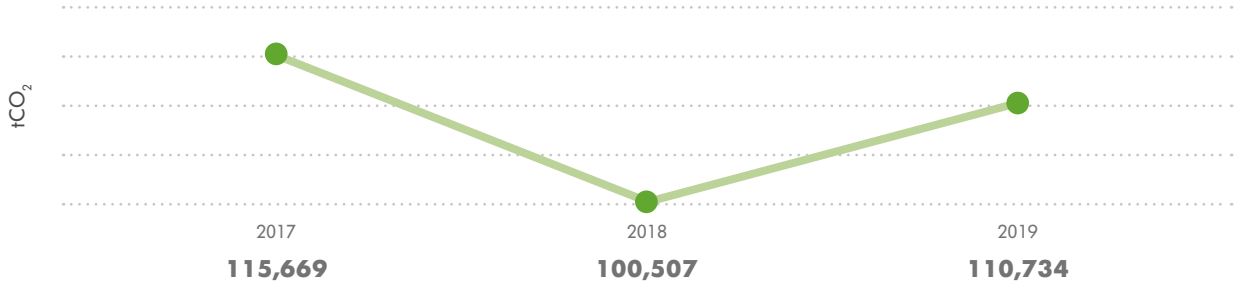
TX LOGISTIK

Final energy consumption	Unit of measure	2019	2018	2017
Electricity for railway traction	MWh	150,000	145,841	159,599
Electricity for other uses	MWh	730	720	712
with guarantee of origin or self-produced using photovoltaic technologies	%	0	0	0
Diesel	l	128,161	135,630	133,921

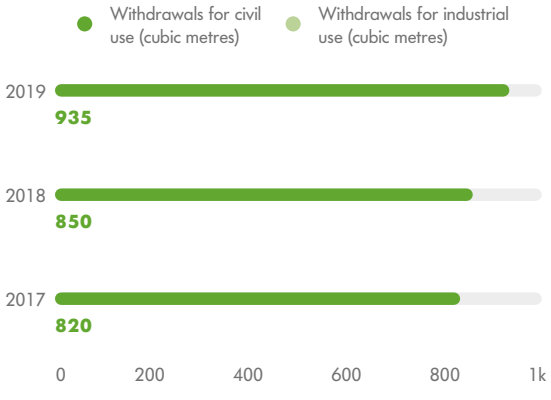
COMMENTS ON THE TREND

The increase in electricity consumption for traction is due to the growth in traffic volumes, while the changes in electricity consumption for other uses are mainly due to weather trends. The consumption of diesel decreased in relation to changes in the car fleet.

TOTAL CO_2 EMISSIONS (MARKET BASED)



WATER



COMMENTS ON THE TREND

The trend is substantially steady.

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, focused on environmental aspects, handing any potentially critical environmental issues by planning and redeveloping land with intermodal and urban-planning solutions.

PROJECTS AND INITIATIVES

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Development of FS Italiane Group areas for urban regeneration and environmental, tourism and archaeological development in the Appia Antica Park.	2023	+ regeneration of natural capital		
	Development of the Venezia Mestre – Parco del Piraghetto areas for urban regeneration and environmental development.	2021	+ regeneration of natural capital		The service conference was completed and the programme contract was signed.
	"Campus of Arts" at the Farini Scalo Unit within the special Farini zone, with an extension of roughly 25,000 square metres for around 3,500 students and 400 workers.	2021	+ regeneration of natural capital		The master plan of projects was published.

Scope	Description	Deadline	Average annual savings/target	Status	Notes
	Construction of a recreational path along the retired Genoa Ventimiglia railway line, between San Lorenzo al mare and Andora, and redevelopment of idle areas like former freight terminals and/or retired passenger buildings.	2020	+ regeneration of natural capital		
	Plant to redevelop and reorganise the Napoli Garibaldi intermodal hub	2023	+ regeneration of natural capital		

KEY

in progress

completed

Continuous improvement

Raw materials cycle

Energy and emissions

Water cycle

Land

02

Management systems

MANAGEMENT SYSTEMS

The following table shows the certification scopes for the various Group companies. The "Integrated systems" column shows information on the integration of the management systems (Quality, Environment, Occupational safety).

Ferrovie dello Stato Italiane	Integrated systems: -
Environment (E)	**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.

RFI	Integrated systems: Q + E + S
Quality (Q)	**Commercial and Network Operation Department and Steering Departments** Scope: › management of train traffic to ensure safe railway operation. **Production Department (PD) and Local 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 electric traction), civil engineering, road engineering and environmental protection in the railway field. **National Electric 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 electric 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.

RFI	Integrated systems: Q + E + S
Environment (E)	**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. **Local 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 Electric 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 electric 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.

RFI	Integrated systems: -
Occupational safety (S)	**Steering Divisions** Scope: › management of train traffic to ensure safe railway operation. **Local 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 Electric 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 electric 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.

Bluferries	Integrated systems: -
Environment (E)	**Bluferries (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) Environment (E)	**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.

Trenitalia	Integrated systems: Q + E + S
Quality (Q)	
Environment (E)	**Trenitalia (Headquarters and operating sites)** Scope: › design and provide integrated mobility passenger transport by rail.
Occupational safety (S)	

Trenitalia c2c	Integrated systems: -
Environment (E)	**Trenitalia c2c** Scope: › operation and maintenance of infrastructure and the fleet controlled by c2c on the Tilbury and Southend routes arriving from and departing for London Fenchurch Street.
Occupational safety (S)	

Busitalia - Sita Nord	Integrated systems: Q + E + S
Quality (Q)	**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.
Environment (E)	**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)	**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)

Environment (E)

Occupational safety (S)

Busitalia Veneto (Headquarters and operating sites)

Scope:

- design and provision of transport services using buses and trolleys: local public transport. Design and provision of transport services using buses: long haul lines, rentals and atypical services. Maintenance and depot facilities for its own vehicle fleet.

Busitalia Campania — Integrated systems: -

Quality (Q)

Busitalia Campania (Headquarters and operating sites)

Scope:

- 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)

Environment (E)

Ataf Gestioni (Headquarters and operating sites)

Scope:

- design and provision of local public transport using buses. Maintenance and depot facilities for its fleet.

Mercitalia *Logistics* — Integrated systems: Q + E + S

Quality (Q)

Environment (E)

Occupational safety (S)

Mercitalia Logistics (Headquarters and local units)

Scope:

- steering and coordinating the Mercitalia operating companies;
- organisation and provision of logistics services in connection with sundry freight through third-party coordination;
- management of real estate assets. - Organisation of "fast" transport by train and logistics for sundry freight through third-party coordination.

Mercitalia Shunting&Terminal — Integrated systems: Q + E + S

Quality (Q)

Environment (E)

Occupational safety (S)

Mercitalia Shunting&Terminal (Headquarters, Genoa office and operating site in Udine)

Scope:

- design, construction, maintenance and restructuring of railway connections;
- freight and passenger transport services as railway company in the national railway infrastructure;
- management of shunting in railway connections;
- maintenance and reconditioning of diesel traction vehicles, railway rolling stock for freight transport and related services.

Mercitalia Rail — Integrated systems: Q + E + S

Quality (Q)

Environment (E)

Occupational safety (S)

Mercitalia Rail (Headquarters and operating sites)

Scope:

- design and provision of freight transport services by rail.

FS Sistemi Urbani — Integrated systems: -

Environment (E)

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.

Grandi Stazioni Rail — Integrated systems: -

Environment (E)

Grandi Stazioni Rail (Roma Termini, Milano Centrale, Venezia S. Lucia, Torino Porta Nuova, Napoli Centrale, Venezia 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)	**Ferservizi (Headquarters and operating units)** Scope: › service management: administration, procurement, real estate sales services, leases and agreements, technical and asset services, maintenance and facility management services for office buildings and hotels, the issue of travel concessions, company canteen services, real estate and legal custody services, printing services, credit management, tax services, correspondence, notifications and document filing.
Environment (E) Occupational safety (S)	**Ferservizi (Headquarters and operating units)** Scope: › provision of all the activities that the company performs to manage administrative, sale and lease of real estate, custody and safeguarding of real estate and facility services, in addition to Group procurement, IT, maintenance and document filing.

Italferr	Integrated systems: Q + E + S
Quality (Q)	
Environment (E)	**Italferr (Headquarters and operating sites)** Scope: › project management, design, contracting management, works oversight and supervision and safety coordination for transport infrastructure work and the related interferences.
Occupational safety (S)	

Gruppo Netinera	Integrated systems: -
	Netinera Deutschland Scope: › development of the Group's business; › management of new or existing public transport contracts in Germany and abroad; › support to the affiliated companies with technical and non-technical services.
Quality (Q)	**Netinera Werke** Scope: › maintenance and inspection of railway vehicles in accordance with current German regulations (Railway, Building and Operating Regulations – EBO).
	OHE Scope: › operating maintenance on electric trains and passenger carriages; › maintenance and inspection of railway vehicles in accordance with current German regulations (Railway, Building and Operating Regulations – EBO).
	Vlexx Scope: › public transport with electric and diesel buses; › operating and heavy maintenance on vehicles at proprietary workshops.
Environment (E)	**Erixx** Scope: › public transport with diesel buses; › operating maintenance on vehicles at proprietary workshops.
	Länderbahn Scope: › public transport with diesel buses and electric and diesel trains; › operating maintenance on vehicles at proprietary workshops.

Anas	Integrated systems: -
Quality (Q)	**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 (Q)	**TrainOSE** Scope: › definition of objectives and measurement of delivered service quality.
Safety (S)	**EESSTY** Scope: › definition of objectives and measurement of delivered service quality.

Ferrovie del Sud-Est e Servizi Automobilistici	Integrated systems: -
Quality (Q)	**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.

Sitaf Group **Integrated systems: -**

Quality (Q)

Musinet

Scope:

› design, planning and oversight of works on roads, motorways, tunnels, infrastructure and technological plant, environmental monitoring and structural works, provision of the related specialist services. Application of Building Information Modelling (BIM). Inspections of works design for approval in accordance with the applicable legislation.

Ok Go srl

Scope:

› design and provision of active fire-prevention surveillance. Maintenance on the fire-prevention system (extinguishers and hydrants). Provision of user services: motorway assistance call centre, remote video surveillance control service. Installation, removal and maintenance of temporary signs in road sites and surveillance.

Environment (E)

Sitalfa

Scope:

› construction and maintenance of roads, motorways and industrial buildings. Construction and maintenance of electric, thermal, air conditioning, fan and fire-prevention plans for the industrial sector.

Sitaf – Tecnositaf SpA

Scope:

› design and development, construction and maintenance of devices and mobility management, control and safety systems.

Occupational safety (S)

Ok Go srl

Scope:

› design and provision of active fire-prevention surveillance. Maintenance on the fire-prevention system (extinguishers and hydrants). Provision of user services: motorway assistance call centre, remote video surveillance control service. Installation, removal and maintenance of temporary signs in road sites and surveillance.

Sitaf – Tecnositaf SpA

Scope:

› design and development, construction and maintenance of devices and mobility management, control and safety systems.

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