# BUILDING FUTURE'S MOBILITY TOGETHER

## 2020
## SUSTAINABILITY REPORT

ANNEX
**COMPANY HIGHLIGHTS** - THE ENVIRONMENT


FERROVIE DELLO STATO ITALIANE

# BUILDING FUTURE'S MOBILITY TOGETHER

2020
SUSTAINABILITY REPORT

ANNEX
**COMPANY HIGHLIGHTS** - THE ENVIRONMENT

FERROVIE DELLO STATO ITALIANE

# CONTENTS

## 01



## 02


TRA LE DONNE
8 SU 10

# 01

2020 SUSTAINABILITY REPORT

# 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.

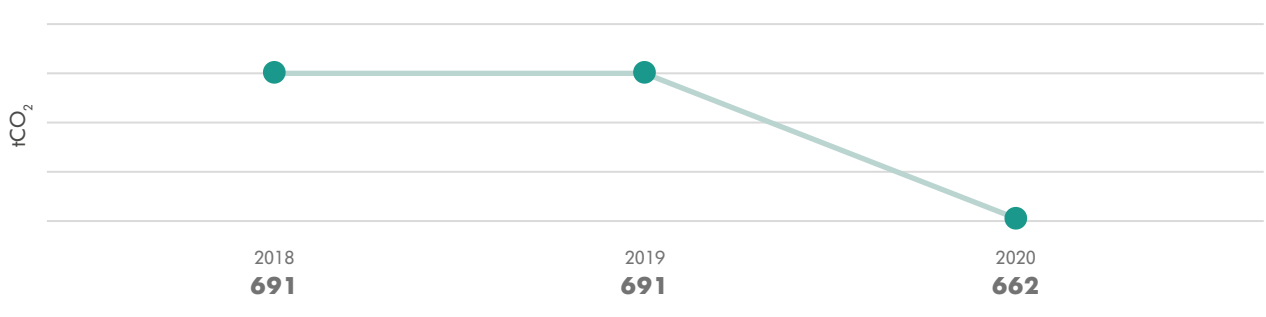
The environmental management policy and system guide the processes and actions towards continuous improvement, carefully and continuously developing natural capital by spreading awareness of environmental matters and actively supporting the monitoring of environmental impacts.

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 4,686 | 5,629 | 5,670 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 100% | 100% | 100% |
| Diesel | l | 0 | 0 | 31,550 |
| Natural gas | $Sm^3$ | 335,549 | 349,529 | 306,921 |

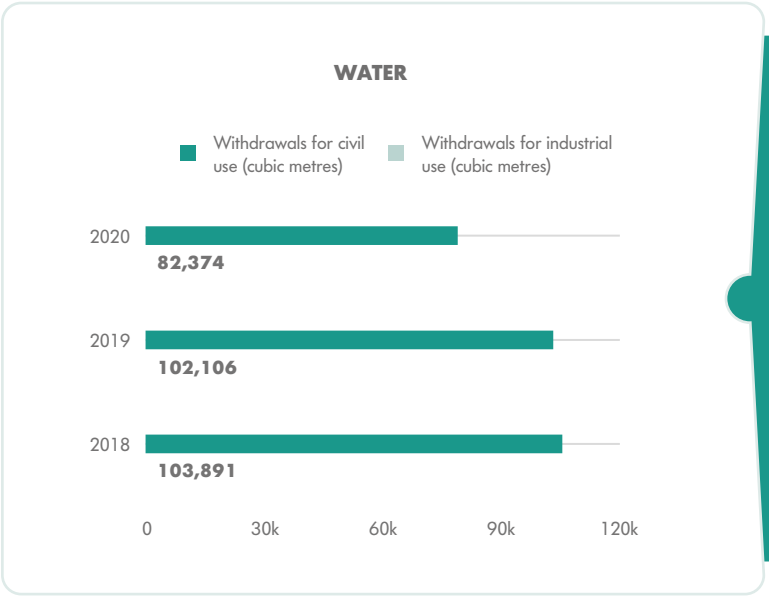
**COMMENTS ON THE TREND**

There was a significant drop in electricity consumption in offices in 2020 due to greater numbers of people working from home as a result of the public health emergency. This also led to a slight decrease in natural gas consumption for heating compared to 2019.

**TOTAL $CO_2$ EMISSIONS (MARKET-BASED[1])**

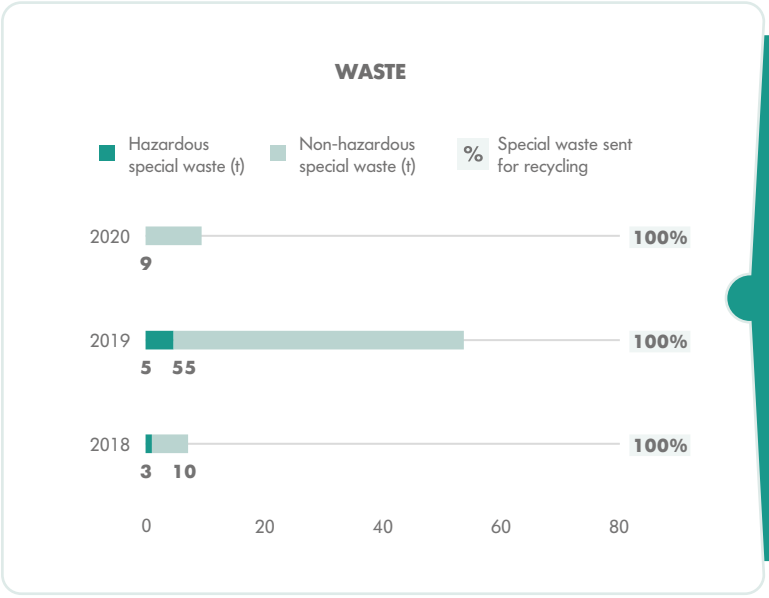



[1] The market-based approach entails the use of emissions factors defined in the contract with the electricity supplier. If there are no specific contractual agreements, where the Group companies and the electricity supplier can negotiate them (e.g., by purchasing guarantees of origin), the emission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




**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.
The fall in consumption in 2020 is linked to the reduced presence of personnel in offices under the emergency remote working arrangement.




**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 |
|---|---|---|---|---|---|
|  | **Induction cycle on sustainability issues** for management and members of the boards of directors of direct subsidiaries. | 2020 | + culture and awareness<br>+ knowledge and commitment |  | The induction programme continued in 2020 for:<br>the boards of directors of the main Group companies. |
| | **Cultural transformation on sustainability issues,** an online course to raise awareness throughout the Group. | 2020 | + culture and awareness<br>+ virtuous practices |  | The multimedia journey on sustainability for personnel was completed. It comprised four video clips, each focused specifically on one issue. |
| | **Include greenhouse gas emissions targets in top management's remuneration policies.** | 2020 | + commitment<br>- $CO_2$ |  | |
| | **Define a model to assess external economic, social and environmental issues** to be applied to the Group's main projects. | 2021 | + valore condiviso |  | |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **Encourage the integration of environmental and social considerations in procurement.** | 2020 | + culture and awareness | ✔ | The guidelines on sustainable procurement were formalised. |
| | **Define a control model for data** on sustainability performance required for Group reporting. | 2021 | + control | 🕒 | |
| | **Begin reporting climate data** on the Carbon Disclosure Project (CDP) global platform set up to understand and manage energy and $CO_2$ emissions issues. | 2020 | + culture and awareness<br>- $CO_2$ | ✔ | FS Italiane took part in CDP 2020 reporting and was rated "A-" in the leadership bracket. |

**KEY**

🕒 in progress ✔ completed

CONTINUOUS IMPROVEMENT | RAW MATERIALS CYCLE | ENERGY AND EMISSIONS | WATER CYCLE | LAND

# 10 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 steady 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 ISO 45001, ISO 14001 and ISO 9001 standards.

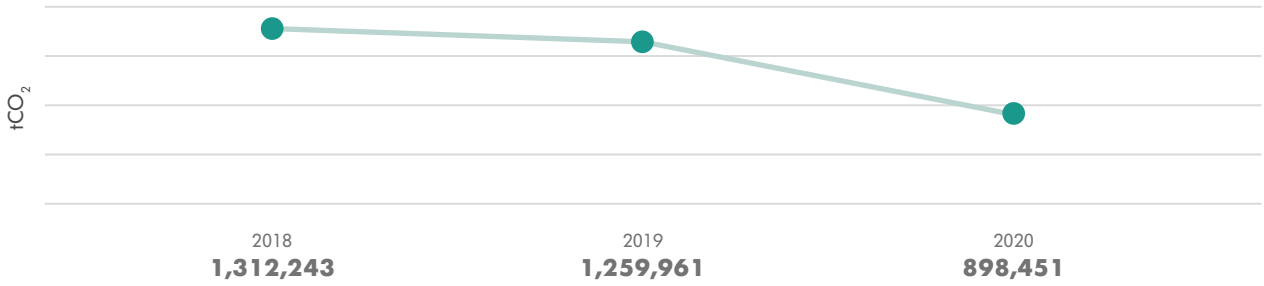
As for energy efficiency, for five years Trenitalia has been pursuing a broad energy diagnosis campaign at its industrial plants to progressively improve the energy performance of its maintenance activities, which also consists of significant investments in the installation of LED lighting systems and 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 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 | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity for railway traction | MWh | 2,581,955 | 3,473,128 | 3,554,179 |
| Electricity for other uses | MWh | 73,673 | 77,558 | 78,624 |
| with guarantee of origin or self-produced using photovoltaic technologies | | 100% | 100% | 100% |
| Self-produced and consumed solar energy | MWh | 2,322 | 220 | 62 |
| Diesel | l | 38,483,358 | 48,531,837 | 49,264,725 |
| Natural gas | $Sm_3$ | 15,300,319 | 15,935,245 | 19,549,254 |

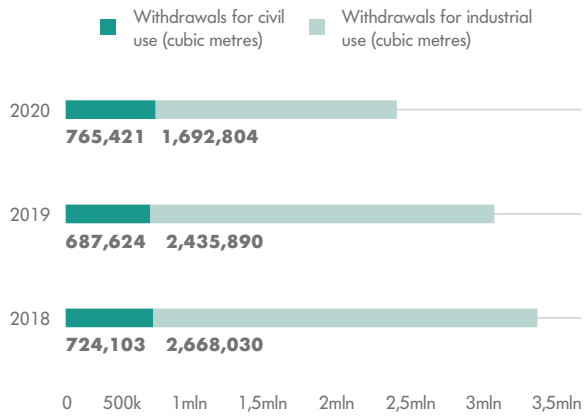
**COMMENTS ON THE TREND**

Energy consumption decreased in 2020, for both electricity and natural gas and diesel, due to the unexpected reduction of production activities as a result of the public health emergency. In addition, there was a considerable increase in energy generated by photovoltaic plants as new plants were installed or upgraded at company offices during the year.

## TOTAL $CO_2$ EMISSIONS (MARKET-BASED)



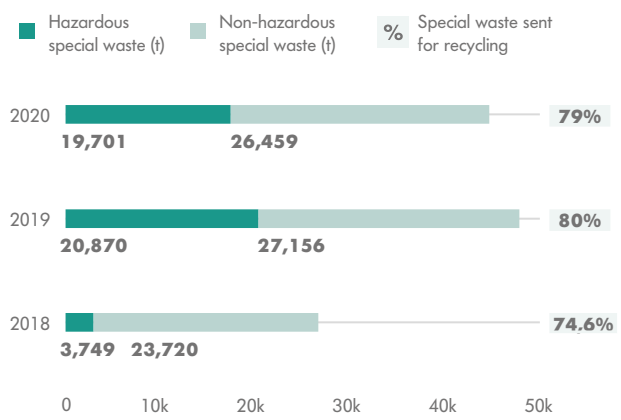

## WATER




### COMMENTS ON THE TREND

Following on from the previous three years, water consumption continued to decrease thanks to the rationalisation of water networks and adoption of management, infrastructure and technological solutions to optimise the water cycle. A portion of the reduction is linked to physiological changes related to the type and volume of production activities carried out during the pandemic.

## WASTE




### COMMENTS ON THE TREND

Overall waste produced was 4% lower than the previous year. Maintenance, sanitisation, cleaning and tidying activities were upgraded during the year.

## 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<br>- $CO_2$ | | Installation on the V**ivalto NCDP fleet** began at the end of 2017 and will cover 257 carriages **(progress: 254 out of 257 carriages)**. Installation began on the **medium-haul face-lifted carriages** in 2019 and will cover 1,210 of them **(progress: 419 out of 1,210)** while modifications on the **TAF fleet** will cover 74 carriages **(progress: 67 out of 74)**. |
| | The **new Pop** and **Rock trains for regional service** were purchased and rolled out. | In progress | + comfort<br>- $CO_2$ | | 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.** A further 100 trains were delivered in 2019 and 2020. |
| | Purchase of **new regional diesel/electric Blues trains** designed for commuters. | In progress | + comfort<br>- $CO_2$ | | 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. |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | Installation and roll-out of n**ew photovoltaic plants.** | In progress | 11,675 **MWh**<br>3,694 **$tCO_2$** | | **In 2020, new photovoltaic plants were rolled out** at the HS Rome current maintenance plant, the Napoli Centrale current maintenance plant and the S.M. La Bruna ordinary maintenance workshop and two new sections were added to the pre-existing plant at the HS Milan current maintenance plant. In 2021, photovoltaic plants will be rolled out at the HS Naples current maintenance plant and further upgraded at the HS Milan current maintenance plant (with the roll-out of the fourth and last section). |
| | **Installation of new solar thermal plants** at 11 maintenance plants. | 2022 | 84 **tep**<br>67 **$tCO_2$** | | |
| | **LED lighting** at **14** maintenance plants. | 2023 | 5,850 **MWh**<br>1,850 **$tCO_2$** | | |
| | **LED lighting and building automation systems** in the HS Milan current maintenance plant of Long-haul Passenger Division (LHPD) and the Milan current maintenance plant. | 2020 | 1,000 **MWh**<br>320 **$tCO_2$** | ✓ | |
| | **Installation of radiant strip heating systems** at the LHPD Milan hub (at MAV 1 and MAV 2 of the HS Milano FR current maintenance plant and the Milano SU current maintenance plant and at the Milano Greco current maintenance plant) and four additional plants. | 2023 | 928 **tep**<br>760 **$tCO_2$** | | |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **Rationalisation of water networks for industrial plants** and adoption of **management, infrastructure and technological solutions** to optimise water use. | 2024 | 0.43 **litres of water**/train-km<br><br>1.41 **litres of water**/hours worked | | **Work completed at the Verona ordinary maintenance workshop and the Naples ordinary maintenance workshop** in 2020. |
| | **Rationalisation of the collection of waste** from industrial production and **awareness raising** for personnel and third-party firms on environmental management. | 2024 | +1.2% **waste sent for recycling** | | |
| | NEW<br>**Biosafety Trust Certification (management system certification aimed at the prevention of the spread of infections)** obtained. | 2023 | + culture, awareness, knowledge and commitment | ✓ | |

**KEY**

in progress ✓ completed

CONTINUOUS IMPROVEMENT · RAW MATERIALS CYCLE · ENERGY AND EMISSIONS · WATER CYCLE · LAND

# TRENITALIA'S SUBSIDIARIES

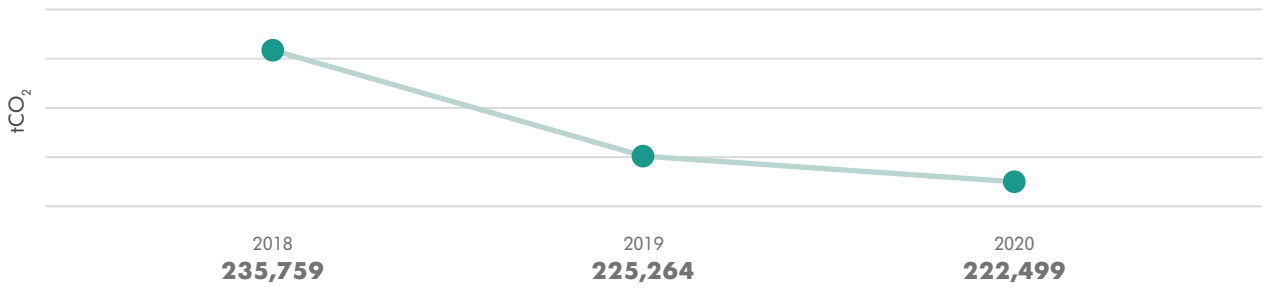
NETINERA GROUP

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity for railway traction | MWh | 173,089 | 162,797 | 162,814 |
| Electricity for other uses | MWh | 6,459 | 7,676 | 10,207 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 0% | 0% | 0% |
| Diesel | l | 34,137,692 | 36,861,310 | 40,299,768 |
| Natural gas | $Sm_3$ | 599,286 | 991,439 | 1,126,596 |

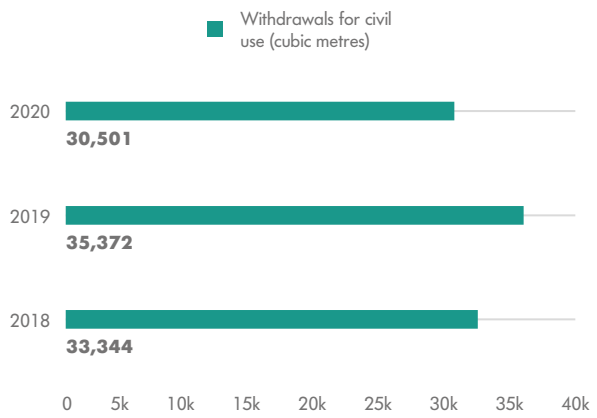
**COMMENTS ON THE TREND**

The consumption of electricity for railway traction increased in 2020 due to roll-out of Vlexx's new E-Netze Saar line. The consumption of natural gas and electricity for other uses decreased as a result of employees working from home during the public health emergency and also due to a milder winter compared to the previous year.

**TOTAL $CO_2$ EMISSIONS (MARKET-BASED)**

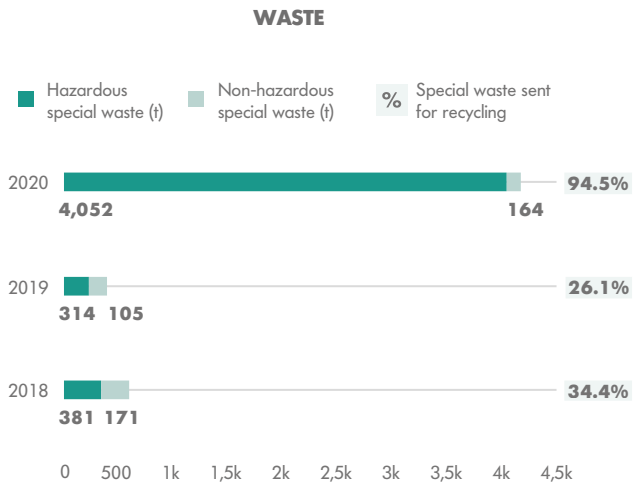



**WATER**




**COMMENTS ON THE TREND**

The data show a substantially steady trend. The slight drop in water consumption in 2020 is attributable to reduced operations during the public health emergency.




**COMMENTS ON THE TREND**

The rise in waste production in 2020 compared to previous years is mainly due to works by the company OHE to replace railway sleepers.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | The Elektro-Netz Saar project for the **electrification of railway transport in the Saarland region**, gradually replacing diesel trains with electric and electric battery trains starting from 2024. | In progress | - $CO_2$ | | |

**KEY**

in progress

completed

CONTINUOUS IMPROVEMENT

RAW MATERIALS CYCLE

ENERGY AND EMISSIONS

WATER CYCLE

LAND

# CONTROLLATE DI TRENITALIA

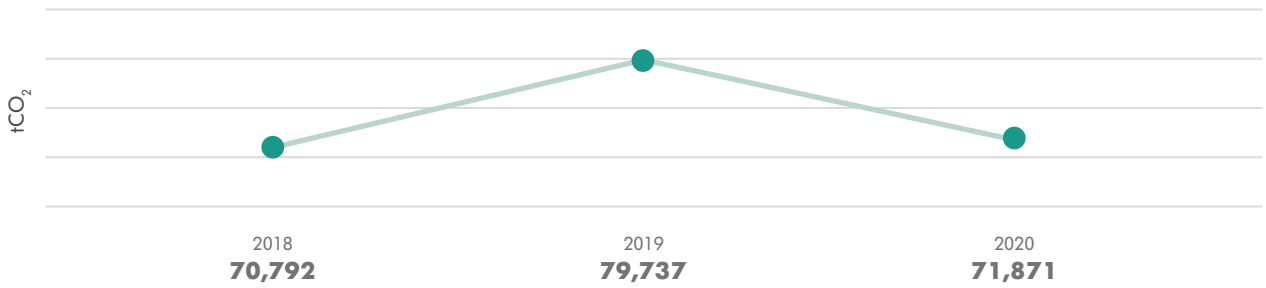
TRAINOSE

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity for railway traction | MWh | 66,347 | 67,992 | 48,325 |
| Electricity for other uses | MWh | 5,441 | 5,341 | 50 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 0% | 0% | 0% |
| Diesel | l | 9,127,979 | 12,700,094 | 15,915,362 |

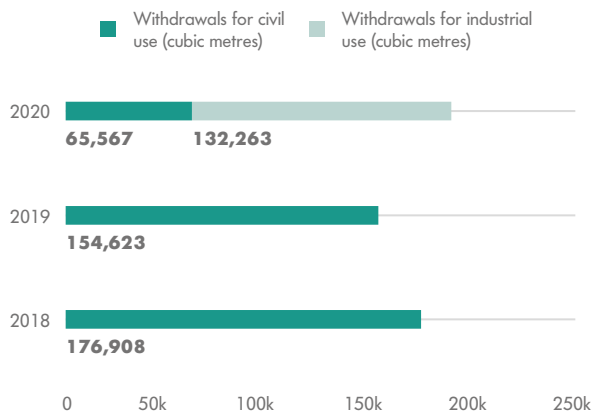
**COMMENTS ON THE TREND**

Diesel consumption decreased in 2020 mainly as a result of reduced services during the public health emergency. In addition, the main line in the Athens-Thessaloniki region was electrified in May 2019, thus reducing diesel consumption and increasing electricity consumption in 2020. However, the latter increase was fully offset by the reduction of electric transport services during the public health emergency. Electricity consumption for railway traction only dropped by approximately 2% and did not experience the same level of reduction seen as diesel consumption.

**TOTAL $CO_2$ EMISSIONS (MARKET-BASED)**

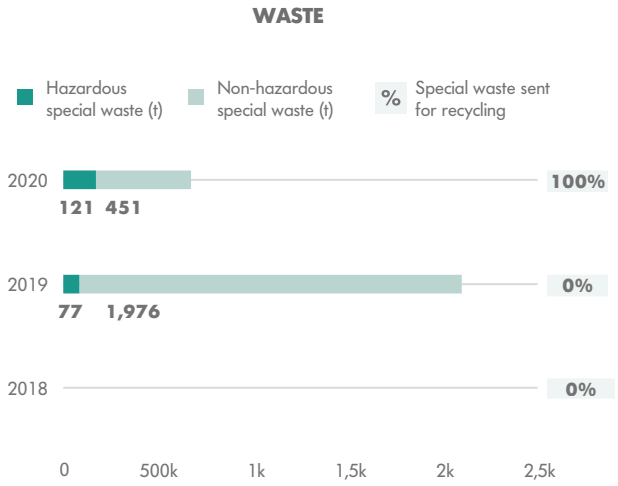



**WATER**




**COMMENTS ON THE TREND**

The company adopted a new method for monitoring water resources in 2020, successfully separating consumption for civil use from consumption for industrial use.




**COMMENTS ON THE TREND**

The fall in waste production in 2020 is mainly due to reduced production activities as a result of the public health emergency.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | NEW<br>**A procedure** was formalised **to better manage industrial waste at plants and mitigate the risk of polluting the environment.** | 2020 | + culture | ✓ | |
| | NEW<br>**Digitalisation of paper tickets:** e-tickets associated with new products and awards for passengers (e.g., 10% discount for e-tickets on mobile phones). | 2023 | - paper<br>+ digitalisation | | |
| | **ISO 50001 certification was obtained** (energy management system) and **the ISO 14001 environmental management system was implemented.** | 2022 | + culture | | |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | NEW **SHIFT2RAIL DAYDREAMS:** optimised maintenance of the railway infrastructure via AI. | 2023 | + efficiency | | Project financed by the European Union. |
| | NEW **Upgrade and renovation of the Thessaloniki depot to hold ETR 470 trains.** | 2021 | + efficiency | | |
| | NEW **HORIZON2020 5G VICTORI project**: increasing **self-generated energy from braking** by electric railway systems by coordinating rolling stock and HS substations. | 2023 | + efficiency | | Project financed by the European Union. |

**KEY**

in progress

completed

CONTINUOUS IMPROVEMENT

RAW MATERIALS CYCLE

ENERGY AND EMISSIONS

WATER CYCLE

LAND

# TRENITALIA'S SUBSIDIARIES

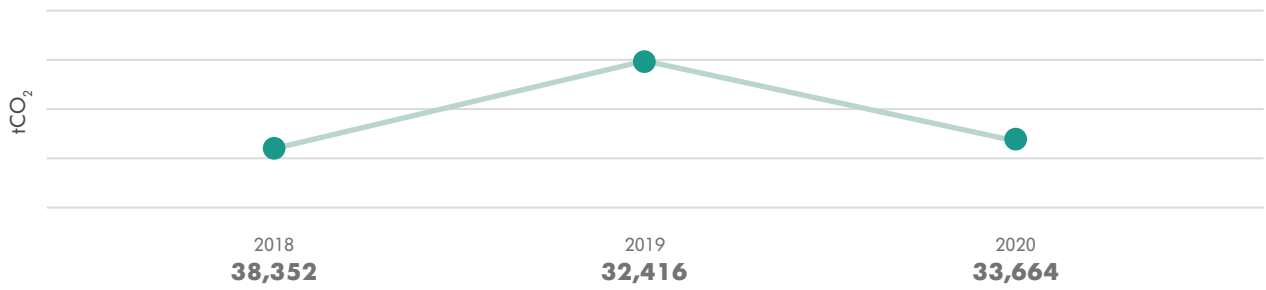
## TRENITALIA C2C

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity for railway traction | MWh | 80,824 | 80,401 | 90,313 |
| Electricity for other uses | MWh | 6,949 | 7,323 | 7,099 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 2% | 0% | 0% |
| Self-produced and consumed solar energy | MWh | 141 | 0 | 0 |
| Natural gas | l | 161,236 | 132,956 | 156,559 |

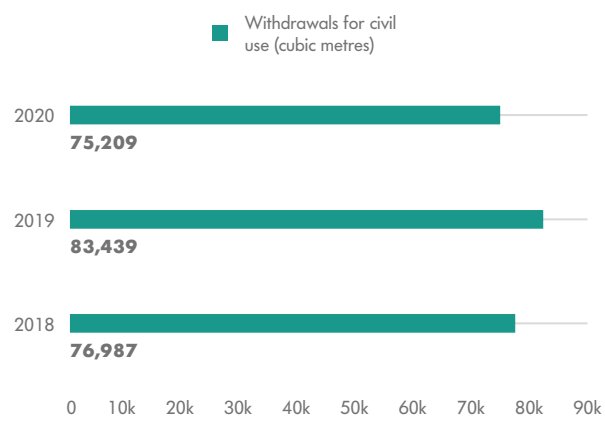
### COMMENTS ON THE TREND

Electricity consumption for traction remained basically unchanged. There was a reduction in 2019 on 2018, however, partly 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 increased in 2020 to heat the East Ham depot.

### TOTAL $CO_2$ EMISSIONS (MARKET-BASED)




### WATER




### COMMENTS ON THE TREND

The roughly 10% decrease in water consumption in 2020 is attributable to the COVID-19 emergency along with the project to modernise the water pipes at the Shoeburyness depot.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
|  | Upgrading of **air conditioning systems on trains.** | In esecuzione | **-** $CO_2$ **+** delivered service quality |  | |
| | ***NEW*** LED project at the East Ham depot. | 2022 | 440 **MWh** 122 **$tCO_2$** |  | |
| | Upgrading the lighting system at the East Ham depot begun in September 2020 to reduce consumption during less busy times, estimated to save 40Wh per day. | 2020 | **-** $CO_2$ |  | |

**KEY**

 in progress

 completed

 CONTINUOUS IMPROVEMENT

 RAW MATERIALS CYCLE

 ENERGY AND EMISSIONS

 WATER CYCLE

 LAND

# RFI

## OUR APPROACH

RFI's approach to operating national railway infrastructure focuses on boosting the network's value as a fundamental asset of Italy's mobility system and as a key part of improving the local society, economy and environment.

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 also a systemic approach to all business aspects, to creating shared value and contributing to the achievement of sustainable development goals, also by designing and applying process and product innovation aimed at green and digital transition.

Operating the railway network efficiently, safely and accessibly means, in and of itself, contributing to a more sustainable transport system where trains, together with other means of collective transport, can attract growing percentages of private transport, reducing detrimental effects on the population in terms of emissions, consumption of natural resources, accidents and traffic, and meeting passenger and freight transport needs more effectively. The company is making this goal more attainable 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, especially commuters, and to improve its performance for them.

This means that, on the field and every day, 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. RFI also relies on its integrated safety management system which comprises the environmental management system, occupational health and safety management system and safe train travel and railway operation management system.

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 | 2020 | 2019 | 2018* |
|---|---|---|---|---|
| Electricity** | MWh | 453,862 | 476,220 | 473,609 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 20% | 11% | 0% |
| Transmission of electricity for railway traction (network dissipation)*** | MWh | 385,138 | 460,530 | 458,108 |
| Diesel | l | 16,602,986 | 18,392,402 | 16,910,230 |
| Natural gas | $Sm^3$ | 8,397,512 | 9,283,706 | 10,360,379 |

* Energy and emissions data include the consumption of Centostazioni S.p.A. which merged into RFI as per the merger deed dated 16 July 2018.

** 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".

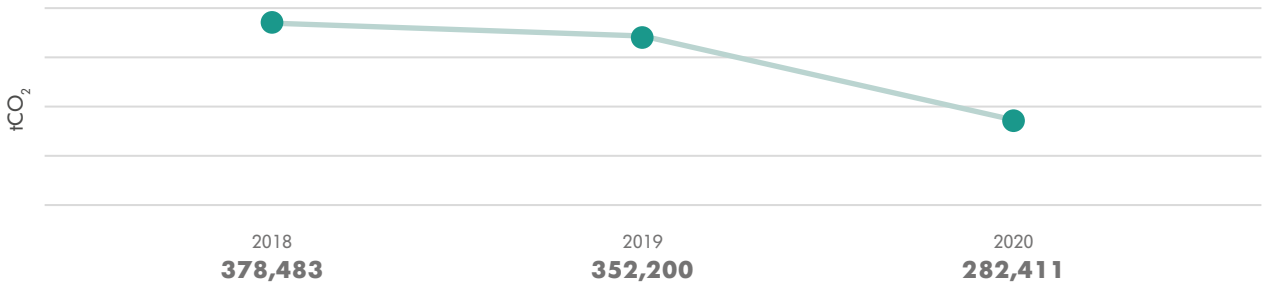
## COMMENTS ON THE TREND

Electricity consumption for internal use dropped roughly 4% over the three years from 2018 to 2020 mainly due to the approximate 5% reduction in 2020 compared to 2019. This was largely a result of the shutdown of production at industrial workshops in the early months of the public health emergency and the lesser need for electricity at offices due to more employees working from home. Consumption of electricity from renewable sources rose in 2020 thanks to the supply of the entire share of electricity with guarantee of origin purchased by RFI under a specific supply contract (roughly 90 GWh, 20% of total electricity consumed for internal use). The remaining 80% of electricity is procured from the Italian Power Exchange (GME) under a contract with GSE and converted to renewable sources as part of a wider revision of the relevant legislation and regulations.

Diesel consumption remained at the same level over the 2018-2020 period though as a balance of two opposing trends. There was an approximate 9% increase from 2018 to 2019 due to the rise in railway ferrying and a roughly 10% decrease from 2019 to 2020 caused by various factors including: decreased consumption for railway ferrying (-21%) due to the combined effect of lower maritime traffic during the public health emergency and the use of a more efficient ship; decreased diesel consumption for shunting (-37%) due to the gradual outsourcing of such activity; decreased diesel consumption for heating (-14%) as a result of the gradual replacement of diesel power plants with more environmentally-friendly plants along with the reduced use of work spaces and stations during the public health emergency.

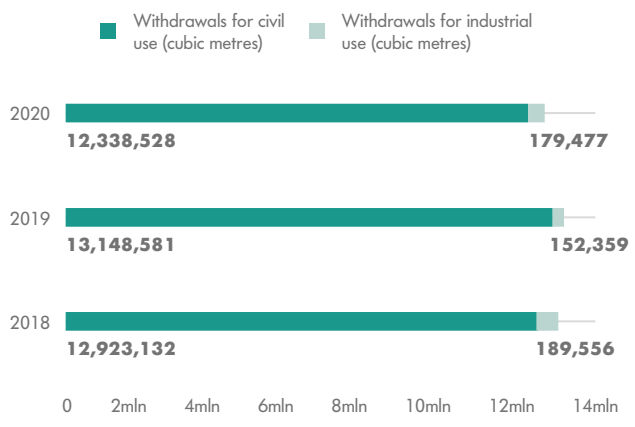
Finally, natural gas consumption decreased by approximately 19% from 2018 to 2020. Specifically, consumption for heating dropped roughly 10% from 2019 to 2020 as a result of the reduced use of offices and station areas during the public health emergency.

## TOTAL $CO_2$ EMISSIONS* (MARKET-BASED)



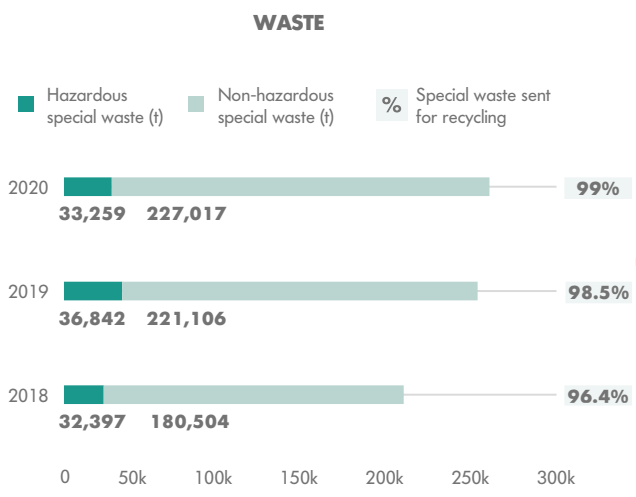

* $CO_2$ emissions also include those related to the transmission of electricity for railway traction on the RFI network (catenary and substations), amounting to around 40%.

## WATER




## COMMENTS ON THE TREND

Overall water consumption decreased approximately 5% over the 2018-2020 three-year period, mainly due to changes in withdrawals for civil use.
Specifically, there was a roughly 3% increase from 2018 to 2019 in correlation with the physiological changes related to the type and volume of production activities. This was followed by an approximate 6% decrease from 2019 to 2020 as a result of lower numbers of people in offices and stations during the public health emergency along with works to optimise water systems (closure of some wells and repair of water leaks in some areas).




**COMMENTS ON THE TREND**

Overall waste production increased over the 2018-2020 three-year period (by approximately 22%) mainly due to the growth in railway infrastructure maintenance from 2018 to 2019.
Waste production levels remained essentially unchanged from 2019 to 2020, both overall (+1%) and in the breakdown of non-hazardous waste (87%) and hazardous waste (13%). Non-hazardous waste rose 3% in 2020 - particularly iron and steel waste produced in upgrading railway infrastructure - and hazardous waste dropped 10% - mainly as the lines undergoing maintenance feature less wood sleepers treated with creosote oil, which have been gradually replaced with more eco-friendly CAP sleepers. The portion of waste sent for recycling remained unchanged in 2020 (99%).

## 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-produce and self-consume electricity** at the national workshops in Bologna, Bari and Pontassieve. | 2022 | 5,000 **MWh**<br>1,607 **$tCO_2$** | | The **design activities** for the selection of the contractor are **complete** and PPP negotiations are being prepared. |
| | **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 Equipment Management" (SEM) platform at the 600 stations being upgraded under the Easy Station and Smart Station projects. | 2027 | 8,072 **MWh**<br>2,594 **$tCO_2$** | | The stations are currently being equipped. |
| | **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**<br>9,640 **$tCO_2$** | | The stations are currently being equipped. |

| 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** in order to define technical and operation standards for the large-scale use of the railway system as a whole. | 2024 | 200 **MWh**<br>60 **$tCO_2$** | | The two prototypes are being constructed. |
| | **E-car fleet:** start of the **conversion of some of the petrol/diesel-fuelled company car fleet with electric cars**. The project is focused on replacing approximately 100 cars used by management under long-term leases, especially at Local Production Units. | 2023 | 50 **$tCO_2$** | | Petrol/diesel-fuelled cars are **currently being replaced** by electric cars. |
| | ***NEW***<br>**Green Station: applying LEED** and other protocols/standards for the **energy efficiency and environmental sustainability of railway stations**; extending works to boost energy efficiency to buildings and other plants at non-passenger areas. | continuativo | + efficiency | | **Pre-assessment carried out according to LEED protocol** for the Frosinone station project. |
| | ***NEW***<br>**Hydrogen mobility study:** carrying out a s**tudy on hydrogen railway transport and relevant production infrastructure** called "Technical and financial feasibility study: earthing systems for hybrid electric trains powered by hydrogen cells and batteries" **in partnership with La Sapienza University in Rome and the Italian national maintenance committee (CNIM).** | 2020 | - $CO_2$ | ✓ | |
| | **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.** | 2024 | + safety | | **Call for tender published** for engineering the system and supplying the first 600 devices. The **bids are currently being assessed.** |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **Integrated automatic work site protection system (SIPAC): implementation of a system to protect workers** near operating double-track lines **at stations and along the lines.**<br>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 | | Negotiations are under way for the required reprogramming of the test computerised central unit. |
| | **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 | | **A technical party has been chosen** for developing the system and implementing it on the test sections. |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | NEW<br>**Technical Academy**: boosting the efficiency and effectiveness of the **technical training** system by:<br>› **building/revamping** three training centres (Milan, Bologna, Naples);<br>› **reformulating** technical training **programmes and processes** and defining the **full-time instructor role;**<br>› **digitalising** teaching methods (acquiring software platforms and digital tools) and training content (creating e-courses, practical exercises with digital tools, etc.) and **implementing virtual and physical simulators** (training test grounds). | 2025 | + culture | | **The building/revamping of three training centres** (Milan, Bologna, Naples) **is under way.** |
| | NEW<br>**Envision protocol - stations (as part of the Green Station project)**: applying the Envision protocol for the design of sustainable infrastructure to station projects and training internal qualified personnel. | 2030 | + culture | | **A methodology and solutions** to meet the parameters set for railway stations **have been finalised. The pre-assessment of some hubs has been completed.** |
| | **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 | 13,300<br>**$m^3$ of water** | | The **design of plants at the Carini and Catanzaro workshops is being fine-tuned** and design began on the Milan local production unit. |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **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 | | **The gradual delivery of the designs to the relevant local production units, which are in charge of carrying out the works.** |
| | **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 | | Preparation for the roll-out of the first project phase by testing low enthalpy geothermal systems at two pilot sites. |
| | **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. | 2021 | + 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 | | **Validation of the results of the new functions developed on the first release** of the system. |
| | **BLESS+** (Bed LEvel Seeking System): the **BLESS+ 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 |
|---|---|---|---|---|---|
| | NEW **RAMPS: design and construction of a prototype wheelchair ramp for the disabled** in order to produce an RFI standard. | 2020 | + safety | ✓ | |
| | **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.** | 2021 | - 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 | 2020 | 2019 | 2018* |
|---|---|---|---|---|
| Electricity* | MWh | 54,755 | 64,671 | 61,139 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 28% | 3% | 30% |
| Diesel* | l | 190,469 | 212,326 | 107,068 |
| Natural gas* | $Sm^3$ | 4,044,491 | 4,613,326 | 4,152,442 |

* Excluding consumption attributable to company customers.

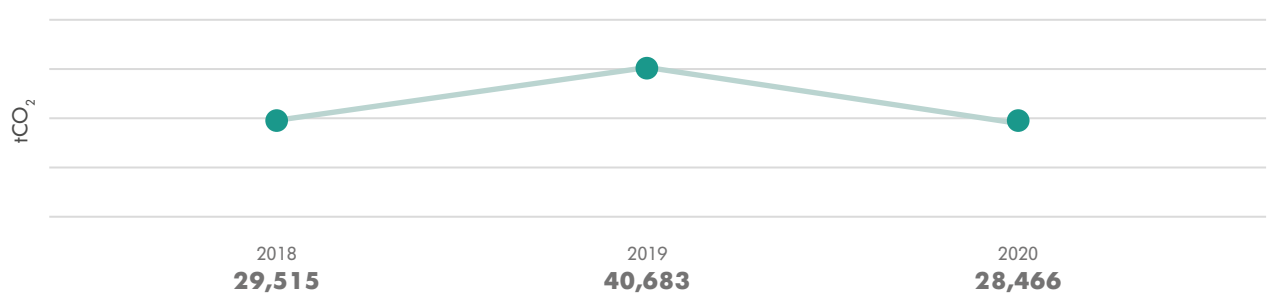
### COMMENTS ON THE TREND

Electricity consumption for internal use decreased over the 2018-2020 period (by roughly 10%) as the net effect of two opposing trends. The roughly 6% increase from 2018 to 2019 was followed by an approximate 15% drop from 2019 to 2020 due to the lower consumption of energy in offices and stations during the public health emergency. The breakdown of energy sources changed in 2020 following the roll-out of a new supply contract with Enel Energy on 1 August 2020 for energy from 100% renewable sources certified with guarantees of origin. The previous contract for purchasing energy on the market comprising a portion of renewable energy ended on 31 January 2019. Accordingly, the percentage of electricity from certified renewable sources dropped from 2018 to 2019.

Diesel consumption for internal use was highest in 2019 following a substantial increase (by approximately 98%) compared to 2018 following the conversion of the thermal power plant at the Genova Piazza Principe station from fuel oil to diesel. This then fell approximately 10% in 2020 due to reduced diesel consumption for heating offices during the public health emergency.

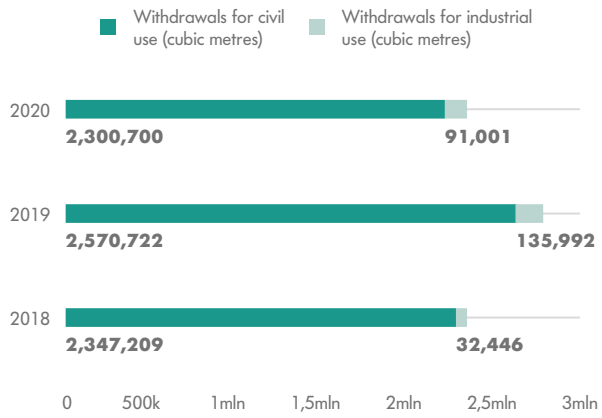
Trends in natural gas consumption for internal use were similar. Consumption was highest in 2019 following an approximate 11% increase on 2018 due to the roll-out of the service platform for Roma Termini station passengers in the second half of 2018 and then decreased approximately 12% in 2020 due to reduced consumption for heating offices and stations during the public health emergency.

### 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 exclude consumption by station customers.

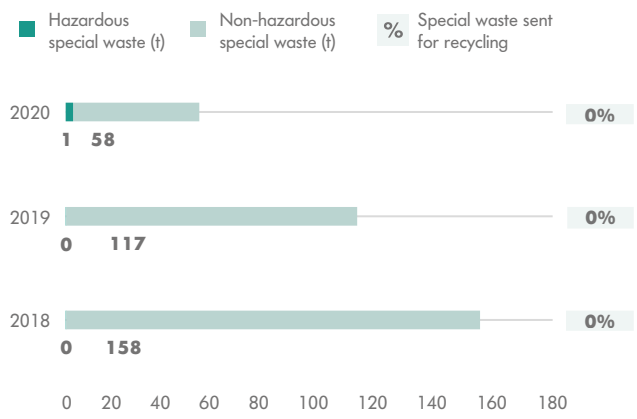
## WATER




### COMMENTS ON THE TREND

Over the three-year period, trends in water consumption peaked in 2019 with an approximate 14% increase on 2018. This was mainly due to a leak that was found and promptly fixed in the plumbing at Napoli Centrale station. Consumption dropped by roughly 12% in 2020 as a result of lower numbers of people in offices and stations during the public health emergency.

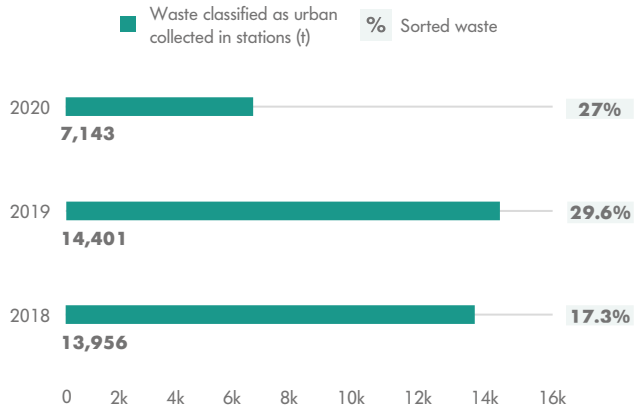
## SPECIAL WASTE




### COMMENTS ON THE TREND

Quantities of waste produced decreased by roughly 63% over the three-year period, dropping 26% in 2019 and 50% in 2020 mainly because of the smaller amount of sludge produced by the septic tank treatment and discharge systems as a result of lower numbers of people in offices and stations during the public health emergency.

## WASTE CLASSIFIED AS URBAN WASTE AT STATIONS




### COMMENTS ON THE TREND

Quantities of waste classified as urban waste at stations remained largely unchanged from 2018 to 2019 but then dropped considerably (by approximately 50%) in 2020 due to lower numbers of people at stations during the public health emergency. The percentage of sorted waste remained more or less unchanged from 2019 to 2020 following an increase on 2018.

## 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**<br>1,300 **$tCO_2$** |  | Work is slated to begin in the second quarter of 2021 and end by the end of the year. |
| | **Feasibility study for the construction of a photovoltaic farm** above the new car park at the Roma Termini station. | 2022 | 1,300 **MWh**<br>400 **$tCO_2$** |  | The study is scheduled to begin in the first quarter of 2021. |
| | **Conversion of the thermal power plant** serving the Genova Principe station **from diesel to natural gas.** | 2022 | 50 **tep**<br>300 **$tCO_2$** |  | |
| | **Energy upgrade and rationalisation** of the thermal power plant and refrigeration units at the Torino Porta Nuova station. | 2020 | 70 **tep**<br>160 **$tCO_2$** | ✓ | |
| | **NEW**<br>Signing a **contract for purchasing guarantee of origin certificates** to certify 100% of energy consumed. | 2020 | 22,000 **$tCO_2$** | ✓ | |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | Maintain **ISO 14001:2015 certification** and extend it t**o all network stations** | 2021 | + prevention and control | | Certification extended to Bologna Centrale, Genova P.Principe and Genova Brignole stations in 2020 and will be extended to Firenze S.M.N., Bari Centrale and Palermo Centrale in 2021. |
| | ***NEW*** **Reducing plastic waste** at the company headquarters by installing water fountains and giving employees water bottles. | 2020 | 900 **kg of waste** | ✓ | |

**KEY**

in progress ✓ completed

CONTINUOUS IMPROVEMENT · RAW MATERIALS CYCLE · ENERGY AND EMISSIONS · WATER CYCLE · LAND

# RFI'S SUBSIDIARIES

## TERMINALI ITALIA

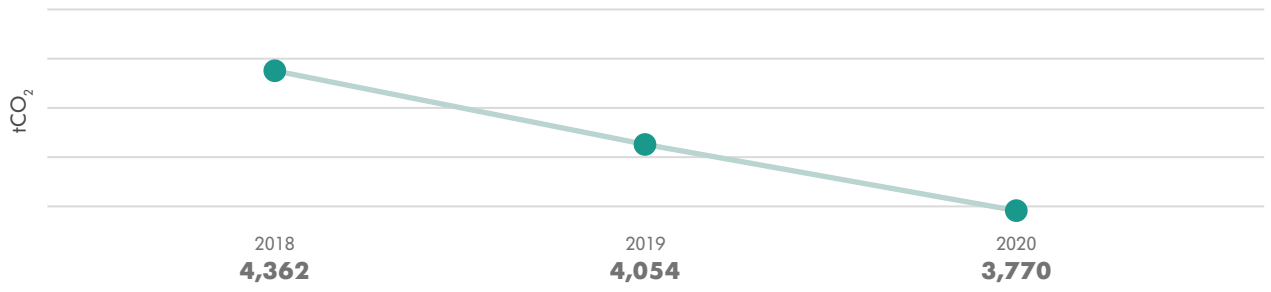
| Final energy consumption | Unit of measure | 2020 | 2019 | 2018* |
|---|---|---|---|---|
| Electricity | MWh | 2,123 | 2,242 | 2,371 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 85% | 84% | 66% |
| Diesel | l | 1,346,266 | 1,458,460 | 1,498,000 |

### COMMENTS ON THE TREND

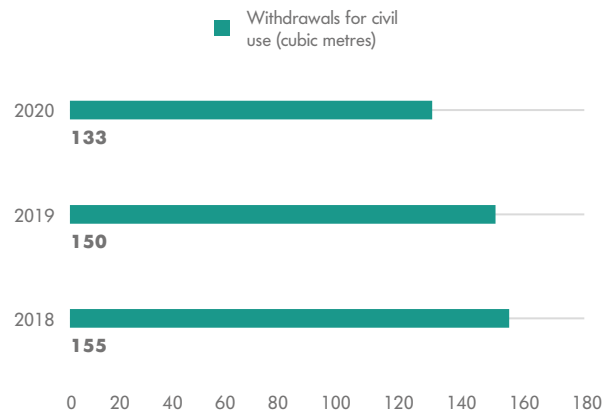
There was a slight decrease in the consumption of electricity for internal use over the three-year period, while the percentage of energy from certified renewable sources remained constant between 2019 and 2020 thanks to the extension of the contract with CVA Trading in 2019 which had led to an 18 percentage point increase on 2018.

Diesel consumption decreased approximately 10% over the three-year period, down roughly 3% from 2018 to 2019 due to the upgrade of the shunting engine fleet, with the new vehicles rolled out in mid-2018, and down approximately 8% from 2019 to 2020 due to lower production during the public health emergency from March to May.

### TOTAL $CO_2$ EMISSIONS (MARKET-BASED)

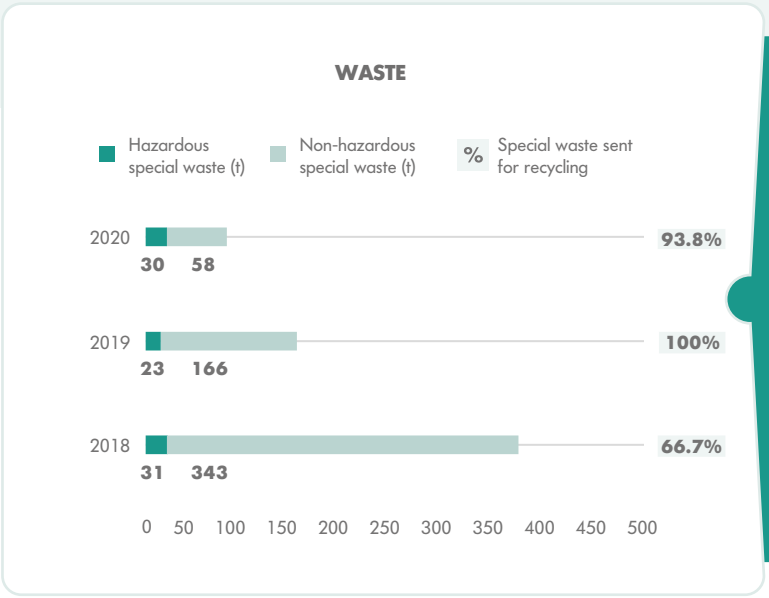



### WATER




### COMMENTS ON THE TREND

The company's water consumption, relating entirely to the Verona terminal, decreased in 2020 mainly attributable to the fire prevention system.




**COMMENTS ON THE TREND**

The considerable drop in overall waste over the three-year period is tied to the reduction in non-routine cleaning operations on sludge tanks, drains and yards, especially in 2018. The reduced cleaning of yards following their resurfacing led to a further decrease in 2020.
The portion of waste sent for recycling remained high (approximately 94%).

## 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 | 56,5 **thousand litres** (fuel)<br>150 **$tCO_2$** | ✓ | **Monitoring of diesel consumption for road and work vehicles showed savings of roughly 282 thousand litres, using 2015 (the year prior to the roll-out of the new cranes) figures as a base point.** |
| | **Upgrade of the shunting engine fleet** in Verona and Bari, equal to 67% of the total. | 2020 | 55 **thousand litres** (fuel<br>146 **$tCO_2$** | ✓ | **Monitoring of diesel consumption for railway traction showed savings of roughly 220 thousand litres, using 2016 (the year prior to the roll-out of the first two shunting engines) figures as a base point.** |

**KEY**

in progress ✓ completed

CONTINUOUS IMPROVEMENT · RAW MATERIALS CYCLE · ENERGY AND EMISSIONS · WATER CYCLE · LAND

# RFI'S SUBSIDIARIES

BLUFERRIES

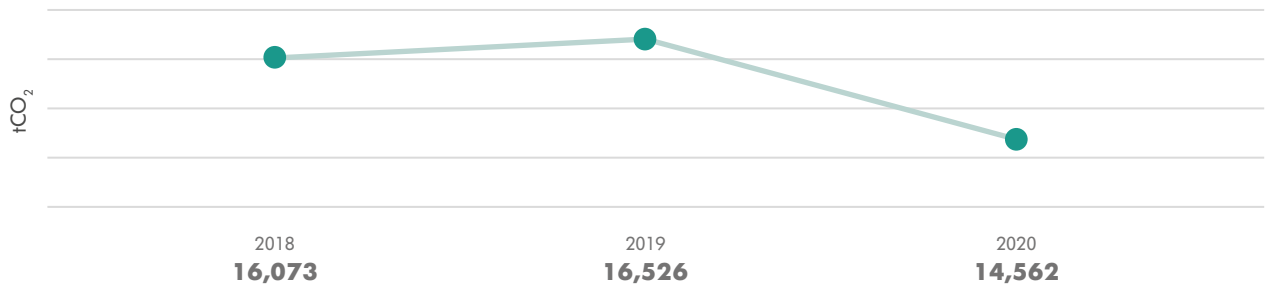
| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Diesel | l | 6,273,743 | 7,120,000 | 6,924,716 |

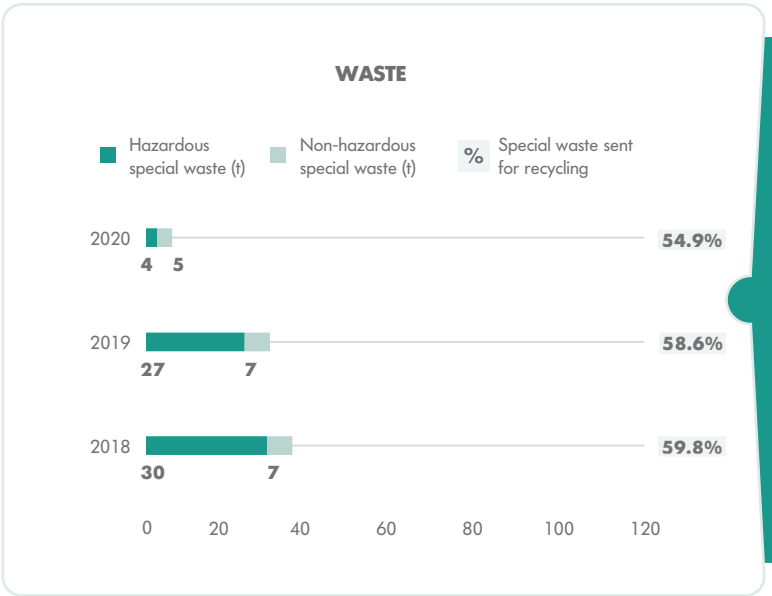
## COMMENTO AL TREND

Nel corso del triennio 2018-2020 il consumo di gasolio registra una riduzione di ~9%, principalmente dovuta alla scissione nel 2018 del ramo d'azienda relativo alla gestione delle unità navali veloci per trasporto marittimo di passeggeri dalla società Bluferries alla società Blu Jet divenuta effettiva a partire dal mese di maggio 2019.

In particolare, nel 2020 si registra una riduzione dei consumi di gasolio di ~12% rispetto al 2019 riconducibile sia alla citata cessione delle unità navali veloci sia a un minor numero di corse effettuate nel primo semestre 2020 a causa dell'emergenza sanitaria, mentre nel 2019 il dato aveva registrato un lieve aumento di ~3% rispetto al 2018 riconducibile all'utilizzo di un'ulteriore nave nel secondo semestre.

## TOTAL $CO_2$ EMISSIONS (MARKET-BASED)




## COMMENTS ON THE TREND

There was an overall approximate 76% decrease in waste over the three-year period. This was chiefly due to the roughly 74% drop in hazardous waste produced in 2020 as a result of outsourcing the disposal of oil used on board boats to the relevant port authorities and less non-routine maintenance carried out on ships during the year.

The portion of waste sent for recycling is roughly 55% and only refers to non-hazardous waste.

## 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)<br>300 **$tCO_2$** | | The boat is currently being built. |
| | **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

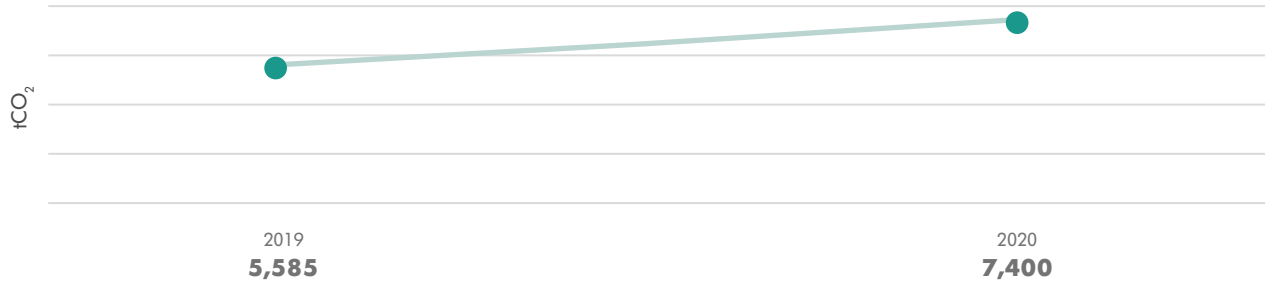
## BLUJET[2]

| Final energy consumption | Unit of measure | 2020 | 2019 |
|---|---|---|---|
| Diesel | l | 3,190,143 | 2,408,000 |

**COMMENTS ON THE TREND**

2020 figures are higher as the company only began operating in May 2019. An analysis of monthly data shows a reduction in consumption in 2020 as the number of passenger journeys were reduced due to mobility restrictions during the public health emergency.

**TOTAL $CO_2$ EMISSIONS (MARKET-BASED)**




[2] 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.

# ITALFERR

## OUR APPROACH

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 refined an approach to developing infrastructure project by enhancing the traditional project engineering method with a new outlook focused on opportunities to generate value in the reference area.

Aware of the decisive role that engineering can play in tangibly contributing to the reduction of $CO_2$ emissions, for several years now, Italferr has voluntarily chosen 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 more sustainable construction materials.

Another step was taken in 2020 towards systematic use of sustainable methodologies in company processes by setting up a $CO_2$ rate table. Thanks to this innovative tool, the Group can apply its methodology for calculating carbon footprint to all projects. It creates an inventory of the $CO_2$ emissions linked to the materials, transport and processing used in the construction of infrastructural works on the basis of price items used in developing projects. The $CO_2$ rate table was ISO 14064 certified by the certification body SGS after its audit of the Venice airport railway connection project during the year.

In addition, the company's carbon footprint was also a factor in quantifying the $CO_2$ emissions from its processes and operations, in accordance with UNI EN ISO 14064:2012 and ISO/TR 14069:2013 standards, with the aim of identifying opportunities to boost efficiency at the company's sites.

As part of integrating sustainability into the design of infrastructure, implementing new models and tools aimed at boosting stakeholder engagement is particularly important. Accordingly, the company worked on structuring a stakeholder engagement process in 2020 to create a broad support network throughout the regions touched by infrastructure projects. This engagement process helps identify stakeholder expectations and needs, pinpointing opportunities for development in the regions which can be used to steer new project exploration and get a full picture of the project. A broader analysis not simply focused on technical aspects helps understand the role of infrastructure as an active player in the modelling of landscape, the redevelopment of land and the creation of new economic and social dynamics.

Specific sustainability studies and analyses were developed using indicators chosen based on Italferr's stakeholder engagement guidelines to enhance the benefits offered by infrastructure projects and their capacity to create value in terms of economic, environmental, social and tourist development of the regions.

In addition, Italferr developed a specific sentiment analysis platform which enables social media monitoring of strategic infrastructure projects. The platform allows active listening to help gauge opinions. It processes huge quantities of data gathered from online texts (websites, social networks, blogs or forums) and provides an insight into perceptions on key issues of interest to stakeholders.

Environmental planning plays a crucial role for improving the way the works interact with the local area and people. The company carries out specialised studies to check the projects' impacts on the environment and landscape and, more in general, to assess the direct and indirect effects that the construction of infrastructures could have. Furthermore, Italferr develops specific plans to identify material aspects related to processing at sites, mitigation measures and monitoring to ensure proper control over the construction of works.

The 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, an environmental management system for the site activities that provides 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.

This system requires 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.

The environmental management system is part of the integrated quality, environment and occupational health and safety management system (ISO 9001, ISO 14001 and ISO 45001), also audited in 2020 by the certification body SGS which confirmed the company's certifications.

ISO 14064.1 certification of the company's methodology for calculating carbon footprint and $CO_2$ rate table was also confirmed by the competent third-party body in December 2020.

In accordance with the FS Italiane Group's sustainability governance model issued with Group measure no. 268/AD of 30 May 2019, Italferr began building its own materiality matrix during the year. This tool highlights the issues most impacted by the company so that it can define future goals and effectively steer its sustainability strategies. The materiality analysis engaged stakeholders on issues deemed priority for Italferr in promoting an inclusive, sustainable development model and, as a result, identified the material issues.

The recent European Green Deal - the manifest of the new Europe envisaged by the President of the European Commission Ursula Von der Leyen - 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.

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 2,321 | 2,266 | 2,311 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 14% | 10% | 0% |
| Diesel | l | 116,025 | 142,884 | 123,471 |
| Natural gas | $Sm^3$ | 20,584 | 23,002 | 25,607 |

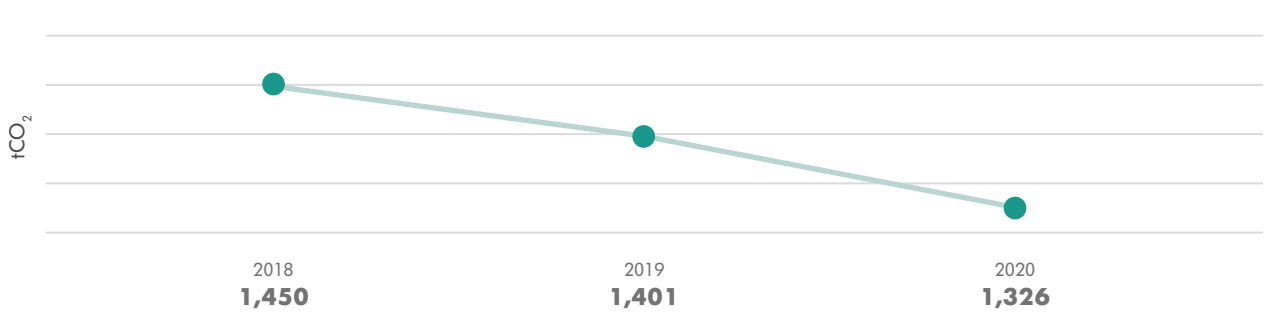
## COMMENTS ON THE TREND

An analysis of energy consumption shows a slight rise in electricity consumption in 2020 following the opening of three new offices in Genoa, Naples and Bari. However, the increase in consumption as a result of these new openings was partially offset by lower electricity consumed due to employees working from home during the public health emergency.

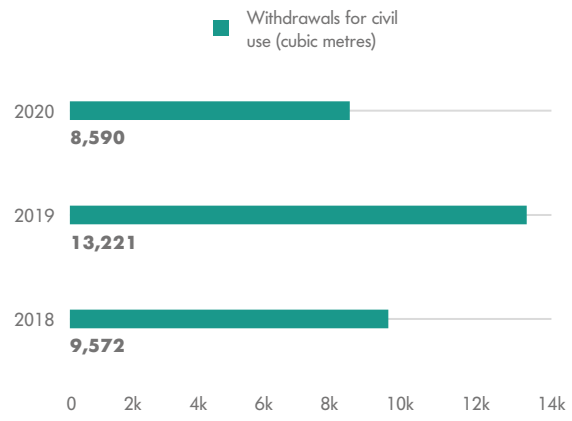
There was a rise in the percentage of electricity from certified renewable sources.

Diesel consumed for company cars decreased as cars were used less during the public health emergency and also as some company cars were replaced with petrol and natural gas fuelled vehicles. However, the reduction in diesel consumption was not particularly significant as site personnel used company cars to a greater extent in 2020 due to restrictions to train travel during the public health emergency.

## TOTAL $CO_2$ EMISSIONS (MARKET-BASED)



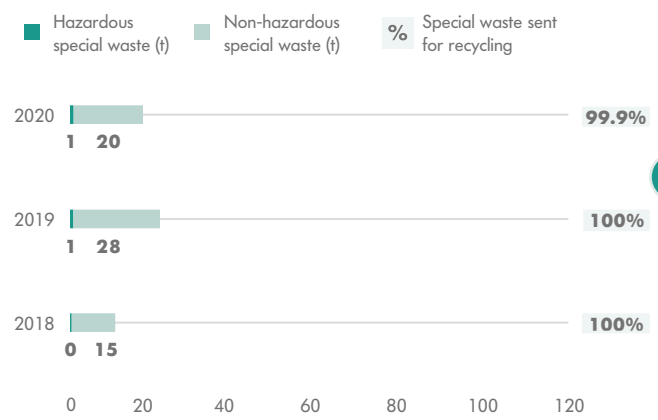
## WATER




### COMMENTS ON THE TREND

Less water was consumed in 2020 due to employees working from home during the public health emergency.

## WASTE




### COMMENTS ON THE TREND

Figures remained essentially unchanged. The reduction in non-hazardous special waste is a result of less waste produced from transfers and optimised office spaces.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
|  | **Purchase of energy from certified 100% renewable sources** for all utilities at Italferr sites. | 2020 | + clean energy | ✓ | |
| | **Replacement of the refrigeration units** used for air conditioning with energy-efficient machines. | 2021 | - $CO_2$ | | Ferservizi was entrusted with replacing the refrigeration units, solely at the site in Via Galati 71, Rome. It begun the process of procuring the new units which it expects to complete by the end of 2021. |
| | **Installation of a photovoltaic plant** at the Rome site. | 2021 | - $CO_2$ | | The executive design process is under way. |
|  | **Installation of water distribution machines** at all operating sites. | 2020 | - 200 thousand **plastic bottles (0.5-litre)/year** | | |
| | ***NEW*** **Replacement of the plastic cups** used in coffee machines **with paper cups.** | 2021 | - plastic | | |
|  | **Sustainability analyses and study of projects to improve local areas, making them more attractive to tourists, to effectively manage the stakeholder engagement process** | Ongoing | + control<br>+ positive external factors | ✓ | |
|  | **Implementation of guidelines for sustainable water management** at work sites and during operations, with respect to recycling/reuse. | 2020 | - consumption of water | ✓ | |
| | **Water consumption of third-party utilities** is now separated at all sites assigned by RFI with specific meters for each user other than RFI. | 2020 | 20.000 **$m^3$ of water** | ✓ | |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | Setting up a **summary dashboard** on the SIGMAP portal for checking **RFI's national water consumption.** | 2020 | - consumption of water | ✔ | The water dashboard provides overviews on data that allow the **relevant parties use and share key information.** It also highlights consumption trends and **swiftly detects irregularities**, such as leaks or faults, thus avoiding needless costs or water wastage. |
| | **Pilot project for installing a digital model of the subservices** at Pomezia station. | 2020 | + efficiency | ✔ | Digitalisation of networks and plants enables, inter alia:<br>1. improving management and maintenance of the assets;<br>2. optimising use of raw materials;<br>3. cutting the time required to acquire databases for new projects;<br>4. managing authorisation deadlines. |

**KEY**

in progress ✔ completed

CONTINUOUS IMPROVEMENT | RAW MATERIALS CYCLE | ENERGY AND EMISSIONS | WATER CYCLE | LAND

# 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 | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 2,574 | 3,192 | 3,592 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 100% | 100% | 100% |
| Self-produced and consumed solar energy | MWh | 54 | 25 | 25 |
| Diesel | l | 124,992 | 138,293 | 132,752 |
| Natural gas | $Sm_3$ | 217,836 | 330,601 | 404,215 |

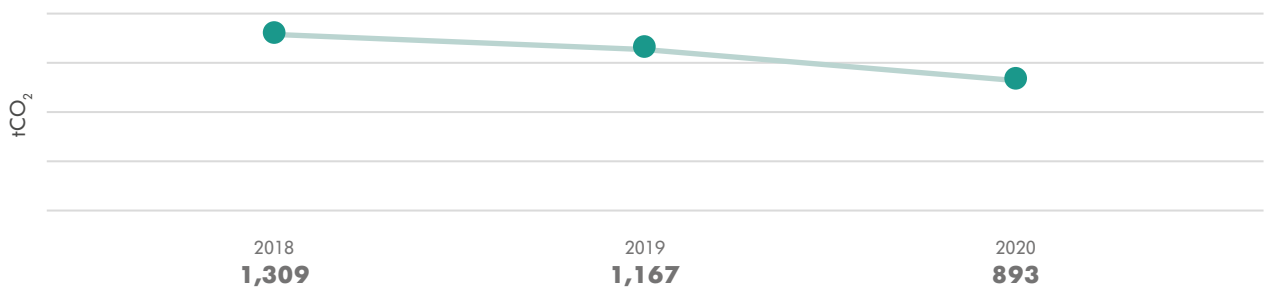
## COMMENTS ON THE TREND

Electricity, diesel and natural gas consumption decreased overall due to spaces (storage facilities, Ferrotels (railway hotels) and offices) being used less during lockdown and employees working from home as an emergency measure due to the pandemic.

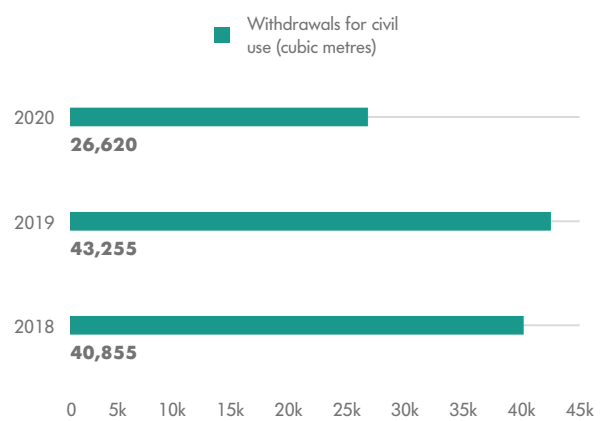
Specifically, reduced diesel consumption was also due to lower usage of company cars for work travel, again as a result of the epidemiological emergency and the closure of the Como Ferrotel whose heating system was fuelled by diesel. In addition to the public health emergency, reduced natural gas consumption was also caused by the closure of the Milan and Turin Ferrotels, in November and May 2019 respectively, whose heating systems were fuelled by natural gas.

The increase in self-produced electricity is due to the photovoltaic plants in Trieste, Reggio Calabria and Naples becoming operational as per the ten-year plan to improve energy efficiency.

## TOTAL $CO_2$ EMISSIONS (MARKET-BASED)




## WATER




## COMMENTS ON THE TREND

Water consumption decreased due to spaces (storage facilities, Ferrotels and offices) being used less during lockdown and employees working from home as an emergency measure due to the pandemic as well as the closure of the Ferrotels in Como (2020), Turin and Milan (2019).


**COMMENTS ON THE TREND**

Waste production decreased due to spaces (storage facilities, Ferrotels and offices) being used less during lockdown and employees working from home as an emergency measure due to the pandemic as well as the closure of the Ferrotels in Como (2020), Turin and Milan (2019).

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **Plans to build photovoltaic plants of 6-20 kWp** at the local Venezia Mestre and Rome sites and the Verona and Foligno storage facilities for a total of 61 kWp. | 2021 | 13,1 **tep** approximately 25 **$tCO_2$** | | |
| | A photovoltaic plant was built on the roof of the Bari site (20 kWp) and the Ferrotels in Ancona, Chiusi and Porta Maggiore (two floors) transitioned to LED lighting. | 2020 | 10,2 **tep** circa 19 **$tCO_2$** | ✓ | |
| | **Supplier audit activities:** extension of activities to hotels and canteens. | 2021 | + quality | | |
| | **Activities to maintain** ISO 9001, ISO 45001 and ISO 14001 **certification of the integrated system in 2021.** | 2021 | + culture | | |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | Updating of system tools: integrated system policy, integration of the quality system with the environment and safety systems, reviewing IT environments, KPI reporting and review methods, streamlining checklists. | 2021 | + quality | | |
| | **Stakeholder engagement process:** materiality analysis, widening scope of self-assessment questionnaires to suppliers, mapping services and identifying material issues in achieving sustainability goals. | 2021 | + dialogue | | |
| | **Employee engagement actions:** training/information sessions to update on legislation and spread awareness of safety and environmental issues. | 2021 | + culture | | |
| | **Periodic information to employees** on salient management system activities to explain how it functions for the **consolidation of shared awareness.** | 2020 | + culture | | |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **Sending self-assessment questionnaires on environmental sustainability** to all suppliers with a significant impact on 2020 revenue. | 2020 | + quality<br>+ culture | ✓ | |
| | **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 and worker health and safety systems and certifying its environmental management system to establish the integrated management of business processes in accordance with the requirements of major international standards.

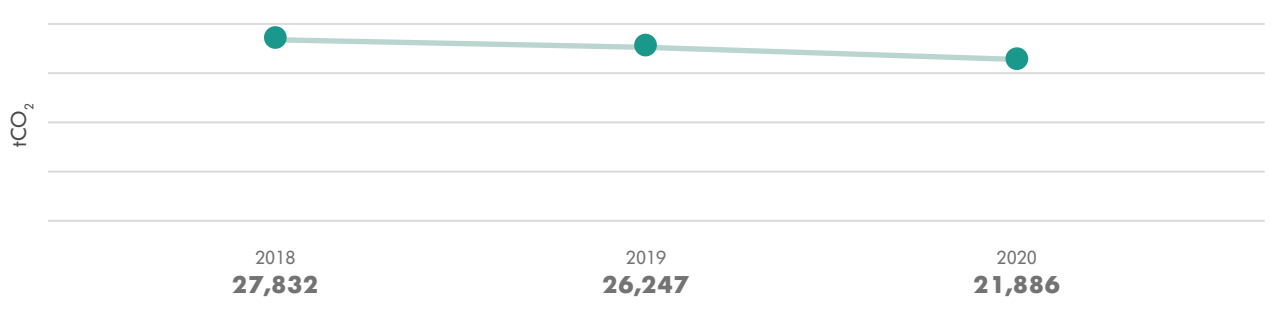
| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity for railway traction | MWh | 1,271 | 566 | 0 |
| Electricity for other uses | MWh | 4,035 | 4,416 | 4,481 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 100% | 100% | 98% |
| Diesel | l | 7,957,754 | 9,722,983 | 10,385,717 |
| Natural gas | $Sm^3$ | 37,144 | 42,015 | 50,114 |

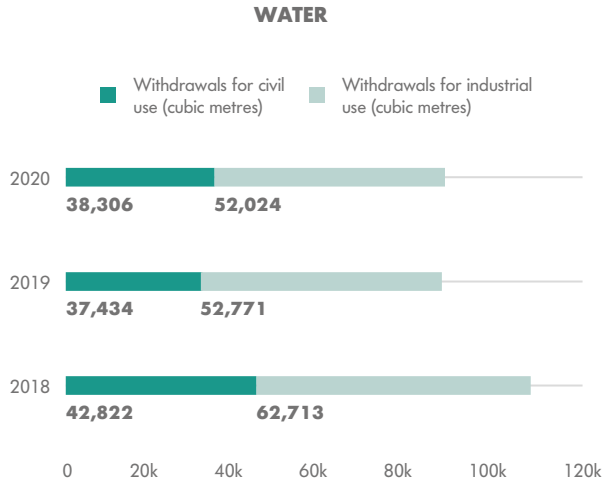
### COMMENTS ON THE TREND

The consumption of electricity for railway traction increased in 2020 due to the gradual rise in railway production using electric trains on the previous year.

Diesel consumption dropped as a result of the lower volume of operations fuelled by diesel following the electrification of part of the overall railway service along with the 5% reduction of road passenger transport service during the public health emergency.

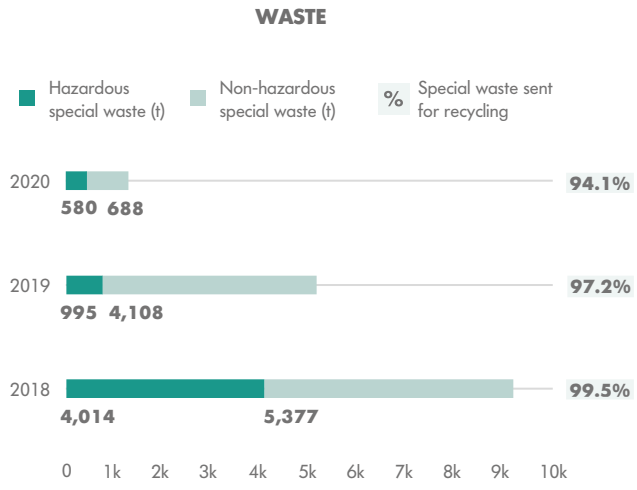
### TOTAL $CO_2$ EMISSIONS (MARKET-BASED)






**COMMENTS ON THE TREND**

Water consumption at company offices, stations and industrial sites remained basically unchanged.




**COMMENTS ON THE TREND**

The production of special waste is chiefly linked to superstructure material deriving from the upgrade of FSE's railway infrastructure. Less upgrade work was carried out in 2020 compared to previous years.

## 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 | + electrification | | In September 2019, **the first five ETRs began operating on the Bari-Putignano line**. Another six ETRs will be purchased and delivered in 2020 and 2021, with the roll-out of another four electric trains slated for 2022 and 2023. |
| | Electrification of the following railway lines: Martina Franca - Lecce, Maglie - Otranto, Zollino - Gagliano and the Lecce - Zollino section. | 2023 | - $CO_2$ | | The overall project provides for the electrification of 186 km lines from Martina Franca to Gagliano del Capo. The goal is to raise the environmental standards and reduce $CO_2$ emissions. |
| | **New Euro 6 buses** to upgrade the fleet. | 2021 | + technology<br>- $CO_2$ | | 52 new buses will be purchased to continue the technological upgrade of the fleet.<br>The purpose of the fleet upgrade and thorough actions taken on service maintenance and production processes is to improve service satisfaction levels. |
| | **Strengthening the railway superstructure on the Bari - Taranto line, replacing wood sleepers** on the line with concrete sleepers, activating the train speed control system (TSCS). | 2022 | + safety | | Infrastructure upgrading to bring the line up to RFI standards and in line with the technical specifications of European interoperability. |
| | Continue with the **certification of the ISO 14001 environmental management system.** | 2021 | + culture | | |

**KEY**

in progress

completed

CONTINUOUS IMPROVEMENT

RAW MATERIALS CYCLE

ENERGY AND EMISSIONS

WATER CYCLE

LAND

# ANAS

## 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.

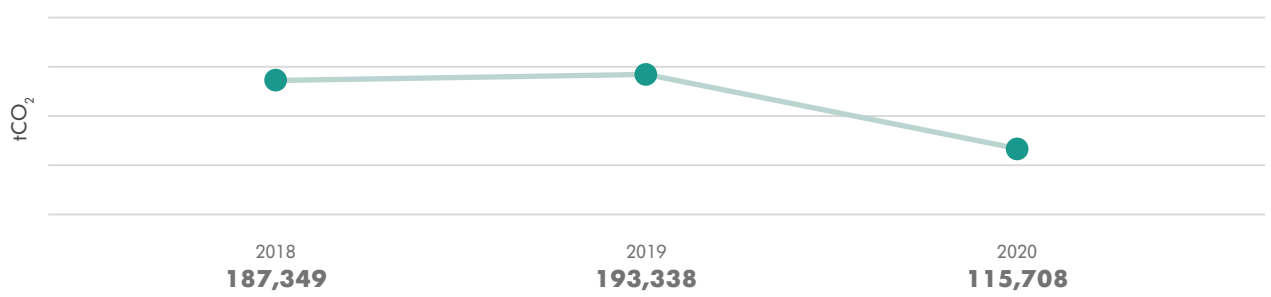
By continuously improving its environmental performance, Anas recognises that it achieves significant advantages, minimising all the adverse environmental impacts of its activities wherever feasible and economically sustainable.

| Final energy consumption and emissions | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity to light roads and tunnels | MWh | 351,631 | 366,666 | 367,783 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 40% | 0% | 0% |
| Electricity for other uses | MWh | 12,180 | 11,627 | 11,796 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 44% | 1% | 3% |
| Diesel | l | 3,643,474 | 4,512,455 | 3,732,318 |
| Natural gas | $Sm_3$ | 497,510 | 450,658 | 413,237 |

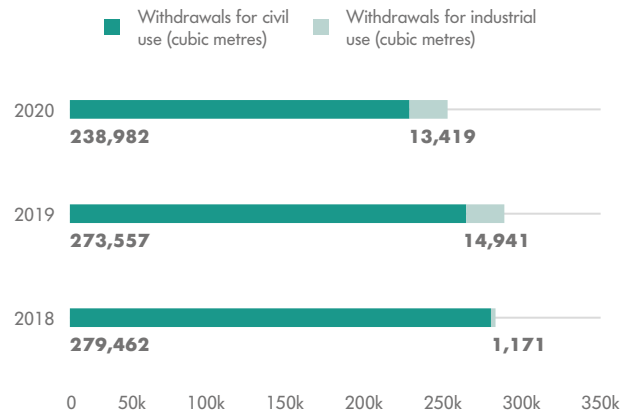
**COMMENTS ON THE TREND**

Diesel consumption fell roughly 20% as company cars were used less during the lockdown imposed due to the public health emergency. There was an increase in natural gas consumption mainly due to new utilities contracts activated. Electricity consumption was more or less in line with the previous year, with a higher percentage from certified renewable sources. Indeed, Anas has been purchasing green energy under the Consip agreement since August 2020.

## TOTAL $CO_2$ EMISSIONS (MARKET-BASED)



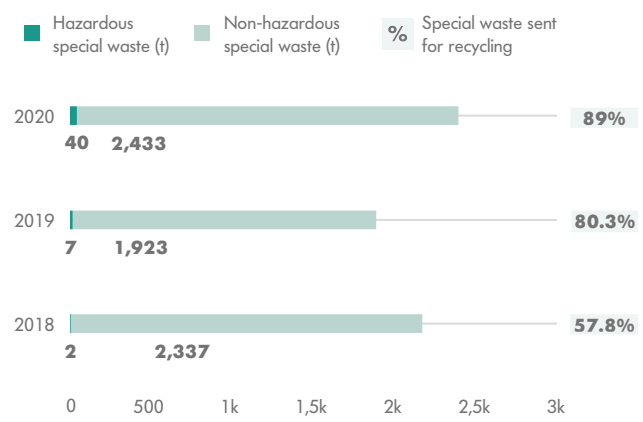

## WATER




### COMMENTS ON THE TREND

Low employee attendance at offices during the public health emergency led to reduced water withdrawn for civil use compared to 2019. Reduced water consumption for industrial use is particularly attributable to company cars being washed less.

## WASTE




### COMMENTS ON THE TREND

The increase in both hazardous and non-hazardous special waste is due to non-routine disposal of materials at the workshops and car parks of some local sites.

## 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:<br>› **10 photovoltaic plants at refuelling stations** with capacity of 19.950 kW;<br>› **10 solar thermal plants** to heat water for the workers' toilets;<br>› **LED light bulbs** for the refuelling area, the yard, the shelter and the sales room;<br>› **air conditioning system** for all rooms in the buildings, **powered by high-efficiency, low-energy absorption heat pumps.** | 2028 | - $CO_2$<br>+ clean energy<br>+ customer satisfaction |  | |
| | **Project to improve the energy efficiency of Anas sites:**<br>› **Insulating** walls, floors and roofs;<br>› **Installing solar panels;**<br>› **Relighting;**<br>› **Implementing smart systems;**<br>› **Replacing systems and devices** with energy-saving technology for heating, water heating, air-conditioning and mechanical ventilation;<br>› **Replacing windows and fixtures.** | 2024 | 17,054 **MWh**<br>3,721 **$tCO_2$** |  | |
| | **Green light project: maintenance of tunnel lighting systems** by replacing obsolete lighting devices **with last-generation LEDs.** | 2021 | 22,700 **MWh**<br>6,466 **$tCO_2$** |  | |
| | ***NEW***<br>**Purchasing green energy** for the company's entire energy consumption, which is equal to 380 GWh per year, for lighting roads and tunnels and for other uses. | 2021 | over 100,000 **$tCO_2$** |  | |

| Scope | Description | Deadline | Average annual savings/targets | Status | Notes |
|---|---|---|---|---|---|
| | **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 and noise | | |
| | **Project to recycle recovered asphalt concrete (milled)** to produce new concrete. | 2026 | - raw materials | | |
| | **"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. | 2021 | - noise | | |
| | **Plastic Free**: project to install water fountains at all General Department offices and provide personnel with insulated water bottles is under development. | 2023 | + customer satisfaction<br>- plastic | | |

**KEY**

in progress

completed

CONTINUOUS IMPROVEMENT

RAW MATERIALS CYCLE

ENERGY AND EMISSIONS

WATER CYCLE

LAND

# BUSITALIA SITA - NORD

## OUR APPROACH

The **sustainability policy** adopted by the sub-holding Busitalia (Busitalia - Sita Nord and its subsidiaries) in January 2021 sets out the principles to be pursued to manage impacts responsibly in line with FS Italiane Group strategies in a management system covering all operating sites.

Busitalia's **sustainable action** is broken down into seven commitments including passenger safety, contributing to more inclusive, resilient and sustainable cities, improving air quality and environmental performance, developing quality infrastructure, listening to the local community and enhancing employees.

Specifically, Busitalia channels its commitment into **fighting climate change**, upgrading to a more environmentally-friendly fleet, promoting **efficient use** of energy resources and **sustainable management** of water resources, carrying out energy saving upgrades and procuring energy from renewable sources.

This report is a way of communicating with the communities served by Busitalia, as an integral part of the strategy developed by the FS Italiane Group.

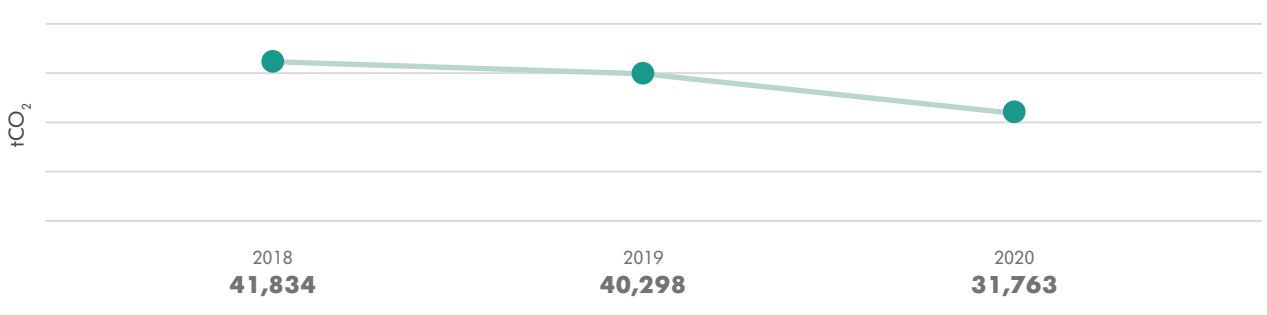
| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 6,598 | 6,527 | 7,606 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 100% | 100% | 87% |
| Diesel | l | 10,712,244 | 13,390,732 | 13,161,107 |
| Natural gas | $Sm_3$ | 1,671,367 | 2,382,410 | 3,244,514 |

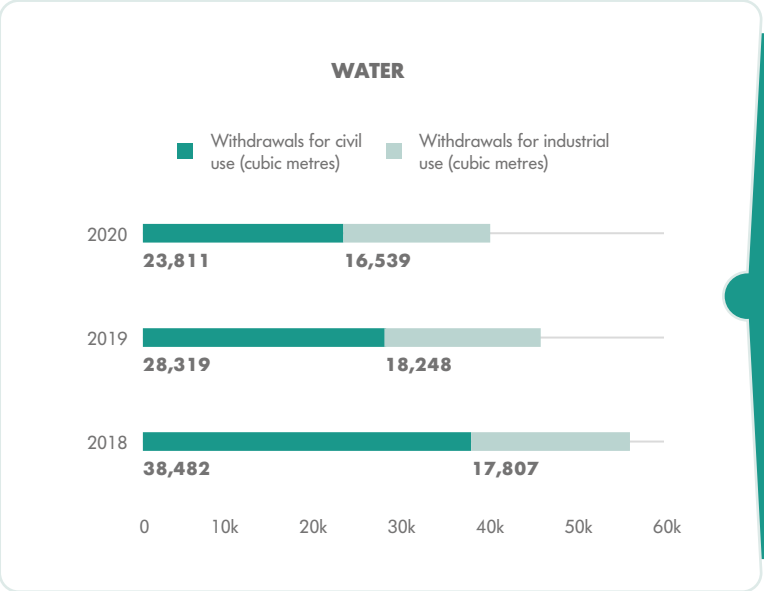
**COMMENTS ON THE TREND**

Electricity consumption remained essentially unchanged in 2020 compared to the previous year. All electricity was certified with guarantees of origin once again in 2020 since Busitalia - Sita Nord signed a master agreement in 2018 for the supply of electricity from 100% renewable sources.

The decrease in diesel and natural gas consumption in 2020 was due to the services being reduced during the public health emergency.

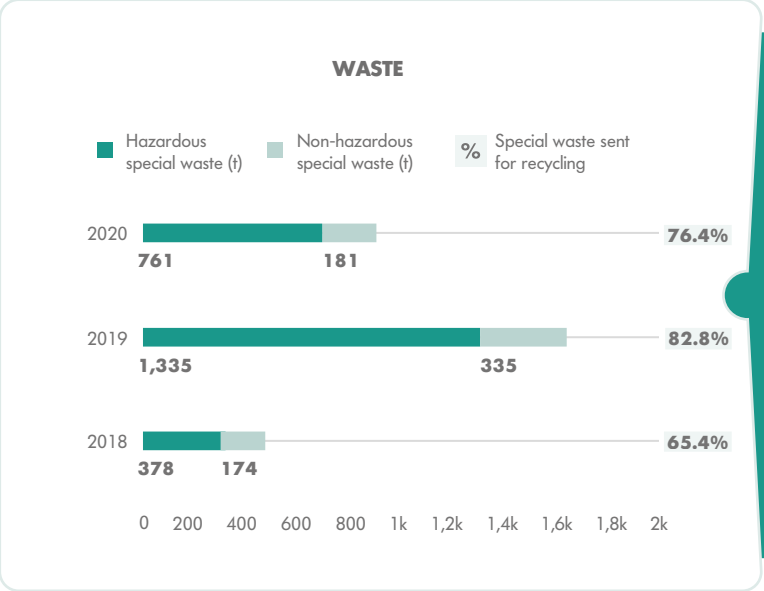
**TOTAL $CO_2$ EMISSIONS (MARKET-BASED)**






**COMMENTS ON THE TREND**

The decrease in the consumption of water for civil use at the Umbria and Tuscany regional divisions in 2020 was basically due to employees working from home which led to less usage of company bathrooms, canteens and bars. The decrease in the consumption of water for industrial use is tied to reduced local public transport services during the March-September period due to the public health emergency.




**COMMENTS ON THE TREND**

In 2019, the Umbria regional division rolled out an extraordinary plan to scrap buses that had been stored at depots for some time. They were all sent for recycling (hazardous waste) along with obsolete metal equipment (non-hazardous waste).
With regard to hazardous waste at the Tuscany regional division, less vehicles were scrapped in 2020 than in the previous year. Overall, the reduced services were provided using a more recent fleet which required less maintenance and thus generated less non-hazardous waste.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **38 buses with Euro 6 engines were added to the vehicle fleet** to replace old-generation vehicles. **Another 51 old-generation buses will be replaced** by 2021. | 2021 | 258 **thousand litres** (fuel)<br>664 **$tCO_2$** | | |

| 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** (fuel)<br>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

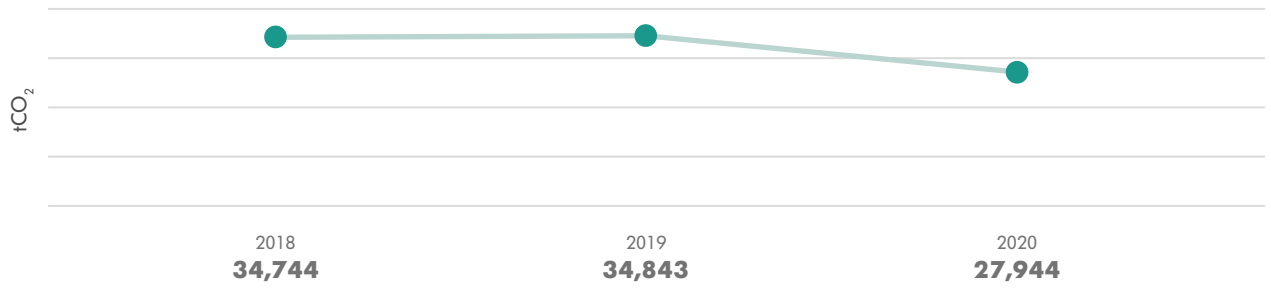
## BUSITALIA VENETO

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 6,135 | 7,174 | 6,896 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 0% | 0% | 0% |
| Diesel | l | 7,519,963 | 9,386,584 | 9,195,369 |
| Natural gas | $Sm^3$ | 2,523,875 | 3,268,867 | 3,579,179 |

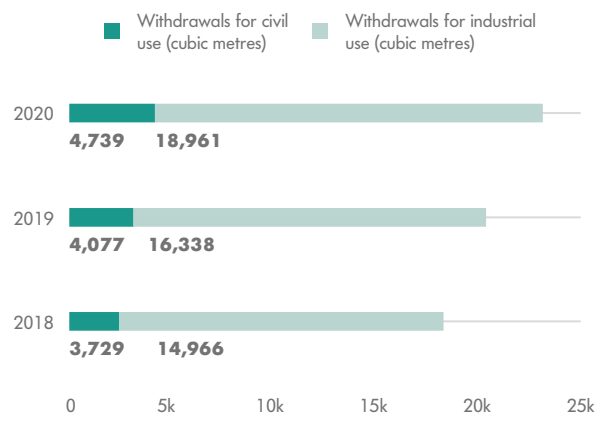
### COMMENTS ON THE TREND

Electricity, diesel and natural gas consumption decreased in 2020 mainly as a result of services being reduced during the public health emergency.

### TOTAL $CO_2$ EMISSIONS (MARKET-BASED)




### WATER




### COMMENTS ON THE TREND

There was an overall decrease in water withdrawals for civil and industrial use in 2020 (-20% on 2019). However, some hidden leaks - which were fixed during the year - meant both types of consumption figures increased.


**COMMENTS ON THE TREND**

Busitalia Veneto produced lower quantities of hazardous and non-hazardous special waste in 2020 due to a lower number of buses scrapped either as hazardous or non-hazardous special waste.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **Addition of 17 new low-emissions buses** - with Euro 6 (5 diesel and 11 compressed natural gas buses) or zero-emissions engines (one electric bus). | 2020 | 160 $tCO_2$ | ✓ | 14 buses were sent to Padua and three to Rovigo. |

**KEY**

in progress ✓ completed

CONTINUOUS IMPROVEMENT · RAW MATERIALS CYCLE · ENERGY AND EMISSIONS · WATER CYCLE · LAND

# BUSITALIA - SITA NORD'S SUBSIDIARIES

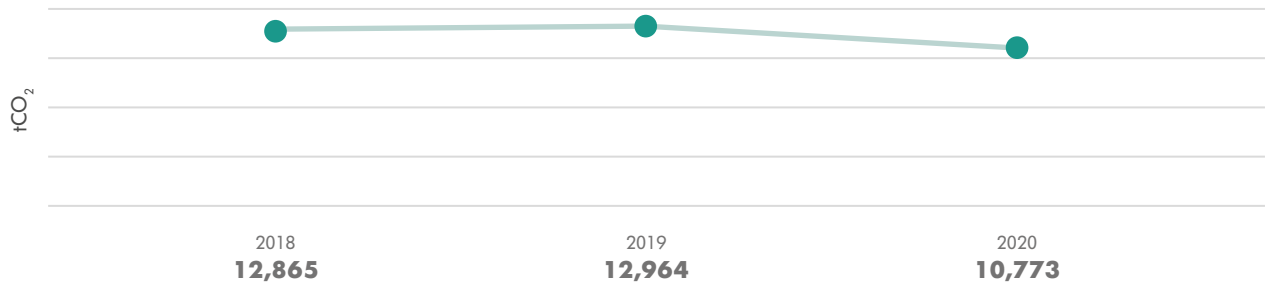
## BUSITALIA CAMPANIA

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 601 | 642 | 726 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 100% | 100% | 61% |
| Diesel | l | 3,554,352 | 4,199,715 | 4,071,485 |
| Natural gas | $Sm^3$ | 670,281 | 908,226 | 963,908 |

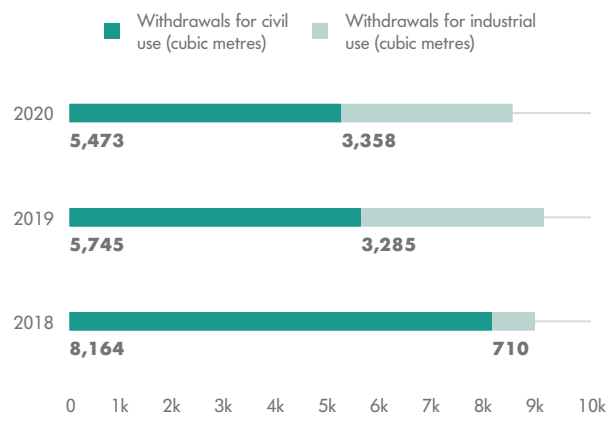
### COMMENTS ON THE TREND

There was a decrease in diesel and natural gas consumption in 2020 as a result of services being reduced during the public health emergency. In addition, new Euro 6 diesel buses entered circulation between 2019 and 2020, thus contributing to the drop in consumption.

### TOTAL $CO_2$ EMISSIONS (MARKET-BASED)

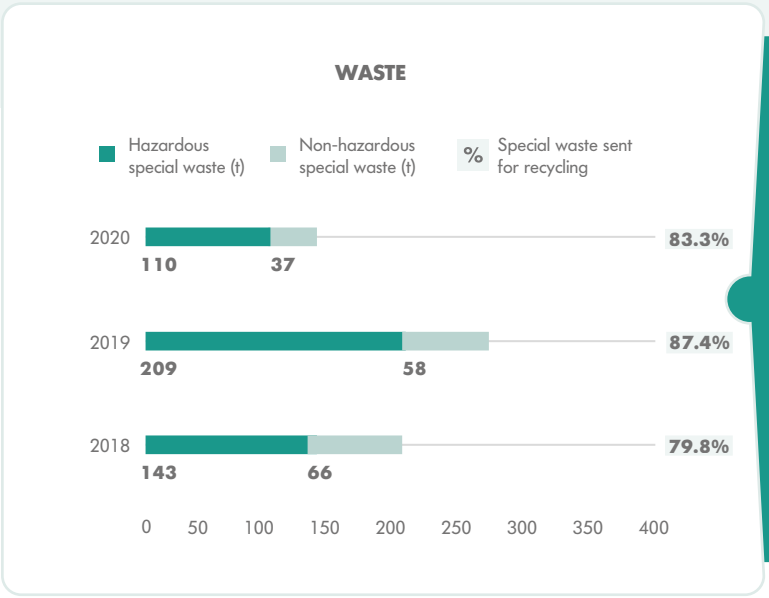



### WATER




### COMMENTS ON THE TREND

The measures implemented to handle the COVID-19 emergency, especially working from home and the bilateral fund, reduced employee presence at company sites, thus cutting the consumption of water for civil use. Withdrawals for industrial use were in line with 2019, with consumption down due to the shutdown of a washing unit that was being upgraded.




**COMMENTS ON THE TREND**

The decrease in special waste is linked to reduced internal maintenance activities carried out on the rolling stock fleet due to reduced services during the COVID-19 emergency and the increase in external maintenance.

## 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** (fuel)<br>330 **t$CO_2$** | | **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) were rolled out in 2020. |
| | **Replacement of 42 buses with new,** higher environmental performance models (Euro 6 engines). | 2021 | 68 **thousand litres** (fuel)<br>205 **t$CO_2$** | | |

**KEY**

in progress

completed

CONTINUOUS IMPROVEMENT

RAW MATERIALS CYCLE

ENERGY AND EMISSIONS

WATER CYCLE

LAND

# BUSITALIA - SITA NORD'S SUBSIDIARIES

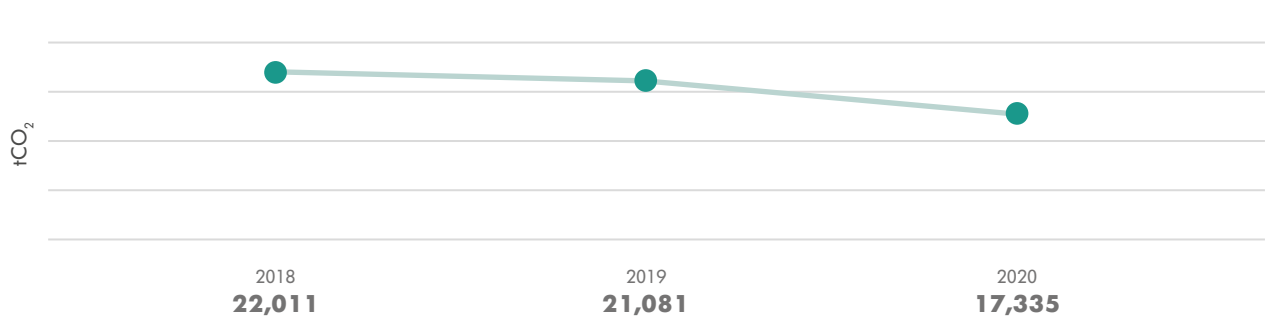
ATAF GESTIONI

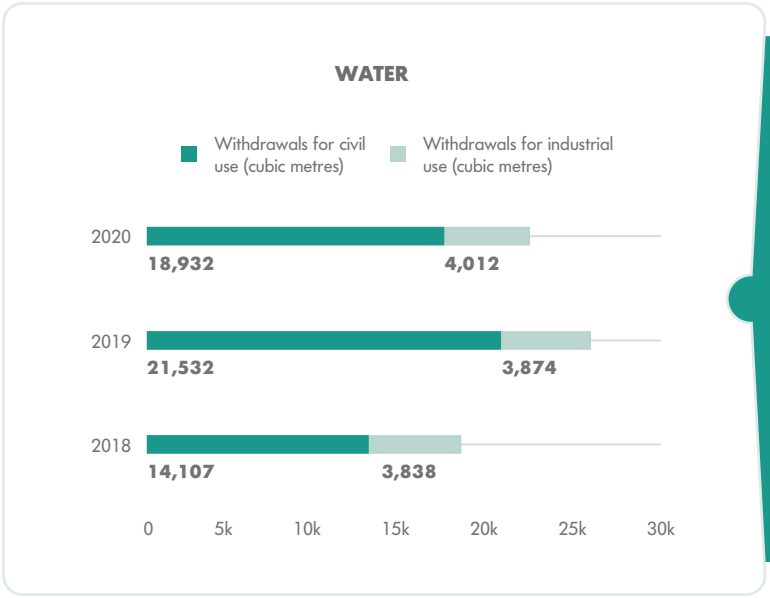
| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 1,796 | 2,250 | 2,894 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 100% | 100% | 94% |
| Diesel | l | 6,112,960 | 7,162,507 | 6,531,063 |
| Natural gas | $Sm^3$ | 545,939 | 1,027,116 | 2,299,629 |

**COMMENTS ON THE TREND**

The decrease in electricity volumes is mainly due to lower consumption at offices while employees were working from home during the public health emergency. Diesel and natural gas consumption also decreased significantly due to the reduction of the road passenger transport service during the public health emergency.

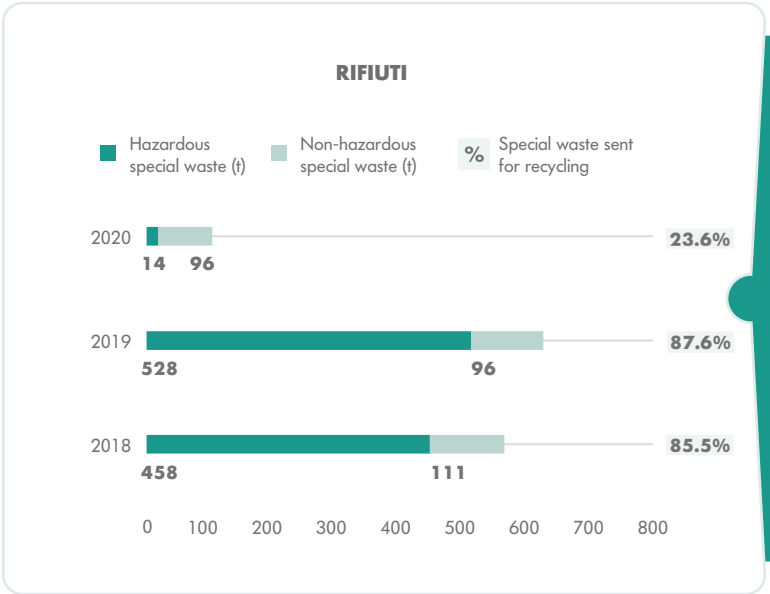
**TOTAL $CO_2$ EMISSIONS (MARKET-BASED)**






**COMMENTS ON THE TREND**

The decrease on 2019 is attributable to the lower employee presence and reduced services due to COVID-19. Consumption for industrial use would also be lower but for a leak that was only detected at the end of the year, thus slightly increasing volumes.




**COMMENTS ON THE TREND**

The drop in 2020 is attributable to the reduction of hazardous special waste as no vehicles were scrapped during the year.

# BUSITALIA - SITA NORD'S SUBSIDIARIES

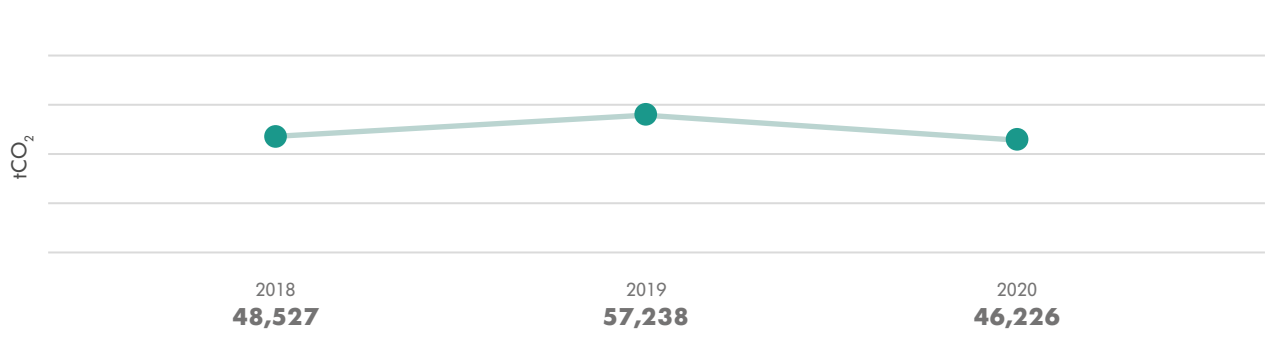
QBUZZ

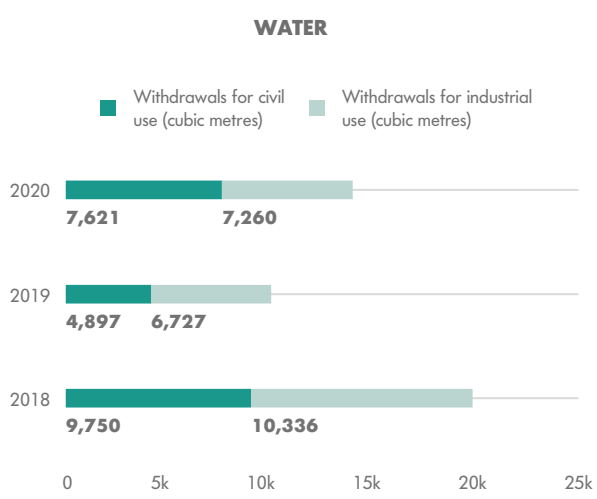
| Final energy consumption and emissions | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 28,325 | 17,358 | 4,032 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 100% | 100% | 100% |
| Self-produced and consumed solar energy | MWh | 40 | 64 | 14 |
| Diesel | l | 17,253,938 | 21,365,298 | 18,121,559 |
| Natural gas | $Sm^3$ | 70,451 | 127,427 | 112,250 |

## COMMENTS ON THE TREND

Following the roll-out of numerous electric buses into the fleet, electricity consumption jumped considerably and diesel consumption dropped. Overall energy consumption rose due to the strengthening of the fleet with a larger number of buses in 2020 compared to 2019.

## TOTAL $CO_2$ EMISSIONS (MARKET-BASED)






**COMMENTS ON THE TREND**

The company expanded its operations at the end of 2019 by acquiring new buildings and a new vehicle washing unit which led to an increase in water consumption for both civil and industrial use in 2020.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | Roll-out of 20 **hydrogen buses** into the vehicle fleet in Groningen. | 2021 | 448 **thousand litres** (fuel)<br>1,375 **$tCO_2$** | | |
| | Roll-out of **35 fully-electric articulated buses** into the vehicle fleet in Utrecht. | 2021 | 784 **thousand litres** (fuel)<br>2,406 **$tCO_2$** | | |
| | Roll-out of **10 hydrogen buses** into the vehicle fleet **in Emmen**. | 2022 | 224 **thousand litres** (fuel)<br>687 **$tCO_2$** | | |

**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.

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 Roma San Lorenzo site, which contributes to achieving the pollution prevention goal by using alternative sources of energy, thus 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 core fields of its business and that of the Mercitalia hub.

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity | MWh | 2,045 | 2,726 | 2,956 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 69% | 71% | 78% |
| Diesel | l | 1,073 | 2,744 | 4,556 |
| Natural gas | $Sm^3$ | 20,998 | 23,852 | 31,092 |

**COMMENTS ON THE TREND**

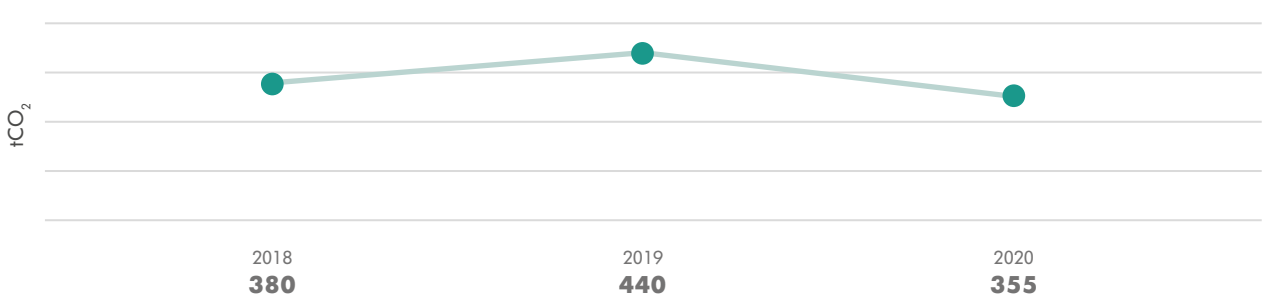
Consumption of electricity for uses other than railway traction was down at all local Mercitalia Logistics sites in 2020 due to working from home being extended to all company employees during the public health emergency.

The use of electricity produced by renewable sources (guarantee of origin) since 2018 has helped strengthen the company's commitment to sustainability issues.

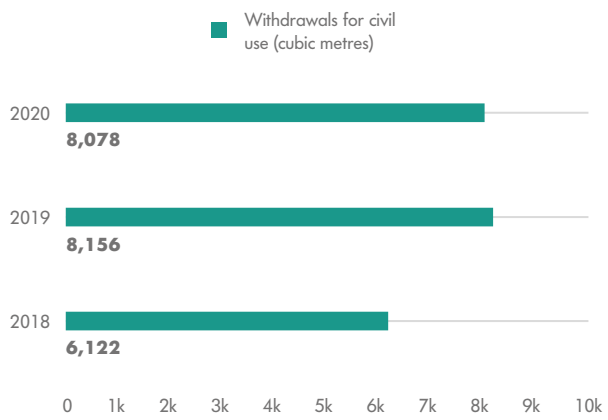
Total diesel consumption decreased from 2018 to 2019 due to the upgrade of the company car fleet, with three petrol/electric hybrid cars replacing three diesel cars. Diesel consumption decreased further in 2020 due to lower usage of company cars as on-site operations could not be carried out during the public health emergency.

The decrease in natural gas consumption in 2019 was due to the retirement of one of the thermal power plants at the Bentivoglio (Bologna) site.

## TOTAL $CO_2$ EMISSIONS (MARKET-BASED)



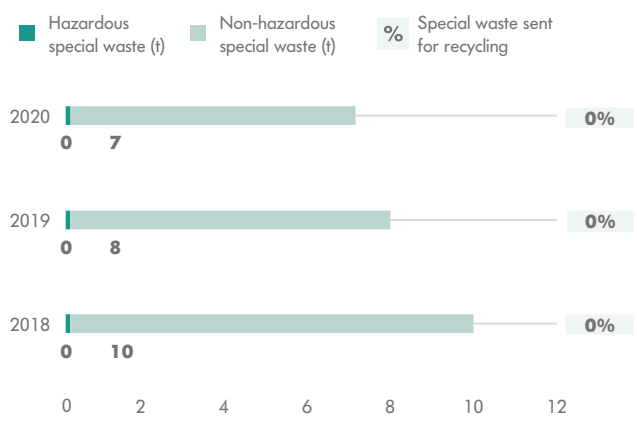

## WATER




### COMMENTS ON THE TREND

Water requirements increased in 2019 following a considerable rise in personnel at the Roma San Lorenzo site. Consumption of water remained more or less unchanged in 2020 despite the lower presence of employees during the public health emergency as billed consumption is estimated by the supplier rather than read. Adjustments are made for actual consumption once the meter has been read.

## WASTE




### COMMENTS ON THE TREND

The waste quantities shown in the table are attributable to the cleaning of the septic tank at the Orbassano site.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **Maintaining UNI EN ISO 14064-1:2019 certification** to quantify and report on greenhouse gas emissions and **extending the scope of application of the integrated management system** to include **the process for planning company services** including the **Mercitalia Fast** freight transport service. | 2020 | + control | ✓ | |
| | **Maintaining UNI EN ISO 14001:2015, UNI EN ISO 9001:2015 and UNI ISO 45001:2018 certification** and extending the scope of application to the process for planning services. | 2020 | + control | ✓ | Extending the scope of application of the UNI ISO 45001:2018 standard to the Florence site. |
| | **Drafting the sustainability plan and materiality matrix** of Polo Mercitalia. | 2020 | + commitment | ✓ | The materiality matrix was presented to the secretary of the FS Italiane Group's Sustainability Committee, all members of senior management and Polo Mercitalia personnel. |
| | **Organising the Safety & Sustainability Day** focused on the topic "Working safely during COVID". | 2020 | + commitment | ✓ | |

**KEY**

in progress ✓ completed

CONTINUOUS IMPROVEMENT | RAW MATERIALS CYCLE | ENERGY AND EMISSIONS | WATER CYCLE | LAND

# MERCITALIA LOGISTICS' SUBSIDIARIES

## MERCITALIA RAIL

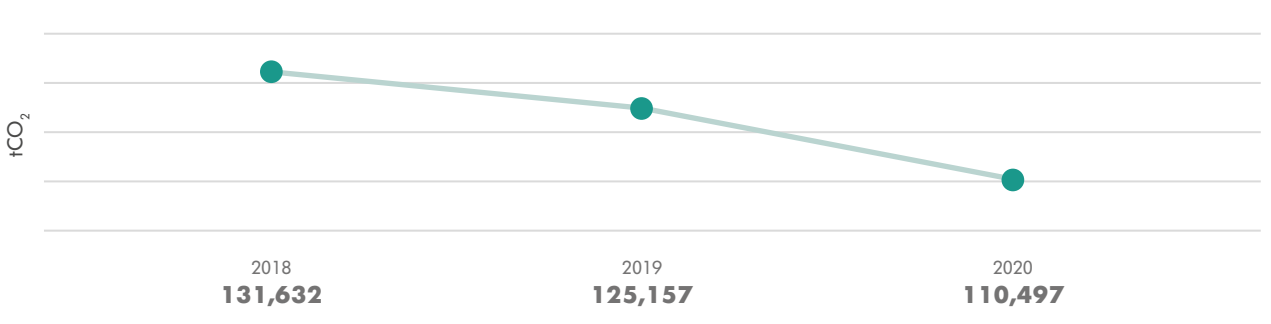
| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity for railway traction | MWh | 353,005 | 369,435 | 375,803 |
| Electricity for other uses | MWh | 2,413 | 2,721 | 3,005 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 100% | 100% | 0% |
| Diesel | l | 1,510,560 | 2,086,894 | 2,753,624 |
| Natural gas | $Sm^3$ | 911,554 | 1,341,484 | 1,067,300 |

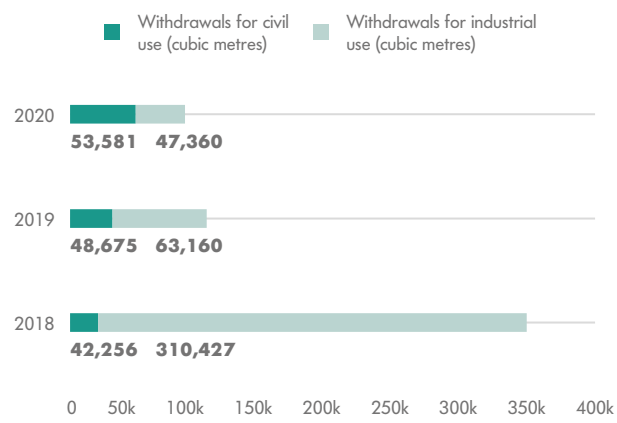
### COMMENTS ON THE TREND

Electricity and diesel consumption decreased significantly in 2020 mainly as a result of services being reduced during the public health emergency.

The decrease in natural gas consumption is also attributable to the public health emergency with large numbers of employees working from home.

### TOTAL $CO_2$ EMISSIONS (MARKET-BASED)






**COMMENTS ON THE TREND**

The 2018 figure was influenced by the industrial water consumption declaration at the Verona maintenance plant. The MIR segment wrongly declared its water consumption in 2018 unlike in previous years, thus causing this irregular trend.
Water withdrawals for civil use increased from 2019 to 2020 due to consumption at the Milan train maintenance site despite the roughly 6,660 $m^3$ reduction recorded by the Adriatica Nord production site following a leak fixed near Parma.


**COMMENTS ON THE TREND**

There was a generalised decrease in waste at most sites in 2020, especially non-hazardous special waste.
Specifically, the largest decrease was recorded at the Liguria production site (down approximately 10,000 $m^3$) and at the Turin current maintenance plant (down approximately 4,000 m3) as the campaign to demolish railway cars was downsized during the public health emergency.

## PROJECTS AND INITIATIVES

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | **Upgrade of the fleet with electric engines, diesel engines and last-generation wagons** improving the efficiency and sustainability of the transport service:<br>› • 40 E494 electric engines<br>› • 5 diesel engines<br>› • 240 coil cars | 2021 | - 52.4 **$tCO_2$**<br>**+** control | | The annual average $CO_2$ savings are solely attributable to the electric engines and cars rolled out. The diesel engines are currently being tested on site for best energy efficiency before purchasing. |

| 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. | 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.. | 2020 | - waste produced<br>+ 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. | 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

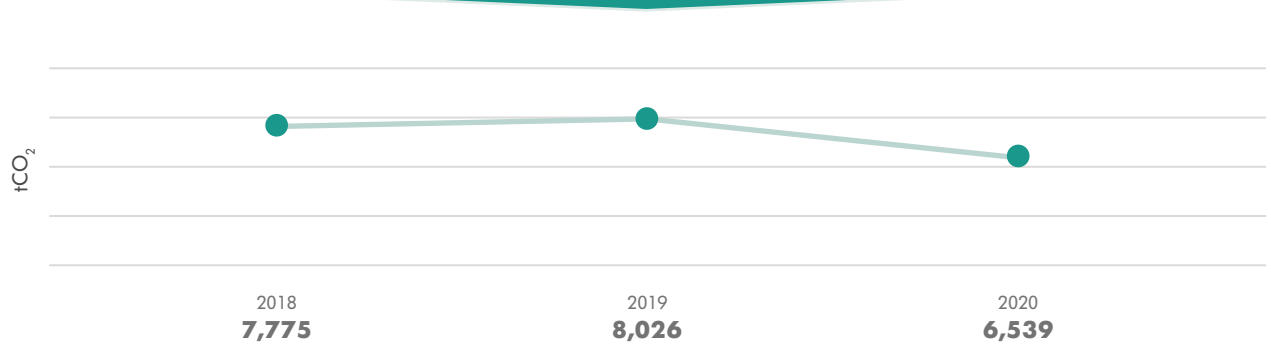
MERCITALIA SHUNTING & TERMINAL

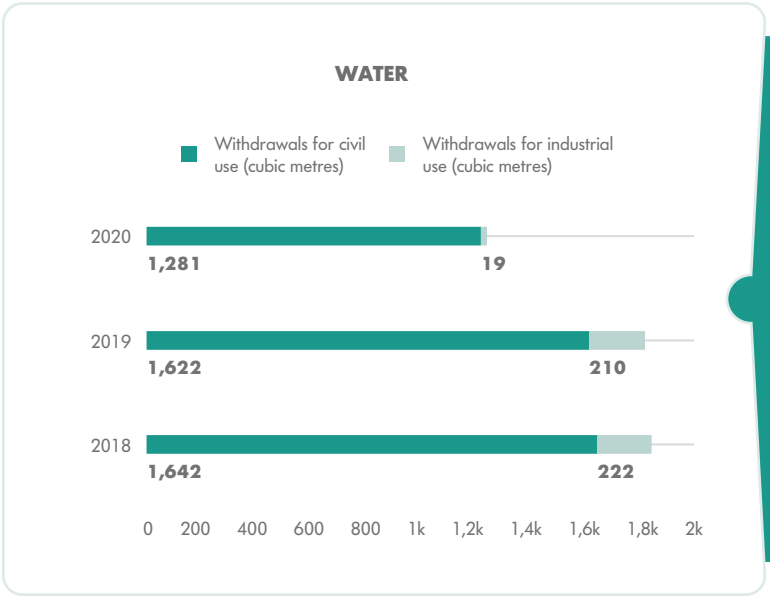
| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity for railway traction | MWh | 828 | 866 | 921 |
| Electricity for other uses | MWh | 419 | 411 | 407 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 10% | 10% | 10% |
| Self-produced and consumed solar energy | MWh | 40 | 39 | 42 |
| Diesel | l | 2,267,230 | 2,800,000 | 2,717,948 |

**COMMENTS ON THE TREND**

The consumption of diesel for railway traction dropped considerably as a result of services being reduced during the public health emergency, especially with regard to the suspension of the cruise passenger service at Civitavecchia-Roma San Pietro.

**TOTAL $CO_2$ EMISSIONS (MARKET-BASED)**






**COMMENTS ON THE TREND**

Lower water consumption, especially for civil use, is chiefly due to employees working from home during the public health emergency in 2020.


**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 26 engines. | 2022 | - $CO_2$ | | |
| | NEW **Acquisition of six** CZ Loco 744 and 741 **shunting engines.** | 2021 | - $CO_2$ | | |
| | NEW **Acquisition of two diesel/ electric hybrid shunting engines** at the La Spezia site. | 2022 | - $CO_2$ | | |
| | Continuation of the **noise and vibration monitoring** campaign at sites that had not yet been checked and newly-opened sites (10 sites checked). | 2020 | - noise | ✓ | |

**KEY**

in progress

completed

CONTINUOUS IMPROVEMENT

RAW MATERIALS CYCLE

ENERGY AND EMISSIONS

WATER CYCLE

LAND

# MERCITALIA LOGISTICS' SUBSIDIARIES

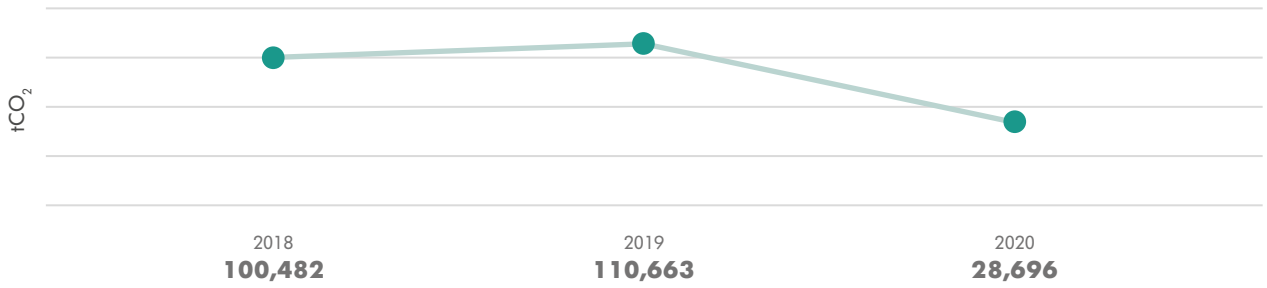
## TX LOGISTIK

| Final energy consumption | Unit of measure | 2020 | 2019 | 2018 |
|---|---|---|---|---|
| Electricity for railway traction | MWh | 160,367 | 150,000 | 145,841 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 78% | 0% | 0% |
| Electricity for other uses | MWh | 708 | 730 | 720 |
| with guarantee of origin or self-produced using photovoltaic technologies | % | 0% | 0% | 0% |
| Diesel | l | 128,330 | 128,161 | 135,630 |

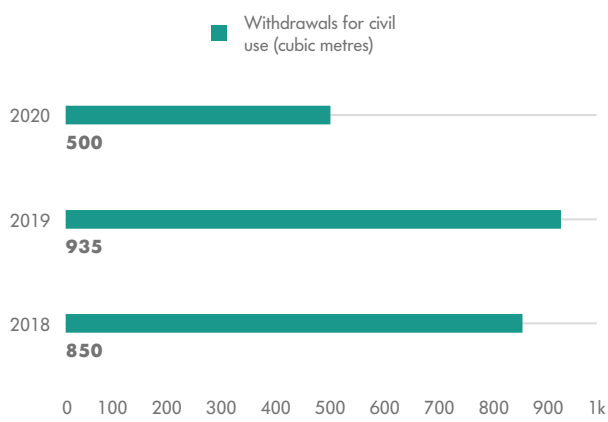
### COMMENTS ON THE TREND

There was a significant increase in the percentage of electricity from certified renewable sources in 2020. Diesel consumption remained unchanged, while the decrease in 2019 was due to changes in the company car fleet.

### TOTAL $CO_2$ EMISSIONS (MARKET-BASED)




### WATER




### COMMENTS ON THE TREND

The trend is substantially steady. The decrease in withdrawals in 2020 is attributable to the reduction of work activities during the public health emergency.

# 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 and social aspects, handling any potentially critical issues by carefully planning and redeveloping land with intermodal and urban-planning solutions.

The company began a process to implement sustainability within its governance system. In 2020, it carried out a materiality analysis comparing company and stakeholder interests and highlighting areas that have a significant impact on the company's ability to create long-term value and which require strategic action.

## 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 | | An urban regeneration and smart, green development master plan was drafted. |
| | Development of FS Italiane Group areas at **Roma Tuscolana** for environmental and urban regeneration via the international **Reinventing Cities** competition. | 2024 | + regeneration of natural capital | | The five finalist projects of the first phase of the competition were chosen and the second phase was initiated. |
| | Urban regeneration project for the Rome hub railway areas no longer in use as part of the **"green circle"** from Roma Tiburtina to Roma Trastevere. | TBD | + regeneration of natural capital | | The general structure outline of the green circle was approved. |
| | Development of FS Italiane Group areas in **Turin** for urban regeneration. | 2023 | + regeneration of natural capital | | FS Sistemi Urbani's **"Rail City Lab"** project won the 2020 Urban Planning Award in the "Environmental, economic and social regeneration" category voted by participants in the 2019 edition of the UrbanPromo event. |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | Development of the **Venezia Mestre – Parco del Piraghetto** areas for urban regeneration and environmental development. | 2023 | + regeneration of natural capital | | The service conference was completed and the programme contract was signed. |
| | Development of FS Italiane groupGroup areas at the **Verona Porta Nuova** hub, turning the freight hub areas into a city park enhanced with new functions for a total surface area of 450,000 $m^2$. | 2023 | + regeneration of natural capital | | An addendum was added to the memorandum of understanding with the Veneto regional authorities and Verona municipal authorities. The call for tenders for the urban-planning variation was published. |
| | Development of FS Italiane Group areas at Milano Greco-Breda for environmental and urban regeneration via the international **Reinventing Cities** competition. | 2020 | + regeneration of natural capital | ✓ | Winning project "L'Innesto" for zero carbon social housing – area sold. |
| | Urban regeneration project for the **Milano Porta Romana** hub, for a total surface area of roughly 190,000 m2 with roughly 164,000 m2 suitable for building on. The development includes a large park, with an area of roughly 100,000 m2, surrounded by houses, offices, social housing, student housing and services interconnected with the entire metropolitan area. | 2021 | + regeneration of natural capital | | The winning team was chosen for the tender to sell the area and draft the master plan. |
| | **Brera Academy "Campus of Arts" at the Farini Scalo Unit** within the special Farini zone, with an extension of roughly 25,000 $m^2$ for around 3,500 students and 400 workers. | 2021 | + regeneration of natural capital | | A feasibility study was drafted by the Brera Academy. |

| Scope | Description | Deadline | Average annual savings/target | Status | Notes |
|---|---|---|---|---|---|
| | Development of FS Sistemi Urbani areas at the **Milano Lambrate hub** for environmental and urban regeneration via the international **Reinventing Cities** competition. | 2021 | + regeneration of natural capital | | The five finalist projects of the first phase of the competition were chosen and the second phase was initiated. |
| | Project for constructing 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. | 2023 | + regeneration of natural capital | | |
| | Plan to redevelop and reorganise the **Napoli Garibaldi intermodal hub**. | 2023 | + regeneration of natural capital | | |
| | Roll-out of process to implement **sustainability** within the FS Sistemi Urbani governance system via a stakeholder engagement process and by drafting a **materiality** matrix. | 2020 | + quality | ✓ | |

**KEY**

in progress

completed

CONTINUOUS IMPROVEMENT

RAW MATERIALS CYCLE

ENERGY AND EMISSIONS

WATER CYCLE

LAND


BOMBARDIER
MERCITALIA RAIL

# 02

2020 SUSTAINABILITY REPORT

# 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)**<br>Scope:<br>› 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**<br>Scope:<br>› management of train traffic to ensure safe railway operation.<br><br>**Production Department (PD) and Local Production Units**<br>Scope:<br>› maintenance of the railway infrastructure to ensure safe train travel and railway operation and the performance of train travel and shunting activities;<br>› design in the railway engineering sector (superstructure, signalling and telecommunications systems and electrical traction), civil engineering, road engineering and environmental protection in the railway field.<br><br>**National Electric Equipment Workshop - Bologna, the PD's national workshops**<br>Scope:<br>› maintenance to ensure safe train travel and railway operation through the inspection, repair, rehaul and assistance for vehicles operating on the rails and railway equipment for electrical traction systems and safety and signalling systems.<br><br>**National Superstructure Workshop - Pontassieve, the PD's national workshops**<br>Scope:<br>› 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.<br><br>**National Carriage Workshop - Catanzaro, the PD's national workshops**<br>Scope:<br>› maintenance to ensure safe train travel and railway operation through general inspections, non-routine maintenance, 5-year checks, repairs and assistance for the vehicles operating on rails. |

| RFI | Integrated systems: Q + E + S |
|---|---|
| Environment (E) | **Central Divisions**<br>Scope:<br>› design, construction, implementation, management and maintenance of national railway infrastructure.<br><br>**Steering Divisions**<br>Scope:<br>› management of train traffic to ensure safe railway operation.<br><br>**Local Production Units**<br>Scope:<br>› maintenance of the railway infrastructure to ensure safe train travel and railway operation and the performance of train travel and shunting activities.<br><br>**National Electrical Equipment Workshop - Bologna, the PD's national workshops**<br>Scope:<br>› maintenance to ensure safe train travel and railway operation through the inspection, repair, rehaul and assistance for vehicles operating on the rails and railway equipment for electrical traction systems and safety and signalling systems.<br><br>**National Superstructure Workshop - Pontassieve, the PD's national workshops**<br>Scope:<br>› 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.<br><br>**National Carriage Workshop - Catanzaro, the PD's national workshops**<br>Scope:<br>› maintenance to ensure safe train travel and railway operation through general inspections, non-routine maintenance, 5-year checks, repairs and assistance for the vehicles operating on rails. |

| RFI | Integrated systems: Q + E + S |
|---|---|
| Occupational safety (S) | **Steering Divisions**<br>Scope:<br>› management of train traffic to ensure safe railway operation.<br><br>**Local Production Units**<br>Scope:<br>› maintenance of the railway infrastructure to ensure safe train travel and railway operation and the performance of train travel and shunting activities.<br><br>**National Electrical Equipment Workshop - Bologna, the PD's national workshops**<br>Scope:<br>› maintenance to ensure safe train travel and railway operation through the inspection, repair, rehaul and assistance for vehicles operating on the rails and railway equipment for electrical traction systems and safety and signalling systems.<br><br>**National Superstructure Workshop - Pontassieve, the PD's national workshops**<br>Scope:<br>› 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.<br><br>**National Carriage Workshop - Catanzaro, the PD's national workshops**<br>Scope:<br>› 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: Q + E + S |
|---|---|
| Quality (Q) | |
| Environment (E) | **Bluferries (Registered office, operating sites and owned ships)**<br>Scope:<br>› Maritime transport using roll-on roll-off (ro-ro) ships and high-speed craft (HSC). |
| Safety (S) | |

| Terminali Italia | Integrated systems: Q + E + S |
|---|---|
| Quality (Q) | |
| Environment (E) | **Terminali Italia (Headquarters and operating sites)**<br>Scope:<br>› management and operation of terminals equipped for intermodal transport;<br>› provision of terminal services through shunting, container handling and accessory services. |
| Safety (S) | |

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

| Trenitalia c2c | Integrated systems: - |
|---|---|
| Environment (E) | **Trenitalia c2c**<br>Scope:<br>› 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)**<br>Scope:<br>› 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)**<br>Scope:<br>› 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)**<br>Scope:<br>› 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)<br>Environment (E)<br>Occupational safety (S) | **Busitalia Veneto (Headquarters and operating sites)**<br>Scope:<br>› 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)**<br>Scope:<br>› design and provision of transport services using buses (local public transport, long haul lines, rentals and atypical services);<br>› maintenance depot facilities for its own vehicle fleet (Sector EA: 31 - 35). |

| Ataf Gestioni | Integrated systems: Q + E |
|---|---|
| Quality (Q)<br>Environment (E) | **Ataf Gestioni (Headquarters and operating sites)**<br>Scope:<br>› 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)<br>Environment (E)<br>Occupational safety (S) | **Mercitalia Logistics (Headquarters and local units)**<br>Scope:<br>› steering and coordinating the Mercitalia operating companies;<br>› organisation and provision of logistics services in connection with sundry freight through third-party coordination;<br>› management of real estate assets. - Organisation of "fast" transport by train and logistics for sundry freight through third-party coordination;<br>› process for planning company services including the "FAST" freight transport service. |

## 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)**

**Mercitalia Rail (Headquarters and operating sites)**

Scope:

- design and provision of freight transport services by rail.

**Occupational safety (S)**

## 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, Roma Tiburtina, Milano Centrale, Venezia S. Lucia, Torino Porta Nuova, Napoli Centrale, Venezia Mestre, Verona Porta Nuova, Bologna Centrale, Genova P. Principe and Genova Brignole 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)**<br>Scope:<br>› 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) | **Ferservizi (Headquarters and operating units)**<br>Scope:<br>› provision of all the activities that the company performs to manage administrative, sale and lease of real estate, custody and safeguarding of real estate and facility services, in addition to group procurement, IT, maintenance and document filing. |
| Occupational safety (S) | |

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

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

| Anas | Integrated systems: - |
|---|---|
| Quality (Q) | **Anas (Central and Divisions and Regional Units)**<br>Scope:<br>› 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**<br>Scope:<br>› definition of objectives and measurement of delivered service quality. |
| Safety (S) | **EESSTY**<br>Scope:<br>› definition of objectives and measurement of delivered service quality. |

| Ferrovie del Sud-Est e Servizi Automobilistici | Integrated systems: Q + S |
|---|---|
| Quality (Q) | **Ferrovie del Sud-Est e Servizi Automobilistici (Headquarters and operating sites)**<br>Scope:<br>› 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. |
| Occupational safety (S) | |


BUSITALIA
BUSITALIA
BUSITALIA
BUSITALIA

Group Strategies, Planning, Innovation and Sustainability Department
Mail: rapportosostenibilita@fsitaliane.it

Ferrovie dello Stato Italiane SpA
Head Office External Communications Department - Off Line publisher

Piazza della Croce Rossa 1 - 00161 Roma

**Photographs**
© FS Italiane | Photo

**Creation, graphic design and printing**

GRAFICANAPPA
PRINTING | PACKAGING | IML

Via A. Gramsci, 19 - 81031 Aversa (CE)

Completed in June 2021