

# SUSTAINABILITY REPORT



# 2018





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# LETTER TO STAKEHOLDERS

Dear Stakeholders

I am extremely pleased to present the third edition of the ASTM Group's Sustainability Report, bringing you information each year about the Group's commitment to its Sustainability Project.

Sustainability is an extensive and broad-ranging issue for all of us, and the Report, or rather the Consolidated Non-Financial Statement (NFS) as it is defined by the Legislator, is an important, but not the only factor.

In the motorway sector, we have continued to invest in equipment, human resources and technologies, to ensure the increasing quality of our service and maintenance of our infrastructure.

This approach constitutes a real cultural and strategic project, in which we are committed to pursuing our industrial goals with a view to business sustainability, connected with promoting employment, respecting people and protecting the environment.

Our commitment to these issues has been a cornerstone of our operations and forms the basis for both the Sustainability Plan and the 2017-2021 Group Strategic Plan, with a view to creating value in the medium/long-term.

In this context, we wanted to involve our subsidiary Itinera more directly, as one of Italy's leading construction companies and a global player in major transport infrastructure and civil building projects. For the first time and without any legal obligation, Itinera has presented its own independent sustainability report for 2018. We believe this is another important step towards growth and transparency for all our Stakeholders, internal and external, engaged with a Group that successfully operates on the world infrastructure market as a licensee in the motorway sector, as the third largest operator worldwide, and as an EPC contractor and leader in the sector of applied technologies for transport mobility.

Finance and major clients are also driving sustainability, with an ever-increasing focus on environmental issues, human rights, the fight against corruption, and transparency in governance systems.

Leading international funds predict that investors will focus more and more on ESG (Environment, Social and Governance) indicators in the near future, to determine business value. With Ardian, the private investment firm and world leader managing 90 billion dollars and providing consultancy services in Europe, the Americas and Asia, acquiring an investment in the share capital of the holding ASTM in 2018, we must strive to improve even more and give our operations new strength and a boost to create value in the long term for all our Stakeholders.

The report extensively covers all Group activity carried out over the year. Some of the most important aspects are summarised below.

In the internationalisation process promoted by the Group, the subsidiary Itinera, which is active in the construction industry and major works, acquired control of the US company Halmar International in 2017. Halmar International is one of the top five companies in the metropolitan area of New York in the development of transport infrastructure. In this edition of the Report, we focus on the company, but above all - and for the first time - on indicators related to the company and its subsidiaries.

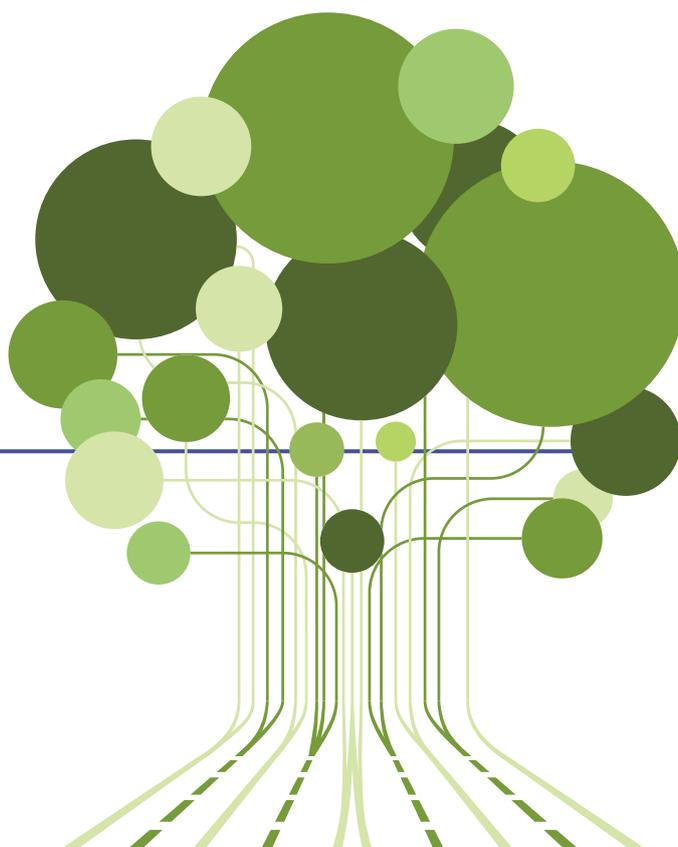
In 2018, as well, we conducted an analysis to assess the direct, indirect and related social impact of our business operations. Specifically, with an added value of €1.7 billion generated by the ASTM Group in 2018, an increase of 16% compared with the previous year, we have estimated a direct, indirect and related economic contribution totalling around €6 billion.

Investing in people and employees is one of the pillars of sustainability. Within this framework, ASTM has developed a specific policy on human rights and an important and unique Stakeholder engagement initiative in 2018 for its employees, to understand their needs and expectations, as part of the Group's profound process of change management in recent years. As a result, sustainability - with its different interpretations and actions - enables us to promote a new process of building our identity and takes on a central role in the Company's organisational model.

Lastly, I would like to mention the two smart road projects promoted by ANAS for the Autostrada del Mediterraneo (A2), the Grande Raccordo Anulare (A90) and the Roma-Aeroporto di Fiumicino (A91), which was awarded to the Group's technology company SINELEC. The smart road project is one of the most innovative in Europe for the digitalisation of transport infrastructure and we are proud to be able to make a technical contribution to an ambitious, visionary programme that will improve the safety of infrastructure networks, developing smart interaction among all the many players of the mobility ecosystem.

I hope you enjoy reading this Report.

**Alberto Rubegni**  
*Chief Executive Officer*



# METHODOLOGICAL NOTE

**T**his Non-Financial Statement ("NFS" or "Sustainability Report") of ASTM S.p.A. ("ASTM" or the "Company") and its wholly consolidated subsidiaries ("ASTM Group" or "Group") at 31 December 2018 describes initiatives and main results in terms of sustainability performance relative to the period from 1 January to 31 December 2018 and complies with provisions in articles 3 and 4 of Italian Legislative Decree 254/16 (the "Decree").

As required by article 5 of Legislative Decree 254/16, this document is a separate report, as indicated, referring to Consolidated Non-Financial Statement required by law.

Non-Financial Statement, to the extent necessary to ensure an understanding of a business's activities, its performance, results and the impact it produces, covers environmental, social and personnel issues, respect for human rights, and the fight against active and passive corruption, which are significant in light of the company's activities and characteristics, and the expectations of its Stakeholders, as shown in the materiality matrix in this report.

This Sustainability Report has been prepared in compliance with the GRI Sustainability Reporting Standards, published in 2016 by Global Reporting Initiative (GRI), based on the "in accordance-core" option.

The "GRI Content Index" is included in the annex of this document, with details on contents reported in compliance with GRI.

For the preparation of the Sustainability Report, reference was made to the "Ten Principles" of the United Nations Global Compact, ISO 26000:2010 and Guidelines on non-financial reporting of the European Commission.

Data and information on the Non-Financial Statement refer to all subsidiaries consolidated on a line-by-line basis in the Consolidated Financial Statements of the ASTM Group at 31 December 2018; any exceptions, in addition to information below, are specifically indicated.

Regarding the main changes to the scope of consolidation, the following is reported:

- From 1 January 2018, non-financial information concerning the Halmar Group has been included in this report. Moreover, Itinera S.p.A. data includes information relative to the foreign branches in Botswana, Romania, Sweden and Abu Dhabi.
- On 25 June 2018, Itinera S.p.A. purchased an additional 44% of the share capital in Impresa Costruzioni Milano S.c.a r.l. - ICOM in liquidation, reaching a total stake of 93% in the share capital.
- In July 2018, Itinera S.p.A. purchased all shares of Interstrade S.p.A.. On 1 December 2018, the company Interstrade S.p.A. was merged by absorption with Itinera S.p.A.
- On 4 July 2018, the company Itinera S.p.A. purchased the entire share capital of SEA Segnaletica Stradale S.p.A.
- On 5 July 2018, the company Euroimpianti S.p.A. subscribed 58.79% of the newly established consortium CIT S.c.a r.l.
- On 31 December 2018, the company Itinera S.p.A. subscribed 100% of the share capital of the newly established Società Attività Marittime S.p.A.
- since 2018, the joint operations Consortium Baixada Santista, Alcas da Ponte Consortium, MG-135 Consortium, Odense Hospital Project Team, Køge Hospital Project Team, 3RD Track Constructors and Consórcio Binário Porto de Santos have been included in the scope of consolidation.

Moreover, on 1 March 2018, the subsidiary Autovia Padana S.p.A. took over the concession of the A21 Piacenza-Cremona-Brescia stretch.

As regards the scope of consolidation of the ASTM Group, data on joint operations are reported in full, without taking into consideration the percentage held, with the exception of the joint operation Arge H51, which became operative in 2018, and for which non-financial information and data are not included in this document.

To compare data and information over time and assess the trend of Group operations, a comparison with the previous year has been made, where possible. Information on actions taken in previous years that still apply to Group operations is also included.

The Group has prepared a materiality analysis, as required by GRI standards, in order to report on the sustainability issues considered most significant by its Stakeholders and the organisation.

This analysis was conducted in line with previous years, and in consideration of the issues and areas indicated in article 3 of the Decree.

It was also considered appropriate in this analysis to compare significant issues identified from the materiality matrix with sector best practices in order to ensure a broader comparison.

Starting with the issues considered significant and considering the areas covered by the Decree, an analysis was carried out of the risks generated or suffered by the Group's activity, services/products, including supply chain and subcontractors where relevant and avail-

able. In particular, ASTM and its significant operating subsidiaries have adopted a Risk Management system in line with best practices defined by the Enterprise Risk Management Integrated Framework (COSO ERM) and ISO 31000:2009. The main inherent risks connected with sustainability issues and relative management and mitigation procedures are indicated in the section "Internal audit and risk management system", to which reference is made for details.

In November 2017, the ASTM Group started a process to continually improve sustainability aspects and set out its commitments in the 2017-2021 Sustainability Plan approved by ASTM S.p.A.'s Board of Directors. This document maps the strategic sustainability guidelines with a view to creating value for all Stakeholders in the medium to long term and considers them in terms of objective, concrete actions, starting from an analysis of the UN's 17 Sustainable Development Goals (SDGs) to be reached by 2030, which are related.

In this regard, the actions taken by the Group with reference to various sustainability topics are summarised below.





## ENVIRONMENT

The ASTM Group is committed to pursuing solutions that can guarantee protection of local areas, a responsible use of natural resources, efficient energy consumption, the management of atmospheric emissions and protection of biodiversity.

The Group has developed expertise to design and develop transport infrastructure and civil and industrial buildings with a low environmental impact and a high LEED (Leadership in Energy and Environmental Design) classification.

Since 2018, ASTM has been a member of the CDP Climate Change Programme.

Moreover, in line with objectives defined in the Sustainability Plan, Group companies contribute to protecting and safeguarding the environment, also through the following actions:

- i.** the promotion of energy saving policies through the use of work sites with a reduced environmental impact and policies that are also adopted by sub-contractors;
- ii.** efficient lighting systems on motorways, through increased use of LEDs
- iii.** noise abatement plans for motorway infrastructure;
- iv.** the promotion of recycled materials, as part of activities for the maintenance and modernisation of motorway infrastructure and with a view to supporting a circular economy;
- v.** promoting protection of the local area, reduction in land use and protection of biodiversity.

In this context, a project has been launched to harmonise environmental management systems in each sector of operations, scheduled for completion by 2021.

## SOCIAL ASPECTS

Social issues have always been a key value and objective of the ASTM Group, which is committed daily to ensuring the safety of its employees and, through its licensee companies, road safety and service quality, promoting solutions to improve motorway infrastructure and user satisfaction.

In 2018, current quality, safety and environmental management systems were aligned with applicable ISO releases, while maintaining all certification awarded, and activities were carried out to promote safe driving through the development and dissemination of the Autostradafacendo campaign.

In this framework, in line with the objectives set out in the Sustainability Plan:

- i. Group companies promote the adoption of operating standards applied in Italy by foreign operators, also by extending management systems;
- ii. Group licensee companies will obtain ISO 39001 (Road Safety Management System) certification by 2021. During 2019, the licensees Autostrada dei Fiori S.p.A. and Itinera S.p.A. that oversee motorway maintenance following the merger by incorporation of Interstrade S.p.A., will adopt a Management System conforming to UNI ISO 39001:2016, in the context of pilot projects;
- iii. Group licensees will continue their investment plans for road safety (with investments for the 2017-2021 period estimated to be approximately 400 million).
- iv. During 2019, a project will be started to extend the motorway user satisfaction measurement system to main Group licensees.
- v. the "Infomobility" application will be implemented in 2019, to give motorway users updates on road traffic in real time.

## PERSONNEL

The ASTM Group has adopted initiatives to empower its human capital, with a particular focus on employees' health and safety, company welfare, diversity and inclusion.

ASTM and main significant operating subsidiaries have implemented a diversity and inclusion policy, and launched a talent policy based on an integrated human capital management system and employee training and development programmes, in order to create a shared company culture based on competencies and innovation.

Lastly, a project was started to harmonise occupational health and safety management systems, scheduled for completion by 2021.

## RESPECT FOR HUMAN RIGHTS

The Group recognises the intrinsic value of each person and endeavours to ensure that human rights are respected along the entire value chain, promoting accessibility without any type of discrimination and encouraging the use of services by persons with reduced mobility.

To consolidate its commitment in this area, ASTM adopted a Human Rights Policy in January 2019, which supplements the Code of Ethics, Suppliers Code of Conduct and other sustainability policies. This policy will be adopted in 2019 also by significant operating subsidiaries.

## **THE FIGHT AGAINST ACTIVE AND PASSIVE CORRUPTION**

To develop a management strategy increasingly aimed at fighting active and passive corruption, an Anti-Corruption Policy has been adopted, in line with best practices and national and international standards.

The Internal Audit function is in charge of monitoring the adoption and dissemination of this policy. Moreover, the Supervisory Body, as part of its oversight activities, checks the operating effectiveness of controls adopted to prevent corruption.

A channel has also been set up to report offences or irregularities identified during work activities.

Training courses on corruption risks are held at regular intervals for executives and people most exposed to these risks.

Where possible, the use of estimates in this document has been limited and if present, estimates are indicated. Estimates are based on the best information available, or on sample surveys.

The reporting on the impact of Group operations on the local area and relative external factors in terms of value created and distributed, contained in the section on "Impact Measurement" is not based on GRI reporting standards, but on the use of an input-output model. This model statistically analyses the interaction between a country's industries, making it possible to further understand the economic context in which a business operates.

The Board of Directors of ASTM S.p.A. approved this Sustainability Report on 27 March 2019.

This document was subject to a limited assurance engagement, as defined by ISAE 3000 Revised, by the appointed auditors Deloitte & Touche S.p.A. This engagement was carried out according to procedures in the "Report of the Independent Auditors" included at the end of the document.

The Sustainability Report of the ASTM Group at 31 December 2018 is available on the Company's website [www.astm.it](http://www.astm.it) in the section "Sustainability".

Contacts:

[sostenibilita@astm.it](mailto:sostenibilita@astm.it)  
[www.astm.it/sostenibilita](http://www.astm.it/sostenibilita)







# The ASTM Group and sustainability



ASTM S.p.A. is an industrial holding, with headquarters at Corso Regina Margherita 165, Torino, mainly involved in the management of motorway networks under concession and in the planning and development of major infrastructure, as well as technologies for road and motorway infrastructure.

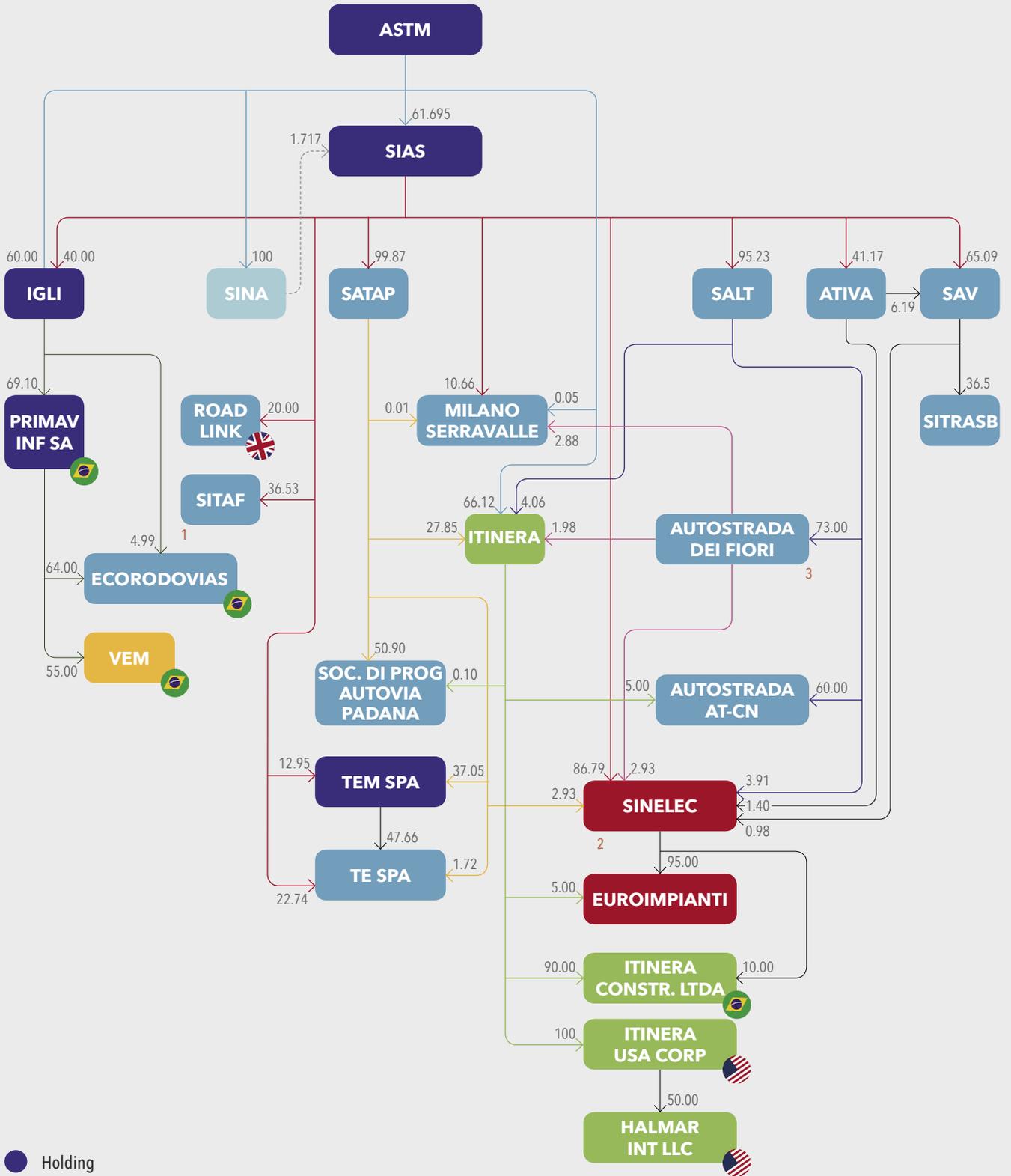
The Group has over 8,400 employees with a high level of expertise and ended the 2018 financial year with total revenues equal to €1,992 million.

ASTM S.p.A. is a company listed on the electronic stock exchange (MTA) supervised by Borsa Italiana S.p.A. and is managed and coordinated by Argo Finanziaria S.p.A.



## GROUP STRUCTURE

The equity investments of main companies of the ASTM Group at 31 December 2018 are indicated below, indicating the business segment.



- Holding
- Motorway companies
- Urban transport companies
- Construction company
- Technological services (IT)
- Engineering company

1 from Ativa 1.08

2 from SITAF 1.08

3 of which 1.86 from Albenga Garessio Ceva



<sup>1</sup> For further information, see the Company's website [www.grupposias.it](http://www.grupposias.it)

<sup>2</sup> Through control, joint control or non-controlling equity investment

## BUSINESS

### Motorway concessions

Through its subsidiary SIAS S.p.A.<sup>1</sup>, which is listed on the electronic stock exchange (MTA) managed by Borsa Italiana S.p.A., ASTM has considerable experience in the road and motorway concession sector.

Today the Group is a leading international player and the world's **third largest** toll-motorway <sup>2</sup> operator, managing a network of approximately 4,156 km:

- in **Italy**, it is the largest motorway operator in the north-west, managing a network of approximately 1,423 km, in one of Europe's wealthiest areas per capita along main European infrastructure corridors and the strategic routes identified by the European Community for the development of passenger and goods transport;
- in **Brazil** the Group, through the jointly controlled EcoRodovias Group, which is listed on the Bovespa stock market in São Paulo, is one of the country's most important infrastructure operators, managing a network of approximately 2,649 km;
- in **the United Kingdom**, the Group holds an investment in the Carlisle-Newcastle road (A69) licensee company (84 km).

### Construction

ASTM is a player in the construction of major infrastructure through its subsidiary Itinera S.p.A., a leading Italian company in the sector, in terms of scale, revenues, backlog, expertise and know-how.

Roads, motorways, railways, underground railways, bridges, viaducts, dams and civil and industrial building works are all sectors in which the Company operates at an international level, delivering technologically advanced, global solutions to its customers.

Itinera is also a global player in the development of public private partnerships (PPP). The Group is active in Europe, Africa, the Middle East, Latin America, and the US where it operates through its subsidiary Halmar International, a leading developer of transport infrastructure working in the New York area and on the East Coast.

### Engineering

Engineering is a key factor for transport and mobility operators. ASTM is active in the engineering and development of new works through the company SINA.

In particular, SINA oversees the design, planning and operation of new infrastructure for major road systems, guaranteeing controls and inspections of infrastructure and environmental monitoring, and is specialised in the surveillance of safety systems and tunnels.

### Technology and plant engineering

ASTM is active in technology applied to mobility mainly through Sinelec and Euroimpianti, leaders in the study, design, installation and maintenance of advanced systems for mobility and transport data management, for motorway operation and enhanced safety. Its main activities concern Intelligent Transport Systems (ITS), advanced toll collection systems in line with European Directives, and electronic systems for monitoring traffic and motorway infrastructure. The Group also operates through numerous data centres, besides its own WAN and manages the acquisition and installation of fibre-optic cables and any type of instrument related to technological systems for mobility management along the motorway sections it operates.



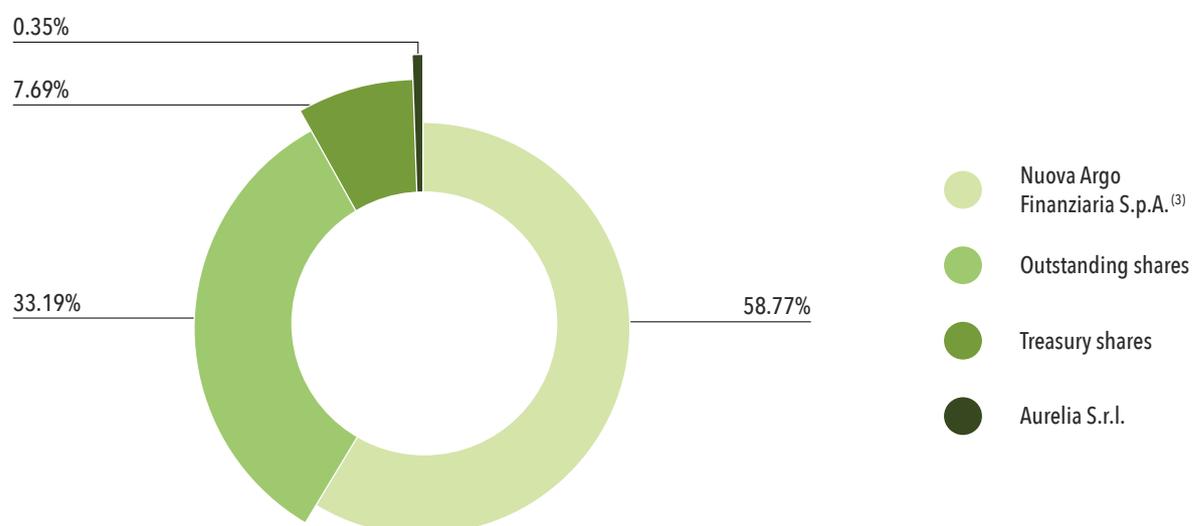
## CORPORATE OWNERSHIP AT 31 DECEMBER 2018

ASTM S.p.A. is a company with share capital listed on the electronic stock exchange (MTA) managed by Borsa Italiana S.p.A. Based on available information, holders of ordinary shares amounting to more than 3% of the share capital, at 31 December 2018, were as follows:

Nuova Argo Finanziaria S.p.A. <sup>3</sup>	58.77% <sup>4</sup>
Aurelia S.r.l.	0.35%
Treasury shares	7.69%
Outstanding shares	33.19%
<b>Total</b>	<b>100.00%</b>

<sup>3</sup> Nuova Argo Finanziaria S.p.A. is controlled by Aurelia S.r.l. (60%), the holding of the Gavio Group, in which Mercure Investment S.à r.l. has a stake. (40%), in turn controlled by Ardian.

<sup>4</sup> of which 1.97% through Nuova Codelfa S.p.A.

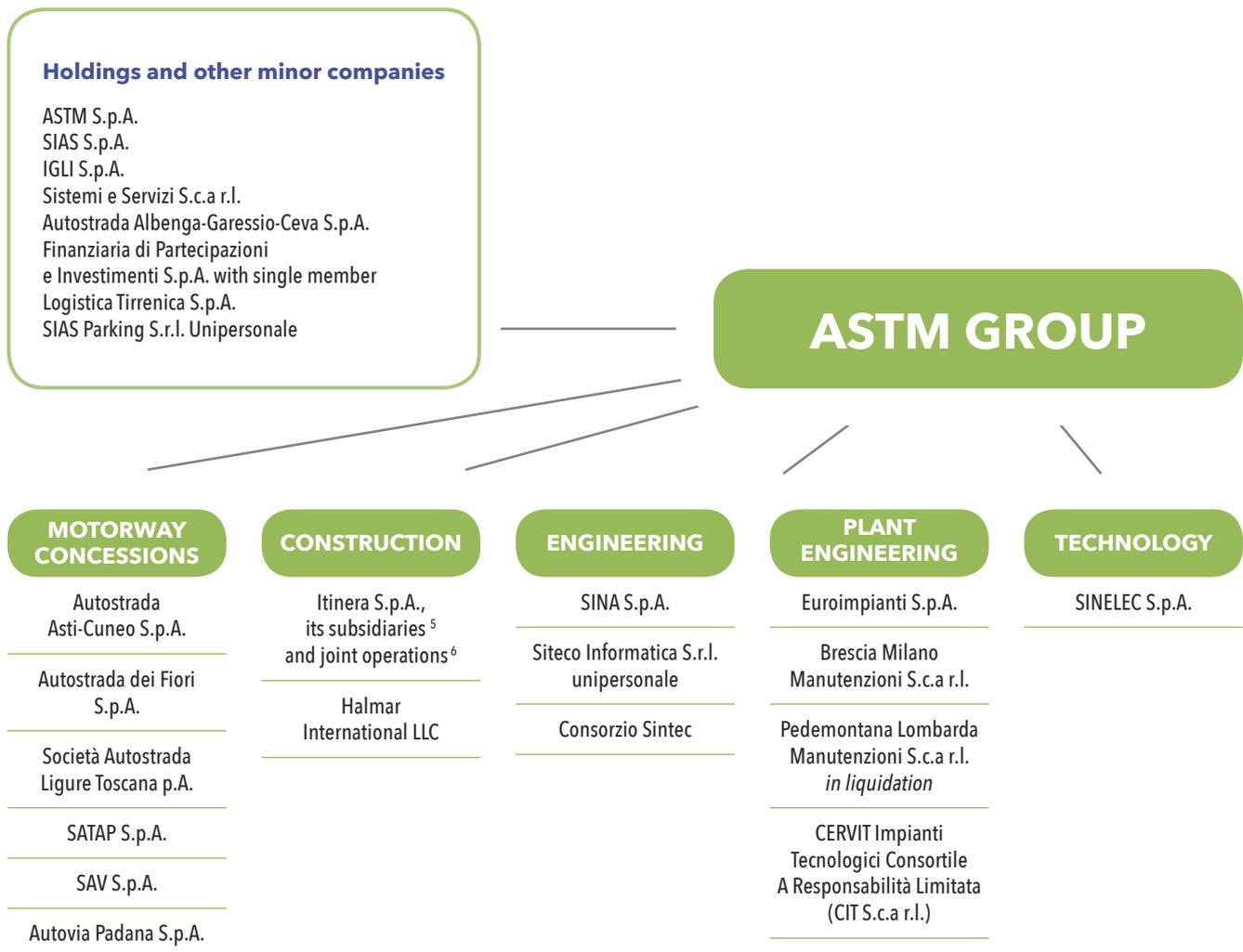




## GROUP STRUCTURE AND BUSINESS SEGMENTS

at 31 December 2018

The subsidiaries of ASTM S.p.A. consolidated on a line-by-line basis in the Consolidated Financial Statements of the Group at 31 December 2018 are listed below.



<sup>5</sup> Subsidiaries of Itinera S.p.A.: Argo Costruzioni Infrastrutture S.c.p.a., Agognate S.c.a r.l. *in liquidation*, A7 barriere S.c.a r.l. *in liquidation*, Biandrate S.c.a r.l. *in liquidation*, Brescia Milano Impianti S.c.a r.l. *in liquidation*, Carisio S.c.a r.l. *in liquidation*, CERVIT S.c.a r.l., Cornigliano 2009 S.c.a r.l., Crispi S.c.a r.l. with single member *in liquidation*, CRZ01 S.c.a r.l. *in liquidation*, Diga Alto Cedrino S.c.a r.l., Impresa Costruzioni Milano S.c.a r.l. *in liquidation*, Lambro S.c.a r.l., Malpensa 2011 S.c.a r.l. *in liquidation*, Marcallo S.c.a r.l., Mazze' S.c.a r.l., Mortara S.c.a r.l. *in liquidation*, Ponte Meier S.c.a r.l., Ramonti S.c.a r.l. *in liquidation*, SGC S.c.a r.l. *in liquidation*, SEA Segnalatica Stradale S.p.A., Sinergie S.c.a r.l. *in liquidation*, Società Attività Marittime S.p.A., Storstrøm Bridge, Taranto Logistica S.p.A., Torre di Isola S.c.a r.l., Urbantech S.r.l., Itinera Construções LTDA, Itinera USA CORP, Halmar International LLC and its subsidiaries (HIC Insurance Company Inc., Halmar Transportation System Llc, Adelaide Crystal Holdings Llc, Halmar A Servidone - B Anthony Llc, Bishop/Halmar, Atlantic Coast Foundations Llc, Halmar International - LB Electric LLC, Halmar International Trucking Inc, Potomac Yard Constructors).

<sup>6</sup> Joint operations in which Itinera S.p.A. is an investee: Itinera/Cimolai, Consortium Baixada Santista, Alças da Ponte Consortium, MG-135 Consortium, Odense Hospital Project Team, Køge Hospital Project Team, Itinera/Ghantoot, 3RD Track Constructors, Arge H51, Consórcio Binário Porto de Santos.

## 2018 HIGHLIGHTS



### OUR ECONOMIC RESPONSIBILITY

**€1,992**  
million

REVENUES

**€771**  
million

EBITDA\*

**€1.6**  
billion

MARKET CAP AT  
28.12.2018\*

**€1,718**  
million

ECONOMIC VALUE  
GENERATED AND  
DISTRIBUTED TO  
STAKEHOLDERS

\* Data from the ASTM Group 2018 Report on Operations



### OUR RESPONSIBILITY TOWARDS PEOPLE

**8,484**

EMPLOYEES AND OTHER  
COLLABORATORS

**92%**

%  
EMPLOYEES WITH  
PERMANENT  
CONTRACTS

**18%**

FEMALE  
EMPLOYEES

Over **68,000**

HOURS OF TRAINING  
FOR EMPLOYEES  
AND OTHER  
COLLABORATORS



### OUR RESPONSIBILITY TOWARDS THE ENVIRONMENT AND LOCAL AREAS

**98%**

WASTE RECYCLED AND REUSED

Over **90%**

LOCAL PURCHASES

As regards so-called Significant Locations of Operations:  
Italy, Rest of Europe, United States, Latin America, South Africa, Middle East.



### OUR BUSINESS SEGMENTS

Over **4,000** km

OF MOTORWAY NETWORK IN ITALY AND BRAZIL

**€450** million

OF INVESTMENTS IN MOTORWAY ASSETS

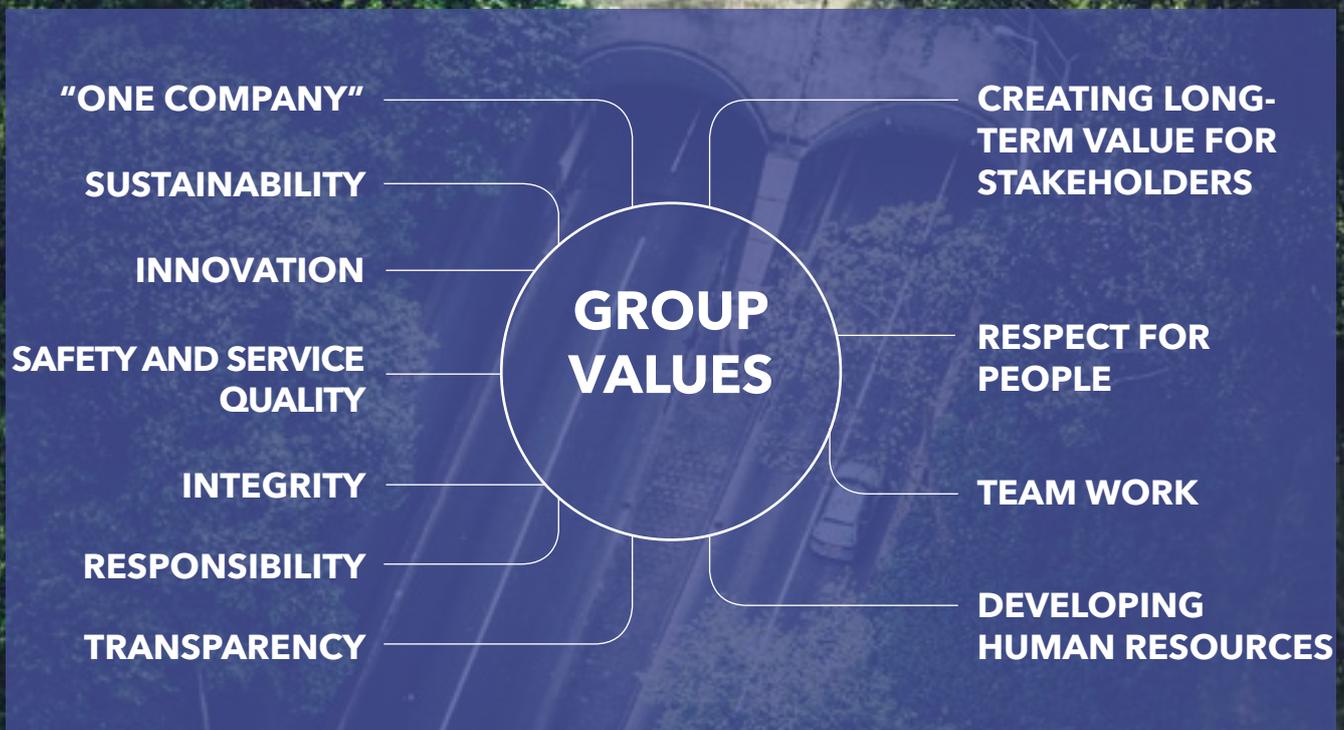
This figure refers to the motorway network managed by the subsidiary SIAS and the Brazilian jointly held subsidiary EcoRodovias.



## MISSION AND VALUES

Creating value for all Group Stakeholders and contributing to the economic and social growth of countries where we operate are the guidelines for our actions. We believe in market challenges and see people as playing a part in our business strategy.

A continual focus on technological innovation, the safety of motorway users and employees, strong support for subsidiaries, an efficient and synergetic management of all activities, and respect for the environment and local areas are all key factors in achieving our goals.

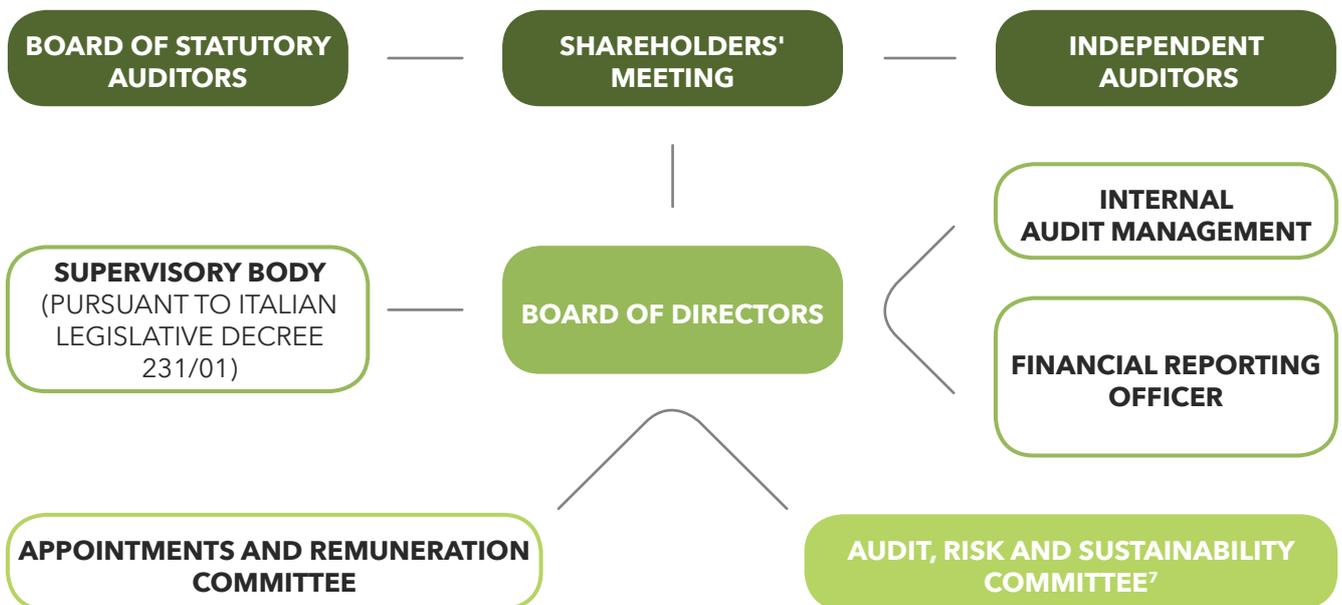


## CORPORATE GOVERNANCE

ASTM's Corporate Governance model conforms to applicable laws and is consistent with provisions in the Corporate Governance Code approved by the Committee on Corporate Governance of Listed Companies of Borsa Italiana S.p.A., which the Company endorses. The Model considers the size of the company, its ownership structure and business segments. The Company adopts a traditional administration and con-

trol system.

For further information on the Corporate Governance system of ASTM S.p.A. and the composition of its internal committees and the Board of Directors, see the "Report on Corporate Governance and Ownership Structure" available on the Company's website [www.astm.it](http://www.astm.it).



<sup>7</sup> Also carries out the functions of the Committee for related party transactions

### ADMINISTRATION AND CONTROL SYSTEM OF ASTM

The current Board of Directors comprises 15 Directors, of whom 10 (67%) are men and five (33%) women. Three are (20%) are

in the 30-50 age group, while 12 (80%) are in the over-50 age group. Nine Directors are considered independent pursuant to the Consolidated Law on Finance (TUF) and meet the independent requirements established in the Corporate Governance Code.



## GOVERNANCE OF SUSTAINABILITY

ASTM has defined the organisational structure for sustainability, formalising roles and responsibilities. ASTM's Board of Directors establishes strategic sustainability guidelines with a view to creating value for all Stakeholders, it monitors the consistency of business activities with the Code of Ethics and Sustainability Policy and approves the Sustainability Plan and Sustainability Report. ASTM's Board of Directors assigned the Audit, Risk and Sustainability Committee the task of supervising sustainability topics related to business operations and of reviewing the Sustainability Report and Sustainability Plan, monitoring their adoption.

The Board also set up the specific "Sustainability" function, which, in line with the strategic guidelines defined by the Board, and assisted by a dedicated work team:

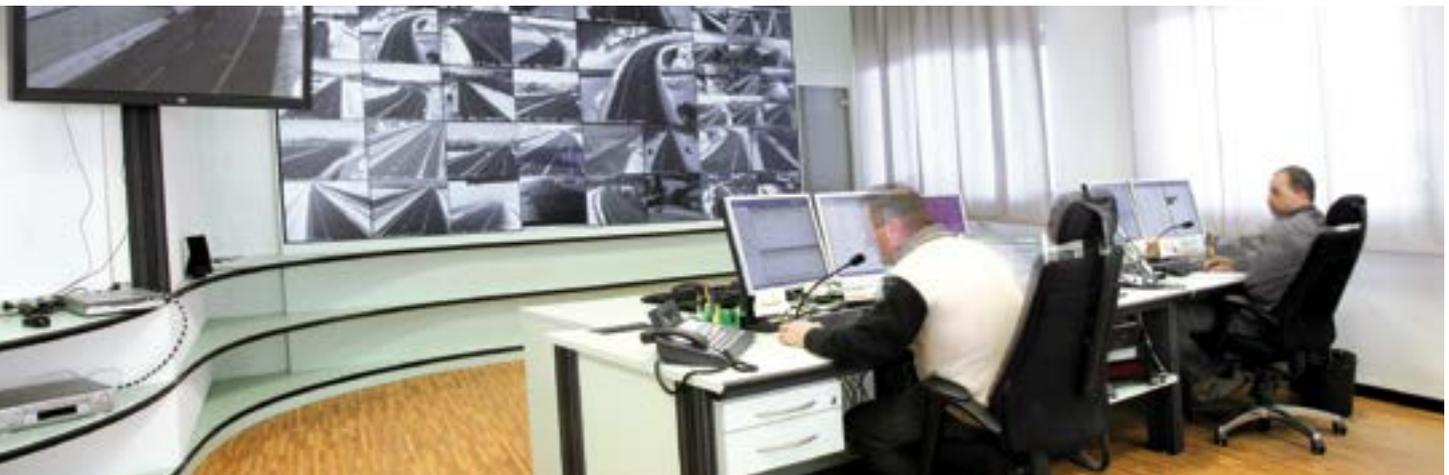
- prepares the Sustainability Plan in line with the strategic guidelines defined by the Board of Directors, setting out objectives in terms of operating actions

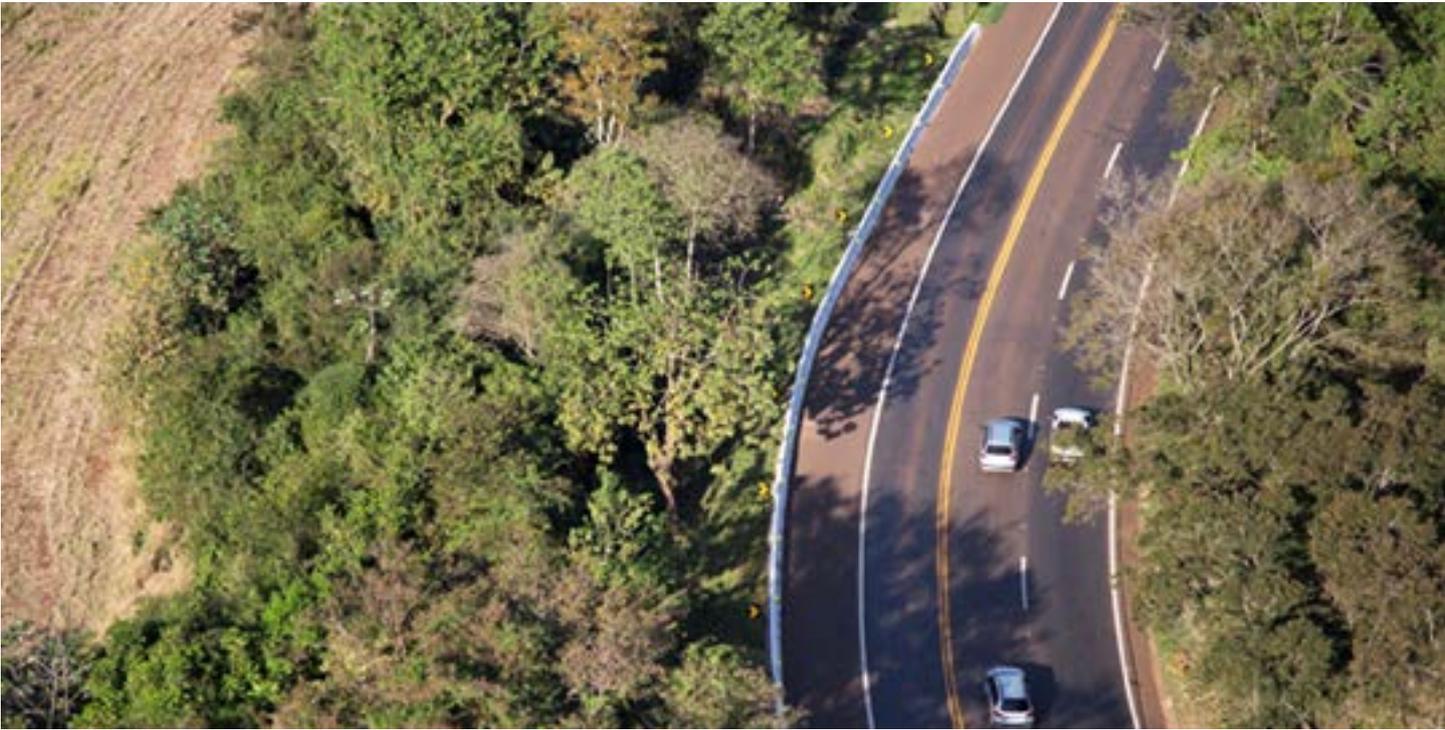
- coordinates the collection and processing of data necessary to produce the Sustainability Report
- plans Stakeholder engagement and internal and external communication activities concerning sustainability topics.

## MANAGEMENT OF CONFLICTS OF INTEREST

The "Procedure for transactions with related parties", approved by the Board of Directors, has been in force since 1 January 2011. This procedure was last updated on 23 January 2017, as part of periodic review activities recommended by Consob, on a three-year basis.

This procedure sets out the rules governing the approval, management and public disclosure of related-party transactions carried out by ASTM, in order to guarantee the transparency and procedural and substantive fairness of such transactions. The procedure is available on the Company website [www.astm.it](http://www.astm.it) in the section "Governance".





## INTERNAL AUDIT AND RISK MANAGEMENT SYSTEM

The Internal Audit and Risk Management System is part of the organisational, administrative and accounting structure and more in general the corporate governance structure, and conforms to recommendations of the Corporate Governance Code of Borsa Italiana, which the company endorses.<sup>8</sup>

The Board of Directors is responsible for the internal audit and risk management system in relation to which, through the specific Committee, it defines the guidelines and periodically checks their adequacy and actual operation, ensuring that main company risks are identified and managed in line with the strategic objectives set.

The Internal Audit and Risk Management Model adopted by ASTM was defined

based on best practices established by COSO's Enterprise Risk Management Integrated Framework and ISO 31000:2009.

In line with the model adopted and with support from dedicated internal functions, risks connected with the attainment of strategic company objectives are assessed, including in terms of sustainability topics.

During 2018, the mapping of main risks generated or sustained, relating to business operations, including aspects concerning environmental, social aspects and employees issues, respect for human rights, the fight against active and passive corruption, was revised.

In particular, the main risks concerning sustainability issues of ASTM S.p.A. and its subsidiaries are reported.

<sup>8</sup> For further information on the Internal Audit and Risk Management System, see ASTM's "Report on Corporate Governance and Ownership Structure" available on its website.



# MAIN RISKS CONCERNING SUSTAINABILITY ISSUES

## RISK OF OPERATIONAL DISRUPTION TO INFRASTRUCTURE

Risks related to operational disruption of motorway infrastructure that may affect motorway traffic safety.

## RISK RELATED TO THE MANAGEMENT OF EMERGENCY EVENTS AND MOTORWAY USER SERVICES

Risks related to the inadequate management of emergency events in motorway operation and the management of motorway services not in line with the standards defined in the services charter.

## RISK RELATED TO ETHICAL BEHAVIOUR

Risks related to a lack of integrity of management and employees of Group companies that could result in unethical, unauthorised, unlawful or fraudulent behaviour, with particular reference to active and passive corruption, corruption between individuals and human rights.

## RISK RELATED TO THE SUPPLY CHAIN AND SUBCONTRACTING

Risks related to the conduct of suppliers and sub-suppliers and lack of visibility and control over supplier practices, particularly in the construction industry, with particular reference to occupational health and safety topics, respect for human rights, compliance with environmental regulations and corruption.

## ENVIRONMENTAL AND OCCUPATIONAL SAFETY COMPLIANCE RISKS

Risks related to non-compliance with environmental legislation (environmental harm, noise pollution, risks of interference with contaminated areas, risks connected to construction and excavation activities, waste disposal and water management), and non-compliance with occupational health and safety.

## RISK RELATED TO PERSONNEL

Risks related to the inadequate management of processes to attract, recruit, develop, motivate and retain key positions within the Group.

## ENVIRONMENTAL COMPLIANCE RISK

Risk related to environmental, legal and related regulations in countries where the Group operates that may affect the organisation's activities.

## "NIMBY" RISK - RELATIONS WITH THE LOCAL AREA

Risks related to NIMBY (Not In My Back Yard) campaigns, i.e. when local communities or trade associations protest against the development of large infrastructure and/or projects to improve road systems undertaken by the Group.

## THE GROUP'S RESPONSE TO RISK

ASTM and its significant operating subsidiaries have adopted a Risk Management system conforming to applicable best practices, defining the organisational structure and assigning clear roles and responsibilities in this regard. Specific processes to identify, monitor and mitigate main company risks have also been defined.

In addition, Itinera S.p.A. renewed its certification of conformity to ISO 31000:2018 for risk analysis of the production cycle in 2018.

As regards main risk mitigation activities, ASTM and its significant operating subsidiaries have adopted a Code of Ethics and Conduct and a Management Programme pursuant to Legislative Decree 231/01 since 2004, also establishing the operating procedures and a disciplinary system.

The main policies adopted by ASTM and its subsidiaries, to mitigate identified sustainability risks, are described in this document, with particular reference to the "Ethics and Integrity" section.

ASTM and its significant operating subsidiaries have adopted management systems in line with applicable best practices, with a particular focus on sections concerning quality, health and safety and the environment.

All significant operating subsidiaries have adopted a management and quality system conforming to ISO 9001.

Some Group companies, including Itinera, have adopted an Environmental Management System certified to ISO 14001 and an Occupational Health and Management System certified to OHSAS 18001, ensuring specific management procedures to continually improve company environmental performance.

SINELEC also has an information security management system, certified to ISO 27001.

Group companies operating in the technology sector and construction industry have developed an integrated management system (Quality, Safety and Environmental) to guarantee that all applicable safety, health and environmental laws have been identified and evaluated, and that all necessary measures to guarantee the legal compliance of all operating units have been taken.

As regards recent legal updates concerning whistleblowing, ASTM and significant operating subsidiaries adopted a system in 2018 to report irregularities and potential offences committed by employees and third parties, to supplement the channels already set up for reporting to the Supervisory Body.



## APPROACH TO RISK MANAGEMENT

**CULTURE**  
Spread a risk management culture within the organisation

**GOVERNANCE**  
Define the Risk Management organisational structure



**RISK ASSESSMENT**  
Identify, monitor and mitigate risks

**RISK LIMITS AND STRATEGY**  
Define and integrate risk limits with strategic objectives

**PROCESSES**  
Integrate risk management in company processes



## ETHICS AND INTEGRITY

ASTM's **Code of Ethics and Conduct** ("Code of Ethics") sets out the ethics and behaviour to adopt in relations with personnel and third parties and that shall apply to any entity operating on behalf of the Company or in contact with it, establishing disciplinary and contractual sanctions in the event of any infringements. The Code of Ethics is distributed to all people and entities that do business and interact with the Company, for any reason whatsoever, together with additional Group policies on sustainability, and is available on the Company's intranet #agorà and on its website [www.astm.it](http://www.astm.it) in the section "Sustainability".

In order to gradually integrate the sustainability culture in all company processes and operating areas, ASTM developed a specific **Sustainability Policy** in 2017, which reflects the Group's commitments, with specific reference to actions targeting governance, employees, the environment, the local area, the supply chain, innovation, road safety and occupational health and safety.

To strengthen ESG (Environment, Social and Governance) monitoring, ASTM and its significant operating subsidiaries have adopted specific policies and procedures, of which the main characteristics are described in brief.

### Anti-corruption

An awareness of corruption risk associated with the nature and characteristics of the business, has led ASTM to take action beyond simple legal compliance, identifying measures to prevent corrupt practices which have become a part of the Group's social responsibility. In this context, in line with the principles set out in the Code of Ethics and Conduct, and Compliance Programme, and based on best practices concerning anti-corruption, and ISO 37001:2016, an **Anti-Corruption Policy** was defined, in order to further mitigate risks of conduct attributable to corruption in countries where the Group operates.

The Internal Audit Function monitors the adoption and dissemination of this policy; Moreover, the Supervisory Body, as part of its monitoring activities, checks the operating

effectiveness of controls adopted to prevent corruption. A channel has also been set up to report offences or irregularities identified during work activities. Training courses on corruption risks are held at regular intervals for executives and people most exposed to these risks.

### Diversity and inclusion

ASTM recognises the diversity of its employees as a success factor and seeks to maximise their experience, capabilities and qualities, on a daily basis. ASTM believes that diversity, in all its forms, is a strategic benefit as it enhances cultural initiatives, promoting a work environment that is inclusive and focussed on cooperation and creativity. These principles are set out in the **Diversity and Inclusion Policy** which all personnel shall comply with in relations with colleagues, customers, suppliers and all people they come into contact with while carrying out activities.

### Suppliers Code of Conduct

The ASTM Group's **Suppliers Code of Conduct** involves its own suppliers in creating a procurement cycle that is sustainable in social, environmental and economic terms. This Code applies along with all existing laws in countries where the Group operates and contains all the principles in the Code of Ethics and Conduct and existing company procedures.

### Human rights

ASTM recognises the intrinsic value of each person and endeavours to ensure that human rights are respected along the entire value chain. To consolidate its commitment on human rights, also considering the Group's international development, ASTM has defined a specific **Human Rights Policy**. The policy is inspired by international standards such as the Universal Declaration of Human rights, Fundamental Conventions of the ILO and Guiding Principles on Business and Human Rights of the United Nations. This policy was approved by the Board of Directors of ASTM in January 2019, and will also be adopted during the year by significant operating subsidiaries.



### Whistleblowing system

At an Italian and international level, whistleblowing is becoming one of the most effective ways to tackle unlawful actions such as bribery, fraud, abuse of power and other serious offences. The whistle-blower is the person who raises the alarm, alerting attention to potentially hazardous situations by reporting a circumstance.

In this context, the system promotes a culture of ethics and lawfulness within the Group, making whistleblowing a form of cooperation between the Group and whistle-blowers and encouraging a climate of transparency and a sense of involvement and belonging to the Group. This helps raise awareness among employees who can help tackle dishonest behaviour.

### Privacy

During 2018, the Group stepped up its focus on protecting the personal data of Stakeholders, aware that protecting the privacy of natural persons is a fundamental right, also recognised by the Charter of Fundamental Rights of the European Union. An organisational and management model for data protection was therefore adopted, conforming to the provisions in Regulation (EU) 2016/679 ("GDPR"), which became effective on 25 May 2018.

In particular, each company has adopted its own organisational model, which establishes the following:

- i.** The Chief Executive Officer is given all powers concerning data protection.
- ii.** Internal managers ("Data Managers") are appointed to run company organisational units in charge of personal data.

- iii.** Data Protection is identified from Data Managers, who coordinates the various Data Managers, providing support and acting as a contact for the Chief Executive Officer and Data Protection Officer ("DPO")
- iv.** persons authorised to process personal data (Data Controllers), who are given specific instructions by Data Managers, are appointed
- v.** the Data Protection Officer is appointed

During the year, periodic meetings were held with Data Protection Contacts and Data Protection Officers attending, to encourage comparison and coordination among company functions on data protection topics.

With particular reference to the management model, each company:

- i.** has adopted an integrated platform for the retention of significant documents, and the management of main privacy obligations on suitable media that can guarantee traceability
- ii.** has adopted its own privacy policy and additional operating procedures to protect personal data, published on the company intranet
- iii.** has revised its own document template (including information sheets for data subjects and agreements with third-party suppliers, in order to align with provisions of the GDPR)

As regards the mapping of their own processing, the companies identified the types of processing with particular risks for data subjects (e.g. personnel management, the operation of motorway stretches, geolocation, video surveillance systems), in order to identify appropriate data protection risk mitigation actions.

## SUSTAINABILITY FOR THE GROUP

For ASTM, adopting a sustainable strategy means pursuing a balanced, conscious approach to doing business, that takes people, the environment and local areas into consideration, in order to create value for all Stakeholders in the medium to long term.

The cornerstones of sustainability for the Group are:

- dedicated governance and responsibility systems
- a Risk Management system that integrates sustainability risk management
- the 2017-2021 sustainability plan "Going Global Sustainably" integrated with the Group Strategic Plan
- sustainability policies and procedures
- an approach based on creating shared value with all Stakeholders
- systems to report non-financial performance

### THE SUSTAINABILITY PLAN

The 2017-2021 Sustainability Plan called Going Global Sustainably, produced by ASTM in 2017, sets out the sustainability aspects considered most important by the

Group and its Stakeholders, and its commitments in terms of feasible actions and concrete results.

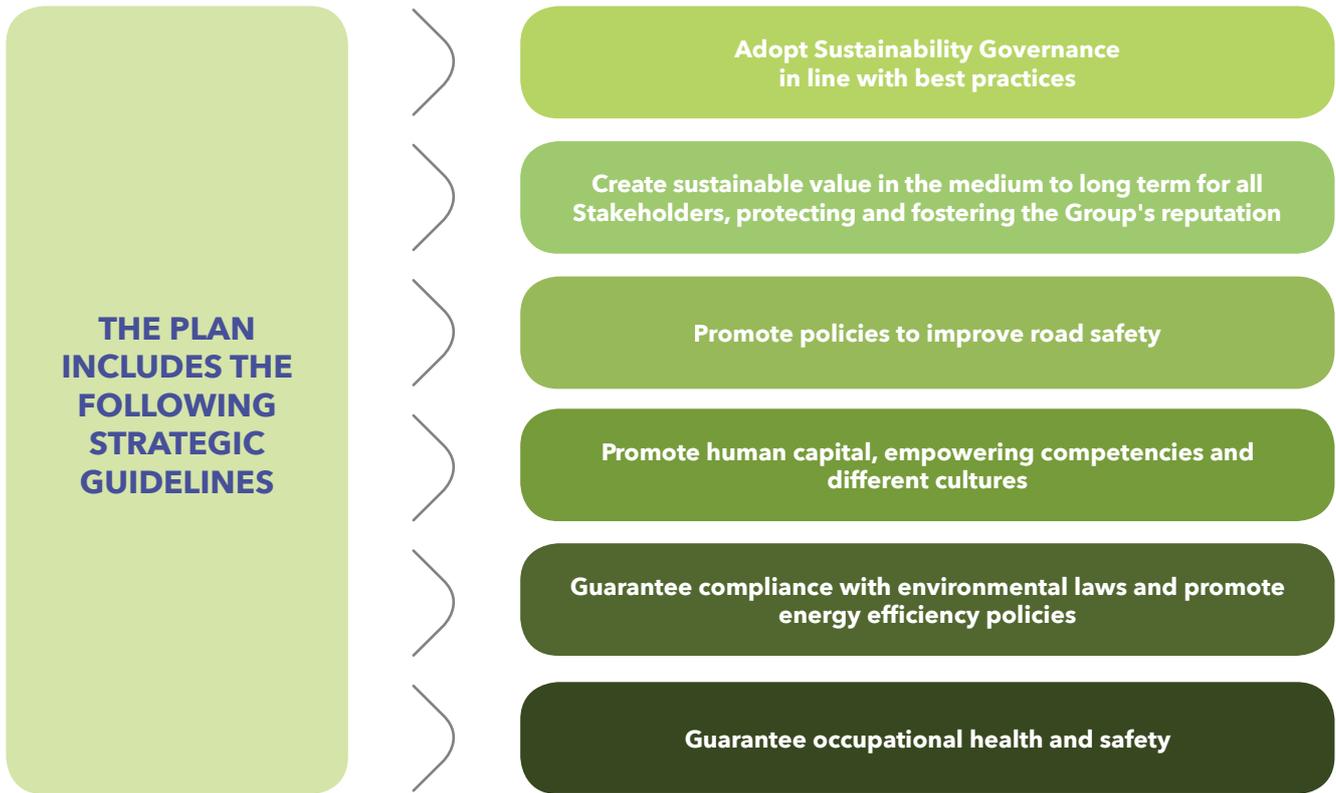
In particular, the Sustainability Plan highlights the Group's commitment to sustainability topics, with a view to continuous performance improvement and clear communication with Stakeholders on its strategic policies for sustainability, sharing its objectives, principles and values.

The Plan sets out the measurable qualitative objectives for each area of commitment, over the medium to long term, in line with the Group's values and its Strategic Plan, increasing the sense of responsibility and motivation of key people involved.

The Plan has been prepared by analysing, integrating and developing a number of factors, such as the "Ten Principles" of the United Nations Global Compact, ISO 26000 Guidelines, the Group's materiality analysis and the 17 Sustainable Development Goals (SDGs) to be reached by 2030 and endorsed by the United Nations.

The Plan is available on the Company website [www.astm.it](http://www.astm.it) in the section "Governance".





 **MEMBERSHIP OF THE CDP CLIMATE CHANGE PROGRAMME**

Main achievements in 2018 include ASTM's first-time membership of the "CDP Climate Change" programme promoted by the Carbon Statement Project (CDP), the international, non-profit organisation that assesses the transparency of main industrial and financial groups in disclosing information on their environmental impact, with the aim of contributing to the fight against climate change at global level.

Organisations that take part in this programme are assessed by compiling a specific questionnaire, to provide quantitative and qualitative data and information on strategies adopted for managing CO<sub>2</sub> emissions. To confirm its commitment to managing and reducing its environmental

impact, the Group obtained an assessment corresponding to "B" on an 8-point assessment scale (from the most virtuous to the least virtuous: A, A-, B, B-, C, C-, D, D-).



This assessment is an important achievement for the Group, that has long been committed to an adequate management of energy consumption and GHG emissions. The assessment also paves the way for new scenarios to enhance continual improvement in line with objectives in the 2017-2021 Sustainability Plan of the ASTM-SIAS Group.

In Italy, the 100 companies listed on the Stock Exchange that are most significant in terms of capitalisation are requested to take part in the assessment.

## OPPORTUNITIES FOR CREATING SHARED VALUE

The 2030 Agenda of the UN for Sustainable Development confirms the importance of the contribution from the private sector to sustainable development, at local, national and international level. In particular, the Sustainable Development Goal 12 "Ensure sustainable consumption and production patterns", encourages the private sector, and in particular large multinationals, to adopt sustainable practices and include sustainability information in their annual reports. This objective has been concretely met by developments in the legal framework concerning non-financial disclosure, promoted at European level by Directive 2014/95/EU and implemented in Italy by Legislative Decree 254 of 2016.

In this context, the private sector is not only dedicated to gradually improving its own non-financial reporting practices, but is also increasingly geared towards generating shared value, with a view to business responsibility that goes beyond the concept

of philanthropy, to become actual business sustainability. In fact, the available data confirms the so-called "shared value"<sup>9</sup> theory, indicating a positive relationship between sustainability and competitiveness. For the OECD, companies that adopt sustainability practices - regarding environmental, social and governance issues - for employees, customers, suppliers and the communities in which they operate, are more competitive in the long term.<sup>10</sup> ISTAT's 2018 Report on the competitiveness of production sectors<sup>11</sup> also highlights a positive relationship between the level of sustainability of a business (measured starting from the number of sustainable actions undertaken<sup>12</sup>) and the increase in the productivity level of work (measured in terms of added value per employee).

ASTM's approach to sustainability is continually steered by analytical processes and critical review of its performance, with the aim of generating shared value for the Group and Stakeholders.

<sup>9</sup> For more information, see: Porter, M. E. & Kramer, M. R. 2011. The big idea: creating shared value. *Harvard Business Review*, 89 (1), 2.

<sup>10</sup> OECD Development Centre. 2018. *Better Business for 2030 - Putting the SDGs at the core*.

<sup>11</sup> ISTAT. 2018. *Report on the competitiveness of production sectors: 2018 edition*.

<sup>12</sup> Company activities that characterise sustainable development include the involvement of external factors in the business value chain, according to ISTAT, as well as environmental impacts and the importance of social effects arising from company operations apart from legal obligations, the involvement of Stakeholders in company decisions and long-term strategic planning.



## STAKEHOLDER MAP AND MATERIALITY ANALYSIS

The ASTM Group has always been aware of context and of the importance of promoting a structured Corporate Responsibility process, and continues to support an even greater synergy of environmental, social, economic and governance issues, aspects concerning human rights and the fight against corruption, embedded in its business operations. In this context, the involvement of Stakeholders is fundamentally important, for sharing the main results achieved, from a critical perspective, and for defining future strategic actions.

The following figure shows the Stakeholder map, which ASTM identified in relation to reference sector analysis. Stakeholders were identified during the Group materiality workshop.

In compliance with the GRI Standards defined by the Global Reporting Initiative (GRI) in 2016, the Group developed and valued a materiality analysis process, providing for specific Stakeholder engagement initiatives, in order to steer the reporting of non-financial aspects included in this Report.

In particular, materiality analysis has enabled the Group to:

- Identify the most significant sustainability topics for ASTM, in light of economic, governance, environmental and social topics, also analysing actions to fight against corruption, personnel organisation and the decision-making and assessment needs of Stakeholders.
- Assess the significance of each material topic for the Group's strategic priorities and for various business segments. This process has contributed to assessing the



consistency of Group objectives, and controls to mitigate sustainability risks identified and Stakeholder expectations.

- Identify actions for future Stakeholder engagement initiatives. In light of the areas for improvement identified, additional Stakeholder engagement activities will be developed, in order to meet Stakeholders' expectations with an increasing focus, in line with continual changes in context.

To promote the active involvement of Stakeholders, in line with previous years and in compliance with the AA1000 Stakeholder engagement standard and Reporting Principles of GRI Standards, the third Stakeholder Engagement Workshop was held within the Group on 9 October 2018. To involve external Stakeholders, a specific survey was conducted, involving representatives from institutions, investors, the media, consumer associations, the supply chain and customers.

The results of the analysis were processed and summarised in the materiality matrix, presented below, considering the topics defined in article 3 of Legislative Decree 254/16, such as respect of human rights, environmental protection, issues concerning personnel, social aspects and the fight against active and passive corruption.

In particular, the following aspects were specified:

- every point represents a topic to be assessed;
- The 23 material topics identified are divided into seven, colour-coded categories (economic and governance, the fight against corruption, social, personnel, human rights, environmental and sector-specific).
- These topics are positioned in the matrix based on the significance for the Group, also considering the sectors in which it operates and its Stakeholders.

The main results are as follows:

- For topics specifically related to the Group's business, the particular importance of road safety and of traffic and emergency management is confirmed. Compared to the previous year, the topic "impact of new technologies" had a greater significance for Stakeholders.
- For social and personnel topics, a distinction is made between occupational health and safety and infrastructural and socio-environmental risk management. Compared to the previous year, employee development and training was more significant.
- For the categories economic and governance and the fight against corruption, anti-corruption is considered important.
- The environmental topics considered most important are noise pollution, land management, energy consumption and impact on the landscape, particularly regarding the sectors the Group operates in.



## ENGAGEMENT WITH SHAREHOLDERS: ITALIAN SUSTAINABILITY DAY

ASTM took part in the second edition of the Italian Sustainability Day, held to promote dialogue between companies and investors on sustainability, innovation and growth issues, promoted by Borsa Italiana on 2 July 2018 in Milano. During the event, companies and investors took part in a training programme and explored a number of topics: from

global macro-trends to sustainable investment strategies, the role of major Italian groups, the sustainability strategies of SMEs, reporting and communication and company/investor and analyst engagement. More specific topics were also addressed such as the funding of sustainable activities through the issue of green bonds. One-to-one sessions were also held to reply to investors' questions. The presentation made to investors is available on the Company website [www.astm.it](http://www.astm.it) in the section "Sustainability".

## THE ASTM GROUP'S MATERIALITY MATRIX



### Key

- Economic and governance
- The fight against corruption
- Social
- Human rights
- Sector-specific
- Environmental
- Personnel



## CORRELATION OF MATERIAL TOPICS, SDGs, AREAS ENVISAGED IN LEGISLATIVE DECREE 254/2016, SUSTAINABILITY RISKS AND MAIN MANAGEMENT AND MITIGATION ACTIONS

Material topics identified were correlated with the areas envisaged by Legislative Decree 254/2016, the Sustainable Development Goals (SDGs) integrated in the Group's 2017-2021 Sustainability Plan objectives and main sustainability risks identified.

The results of this analysis for the most significant material topics for the Group and its Stakeholders are summarised below:

Material topics:

### ROAD SAFETY, TRAFFIC AND EMERGENCY MANAGEMENT

Main sustainability risks associated:

- risk of operational disruption to infrastructure
- risk related to the management of emergency events and motorway services

Summary of main management and mitigation actions:

- management qualification and personnel training, including through drills
- operating procedures for timely and coordinated traffic and emergency management
- continual planning and monitoring of maintenance
- memorandums of understanding with neighbouring licensees and authorities (the police, civil protection, prefectures, etc.)

Envisaged by Legislative Decree 254/2016:  
**SOCIAL,  
ENVIRONMENTAL**



- service contracts with third parties (e.g. winter services)
- grantor monitoring plan
- systems to identify customer satisfaction.

All Group licensees have an operating unit that users may contact in the event of emergencies, and SOS points along the entire motorway network.

The Sustainability Plan envisages the attainment of ISO 39001 (Road Safety Management System) certification for all Group licensees by the end of 2021.

*For further information, see the section "Motorway concessions" in the chapter "Our business segments".*



Material topic:

## MANAGEMENT OF INFRASTRUCTURAL AND SOCIAL/ENVIRONMENTAL RISKS

Main sustainability risks associated:

- risk of operational disruption to infrastructure
- environmental and occupational safety compliance risk.

Summary of main management and mitigation actions:

- monitoring and planning of maintenance to check and guarantee the safety status of motorway infrastructure
- the seismic and hydrogeological monitoring plan
- grantor monitoring of infrastructure
- the "Code of Ethics and Conduct" and "Compliance Programme" adopted by ASTM and main Group companies, including specific operating procedures monitoring environmental offences and occu-

Envisaged by Legislative Decree 254/2016: **SOCIAL, ENVIRONMENTAL**



occupational health and safety

- environmental and occupational health and safety management systems in line with applicable best practices

*For further information, see the section "Motorway concessions" in the chapter "Our business segments", the section "Health and safety" in the chapter "Our responsibility towards people" and the section "Environmental issues management" in the chapter "Our responsibility towards the environment and local areas".*

Material topic:

## OCCUPATIONAL HEALTH AND SAFETY

Main sustainability risks associated:

- environmental and occupational safety compliance risk
- risk related to the supply chain and subcontracting.

Summary of main management and mitigation actions:

- the "Code of Ethics and Conduct" and "Compliance Programme" adopted by ASTM and main Group companies, including specific operating procedures monitoring compliance with the provisions in the Consolidated Safety and Health at Work Act (Legislative Decree 81/08)
- occupational health and safety management systems in line with applicable best practices

Envisaged by Legislative Decree 254/2016: **TOPICS CONCERNING PERSONNEL**



- specific health and safety training and prevention programmes, to reduce accidents, guarantee a safe working environment, and promote and encourage virtuous behaviour in the workplace
- Suppliers' Code of Conduct that establishes the behaviour to adopt in dealings with suppliers and business partners.

With a view to continual improvement, the Group promotes the harmonisation of occupational health and safety policies within each business segment, also through the adoption of an Integrated Quality, Safety and Environmental Management System, in line with applicable international standards.

*For further information, see the section "Health and safety" in the chapter "Our responsibility towards people".*

Material topic:

## EMPLOYEE DEVELOPMENT AND TRAINING

Envisaged by Legislative Decree 254/2016:  
**TOPICS CONCERNING PERSONNEL**



Main sustainability risks associated:

- risk related to personnel

Summary of main management and mitigation actions:

Implementation of an integrated human capital management system, through:

- a managerial incentive system with the aim of valuing competencies and promoting the achievement of results, establishing a virtuous link between compensation and professional performance

- partnerships with universities to attract young talent
- employee development and training programmes to create a shared company culture based on competencies and innovation

With a view to continual improvement, the Group promotes programmes to assess competencies and professional development plans.

*For further information, see the section "Programmes to manage competencies and ongoing training" in the chapter "Our responsibility towards people".*







# Our economic responsibility



## CONTEXT

Investments in sustainable infrastructure and scientific and technological research promote economic growth, the creation of jobs and prosperity. In 2017, it is estimated that global economic growth reached 3%<sup>13</sup>: a figure which is particularly significant given that growth in 2016 amounted to 2.4%. Investments in infrastructure with private participation have increased considerably since the start of the century, with particular reference to average-income countries.

However, since 2012, private investments in infrastructure have been declining. In 2017, private investments in the energy, transport and ICT backbone sectors and in water infrastructure in countries with a low to average income amounted to 93 billion USD in 304 projects in 52 countries.<sup>14</sup> Since 2000, the percentage of expenditure in research and development accounting for world GDP has been rising steadily. However, there is a considerable disparity between developed and developing countries, with the latter recording expenditure in Research and Development which is far lower.

<sup>13</sup>United Nations, World Situation and Prospects 2018, New York.

<sup>14</sup>World Bank, Private Participation in Infrastructure Database.



## ECONOMIC VALUE GENERATED AND DISTRIBUTED

The table showing the breakdown of economic value generated and distributed by the ASTM Group was based on reclassifying items in profit and loss of the Consolidated Financial Statements of ASTM at 31 December 2018.

In 2018, the Group's net global added value was equal to €1,718 million (1,476 million in 2017), increasing by 16% compared to the previous year.

Most of this value, equal to 47%, refers to "Supplier remuneration"; this item mainly consists of costs for services and raw materials. This is followed by "Personnel remuneration" (18%), which mainly refers to salaries and social security contributions.

"Company remuneration", equal to 14% of the total, includes the value retained by ASTM for the Group's future development.

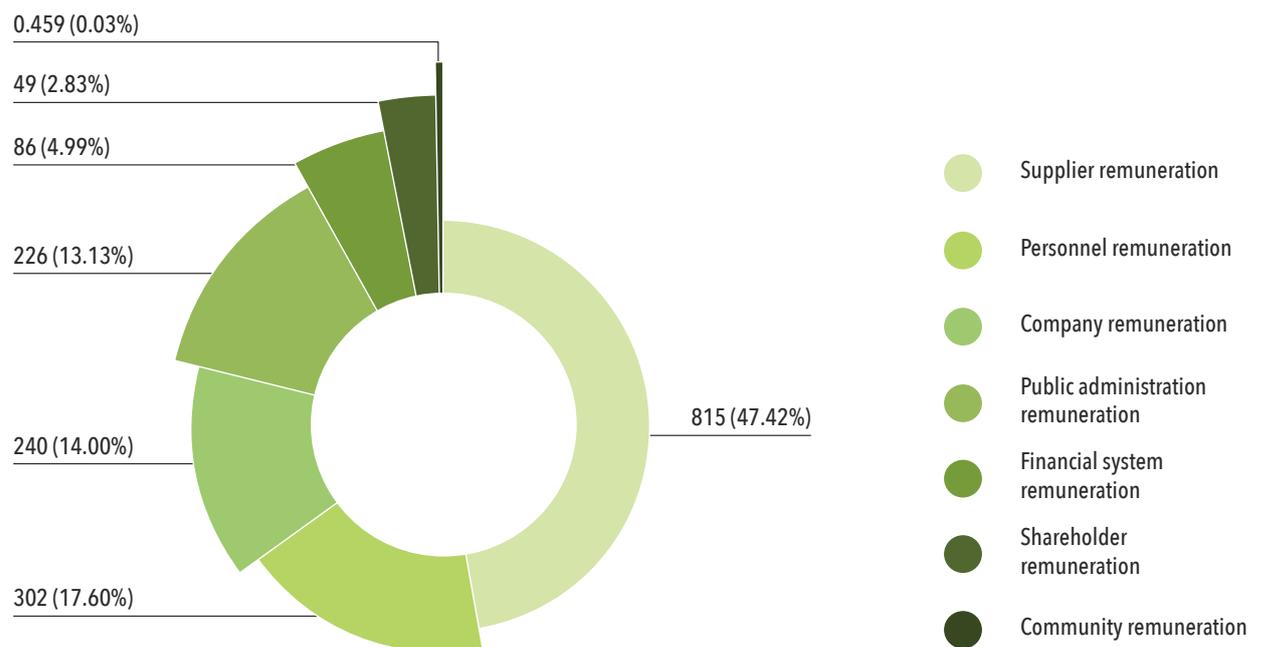
"Public administration remuneration" accounts for 13% and basically refers to income tax and concession fees.

"Financial system remuneration" was equal to 5%.

"Shareholder remuneration" was equal to 3% and refers to the distribution of the portion of profit for 2018.

"Community remuneration" (18%), which mainly refers to salaries and social security contributions.

### DISTRIBUTION OF ECONOMIC VALUE (in millions of euro)

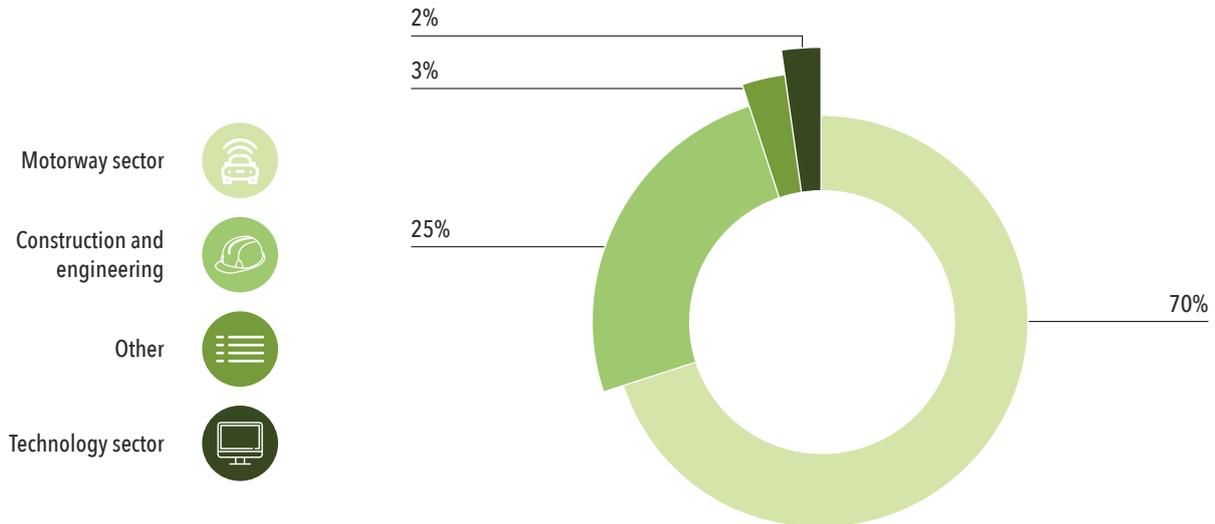




## FOCUS ON REVENUES

In line with previous years, the motorway sector confirmed its leading position within the ASTM Group in 2018 for revenues generated (€1,405 million). This was followed by the construction sector (€490 million), engineering (€6 million), the technological sector (€36 million) and miscellaneous activities (€54 million).

### 2018 REVENUES



## IMPACT MEASUREMENT

The business segments in which ASTM operates, and in particular concessions and construction, are fundamentally important for the economy.

As regards motorway concessions, numerous studies have demonstrated the strong correlation between an area's infrastructure and its rate of development. The economic growth of a nation is in fact related to an increase in passenger and goods mobility in its territory.<sup>15</sup>

Moreover, the construction industry is the driving sector of the domestic economy, purchasing goods and services from 90% of

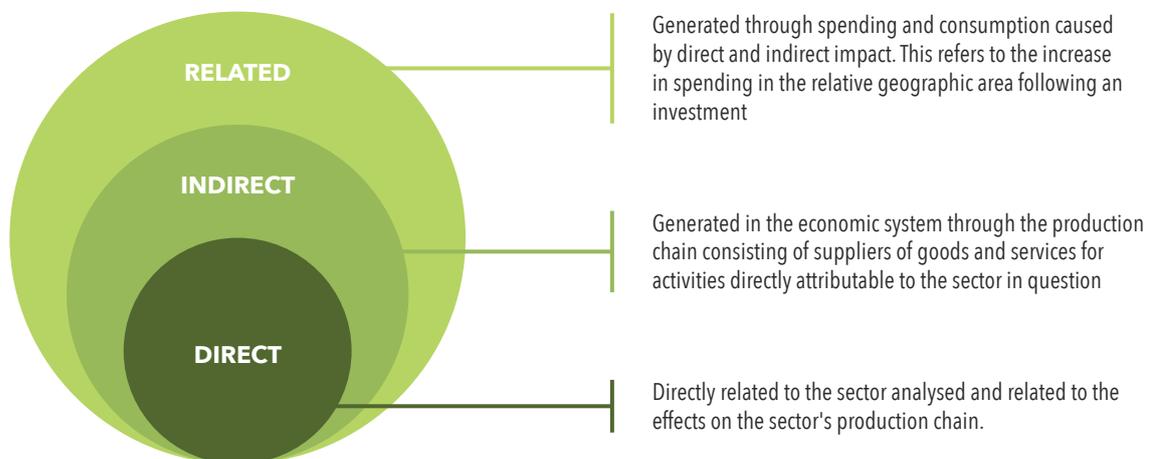
economic sectors.<sup>16</sup>

The estimate of the economic impact makes it possible to measure the incremental wealth generated by an investment in the relative sector and therefore relate the business activity to other economic variables such as GDP and employment.

For this reason, the ASTM Group, aware of the economic and social impact of its business operations, has developed a calculation model to quantify the direct, indirect and related contributions generated by its own business.

<sup>15</sup> Source: "Processing an economic impact indicator for developing new linear transport infrastructure", CRMT (Transport and Infrastructure Research Centre) Unioncamere Lombardia

<sup>16</sup> Source: "The construction industry: structure, sector interdependence and economic growth" by the Economic Affairs Department and Research Centre, ANCE



The analysis is based on the use of an input-output model<sup>17</sup> which, by statistically analysing the interaction between a country's industries, makes it possible to further understand the economic context in which a business operates.

Basically, an input-output model shows all sector interdependences in an area, and is a two-way index representing production of and demand for goods and services of a given economic sector.

By using this model, it is possible to estimate "indirect" multipliers, i.e. the multipliers which make it possible to represent the economic value generated by the Group and distributed to the economic system thanks to interaction with other companies in the local area, as well as the "related" multipliers that reflect the effect generated by the spending of households to whom the Group distributes wealth.

<sup>17</sup> Model developed by the world-famous economist and scientist Leontief, winner of the Nobel Prize for economics in 1973 and inventor of the input-output system



**DIRECT CONTRIBUTIONS**



**INDIRECT CONTRIBUTIONS**



**RELATED CONTRIBUTIONS**

As regards the ASTM Group, the analysis shows the indirect and related contribution, also in relation to generated employment<sup>18</sup>, starting from the economic value generated and distributed in 2018 ("Direct contribution").

The results show how the ASTM Group with its activities makes a significant contribution to creating economic value and jobs in the

area where it operates.

In particular, with an added value of €1,718 million (for more information see the section on Economic value generated and distributed), an overall contribution of around €6 billion is generated (given by the sum of the direct, indirect and related contribution).



<sup>18</sup> As regards activities carried out by the Group in the world, apart from the United States, the multipliers have been estimated using the Input-Output methodology for tables with data on resources and uses in Italy, prepared by ISTAT for 2010 as amended (<https://www.istat.it/it/archivio/195028>) referring to 63 production sectors (NACE63). As regards activities carried out by the Group in the United States, through the subsidiary Halmar International LLC, the reference multipliers indicated by the International Labour Organization, in the publication "The role of construction as an employment provider: a worldwide input-output analysis", ILO, 2015, were used. The data in this section of the Report refer to the result of combining these methodologies, to guarantee a more accurate representation of direct, indirect and related impacts associated with activities and operations of the ASTM Group worldwide.

Through the use of indirect and related employment multipliers, the overall effect on creating new jobs was estimated as equivalent to **more than 132,000 workers**.

This value refers to the sum between direct employees of the Group and the effect on indirect and related employment generated by the latter



## IMPACT ASSESSMENT OF THE ASTI-CUNEO MOTORWAY (A33)

The quantification of external issues generated by an infrastructure has always been, particularly so at this historic time, at the centre of public and academic debate.

The Asti-Cuneo motorway (A33) has been the centre of attention of the local and Italian media for several years now, due to its lack of completion and the effects on the area.

The 10 km or so that have not been completed near Alba (lot II.6 of the project), are affecting the functioning and potential of this infrastructure, which was designed to connect the main roads in the north-west of the country - an area with which has a wealth of outstanding industries, an excellent food and wine sector and tourist industry.

At present, potential users of the A33 have

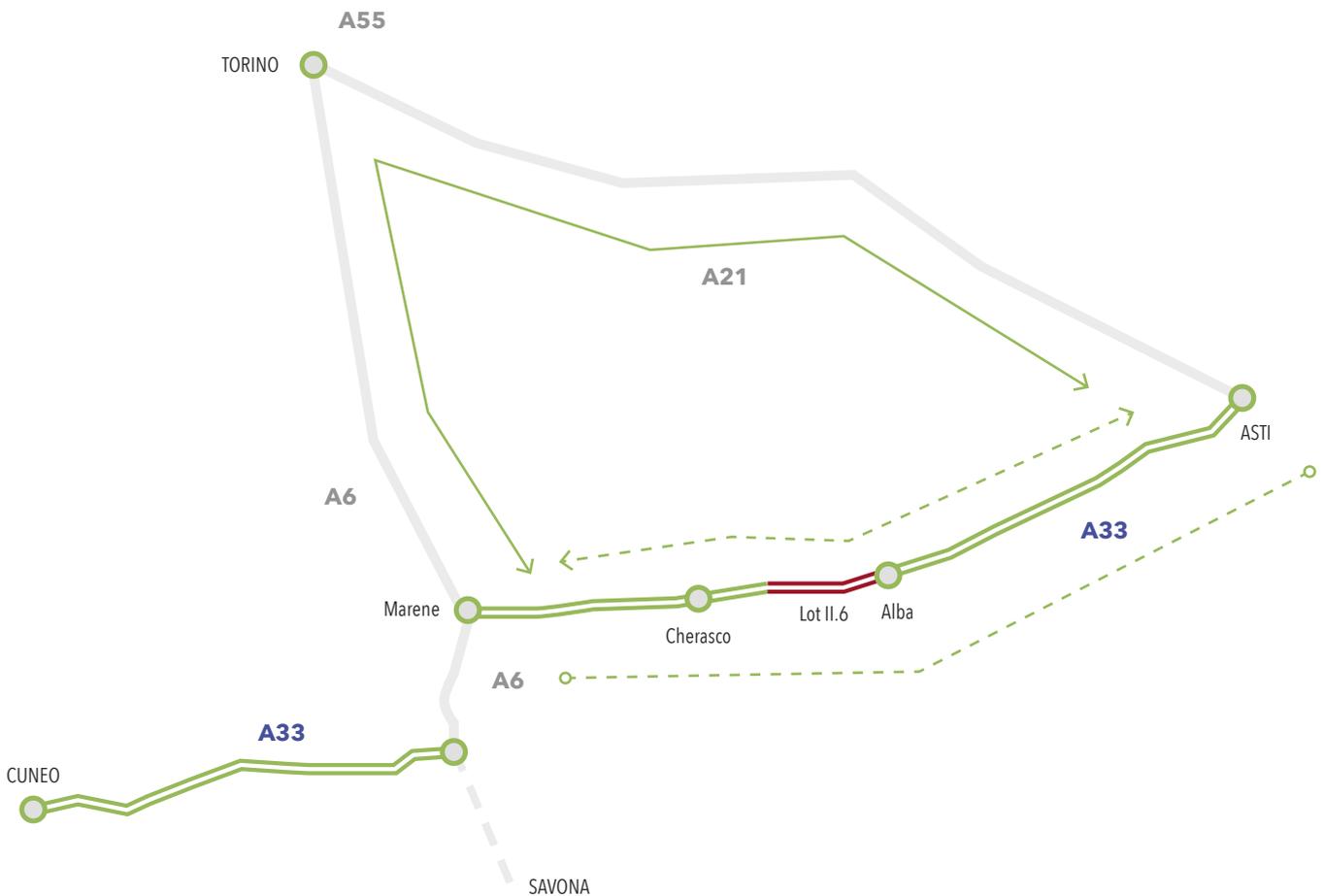
to use alternative roads, and specifically:

- the A6-A55-A21 route (to then continue on the motorway)
- provincial roads parallel to the missing section, to then continue onto the A33

Today, the A33 motorway is a practically unique example of major works in the country, as the Stakeholders, and particularly local communities, have shown the authorities, at various levels, and on a number of occasions, that they want the work to be completed.

This example concerns the PIMBY (Please In My Backyard) effect, as opposed to the NIMBY (Not In My Backyard) effect, which is very frequent in the case of infrastructure works.

To identify a solution to make the entire motorway connection function and also deal with the economic/financial imbalance of the concession due to causes not attributable to the licensee, the Ministry of Infrastructures and Transport (Grantor), identi-



fied a new external route (originally a route partially underground had been identified), also providing for its development through cross-financing between Autostrada Asti-Cuneo S.p.A. and SATAP S.p.A. (A4 stretch), which are both SIAS Group companies, without using any public funds.

In this context, Autostrada Asti-Cuneo S.p.A. appointed ItaliaCamp S.r.l. to measure and assess the potential economic and social impacts of completion of the A33 with the aim of:

- improving transparency with the community
- providing an additional perspective that values and provides grounds for the need to complete the section
- facilitating a more informed assessment by players involved in the decision-making process
- promoting the communication of this information to Stakeholders concerned, for various reasons, by the development of the work.

The assessment process developed by ItaliaCamp considers the economic and social effects that may be generated by completion of both the construction and management stages of lot II.6.

As concerns the economic impact, the investment and completion of the motorway section, based on the Leontief input-output econometric model, would generate an **economic impact** (direct, indirect and related) over the four years estimated for completion of the construction, equal to **€850 million**, for an investment of approximately €350 million.

Moreover, with the completion and consequent operation of the entire motorway stretch, the annual average value estimated to generate benefits for the community is equal to **€142 million**.

To define the social impact, in line with main reference benchmark methods (Social Return On Investment "SROI" and Social Net Present Value "SNPV"), analysis was

conducted considering the comparison between the "as is" scenario (relative to the current situation of the infrastructure) and the "to be" scenario (which considers lot 11.6 completed, according to the Cross Financing project).

Based on this comparison, the social impact that could potentially be generated was calculated in monetary terms, so as to obtain a value and measurement for the external issues related to completion of the infrastructure or otherwise.

The social impacts that may be potentially obtained from completion of lot II.6 measure, in monetary terms, the following three real effects:

- The value of **saved time**, meaning the economic value of the reduction in transit times compared to alternative routes that are used more frequently, which on average are more than 60 km.
- The value of **shorter distances**, corresponding to the economic value relative to the kilometres not travelled by users transiting on the A33 motorway compared to the alternative route (as in the previous case).
- The value of **safety**, or the lower social costs following the reduction in road ac-

cidents estimated for the A33, the section considered safer than alternative routes.

In the light of analyses conducted, completion of the Asti-Cuneo stretch, when works are finished, will be able to produce on average an annual social impact for companies and citizens in the local area equal to approximately **€78 million**.

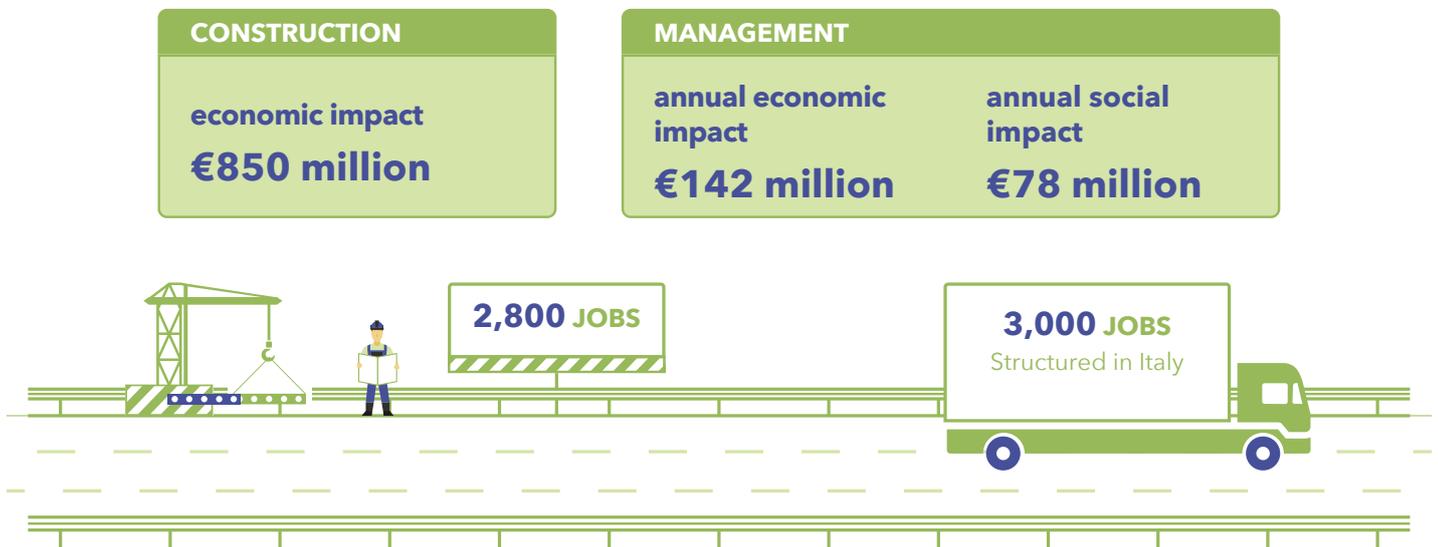
Lastly, in terms of employment,<sup>19</sup> approximately **2,800** jobs could be generated during the **construction stage** and approximately **3,000** in the subsequent **operational stage**.

It is therefore evident that the results from the analysis offer a clear, significant and unequivocal indication of the economic benefits that completion of the Asti-Cuneo stretch could generate.

The analysis carried out can be evaluated from two points of view.

Estimated values represent the benefit that may be generated for the community, but also the costs that the community is currently sustaining due to the lack of completion of the Lot. These costs will increase over time.

<sup>19</sup>The estimate is defined based on the methodological model developed by CRMT (Transport and Infrastructure Research Centre) that defines the number of jobs created thanks to the development of 1 km of new motorway based on four factors: the level of infrastructure in the area (higher than, equal to or lower than the Italian average), the type of operation (new infrastructure or redevelopment of stretches already existing), relevance (regional, national or international) and the function of the infrastructure (stimulus for economic development, integrated in the area or merely passing through).





## SUPPLY CHAIN

**E**nsuring correct and responsible supply chain management is essential to promote the sustainability of the business and the sustainable creation of value in areas where the Group operates. In this context, the ASTM Group recognises the importance of guaranteeing a transparent procurement cycle and of regulating social and environmental impact in order to safeguard Stakeholders.

During 2017, ASTM defined a **Suppliers Code of Conduct** to further integrate the set of policies and procedures that govern the sustainable management of the supply chain for each operating company of the Group. This Code, which applies along with all laws in force in countries where the Group operates and complements all the principles in the Code of Ethics and Conduct and in company procedures in effect, sets out the standards of behaviour that suppliers, partners, business agents and distributors shall adopt, as well as the procedures for disseminating the code and recruiting suppliers. At a Group level, supplier selection and management are based on impartiality and fairness, avoiding conflicts of interest, which are even potential. Considering Group expectations of business ethics, suppliers' services, even if they vary from ASTM's different business segments, must

guarantee necessary quality levels and compliance with the highest standards on human rights, work conditions, ethics and respect for the environment.

In relation to the construction sector, the company Itinera has a Suppliers List in order to meet the need to operate with reliable partners in qualitative, organisational, occupational health and safety and environmental terms, that are acceptable for the company and that may guarantee the provision of activities in compliance with contractual requirements. For further information see the Itinera Group's 2018 Sustainability Report.

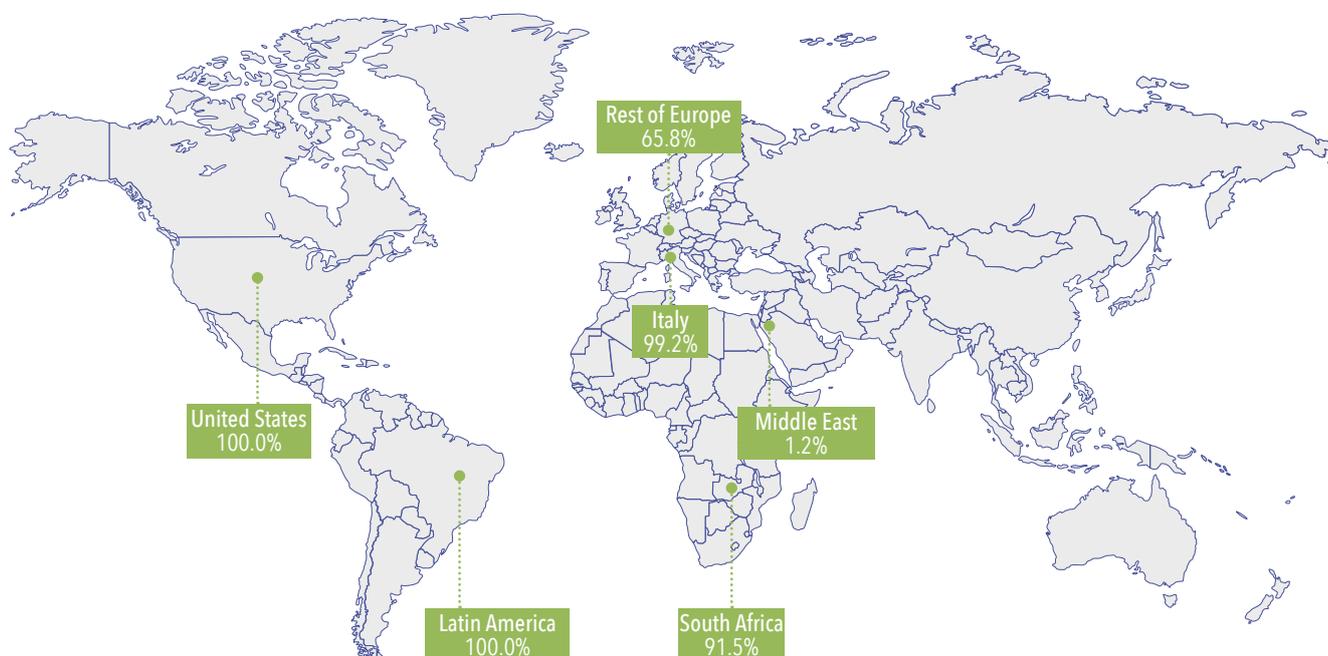
With particular reference to licensees, that all have a Suppliers List, considering the specific nature of the business, the transparency of the process to award works for motorway construction is guaranteed by legal provisions (and in particular the Concession Contract and Public Procurement Code), that licensees companies must observe when assigning works. For further information see the SIAS Group's 2018 Sustainability Report.

During 2018, over 90% of Group purchases were sourced from local suppliers<sup>20</sup>. The chart shows the percentage of local purchases, by geographic area.

<sup>20</sup> As regards so-called Significant Locations of Operations: Italy, Rest of Europe, United States, Latin America, South Africa, Middle East.

## LOCAL PURCHASES

(% of expenditure on local suppliers)



The main, non-renewable materials purchased by the Group during 2018 are broken down as follows, by reference category.

## MAIN MATERIALS PURCHASED IN 2018

	UNIT OF MEASUREMENT	QUANTITY
Oil products	litres	26,111,891
Iron and steel	kg	15,504,285
Bituminous mixes	ton	179,066
Quarry materials	m <sup>3</sup>	49,632
Concrete	m <sup>3</sup>	36,810
Road barriers	ml <sup>21</sup>	13,708
Cement and other binding agents	ton	11,100
Bitumen	ton	10,142
Chlorides	ton	2,203
Prefabricated cement products	m <sup>3</sup>	1,427

  
**OVER 5,900**  
**GROUP SUPPLIERS**  
**ACTIVE IN 2018**

<sup>21</sup> Linear metres



## **SUPPLIER SCREENING AND ASSESSMENT**

Supplier screening and assessment mainly takes place through monitoring supplier conformity to applicable laws and specific labour and environmental requirements.

In particular, regarding the construction industry, suppliers are screened - as part of criteria concerning work practices - according to whether activities are to be carried out in Italy, the EU or the rest of the world. For Italy and EU countries, documents on personnel to use for activities to carry out are examined beforehand. For non-EU partners, a special focus is also placed on child labour (regarding subcontractors directly at the work site and external manufacturers of materials which are then used at work sites), and on living conditions at base camps (accommodation, board, leisure and recreational facilities, transport to and from the home country). In the case of suppliers operating at external production units, specific audits may be directly conducted at the units concerned. As regards environmental topics, when recruiting subcontractors, the characteristics of individual companies in relation to the work to carry out and relevance for environmental topics are normally assessed, requesting information on environmental certification and registration with applicable registers. Special attention is paid, for example, to excavation and earth moving works, environmental clean-ups and specialist works. Moreover, during 2018, some foreign job orders were started (for further details, see the section "Focus" in this document), with contracts that have specific clauses for evaluating the

working conditions of staff. In this regard, the company is certified to SA8000 on social accountability.

In the case of concessions, services and works contracts specifically refer to applicable laws and collective bargaining agreements in use, with particular reference to occupational health and safety, and insurance, welfare and salary conditions. Moreover, an appropriate "environmental" clause is included when stipulating supply contracts, in which the supplier is specifically required to comply with all applicable existing laws. Therefore, contracts shall also include provisions on compliance with environmental regulations and the issue of all certification/qualification required by laws. In the case of specialist environmental suppliers, for example waste disposal operators, certification is obtained and updated as part of Supplier Register management.

Lastly, regarding engineering companies, SINA in particular adopts supplier screening and assessment practices based on technical/professional requirements of occupational health and safety and environmental protection laws, also requesting environmental certification. In addition, in the case of non-EU countries, SINA requires compliance with the UN convention on child labour, for sub-contractors directly present at work sites and for external manufacturers of materials which are then used in works.

In compliance with management systems adopted, suppliers used are generally assessed by Group company management, assisted by relevant Technical Managers and company units.



### ACTIONS TO MITIGATE MAIN RISKS REGARDING CHILD LABOUR

Considering the specific nature of its business and geographic scope of its operations, in the world, the main inherent risks identified for the Itinera Group regarding child and forced labour concern construction sites, with particular reference to the responsible management of the supply chain in Africa and the Middle East. In particular, Itinera requests a statement of compliance with the UN convention on the rights of the child, articles 31-40, in relation to activities and main suppliers, both Italian and foreign, with

a greater risk of the use of child labour. At the Botswana work site, the Human Resources and Health, Safety and Environment departments carry out controls. At the Abu Dhabi work site, work visas are checked before personnel can enter the site. As regards activities and main suppliers with a considerable risk of the use of forced labour, workers selected on a random sample are interviewed during internal audits on human rights and any unlawful situations, in accordance with requirements of SA8000 and Corporate Social Accountability. Boxes are provided at foreign work sites to post anonymous reporting of any breaches.



### FOCUS ON MINIMUM ENVIRONMENTAL CRITERIA

SINA works with the Italian Ministry for the Environment, Land and Sea Protection in relation to Minimum Environmental Criteria. These criteria are defined for various stages of the purchasing process, in order to identify the best design solution, product or service in environmental terms over the entire life cycle.

In particular, the document: "Minimum environmental criteria for design and works concerning the construction and maintenance of road infrastructure" was produced as part of the "Action plan for the environmental sustainability of consumption in the public administration sector - National action plan for green public procurement".





**Our responsibility  
towards people**





## CONTEXT

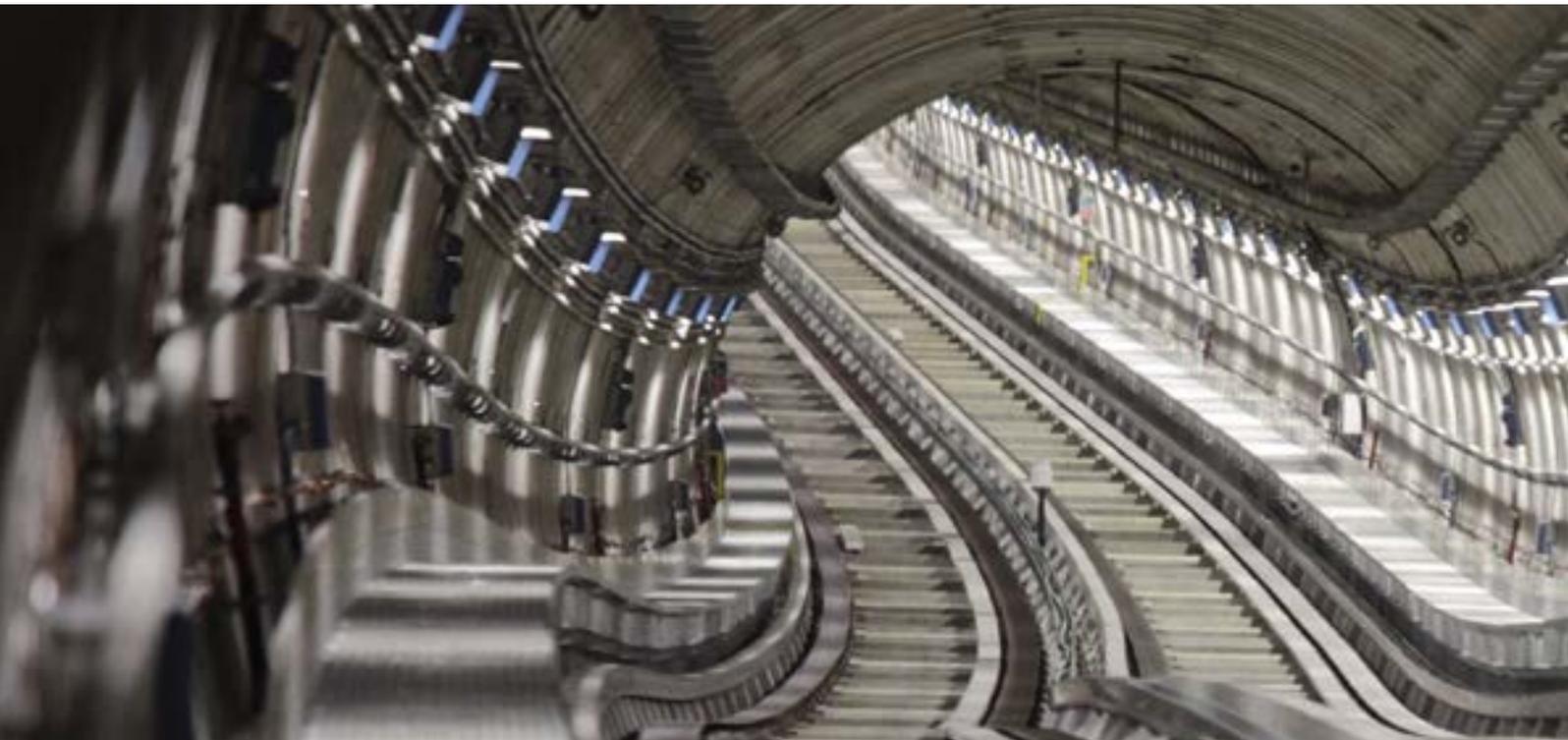
There are approximately 200 million unemployed worldwide: of these, the majority are young people. In particular, the global rate of youth unemployment (13%) is three times greater than the rate of adult unemployment (4.3%).<sup>22</sup> In recent years, the global unemployment rate has decreased and work productivity has increased. However, greater effort is required to promote equal work opportunities, particularly for new generations, to reduce inequality (particularly regarding the gender pay gap) and promote working environments that are more dignified, safer and healthier.<sup>23</sup>

General disparity is still a widespread problem in the world, even if some forms of direct and indirect discrimination against women and girls have attenuated and numerous countries have achieved important goals regarding gender equality in terms of education, health, access to the economy and politics. In particular, even if gender disparity regarding economic involvement and opportunities has gone down by 1% compared to 2017 and by 2.5% compared to 2006, there is still a Global Gender Gap Index of 42%: if this trend continues, the gap will be closed in 202 years.<sup>24</sup>

<sup>22</sup>International Labour Organisation (ILO). 2018. World Employment Social Outlook: Trends 2018.

<sup>23</sup>United Nations (UN). 2018. The Sustainable Development Goals Report 2018.

<sup>24</sup>World Economic Forum (WEF). 2018. The Global Gender Gap Report 2018.



## PEOPLE

“ ASTM pays the utmost attention at all times to empowering people. For this reason it considers meritocracy, professional expertise, honesty and fairness as fundamental and key to taking all decisions concerning career development and any other aspects related to its employees. ”

The Code of Ethics

ASTM considers its employees as the most important resource it has in order to create value within the organisation and also lay the foundations for its success.

ASTM's human resources management policies promote stable, long-lasting working relationships, which include part-time and flexible work, that can meet employees' needs for a more flexible, dynamic approach. The Group also sources a minimum number of out-sourced staff to support it.



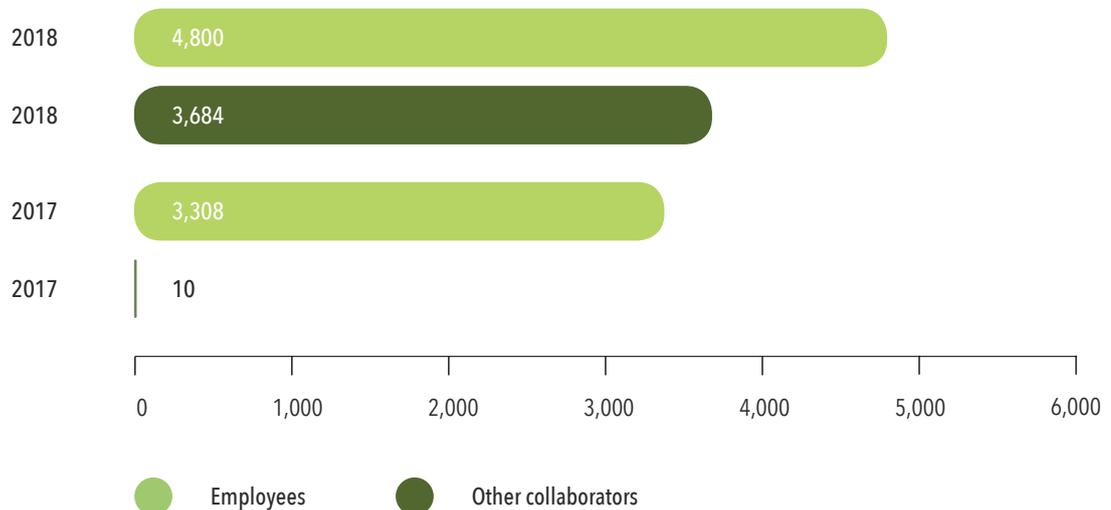
**8,484**  
EMPLOYEES AND OTHER  
COLLABORATORS



**92%**  
EMPLOYEES WITH PERMANENT  
CONTRACTS



## GROUP PERSONNEL



## EMPLOYEES AND OTHER COLLABORATORS BY GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Employees	2,651	657	<b>3,308</b>	3,919	881	<b>4,800</b>
<i>of which joint operations</i>	-	-	-	560	61	<b>621</b>
Other collaborators	6	4	<b>10</b>	3,667	17	<b>3,684</b>
<i>of which joint operations</i>	-	-	-	3,665	16	<b>3,681</b>
<b>Total</b>	<b>2,657</b>	<b>661</b>	<b>3,318</b>	<b>7,586</b>	<b>898</b>	<b>8,484</b>

The Group's overall work force at 31 December 2018 totalled 8,484 people, of whom 4,800 were internal employees, and a considerable number of other collaborators, comprising some 3,684 people.

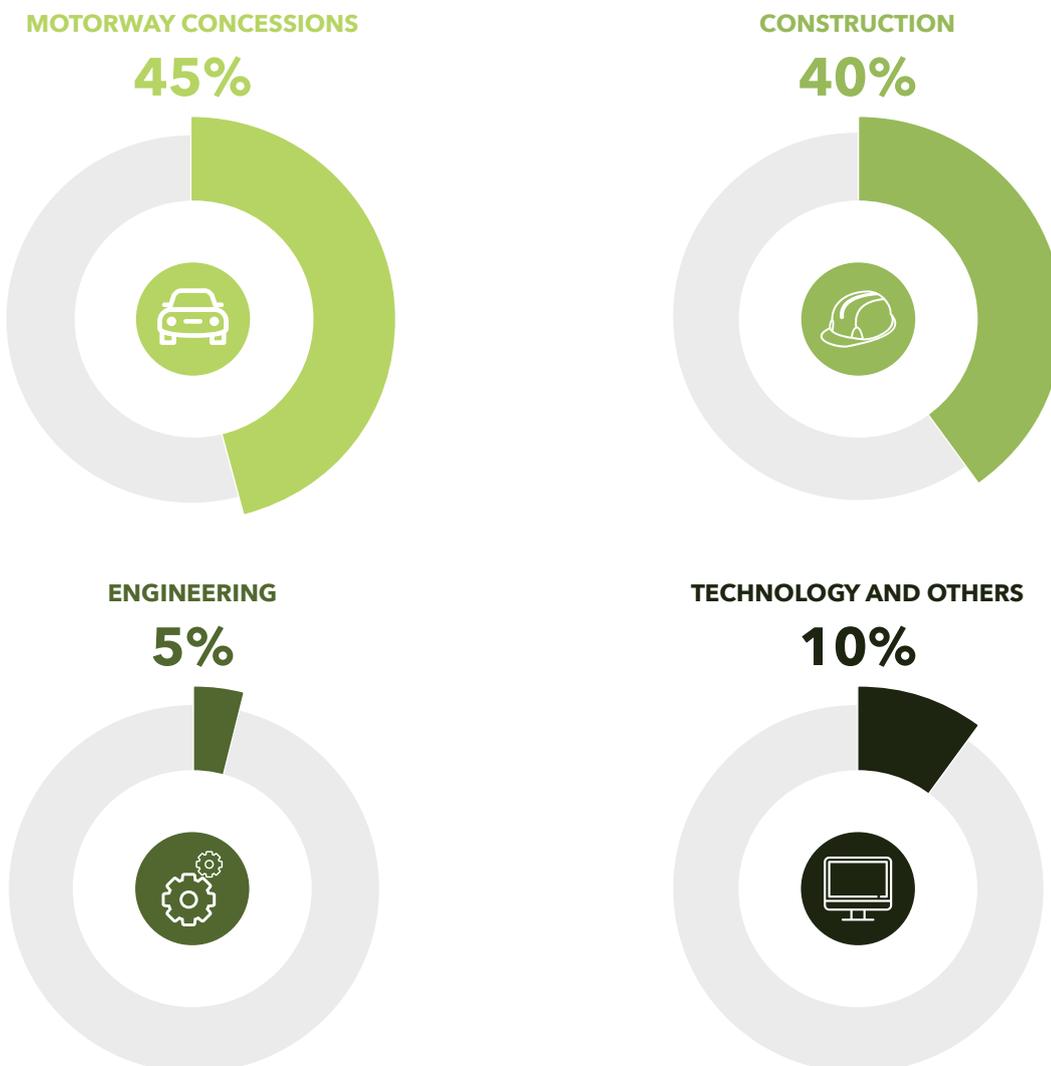
The item "Other collaborators" mainly includes temporary workers deployed at operating sites abroad, of whom 98% for the Itinera/Ghantoot joint operation (3,606), set up for the development of the Reem Mall in Abu Dhabi.

The increase in the number of employees over the previous year is mainly due to changes in the scope of consolidation and,

in particular, to the consolidation of data relative to joint operations (621), the Halmar Group (226), the merger by incorporation of Interstrade S.p.A. (152) with Itinera S.p.A. and SEA Segnaletica Stradale S.p.A. (76). Moreover, with reference to the scope of concessions, the increase in the number of employees over the previous year is due mainly to the transfer of personnel from the previous licensee (Autostrade Centro Padane S.p.A.) to the subsidiary Autovia Padana S.p.A. (211) as from 1 March 2018.

In 2018, 82% of employees were male, and nearly all other collaborators were male.

## GROUP EMPLOYEES BY BUSINESS SEGMENT



Looking at the breakdown of personnel by business segment, approximately 45% of personnel work in the motorway concession sector, around 40% in the construction sector, while the remaining 15% are employed in the engineering and technology sectors and other areas.

## GROUP EMPLOYEES BY GENDER AND TYPE OF CONTRACT (PERMANENT, TEMPORARY)

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Temporary	105	31	136	272	110	382
Permanent	2,546	626	3,172	3,647	771	4,418
<b>Total</b>	<b>2,651</b>	<b>657</b>	<b>3,308</b>	<b>3,919</b>	<b>881</b>	<b>4,800</b>
<i>of which joint operations</i>	-	-	-	560	61	621



As proof of the Group's commitment to promoting stable, long-lasting working relationships, 92% of employees have permanent contracts. This percentage is another excellent result regarding the current macro-economic context in which the Group operates.

Employees on permanent contracts totalled 3,623 in Italy, 477 in Latin America, 52 in the Middle East, 225 in the United States and 41 in Europe. Employees on temporary contracts totalled 217 in Italy, 16 in Latin America, 116 in South Africa, 1 in the United States and 32 in Europe.

## GROUP EMPLOYEES BY GENDER AND TYPE OF CONTRACT (FULL-TIME, PART-TIME)

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Full-time	2,358	423	<b>2,781</b>	3,564	591	<b>4,155</b>
Part-time	293	234	<b>527</b>	355	290	<b>645</b>
<b>Total</b>	<b>2,651</b>	<b>657</b>	<b>3,308</b>	<b>3,919</b>	<b>881</b>	<b>4,800</b>
<i>of which joint operations</i>	-	-	-	560	61	621

In 2018, 645 members of staff were on part-time contracts, equal to 13% of employees. The workforce is made up of roughly the same numbers between men and women, with men accounting for a slightly higher figure (55%).

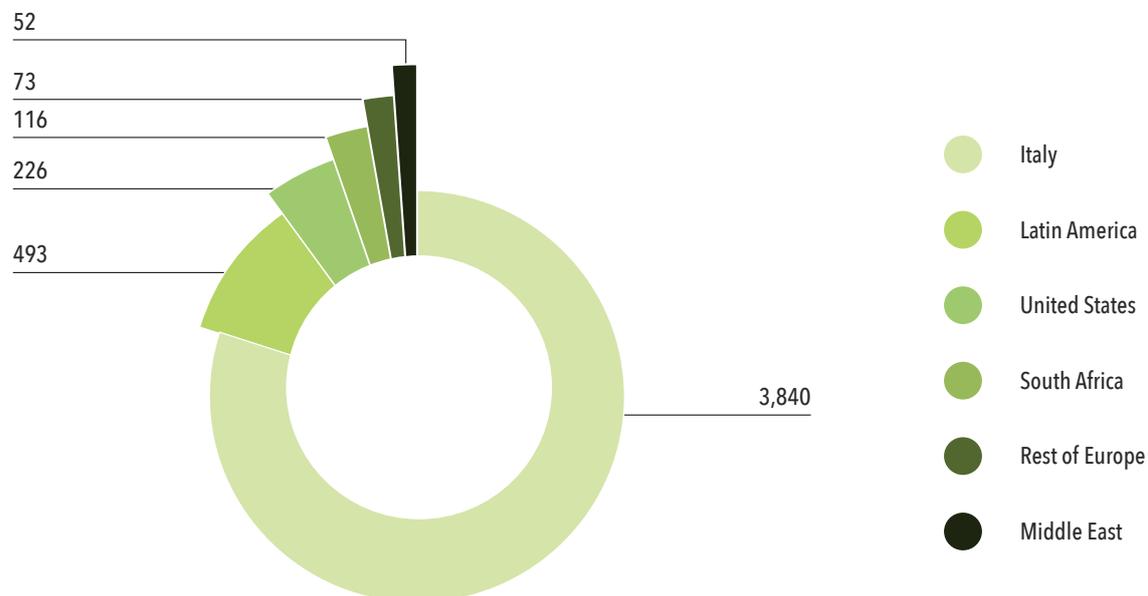
In line with the principles in its Diversity and Inclusion Policy, the Group ensures it avoids

all forms of discrimination concerning employment and work, and does not tolerate any form of discrimination based on ethnic or racial origin, skin colour, gender, sexual orientation, religious beliefs, nationality, age, political opinions, trade union representation, marital status, health, and any other social or personal conditions.

## GROUP EMPLOYEES BY GEOGRAPHIC AREA

NO. OF PEOPLE	AT 31 DECEMBER 2018		
	Men	Women	Total
Italy	3,070	770	<b>3,840</b>
Latin America	463	30	<b>493</b>
Middle East	47	5	<b>52</b>
South Africa	89	27	<b>116</b>
United States	208	18	<b>226</b>
Rest of Europe	42	31	<b>73</b>
<b>Total</b>	<b>3,919</b>	<b>881</b>	<b>4,800</b>

## GROUP EMPLOYEES BY GEOGRAPHIC AREA



In 2018, 80% of Group employees were based in Italy, 10% in Latin America and around 5% in the United States.

## NEW HIRES BY GENDER AND AGE GROUP

	AGE	2017		2018	
		no. of people	Turnover %	no. of people	Turnover %
Women	<30 years	27	n.a.	85	134.9%
	30-50 years	55	n.a.	196	38.1%
	>50 years	21	n.a.	76	25.1%
<b>Total women</b>		<b>103</b>	<b>15.7%</b>	<b>357</b>	<b>40.5%</b>
Men	<30 years	54	n.a.	306	101.3%
	30-50 years	143	n.a.	909	48.4%
	>50 years	65	n.a.	485	27.9%
<b>Total men</b>		<b>262</b>	<b>9.9%</b>	<b>1,700</b>	<b>43.4%</b>
<b>TOTAL</b>		<b>365</b>	<b>11.0%</b>	<b>2,057</b>	<b>42.9%</b>



In 2018, 2,057 people joined the ASTM Group, with a turnover rate (new hires) equal to 42.8%.

This high rate is due to new companies being included in the scope of consolidation. For further information, see the section "People" in this chapter.

In particular, in Italy, the number of new hires in 2018 amounted to 1,021, in the Rest of Europe 76, in Latin America 552, in the Middle East 66, in South Africa 116 and in the United States 226.

The turnover rate for new hires at 31 December 2018 was 27% in Italy, 104% in the Rest of Europe, 112% in Latin America, 127% in the Middle East and 100% in the United States and South Africa.

With a view to the sustainable development of competencies and human resources, the

Group tries to recruit candidates from areas where it operates, that preferably meet the professional profiles necessary for it to achieve its objectives.

In 2018, 100% of Group executives were working in their home country.

The turnover rate (leavers) at 31 December 2018 was equal to 11.8%. During the year, a total of 565 people left the company, of whom 131 were women and 434 men, mainly in the 30-50 age group.

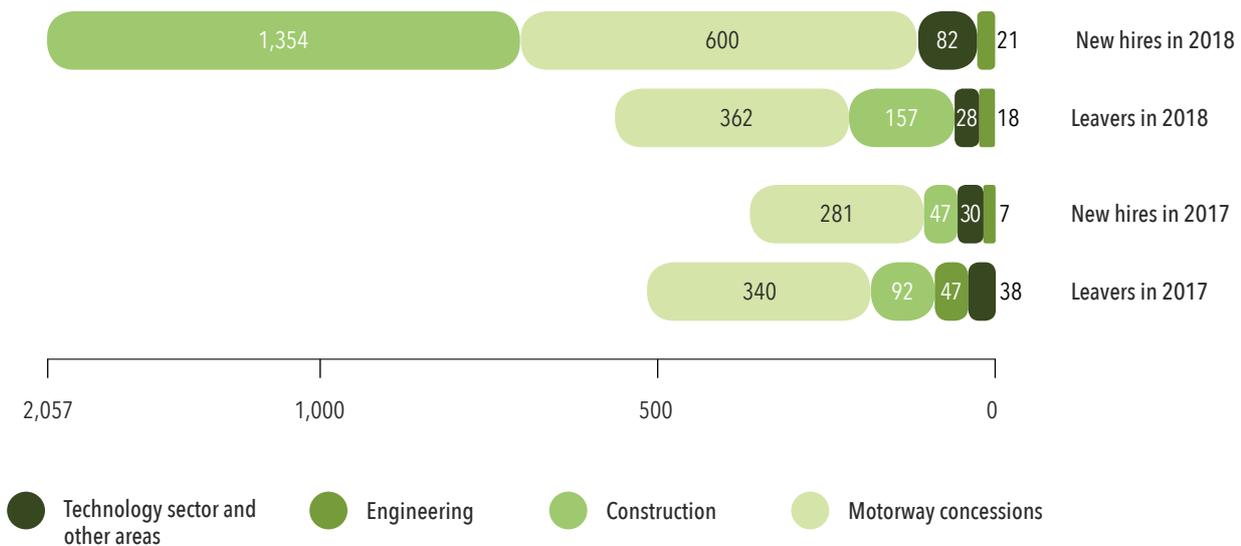
Leavers in Italy totalled 483, in the Rest of Europe 3, in Latin America 65 and in the Middle East 14.

The turnover rate for leavers at 31 December 2018 amounted to 13% in Italy, 4% in the Rest of Europe, 13% in Latin America and 27% in the Middle East.

## LEAVERS BY GENDER AND AGE GROUP

	AGE	2017		2018	
		no. of people	Turnover %	no. of people	Turnover %
Women	<30 years	25	n.a.	36	57.1%
	30-50 years	77	n.a.	55	10.7%
	>50 years	27	n.a.	40	13.2%
<b>Total women</b>		<b>129</b>	<b>19.6%</b>	<b>131</b>	<b>14.9%</b>
Men	<30 years	44	n.a.	64	21.2%
	30-50 years	175	n.a.	199	10.6%
	>50 years	169	n.a.	171	9.8%
<b>Total men</b>		<b>388</b>	<b>14.6%</b>	<b>434</b>	<b>11.1%</b>
<b>TOTAL</b>		<b>517</b>	<b>15.6%</b>	<b>565</b>	<b>11.8%</b>

**TURNOVER FOR NEW HIRES AND LEAVERS BY BUSINESS SECTOR**



Over 65% of new hires and around 28% of leavers are in the construction sector, with 1,354 new hires and 157 leavers in 2018.

ASTM and its subsidiaries have developed a policy to monitor all operating stages concerning personnel employment (also regarding the Compliance Programme): from identifying personal profiles for candidates for specific operating segments to the employment category and salary package.

Personnel are recruited and employed in strict compliance with applicable laws and rules defined by the Company based on criteria of transparency and an assessment of their compliance with requirements of competency, ability and individual professionalism.

The Group ensures that human resources meet profiles which actually match company needs, avoiding favouritism of any kind, and pursues a policy that recognises merit and ensures inclusion.

**INDUSTRIAL RELATIONS**

The operations of ASTM Group Italian companies are extensive, and are covered by a large number of collective bargaining agreements and consequently a considerable number of second-level company and/or local contracts.

100% of employees in Italy are covered by collective bargaining agreements; the most representative, in terms of number of employees are:

- the building industry and local-level agreements
- the engineering industry
- motorways and road tunnels
- items manufactured in concrete
- senior management in industry

Italian Law 300/70 (Workers' Statute) which forms the basis for all labour laws and national and local bargaining agreements, and for all trade union negotiations, is the reference legal framework for companies



to manage industrial relations. Companies acknowledge that the trade union organisations who are signatories of national and local collective bargaining agreements are the "natural" parties to deal and negotiate with regarding financial and legal aspects of redundancy procedures.

Given the high number of contracts in place, industrial relations play an important role in human resources management, also considering the ramifications at a geographic level of the Group's operations in Italy and abroad. As part of its strategies, which target growth and the optimisation of work including safety and quality levels in human resources management, ASTM Group companies focus first and foremost on empowering work, professional qualifications and improving employee satisfaction levels as part of provisions established by law and by contracts. The involvement of trade unions in an industrial relations system that is more functional to achieving results for both companies and employees is strategic to reach objectives.

During 2018, Italian companies of the ASTM Group continued to consolidate industrial relations, confirming the use of contracts with a view to optimising the organisation

and work, with an excellent response in terms of company needs and trade union requests/claims.

In view of the considerable number of collective bargaining agreements managed, companies have sought additional solutions through innovative tools such as welfare measures, supplementary healthcare schemes and, for the construction sector, services from bilateral organisations.

Industrial relations also cover all bargaining, which is often shared, for the professional training of resources, involving both trade union representatives and workers in order to maintain high professional standards. The Fondimpresa/Fondirigenti/Fonte training fund is a valid tool in preparing training programmes and in providing supplementary funding for training costs.

Take-up among employees for supplementary pension and healthcare schemes is very high.

Regarding staff employed abroad, local regulations concerning industrial relations, salaries, insurance and welfare are complied with in full, in accordance with laws in effect in countries where the Group operates.

## DIVERSITY AND INCLUSION

“ Empowering human capital based on meritocracy, professional competencies, appropriate behaviour, honesty and trust, and promoting a working environment that is inclusive and open to diversity, are the cornerstones of the ASTM Group's human resources policies.”

Diversity and Inclusion Policy

### GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	104	16	<b>120</b>	146	18	<b>164</b>
Middle managers	136	21	<b>157</b>	231	30	<b>261</b>
Office workers	1,702	611	<b>2,313</b>	2,114	791	<b>2,905</b>
Manual workers	709	9	<b>718</b>	1,428	42	<b>1,470</b>
<b>Total</b>	<b>2,651</b>	<b>657</b>	<b>3,308</b>	<b>3,919</b>	<b>881</b>	<b>4,800</b>
<i>of which joint operations</i>	-	-	-	560	61	621

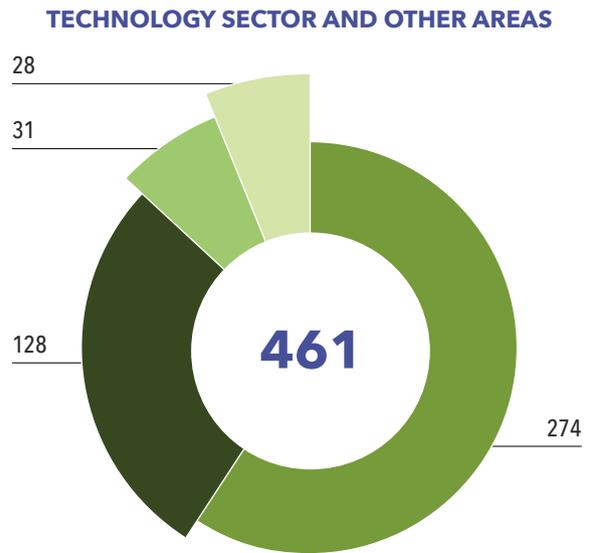
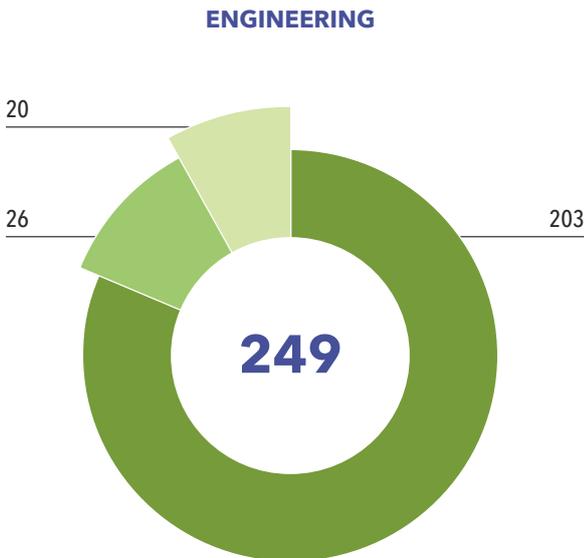
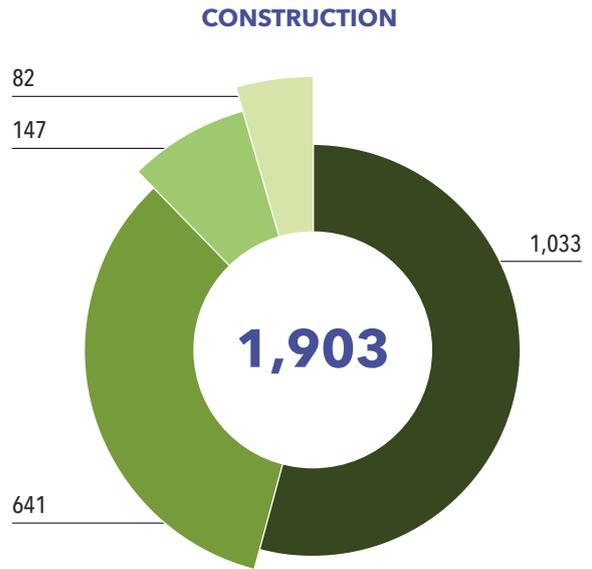
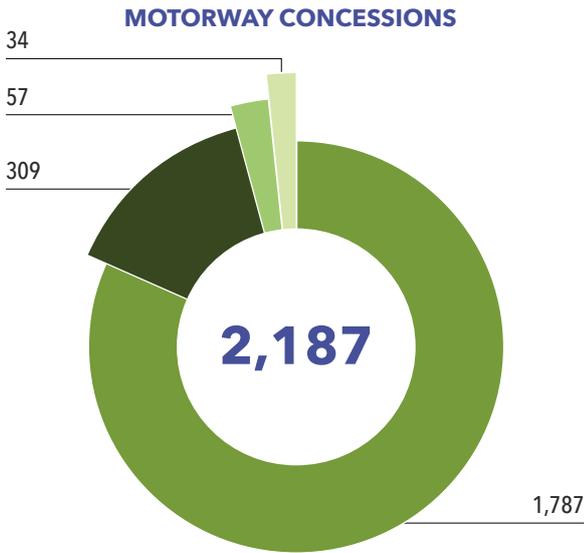
Employees must adopt conduct that respects the rights and individual nature of colleagues, collaborators and third parties, regardless of their position within the Group's hierarchy.

Some 60% of Group employees are office workers, over 30% are manual workers and the remainder are middle managers and senior executives.

In 2018, approximately 18% of employees were female. Over 90% of female employees are office workers, while 18 women hold managerial positions. Female employees at ASTM are an important factor in the Group's development and growth.

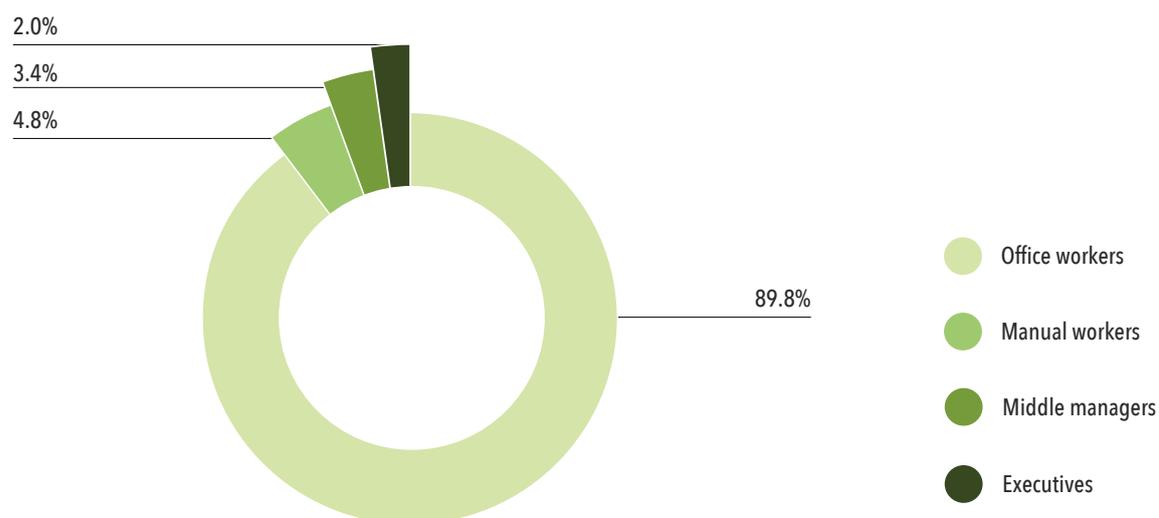


**GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND BUSINESS SEGMENT**



● Executives   ● Middle managers   ● Office workers   ● Manual workers

## GROUP FEMALE EMPLOYEES BY EMPLOYMENT CATEGORY



## GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND AGE GROUP

NO. OF PEOPLE	AT 31 DECEMBER 2017				AT 31 DECEMBER 2018			
	<30	30-50	>50	Total	<30	30-50	>50	Total
Executives	-	34	86	120	-	49	115	164
Middle managers	-	72	85	157	2	133	126	261
Office workers	60	1,191	1,062	2,313	186	1,450	1,269	2,905
Manual workers	27	367	324	718	177	761	532	1,470
<b>Total</b>	<b>87</b>	<b>1,664</b>	<b>1,557</b>	<b>3,308</b>	<b>365</b>	<b>2,393</b>	<b>2,042</b>	<b>4,800</b>
<i>of which joint operations</i>	-	-	-	-	177	358	86	621

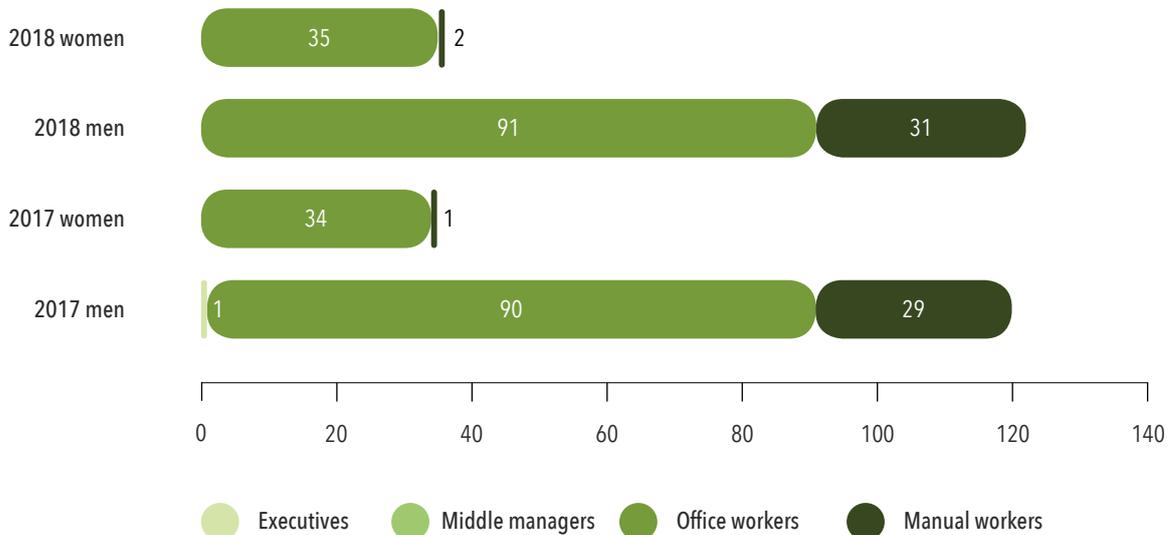
42% of employees are aged over 50, 50% aged between 30 and 50, and 8% are below 30 (3% in 2017). During 2018, partnerships with leading universities were forged, in areas where the Group operates, to attract young talent.



The average age of employees is 46 years, in line with the previous year (47 years). Employees in the concessions sector have the highest average age (49 years), while employees in the construction segment have the lowest average age (44 years).



### GROUP EMPLOYEES IN PROTECTED CATEGORIES



At 31 December 2018, the Group had 159 employees in protected categories, of whom 37 women and 122 men, accounting for 3% and 4% respectively of Group employees.

2,498 employees (52%) have been with the company for over 10 years, 1,975 employees (41%) for between 10 and 29 years, and 523 employees (11%) for over 30 years.

These figures confirm the Group's commitment to long-lasting, solid relationships and investments in its employees.

#### GROUP EMPLOYEES BY LENGTH OF SERVICE



**65%** PEOPLE WORKING FOR  
THE COMPANY FOR MORE THAN 5  
YEARS



**52%** PEOPLE WORKING FOR  
THE COMPANY FOR MORE THAN 10  
YEARS



**41%** PEOPLE WORKING FOR THE  
COMPANY FOR BETWEEN 10 AND 29  
YEARS



**11%** PEOPLE WORKING FOR  
THE COMPANY FOR MORE THAN 30  
YEARS



## REMUNERATION AND BENEFITS

ASTM's salary system recognises each person's skills, role and responsibilities within the Group. Salary policies aim to attract and reward new hires with outstanding professional profiles and talent and are designed to increase employee motivation.

Special attention is paid to career paths and appropriate contract categories, with some Group companies also using various salary parameters of national collective bargaining agreements, for example in the motorway concessions sector, to achieve and verify employee performance.

In this way, the Group encourages horizontal progress.

Senior management reviews the positions and results of each resource on an annual basis, and consequently, the improvement plans with an impact on contract employment categories and relative changes in salary levels, as part of a wide-ranging, extensive bonus programme.

Since 2017, a variable annual MBO incentive system has been in place. This system establishes objectives to be achieved and rewards individual performance, valuing a sense of belonging to the Group and the contribution of each person in developing its strategy. In compliance with national collective bargaining agreements adopted by Group companies, supplementary packages are provided that often anticipate existing welfare regulations and supplement provisions recognised by law. The benefits, for full-time employees, include:

- supplementary pension policies, which also replace contractual funds
- policies reimbursing the medical expenses of employees and their family members, even if not provided for by the relative national collective bargaining agreement
- long-term care
- special conditions for company micro-loans, to assist employees with unexpected expenses
- policies and schemes in addition to law and employment contracts (for example, life and accident insurance policies)

- agreements with trade union organisations for advances/loans to employees at special conditions.

Some Group companies also have solutions in place such as welfare packages which, when supplementary company agreements expired, were reviewed with a view to optimising employee welfare.

### OBLIGATIONS OF THE NATIONAL COLLECTIVE BARGAINING AGREEMENT

The National Collective Bargaining Agreement for staff of Industrial Construction Companies and Similar require registration with the Construction Workers Fund. This Fund is a joint association bringing together workers' trade unions and employers, set up under collective bargaining for construction industry workers, providing benefits and allowances.

Under Legislative Decree 276/2003 as amended, the Fund has public functions, such as the certification of welfare contributions paid by its member companies.

### HEALTHCARE SCHEME

The renewal of the Collective Bargaining Agreement for Construction and Similar Companies, has provided for a national supplementary healthcare scheme to be set up for the construction industry, to provide manual and office workers with the same benefits, in order to achieve a level of standardisation in Italy. This very recent scheme, which became effective on 1 October 2018, requires employers to pay in a contribution.

### FLEXIBLE BENEFITS

The 2016 stability law increased tax incentives for companies that provide company welfare services for their employees (child-care, meal vouchers, supplementary healthcare/pensions scheme, etc.). At the same time, it re-introduced the non-taxation of production bonuses and other salary items related to increased performance.

The law has introduced a number of measures to encourage company welfare with the idea that this type of benefit and service from companies can also be adopted in SMEs, thanks to tax exemption. Companies can therefore save on labour costs, regarding taxes and related contributions, while meeting their employees' needs, offering services and benefits of a monetary

value that is higher than a bonus in their pay packet.

The flexible benefits plan covers areas relevant to employees: education (reimbursement of education fees, school fees, study holidays, school books) family care mortgages and loans culture and free time (gyms and sports' associations, baby sitting, vouchers)

#### RATIO BETWEEN BASIC SALARY OF WOMEN AND MEN BY EMPLOYMENT CATEGORY

AVERAGE BASIC SALARY	2017	2018
	Ratio of women/men	Ratio of women/men
Executives	1.08	0.68
Middle managers	1.01	0.81
Office workers	0.85	0.87
Manual workers	1.11	0.92
<b>Total</b>	<b>1.03</b>	<b>0.83</b>

The ratio between the basic salary of men and women is just under 1, for all categories.

Regarding the ratio between men's and women's remuneration (the basic salary plus the variable part), the figures are: 0.70 for executives, 0.89 for middle managers, 0.80 for office workers and 0.72 for manual workers, for a total of 0.85.



#### REMUNERATION OF DIRECTORS WITH SPECIFIC ROLES AND KEY MANAGEMENT PERSONNEL

The aim of the Remuneration Policy is to:

- define salary packages that can: (i) acknowledge the managerial value of persons involved and their contribution to company growth, in relation to their duties and functions (ii) attract, retain and motivate people with the professional skills and abilities that meet the company's needs
- align the interests of executive directors with the priority goal of creating value for shareholders in the medium to long term
- ensure a connection between managers' remuneration and actual Company performance

- promote sustainability in the medium to long term, with a particular focus on the interests of all Stakeholders

In line with the above, short and long term incentive schemes have been established, to promote the attainment of the Company's qualitative and quantitative objectives, thus promoting the loyalty and engagement of resources.

Sustainability goals have been introduced for the first time ever in the incentive schemes, also in response to the increasing focus of institutional investors on these topics and in line with the strategic importance of Corporate Social Responsibility policies.



## JOINTLY: SHARED WELFARE

The Group, with the support of Jointly, a company specialised in the welfare sector, in association with Sacro Cuore University, Milano, oversaw an important and unique Stakeholder engagement initiative in 2018 for its employees, to understand their needs and expectations, in support of the profound change management process of the Group in recent years. This initiative is strategically central to the process to consolidate the Group as one company.

The results show that the organisation has experienced the transition in recent years from a consolidated tradition more related to being a "family-run" businesses to having a new managerial approach, increasingly targeting the international business dimension. As a consequence, new standard cultural references to identify with are being pursued.

In this context, initiatives dedicated to employees promote the recognition of an identity anchored to values of **safety** and **quality**, delivering benefits to the organisation in terms of **productivity** and **empowering** human resources.

Initiatives for employees, which also come under welfare and/or organisational well-being, are strategically important as support for the change management, and represent an opportunity to lever, in this stage accompanying people through the change.

A survey was conducted addressing three areas: (i) the sense of belonging to the Group (ii) welfare initiative priorities, and (iii) knowledge of the Group's Sustainability Report.

A two-fold approach was used, with a qualitative part, in which three focus groups representing all professional families of the company' workforce were interviewed, and a quantitative survey given to all employees.

The survey was held over 5 months, and important feedback was provided confirming the strong sense of pride and belonging of employees.

Approximately **44%** of employees took part in the initiative, which is higher than Jointly's benchmark of **30%**, and represents an **index of identification with the company** that is higher than the average of Jointly's benchmark.

As regard expectations for the future, 83.5% of respondents expressed the strong need for a welfare plan that can have a positive impact on well-being and productivity (53%) and on work efficiency and valuing human resources and competencies (46%). Both these figures are far higher than the average benchmark for answers registered by Jointly (36% and 27% respectively). In general, initiatives considered the most useful include training, prevention/health, and assistance for family members who are not independent. Due to the average age, which is high (46 years), the percentage of employees who are caregivers for a relative who is not independent is 40%.

In conclusion, investing in people and workers forms the basis of our sustainability project and this project - with its different interpretations and actions - enables us to promote a new process of identity recognition and take on a central role in the company's organisational model. We want to keep investing in our most important resource - people.





The ASTM Group believes strongly in training for personnel growth and is committed to providing training programmes to build up the professional skills and managerial, technical and professional competencies of its employees.

Group companies also adopt programmes for managing competencies. In this framework, each company has already been mapping the competencies of its employees for several years, requesting employees to compile questionnaires on professional skills with reference to their professional background, including training with previous employees and educational background, as well as specific qualifications certified by training organisations. This mapping, which is reviewed at regular intervals, can be used to immediately identify company positions required, within the broader context of the Group.

Training at a Group level differs based on specific activities carried out by various company areas. However, main training courses may be classified as having the following focus:

- quality: training initiatives to give personnel the skills they need to achieve, maintain and improve quality standards defined at a single company and Group level
- health and safety: training initiatives to optimise the information system to manage occupational safety
- technical/professional: training initiatives to gain and maintain practical and theoretical technical/professional competencies
- broad-ranging: training initiatives to gain and maintain competencies shared by various organisational levels and professional categories (foreign language courses, IT skills, legal updates, etc.)

During 2018, over 68,000 hours of training were delivered, of which 35,000 to employees (20,128 hours of training in 2017). Of these, approximately 50% were for specific health and safety training programmes. Moreover, 33,000 hours of training were provided to staff of the Itinera Ghantoot joint operation. For further information, see the table.

**HOURS OF TOTAL AND PER CAPITA TRAINING FOR GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND GENDER**

	2018					
	MEN		WOMEN		TOTAL	
	Training hours	Per capita	Training hours	Per capita	Training hours	Per capita
Executives	1,110	7.60	176	9.75	1,286	7.84
Middle managers	1,592	6.89	157	5.22	1,749	6.70
Office workers	19,756	9.35	4,490	5.68	24,246	8.35
Manual workers	7,564	5.30	379	9.02	7,943	5.40
<b>Total</b>	<b>30,022</b>	<b>7.66</b>	<b>5,201</b>	<b>5.90</b>	<b>35,223</b>	<b>7.34</b>
<i>of which joint operations</i>	284	0.51	28	0.46	312	0.50

The Group provided a total of 20,128 training hours during 2017.



### **PUSH TO OPEN (P2O)**

The Group joined the 2018/2019 edition of the Push to Open programme (P2O), devised by Jointly in partnership with companies, which aims to guide young people in choosing a career after their studies. In three years, the programme has involved over 4,500 people and 31 companies, with an investment of over €500,000. The initiative proved to be a success as demonstrated by the fact that

97% of participants would recommend it to a friend, while 82% of participants were influenced in their choices. Companies taking part, achieved a three-fold aim: providing employees with a company welfare service by involving their children economically supporting the programme becoming actively involved in the "Adopt a class" initiative, as part of school/work placement projects



## HEALTH AND SAFETY

STM Group Companies consider the health and safety of workers to be fundamental, and respect laws and commit at all times to improving work conditions. This commitment has resulted in policies being adopted to ensure that each employee of the Group is in a suitable working environment, which does not pose hazards and provides work conditions that respect the individual. Employees are protected by spreading a culture of safety. Responsible

behaviour is encouraged and hazardous situations are monitored and assessed. A considerable number of solutions have been adopted in the construction and motorway concession sectors to ensure the health and safety of employees, as they are more exposed to risks and hazards in their day-to-day activities. During 2018, 84 accidents were recorded, mainly occurring in the workplace.

### ACCIDENTS AND OCCUPATIONAL DISEASES INVOLVING GROUP EMPLOYEES BY GENDER

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Occupational diseases	2	-	2	3	-	3
Accidents	69	8	77	74	10	84
<i>of which fatal</i>	-	-	-	1	-	1

With reference to the single fatality reported, the dynamics refer to an accident in which the operator was hit by a vehicle driven by a user, while signalling to vehicles transiting along the route where maintenance works were ongoing.

The reconstruction of the accident seems to exclude any liability for the company's or operator's failure to observe occupational safety regulations. Therefore, it may be reasonably considered that the employee's death is due solely to an external cause, not attributable to incompetence or imprudent behaviour in the workplace.

### TYPE OF ACCIDENTS INVOLVING GROUP EMPLOYEES BY GENDER

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Workplace accidents	58	6	64	60	6	66
Accidents while travelling to and from work	11	2	13	14	4	18
<b>Total</b>	<b>69</b>	<b>8</b>	<b>77</b>	<b>74</b>	<b>10</b>	<b>84</b>
<i>of which joint operations</i>	-	-	-	3	-	3

## ABSENCE AND LOST DAYS BY GROUP EMPLOYEES BY GENDER

NO. OF DAYS	2017			2018		
	Men	Women	Total	Men	Women	Total
Absences <sup>25</sup>	23,147	5,333	<b>28,480</b>	35,060	10,774	<b>45,834</b>
Lost days <sup>26</sup>	2,130	317	<b>2,447</b>	2,396	260	<b>2,656</b>

<sup>25</sup> Absence means the days when the worker was absent, not only due to illness or an accident. Days of absence do not include agreed on leave such as holidays, study leave, maternity or paternity leave.

<sup>26</sup> Lost days mean days when work was not carried out due to the worker not being able to carry out his/her usual work because of an accident in the work place or an occupational disease. Resuming work with limited or alternative duties carried out for the same organisation is not considered a lost day.

## GROUP EMPLOYEE HEALTH AND SAFETY INDICATORS BY GENDER

	2017			2018		
	Men	Women	Total	Men	Women	Total
Lost day rate <sup>27</sup>	0.48	0.31	<b>0.45</b>	0.40	0.20	<b>0.37</b>
Occupational disease rate <sup>28</sup>	0.09	-	<b>0.08</b>	0.11	-	<b>0.09</b>
Absentee rate <sup>29</sup>	4.14	4.21	<b>4.15</b>	4.50	6.50	<b>4.85</b>
Injury rate <sup>30</sup>	15.95	8.67	<b>14.67</b>	13.01	8.61	<b>12.27</b>

<sup>27</sup> The lost day rate for accidents is the ratio between the total number of lost days through accidents and the total number of hours that could be worked in the same period, multiplied by 1,000. As provided for by the method to calculate the indicator 403-2 (2016), the lost day rate is calculated excluding lost days due to fatal injuries.

<sup>28</sup> The occupational disease rate is the ratio between the total number of cases of occupational disease and the total of hours worked in the same period, multiplied by 200,000.

<sup>29</sup> The absence rate is the ratio between the total number of days' absence and the total number of hours that could be worked in the same period, multiplied by 100.

<sup>30</sup> The injury rate is the ratio between the total number of accidents and the total number of hours that could be worked in the same period, multiplied by 1,000,000.

The lost day rate and injury rate decreased compared to 2017.

The main health and safety indexes divided by geographic area at 31 December 2018 are indicated below. In Italy, the lost day rate was 0.40, the occupational disease rate equal to 0.07, the absence rate 5.78 and the

injury rate 13.82. In Latin America, the lost day rate was equal to 0.44, the occupational disease rate 0.59, and the injury rate 8.83. In the Middle East, the absence rate was 0.03. In the United States, the absence rate was equal to 0.22, while the injury rate was 3.46. In South Africa, the absence rate was 0.46.



## INJURY RATE OF STAFF

	2018		
	Men	Women	Total
Injury rate	0.32	-	0.32

During 2018, two accidents occurred in the Middle East, involving Group collaborators.



### HEALTH AND SAFETY IN THE CONSTRUCTION SECTOR

In the construction sector, workers' health and safety is particularly important and managed through the internal organisation of work sites and production units. Itinera's internal organisation can be summarised as follows:

- all production units and work sites are managed by adequately trained site directors, with specific powers concerning safety
- each operating sector of the company is overseen by safety officers who have the specific task of monitoring occupational safety issues. The Company Safety Department is served by employees with valid experience, who have been specifically trained as required by law

- specific Risk Assessment Reports are prepared at permanent production units and at maintenance service work sites
- the Safety and Coordination Plan (PSC) is analysed and adopted at temporary and mobile work sites and Operational Safety Plans (POS) are prepared for activities carried out by the company, and the activities of subcontractors are coordinated

Moreover, Itinera S.p.A. has developed and gradually adopted an Integrated Management system in accordance with ISO 9001, ISO 14001, OHSAS 18001, SA8000 and ISO 31000, with a specific focus on controlling safety at all operating sites (work sites, head offices, warehouses and plants).





**Our responsibility  
towards the  
environment and  
local areas**





## CONTEXT

The UNEP (United Nations Environment Programme) reports that the global use of material has tripled over the last four decades, and that the quantity of extracted materials went up from 22 billion tonnes in 1970 to 50 billion tonnes in 2010. This growth also reflects use per capita of resources: on average a person uses 10 tonnes of resources each year.<sup>31</sup> In many countries, industrial sectors are evolving towards a greater efficiency and reduced energy intensity: generally, CO<sub>2</sub> emissions per unit produced are on the decrease. From 2000 to 2014, Europe and North America reduced the intensity of emissions by 36%.<sup>32</sup> In the last 10 years, the capacity for renewable energy at global level has increased steadily, reaching the highest growth rate in 2017, with a 9% increase compared to 2016. This growth has been driven by photovoltaic sources, with a technology that is making quick pro-

gress, decreasing costs.<sup>33</sup> However, these positive trends are not reflected in the levels of greenhouse gas emissions produced, which are still rising: in 2017, the concentration of CO<sub>2</sub> in the atmosphere reached a new record, of 405.5 parts per million. In addition, average temperatures are continually increasing, the sea level is rising, and extreme weather events are increasing in frequency and intensity.

ASTM pays particular attention to protecting and monitoring the environment in which it works. Environmental sustainability is a key aspect and part of the Group's strategic plans to reduce its own environmental impact and promote respect for local areas and communities.

For this reason, ASTM and its subsidiaries are committed to finding adequate solutions with the aim of responsibly using resources, raw materials and reducing use of water, energy and atmospheric emissions.

<sup>31</sup>United Nations Environment Programme (UNEP). 2016. Global material flows and resource productivity.

<sup>32</sup>United Nations (UN). 2017. Progress towards the Sustainable Development Goals, Report of the Secretary-General.

<sup>33</sup>REN21. 2018. Renewables 2018: Global Status Report.



## ENVIRONMENTAL ISSUES MANAGEMENT

All operating companies that have adopted a Compliance Programme have implemented operational controls to guarantee conformity to applicable environmental regulations.

With a view to continual improvement, SATAP (stretch A21), SEA Segnaletica Stradale, Itinera, Itinera Construções, the Itinera/Ghan-toot joint operation, SINA, SINELEC and Euroimpianti have adopted an "Environmental Management System" certified to ISO 14001. This system establishes specific management

procedures for the continual improvement of company performance.

Group companies operating in the technology sector and construction industry have also developed an integrated management system (Quality, Safety and Environmental) to guarantee that all applicable safety, health and environmental laws have been identified and evaluated and that all necessary measures to guarantee the legal compliance of all operating units have been taken.



**6 COMPANIES**  
**1 JOINT OPERATION**  
**ISO 14001 CERTIFICATION**



**NONE**  
**CLAIMS AND NON-CONFORMITIES MANAGED AND SOLVED DURING 2018**

In 2018, the Company Progetto Autovia Padana S.p.A. was awarded UNI EN ISO 9001:2015 certification for the supply of services to motorway users with related

support and assistance, and for the design and development, construction and maintenance of road infrastructure.



### COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

No significant sanctions were administered to Group companies during 2018, due to failure to observe environmental laws and regulations.



## USE OF RESOURCES

### ENERGY CONSUMPTION

In 2018, the ASTM Group's energy consumption totalled over 809,000 GJ, up on the previous year, due to changes in the scope of consolidation and, in particular, to the consolidation of data referring to the Halmar Group, joint operations, SEA Segnaletica Stradale S.p.A. and the merger of Interstrade S.p.A. with Itinera S.p.A.

In particular, natural gas use totalled over 86,000 GJ, slightly up on the previous year.

Besides LPG use being equal to approximately 22,000 GJ in 2018, consumption of diesel for heating amounted to approximately 22,000 GJ, diesel fuel for vehicles to over 248,000 GJ, petrol to 30,000 GJ, electricity to around 370,000 GHJ and fuel oil to approximately 30,000 GJ.



### ENERGY SAVING AND LED LIGHTING

Environmental stewardship and protection is also achieved through a rational use of resources and this is why actions to rationalise the energy consumption of public lighting systems is an important measure. Euroimpianti has devised a number of activities as part of Energy Saving projects to re-qualify public lighting systems in order to reduce energy consumption, light pollution and improve performance thanks to LED lighting. Moreover, actions will include:

the use of latest technologies applied to public lighting to increase system use through remote management and integration with the network of IT services for users, CCTV and WiFi (Smart city)

- the development of projects for energy efficiency in ESCO (Energy Service Company) mode, with a consequent decrease in primary energy consumption with the same volume of final services
- the development of competencies for the planning and construction of buildings with a reduced primary energy consumption, using low environmental impact technologies, also with LEED (Leadership in Energy and Environmental Design) classification.



### MOTORWAY CONCESSIONS: ENERGY SAVING INITIATIVES

SIAS Group companies adopted numerous initiatives during 2018 for energy savings, including:

- the replacement of sodium lamps (SAP) with LED lamps at the Massimini and Fondovalle Tanaro junctions on the A33 (Asti-Cuneo)
- completion of the replacement of lamps on junction lights with LED products on the Torino-Milano motorway (A4)

## ENERGY CONSUMPTION OF THE GROUP <sup>34</sup>

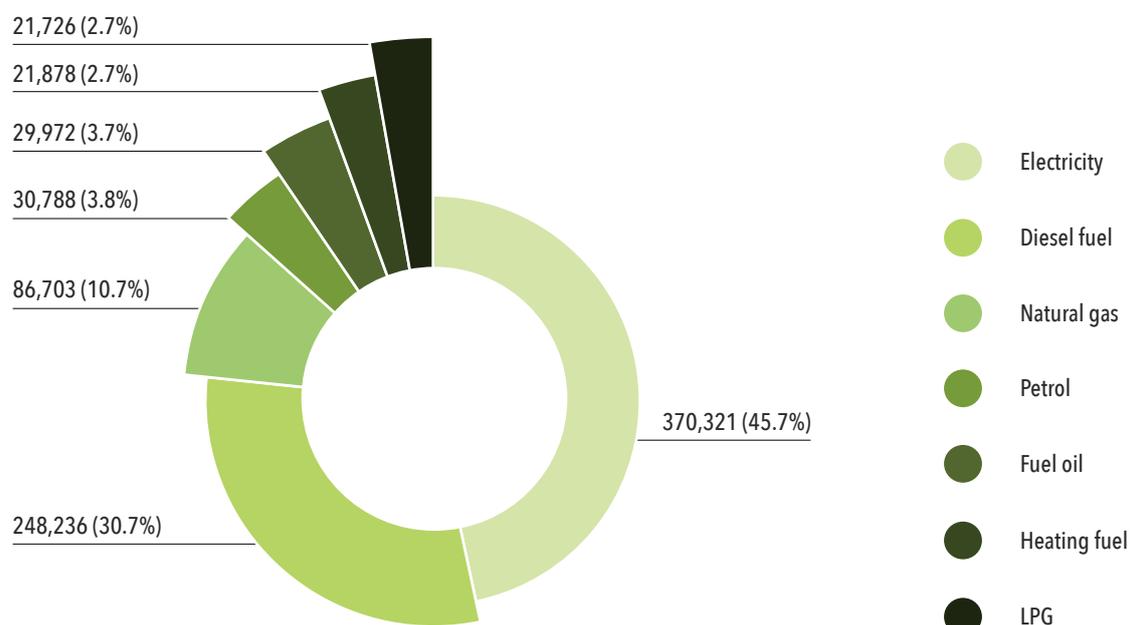
SOURCE	2017	2018
	Total	Total
Natural gas (m <sup>3</sup> /000)	1,162	2,405
Heating fuel (l/000)	576	602
Diesel fuel (l/000)	5,594	7,059
Fuel oil (l/000)	320	852
Petrol (l/000)	7	940
Electricity (kWh/000) <sup>35</sup>	87,561	102,867
<i>of which purchased</i>	87,512	98,623
<i>of which from photovoltaics</i>	622	768
LPG (l/000)	55	915

<sup>34</sup> Some data on energy consumption are based on estimates made according to the best methodologies available.

<sup>35</sup> Data on electricity consumption also include self-produced energy; for this reason, the total of electricity is not the result of the sum of "of which".

In 2018, kWh/000 559 of electricity from photovoltaics were generated and put on the grid.

## ENERGY CONSUMPTION OF THE GROUP BY SOURCE (figures in GJ)





<sup>36</sup>Scope 1 (direct emissions): this category includes emissions from own sources or sources controlled by the organisation

<sup>37</sup>Scope 2 (indirect emissions): this category includes emissions inferred from electricity use. Scope 2 emissions are expressed in tonnes of CO<sub>2</sub>, however the % of natural gas and nitrous oxide had a negligible effect on total greenhouse gas emissions (CO<sub>2</sub> equivalent) as may be inferred from the technical literature

## EMISSIONS

In 2018, direct emissions of CO<sub>2</sub>e (Scope 1<sup>36</sup>) were equal to 31,290 tonnes of CO<sub>2</sub>e, while indirect emissions (Scope 2<sup>37</sup>) were equal to 47,964 tonnes of CO<sub>2</sub> (market-based) and 38,144 tonnes of CO<sub>2</sub> (location-based).

Emissions had increased compared to 2017<sup>38</sup>, following the increase in use and change in the scope of consolidation of non-financial information included in the Report.

### TOTAL DIRECT EMISSIONS (SCOPE 1) [tCO<sub>2</sub>e] AND INDIRECT (SCOPE 2) [tCO<sub>2</sub>]



Source of conversion factors used: DEFRA 2018

Source of emission factors used: TERNA 2015 and AIB 2017

<sup>38</sup>Data on emissions for 2017 were restated based on the emission factors used for 2018



Based on recent reports and scientific studies, emissions from vehicles are continually on the decrease and regarding overall emissions in metropolitan areas, most GHGs (greenhouse gases) are from heating and industrial production processes.



## WATER CONSUMPTION

In 2018, ASTM Group companies used more than 337,000 m<sup>3</sup> of water.

In particular, 52% of water consumed was withdrawn from the mains, over 2% from rivers, around 30% from the aquifer and over 16% from tanks.

### WATER CONSUMPTION OF THE GROUP<sup>39</sup> (figures in m<sup>3</sup>)

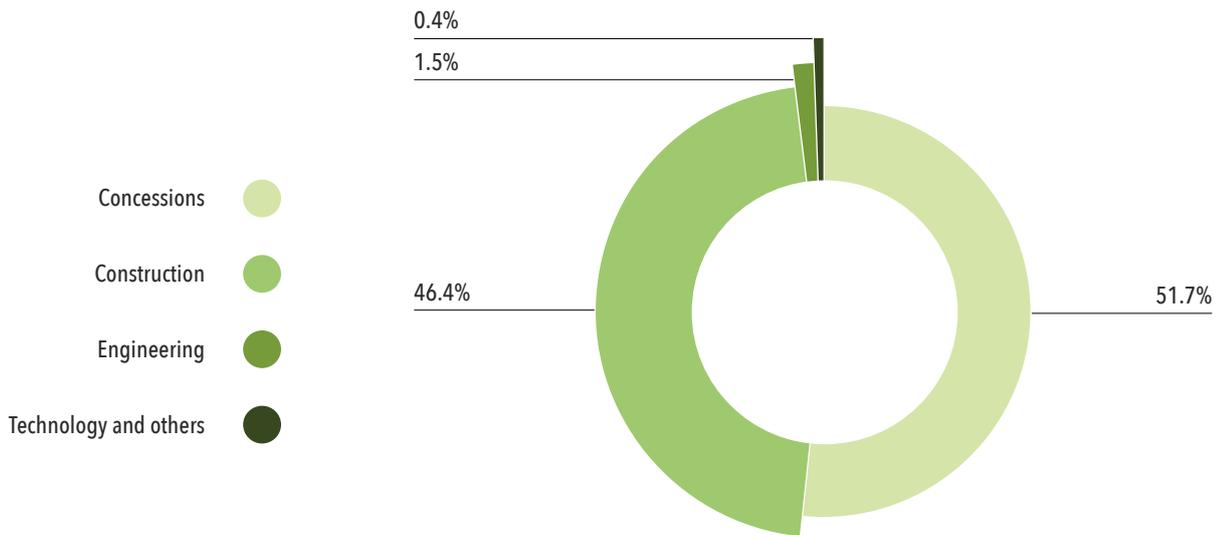
	2017	2018
	Volume	Volume
Water mains	103,887	176,048
Withdrawal from rivers	15,732	7,610
Withdrawal from the aquifer	28,253	97,499
Withdrawal from tanks	-	56,456
<b>Total water</b>	<b>147,872</b>	<b>337,613</b>
<i>of which joint operations</i>	-	80,807

<sup>39</sup> Some data on water use are based on estimates made according to the best methodologies available



### WATER CONSUMPTION OF THE GROUP BY BUSINESS SEGMENT

(percentages in m<sup>3</sup>)



Regarding the concessions sector, water consumption at maintenance work sites was equal to 174,532 m<sup>3</sup>, accounting for approximately 52% of the Group's total consumption.

As shown in the graph, approximately 46% of water consumption refers to the construc-

tion sector. In particular, water is mainly used at work sites, with a consumption equal to 156,695 m<sup>3</sup>.

Water consumption in the engineering and technology sectors is far lower: 6,386 m<sup>3</sup>, mainly used at operating sites.

## OPTIMISING TRANSPORT

ASTM's transport management policy limits excess transit where possible, and encourages the use of a fleet of company vehicles with a low environmental impact. The Company Fleet Units (UFA) deal with the purchase, sale and hire of all Company vehicles and with formalities for owned and hired vehicles. The fleet of vehicles used by employees comprises cars provided as a benefit and service vehicles, as well as the vehicles used by the Road Police Subsection, for motorway patrols.

The UFA is tasked with making users accountable, providing internal notices with information on the correct use of the vehicle (avoiding keeping the engine running while the vehicle is stationary, complying with the Highway Code, in particular with speed limits, not driving if having taken certain medication or other substances that may affect the individual, etc.).

The transport management policy of licenses limits excess transit as far as possible, and encourages the use of a fleet of company vehicles with a low environmental impact.

Car pooling is one of the ways to optimise costs and benefits, and make sure that several people travel to working using the same vehicle.

## Construction

Construction sector equipment comes under three categories:

- vehicles for passenger transport
- vans and minibuses for passenger and goods transport
- heavy goods vehicles for the transport of goods and equipment

Cars are either purchased or hired based on an estimate of the annual mileage of the user, with car hire preferred in reason years in order to optimise the logistics and economic management of the company fleet.

Pooling service cars at work sites, or at various head office sectors, is also being prioritised, with a view to keeping costs down, but chiefly to respecting the environment, limiting pollutant emissions.

The mileage set for cars before their replacement does not necessarily apply to vans and minibuses, as work sites could be opened which require equipment to be used up to end of life conditions.

Lastly, equipment and material are rarely transported using own heavy goods vehicles, but instead Group companies specialised in transport are preferred.



## WASTE

In line with the Group's policies, waste produced is recycled where possible, otherwise it is disposed of at the most suitable sites depending on the type of waste. The Group's policy on waste management aims to guarantee sustainable waste management, while increasing the percentage of recycled waste and ensuring a responsible management of hazardous waste.

The type of waste produced varies, due to the different nature of the Group's business segments. Most waste is produced by the constructions sector (98.6% of the total), followed by the concessions sector with 1.4% and other sectors that overall produce less than 1% of total waste.

In 2018, the Group produced and/or collected through the motorway infrastructure collection service, a total of approximately 296,000 tonnes of waste, down by 4% compared to 2017 and consisting nearly entirely of non-hazardous waste.

In the construction sector, waste produced typically refers to non-hazardous construction and demolition waste and is mainly recovered.

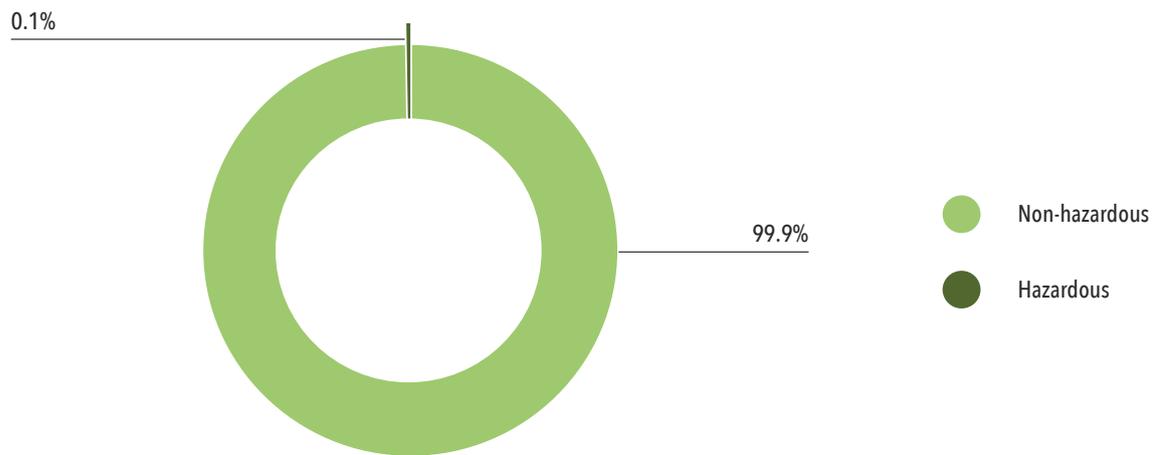
In 2018, nearly all waste produced by the Group was recycled and reused (98.2%), while around 1.8% was sent to landfill, incinerated or disposed of in another way.

Waste disposal is managed through municipal service companies and specialist firms.

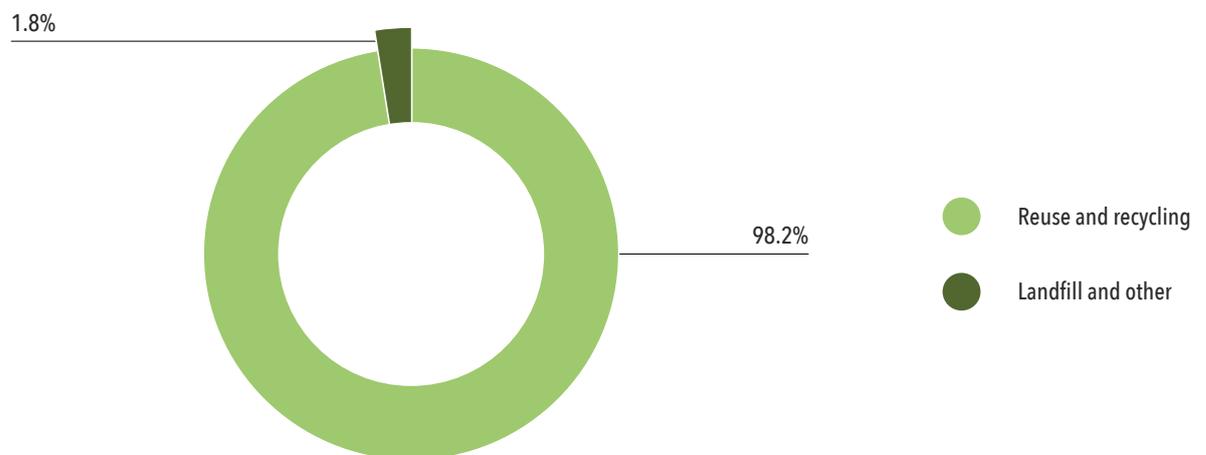
### GROUP WASTE BY DISPOSAL METHOD (figures in tonnes)

DISPOSAL METHOD	2017				2018			
	Hazardous	Non-hazardous	Total	Total (%)	Hazardous	Non-hazardous	Total	Total (%)
Reuse	-	46,679	46,679	15.0%	5	117,730	117,735	39.7%
Recycling	27	262,771	262,798	84.7%	72	173,305	173,377	58.5%
Energy recovery	-	-	-	-	-	72	72	-
Incineration	-	-	-	-	1	1,190	1,191	0.4%
Landfill	66	746	812	0.3%	46	2,518	2,564	0.9%
Other	-	59	59	-	210	1,151	1,360	0.5%
<b>Total</b>	<b>93</b>	<b>310,255</b>	<b>310,348</b>	<b>100.0%</b>	<b>333</b>	<b>295,966</b>	<b>296,300</b>	<b>100.0%</b>
<i>of which joint operations</i>	-	-	-	-	214	21,203	21,417	-

### GROUP WASTE BY TYPE



### GROUP WASTE BY DISPOSAL METHOD





## NOISE MANAGEMENT

Noise management is particularly important in the concessions and construction sectors.

Regarding concessions, vehicles in transit on transport infrastructure such as roads and motorways are a widespread source of noise pollution, particularly when infrastructures are near to residential and built-up areas. Aware of the potentially negative impact on communities, the Group has adopted wide-ranging actions, assessing impact and planning and building mitigation works. The Group paved the way for using silent asphalt combining sound-absorbing and draining properties with benefits for safety and ease of driving in the case of rain.

At 31 December 2018, 95 km of noise barriers were installed along the Group's motorway stretches.

Most motorway sections (not in tunnels) have draining surfaces, which use asphalt conglomerate with a high percentage of empty spaces, for a surface that is also sound-absorbing. Overall, sound-absorbing/draining surfaces cover 712 km of the motorway net-

work. The Group has a draining surface for 70% of the network managed by licensees controlled by SIAS. The surface area is not total, as some areas are excluded, where it is not possible to operate (such as tunnels and mountain stretches).

In the construction sector, the environmental aspect of noise generated by operations at work sites (e.g. excavation and earth moving works, assembly, concrete mixers, handling operating equipment, etc.) is managed based on the location of the work site, as per specific operating instructions.

In the case of mobile and/or temporary local units, a specific application for authorisation is made to the Business Advisory Unit or relevant local authority, if local noise area limits are exceeded.

If instead a permanent local operating unit (e.g. concrete mixers or plants for prefabricated items) is close to sensitive receptors, acoustic impact studies are conducted and compliance with limits is assessed, indicating any relative containment measures to minimise impact.



## NOISE BARRIERS

	2018 (IN KM)
A4 Torino-Milano	25.1
A21 Torino-Piacenza	15.5
A6 Torino-Savona	7.7
A12 Livorno-Sestri Levante	23.8
A15 Parma-La Spezia	3.1
A33 Asti-Cuneo	8.4
A10 Savona-Ventimiglia	9.7
A5 Quincinetto-Aosta Ovest	2.0
<b>Total</b>	<b>95.3</b>



### ITINERA'S PROCEDURE FOR MANAGING NOISE WITH AN EXTERNAL IMPACT

Itinera's Integrated Management System includes an operating procedure for noise management. The aim of this procedure is to establish the operating modes and responsibilities for managing and monitoring sources of noise with an external impact.

The procedure, which applies to fixed and mobile sources of noise at temporary and mobile work sites, governs activities to control noise emissions and ensure that the limits of applicable laws are met, while guaranteeing that environmental objectives and goals are achieved.

In operating terms, a noise survey is the main way to measure acoustic impact at the work site.

This survey is carried out by an expert technician to characterise the work site in terms of noise. Measurements are taken at regular intervals while works are being carried out to ensure compliance with applicable laws and regulations.

Numerous factors have an impact on the sound emissions of a work site (the type of activity, weather conditions, external noise, etc.), and these must be appropriately considered during the survey.



# PROTECTION OF THE LOCAL AREA, REDUCTION IN LAND USE AND PROTECTION OF BIODIVERSITY

<sup>40</sup> Risk analysis also covers geomorphological, hydraulic, hydrogeological, acoustic and atmospheric aspects.

**G**roup activities are carried out with a focus on protecting the environment, seeing it as an asset to protect and value.

The aim is therefore to adapt the environment's characteristics to the needs of communities and standards of institutions in its motorway network maintenance projects and construction of new stretches. Each activity is analysed and an environmental impact assessment is carried out<sup>40</sup>, in order to steer planning, the definition of projects, and monitoring and controls during the construction and operational stages.

## PROTECTION OF THE LOCAL AREA

Local areas have always been considered as a fundamental asset to protect. With this in mind, the Group carries out its activities with a view to protecting the environment in local areas and safeguarding historical and cultural heritage.

During 2018, works continued to develop the new direct connection between the SALT motorway and archaeological area of the historic town of Luni in the province of La Spezia - one of the most important in Italy - which is also home to the Natural Archaeological Museum. To value and facilitate access to the archaeological area, SALT redeveloped a run-down area in the district next to the motorway, carrying out environmental mitigation, developing a new, themed park along the route towards the archaeological area, as well as links and footpaths for direct access.

With a view to the sustainable development of road infrastructure, noise is a particularly important issue. Group licensees have been taking broad-ranging measures for years, including impact analysis, and the planning and construction of mitigation works. In 2018,

activities to plan, develop and test mitigation measures continued, as provided for in the implementing sections of the Noise Abatement Plans pursuant to the Decree of 29 November 2000 of the Ministry for the Environment.

During the construction and operating stages, impact on the local area and mitigation actions adopted are controlled, through specific environmental monitoring activities contained in Environmental Monitoring Projects defined during the planning stage. In 2018, environmental monitoring concerned in particular the A4 motorway, as part of developments in infrastructure modernisation works, and the A12 motorway and Via Aurelia (SS 1) state road near the Livorno toll station.

## MANAGEMENT OF HYDROGEOLOGICAL RISK

The Group also focussed on the hydrogeological context of motorways, developing numerous initiatives in 2018. For example, the licensee SAV developed an integrated hydrogeological risk monitoring system, in conjunction with the Civil Defence Centre, Firenze University, engaging with local authorities and all entities involved in this issue. Since the early 2000s, SALT's hydrogeological risk studies have made it possible to identify, record and monitor over 100 landslide events affecting the motorway stretch of the A15. In 2018, all surveys were carried out for each event identified, at intervals defined and planned in order to monitor developments.

The landslide events considered most at risk are inspected annually, and far more accurate tests are also carried out using inclinometers, piezometers and crack meters on structures, installed since 2011 and still active. Data is used to continually monitor the landslide, including during critical events, supported by remote control. An-

nual topographic surveys are also carried out by specialist technicians from SALT, in association with Parma University.

Monitoring of landslide events makes it possible to plan specific actions with varying levels of intervention. For example, defence works were carried out in 2018 for the F58 Valico landslide, to prevent masses falling on the motorway, using bolted netting, and a water accumulation management system was installed at the bottom of unstable slopes, such as in the area of the F55 Casaline landslide, with accumulation at the bottom of the motorway stretch which is controlled (both landslides are on the Auto-camionale della Cisa [A15]).

## REDUCTION IN LAND USE

Regarding the reduction in land use and general tendency at the European level to reuse resources, maximum reuse of excavation materials has been envisaged at a planning and operational level, thanks also to the introduction of new specific regulations.

In particular, after testing the geotechnical and chemical characteristics, in order to limit as far as possible the use of natural quarry materials at work sites, new works are developed by re-using the natural terrain where the new infrastructure will be located.

In developing Lot I of the TiBre, which is still ongoing, materials were excavated, stored (if necessary) and reused to create banks, fills and finishes, in compliance with project indications and regulations.

Similarly, and with particular reference to the feeder road at the motorway toll booth at Parma Ovest which is an alternative route to the SP 357 R provincial road near the town of Noceto, for which an Operational Plan was produced in 2018, in compliance with regulations, the area affected by excavation works was characterised, with a view to re-using all materials. As this work is inevitable, the request to use existing quarries or quarries being closed down was made, without having to open new sites.

The commitment to reducing the use of soil is also demonstrated by work to restore and make use of areas of land affected by work sites, with habitats that have been lost, degraded and fragmented, and soil that has been used.

Lastly, environmental selection criteria have been included in tender specifications for works and maintenance, which focus in particular on analysis of the lifecycle, with a reduction in emissions and reuse of waste material.

## PROTECTION OF BIODIVERSITY

The Group is committed to protecting biodiversity through planning and subsequent development of environmental mitigation work, involving careful study of potential vegetation for operating areas and native flora which, according to laws, meets defined, demonstrable requirements.



## WATER TREATMENT

In the context of improvement works pursuant to Legislative Decree 264/06 at the Cadibona and Montezemolo tunnels (on the stretch of the A6 owned by Autostrada dei Fiori),

rainwater run-off treatment systems are being put in place. The aim is to collect and remove the run-off water from the motorway surface, as well as flammable and/or toxic substances.



In particular, works to improve the landscape of the SATAP Torino-Milano motorway (A4) area along the Novara-Rho stretch continued in 2018, with around 30,000 plants added.

As part of 10-year agreements stipulated by SATAP with Torino University, activities to develop experimental systems for green areas continued in 2018, to redevelop the landscape and re-naturalise degraded areas affected by work sites for motorway modernisation in several municipalities.

Works also began to create planted areas near the new junction connecting the A12 and Via Aurelia (SS 1) state road near the Livorno toll station, to offset the transformation of the landscape and natural habitat brought about by the construction project. The works comply with the rules of the Migliarino San Rossore and Massaciuccoli Park which aim to protect biodiversity.

Activities also focussed on the Torino-Milano motorway, with naturalisation work in the area near the Olona river crossing, with native trees being planted and improvements made to the existing woodland, and for the alternative route to the SP 357 R provincial road near the town of Noceto, where plants were selected based on an analysis of potential vegetation for the relevant phytoclimatic sector, also enabling reduced maintenance.

Based on a study conducted in 2018 on critical aspects caused by the infrastructure along the Asti-Cuneo connection (A33), in the section where the planned route lies on the right bank of the Tanaro valley and mainly concerns the hilly area of the municipalities of La Morra and Verduno in the Bassa Langa area, and the valley floor. The main permanent and temporary problems concern the fragmentation of the flight corridors of bats from the breeding colony in Santa Vittoria d'Alba, and more generally the flight and feeding activities of bats.

To reduce the effect of the fragmentation and possible increase in road fatalities, safe crossings and adequate connection of the habitats are necessary. The project therefore planned to use a connection via the

Enel channel. Box items (reinforced concrete pass-through items below the motorway), of an adequate size and appropriately integrated with the area, are the most effective structure for bats to cross road infrastructure. The structures must be sufficiently high (over 3 m) and wide (over 8 m) to enable even large bats to pass.

The project also planned for decreasing guides and opaque side screens for the infrastructure (in both directions and of an adequate length) to promote a lower flight path.

The ecological permeability of infrastructure for fauna is an increasingly important topic in planning, with specific defragmentation measures studied, as applicable.

For example, six large pass-through items (measuring 3 m by 2 m) were installed for the passage of fauna in the area of the Torino-Milano motorway (A4) which crosses the Ticino Park. These items are specifically monitored with camera traps that demonstrate effectiveness, recording a moderate number of small and medium-sized fauna passing through.

In addition to areas below viaducts and secondary roads, the Group's infrastructure has over 600 items that, due to their size and location, can serve for the fauna to pass through. Culverts, of a size starting from 1.5 m by 1.5 m, in areas with clear high biodiversity levels (woods) or with linear tree systems, whether linked with canal systems or not, can enable animals to pass.

## **ELECTRIC CHARGING**

Regarding the motorway sector, all SIAS Group licensees, referring to a note of the Italian Ministry of Infrastructures and Transport and in compliance with Legislative Decree 257 of 16/12/2016, submitted their Plan in 2018 for the dissemination of alternative fuels including electric charging, compressed natural gas and liquefied natural gas stations, for the motorway stretches

they manage. These plans set out the current status of and distribution programme for electric charging systems at service areas.

On the SATAP-owned stretch of the A4 in December 2018, a "rapid" electric charging station was installed at the Rho Sud service area. This station is managed through an agreement with Q8-Enel, which is part of

the EVA+ project that plans for a considerable number of stations in Italy and Austria.

The system is highly versatile and technologically neutral, so it is compatible with most electric cars on the market, and has a 50kW capacity, for "rapid" charging in times that are compatible with a stop-off for lunch at the service area.



## RECYCLING AND THE FUTURE: TECHNOSOIL

Regarding the re-naturalisation of degraded areas where cauterisation has taken place, trials were started in spring 2018 in the Vicolungo area, to test the response of 1,120 woodland trees to the use of a new type of "technosoil" generated from targeted types of waste that, after appropriate cauterisation, are suitable from an environmental and agronomic viewpoint.

The technosoil used for the trial was produced using clayey silt, silty or sandy silt alluvial materials, with the addition of materials that have an environmental, soil and agronomic affinity, useful for the production of reconstructed soils, whose properties are long-lasting (production waste, industrial waste, dredging mud from dams and from the processing of cellulose and wood, pruning waste, etc.). In tech-

nological terms, soil reconstruction is based on a chemical and mechanical treatment that pre-mixes the components, separates them, polycondenses the organic matter by adding humic and fulvic acids and subsequently reconstructs the material through mechanical compression.

The entire Vicolungo area was prepared by removing the layer of stabilised material to reach the deeper part of the original subsurface, which was decompacted and mixed with a layer of gravel to improve the structure and facilitate drainage. The area was then divided into four trial lots; the reconstructed soil was put in three of them and in two cases mixed with different amounts of sand, while in one lot a layer of compost was added to rebalance the organic content, and then various types of woodland trees were planted.



### ULTRA-RAPID CHARGING

SIAS, together with individual licensee companies, conducted specific analyses on possible developments and the implementation of ultra-rapid electric charging systems (capacities of more than 150 kW), forging a partnership for this purpose with IONITY, a joint venture between BMW, Daim-

ler, Ford and Volkswagen with Audi and Porsche that aims to install high-power electrical vehicle charging stations on the European motorway network. In particular, after notification to the Ministry of Infrastructures and Transport, that is the grantor, a "Trial Project" was started for SAV, for the development of electric charging systems at the Les Îles de Brissogne Nord service area.



### REUSE OF MATERIALS

To guarantee sustainable development during motorway modernisation, the Group uses innovative raw materials with a reduced environmental impact. In this sense, the Italian legislator has also made its mark, introducing the concept of sustainability in Legislative Decree 50 of 18 April 2016 on public procurement. In the light of applicable laws and regulations, strategic planning means sourcing materials while considering aspects such as recyclability, equivalence of performance, economic benefits and availability on the market/in the area/at the work site.

In this context, minimum environmental criteria have been defined, which go beyond legal requirements, to qualify purchases and procurement in terms of sustainability, also

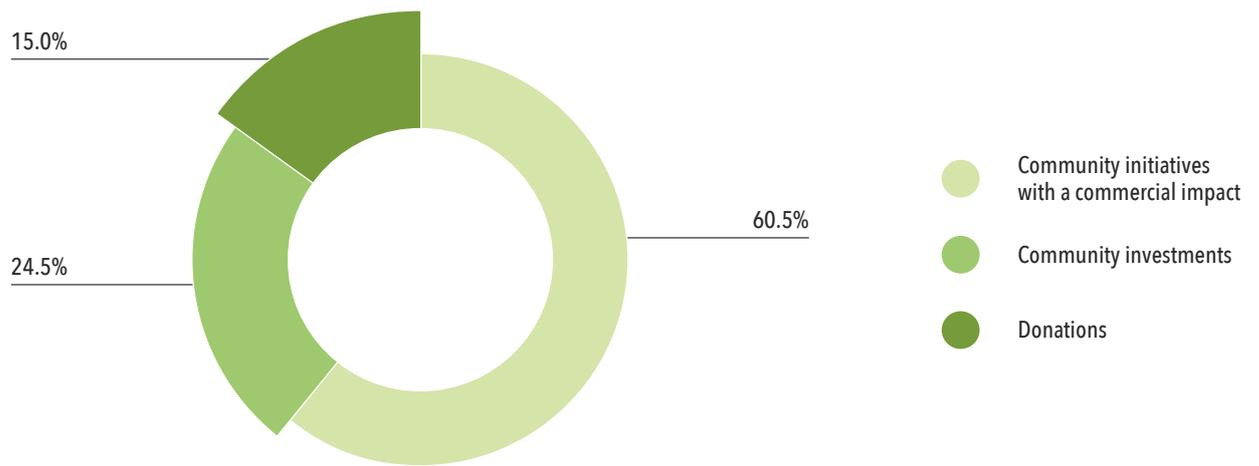
based on the qualification of planners, and the use of recycled or recovered materials for sub-bases and road surfaces. During the motorway planning and development stages, these criteria may be summarised as follows:

- Planner qualification (experience and competence)
- The use of recycled or recovered materials (in the sub-base)
- The use of terrain and rocks from excavations, recovered in situ
- A reduction in laying temperatures
- The use of systems designed to reduce air, water and ground pollution caused by traffic
- The use of maintenance techniques for surface layers as an alternative to resurfacing.

## DONATIONS AND SPONSORSHIPS

The ASTM Group is aware that relations with local communities are an important driver in creating value, and involves them in initiatives that help the economic, social and cultural development of local areas. With this in mind, the Group fosters relationships based on trust and cooperation with local communities, contributing directly or indirectly to supporting and/or funding projects and initiatives with a significant impact on the areas where it operates.

### TYPE OF INITIATIVES





The Group's initiatives for the community include:

- Donations: occasional initiatives to support social, environmental and community organisations through donations (for beneficial purposes and for non-profit associations).
- Community initiatives with a commercial impact: activities carried out by the commercial sector in the local area with a social impact (e.g. events and other activities for the benefit of the community and initiatives supporting scientific research).

In 2018, the Group made donations and invested in the community for an amount of approximately €459,000, compared to €415,026 in 2017.

In particular, the ASTM Group funded Derthona Basket (approximately €120,000) and the paediatric oncological/haematological unit at the Torino health and science centre (€10,000). The Halmar Group funded, among others, the Pope Francis Memorial Fund, study grants for the Dominican College, Rutgers University and the Crossroads Centre for Children (contribut-

ing a total of €115,000).

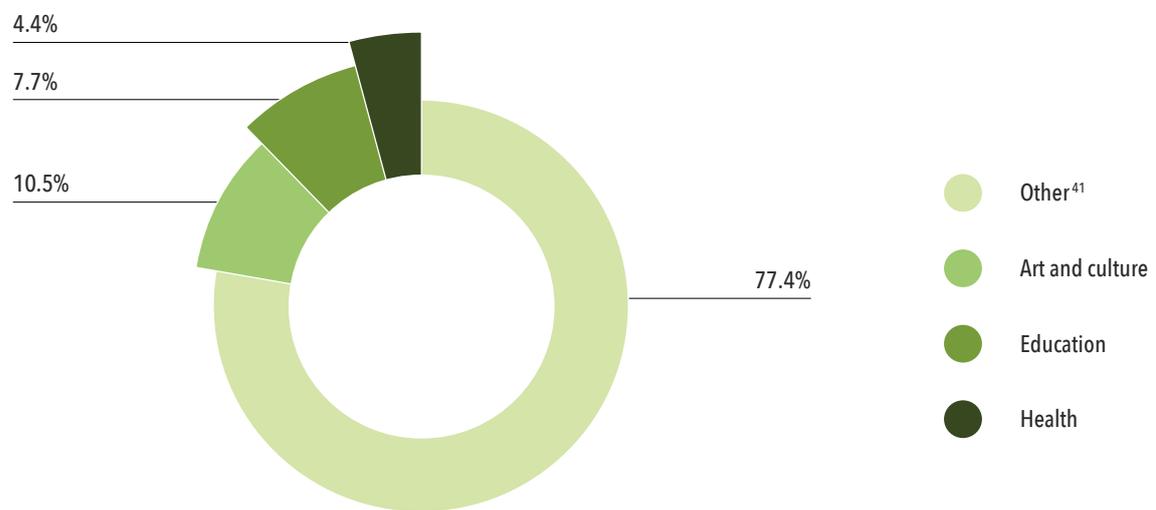
The ASTM Group considers community relations as a vital part of its business.

This is why it establishes long-lasting relations, setting up initiatives and projects that can benefit local areas from both a social and cultural standpoint. In particular, the Group considers sport as an important way to encourage the growth of local communities and the development of young people.

Moreover, during the 2017/2018 sports' season, Itinera S.p.A. was the main sponsor of CUS Ad Maiora Rugby 1951, with a contribution of €50,000. Both the men's and women's CUS Torino (Torino University Sports Centre) teams take part in the Serie A championship. Itinera offers deserving youngsters a chance to go on a work placement, which is a unique opportunity to learn about the company at first hand.

The Group supports the National Association for the Protection of Animals (ENPA) in its campaign against abandoning animals, by issuing free motorway toll cards to volunteers involved in rescue operations.



**TARGET SECTOR**

<sup>41</sup>The item "Other" mainly includes funding for dedicated sports' initiatives.



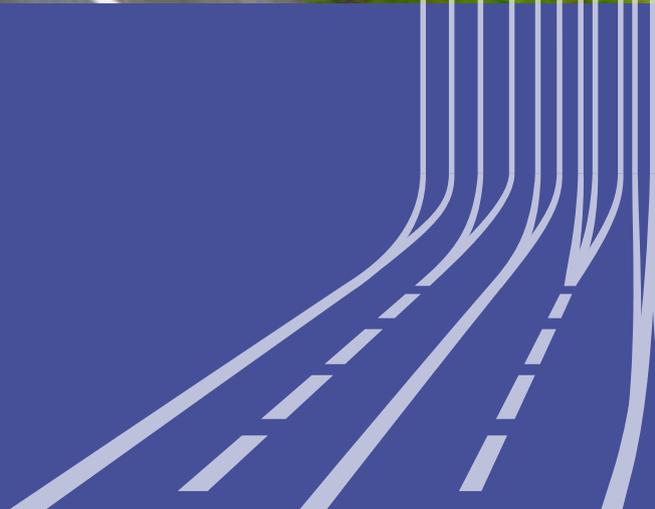
The Group considers donations as short-term activities or one-off contributions for non-government and non-profit organisations, such as investments in the community, long-term initiatives to remedy social and economic problems in

the area where the company operates and initiatives for the community with a commercial impact, and initiatives to promote the brand and corporate identity with a social impact.





# Our business segments



# MOTORWAY CONCESSIONS

**THIRD MOTORWAY  
OPERATOR IN THE WORLD**

**MAIN MOTORWAY  
OPERATOR  
IN NORTH-WEST ITALY**



**4,156 KM**  
OF NETWORK MANAGED UNDER CONCESSION  
IN ITALY, BRAZIL AND THE UNITED KINGDOM

1,423 KM OF NETWORK IN ITALY  
2,649 KM OF NETWORK IN BRAZIL  
84 KM OF NETWORK IN THE UNITED  
KINGDOM

**€1.2 BILLION OF  
REVENUES IN 2018**



**APPROXIMATIVELY 712 KM  
OF MOTORWAY WITH A DRAINING/  
SOUND-ABSORBING ROAD SURFACE**

**OVER 85% OF WASTE  
RECYCLED**



**ONE OF THE LEADING  
PRIVATE INVESTORS  
IN TRANSPORT INFRASTRUCTURE IN ITALY**





In particular, SIAS manages the following motorway stretches under concession, through its subsidiaries:

A4: Torino-Milano (managed by SATAP S.p.A.), approximately 130 km long

A21: Torino-Piacenza (managed by S.A.T.A.P S.p.A.), approximately 168 km long<sup>42</sup>

A21: Piacenza-Cremona-Brescia (managed by Autovia Padana S.p.A.), approximately 117 km long

A10: Savona-Ventimiglia (managed by Autostrada dei Fiori S.p.A.), approximately 113 km long

A6: Torino-Savona (managed by Autostrada dei Fiori S.p.A.), approximately 131 km long

A12: Sestri Levante-Livorno Viareggio-Lucca, Fornola-La Spezia (managed by SALT p.A.) for a total of approximately 155 km

A15: La Spezia-Parma (managed by SALT p.A.), approximately 182 km long

A5: Quincinetto-Aosta (managed by SAV S.p.A.), approximately 60 km long

A33: Asti-Cuneo (managed by Autostrada Asti Cuneo S.p.A.), approximately 78 km long

It also has joint control over the following licensee stretches:

ATIVA - Tangenziale di Torino (A55), Torino-Quincinetto, Ivrea-Santhià and Torino-Pinerolo (156 km)

TE - Tangenziale Est Esterna di Milano (A58) (32 km)

It also holds an interest in the following licensee companies:

SITAF - Torino-Bardonecchia motorway and the Frejus tunnel (94 km)

SITRASB - Società Italiana Traforo del Gran San Bernardo (13 km)

A69 Carlisle-Newcastle (UK) (84 km)

<sup>42</sup> Concession expired and managed by SATAP S.p.A. on an extended terms basis



In Brazil, the Group, through the jointly controlled company EcoRodovias, which is listed on the São Paulo Stock Exchange and is a leading infrastructure operator in the country, manages a motorway network of approximately 2,649 km, along the south-south-east corridor of the country in one of the wealthiest and most industrialised areas with a high population density.



EcoRodovias controls the following licensee companies:

Ecovias dos Imigrantes which connects São Paulo to Porto de Santos (177 km)

Ecopistas which connects São Paulo to Vale do Rio Paraiba (135 km)

Ecovia Caminho do Mar which connects Curitiba to the port of Paranaguá (137 km)

Ecocataratas which connects Paraná to the so-called Triple Border between Brazil, Argentina and Paraguay (387 km)

Ecosul which connects Pelotas, Porto Alegre and Porto del Rio Grande (457 km)

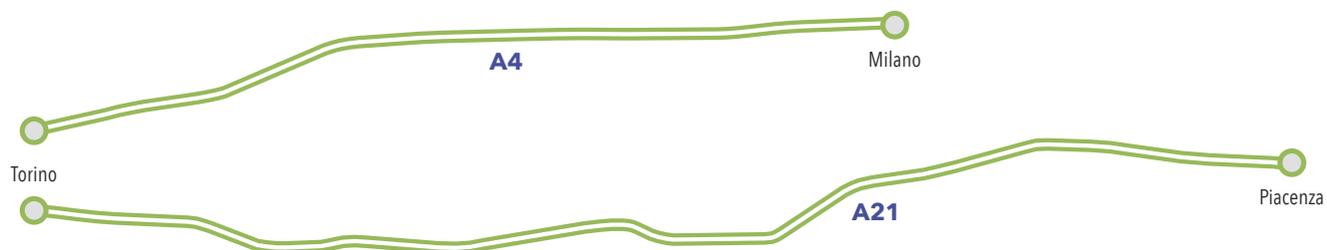
Ecoponte which connects Rio de Janeiro and Niteroi (23 km)

Rodoanel Norte which connects São Paulo and the Northern Ring Road (48 km)

ECO050 MGO which connects Cristalina (Goiás) to Delta (Minas Gerais) (437 km)

ECO135 Montes Claros (Minas Gerais) (364 km)

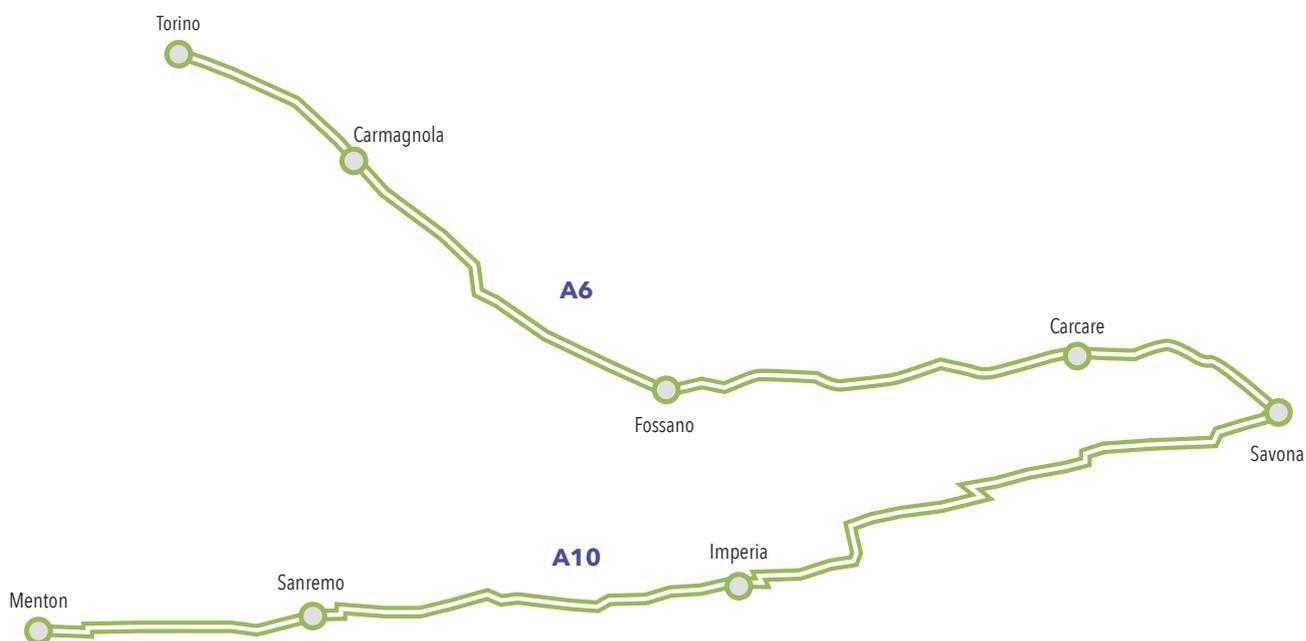
## OUR MOTORWAY LICENSEE COMPANIES <sup>43</sup>



### SATAP S.p.A.

The motorway company SATAP has the concession to manage the following motorway stretches:

- A4 Torino-Milano (130 km)
- A21 Torino-Piacenza (168 km)<sup>44</sup>



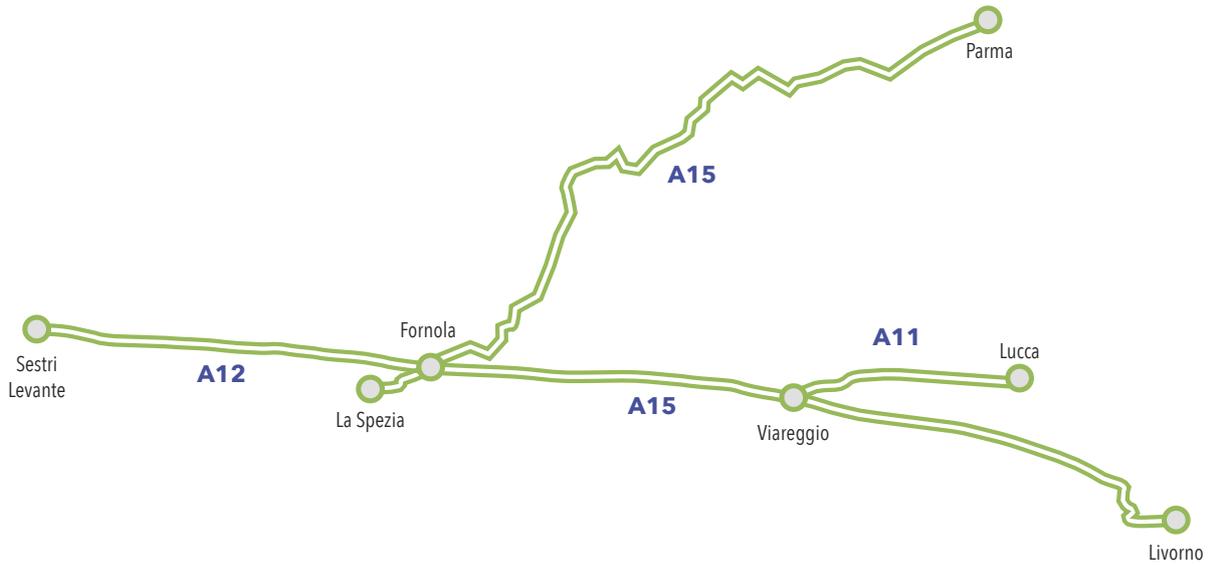
### Autostrada dei Fiori S.p.A.

The company Autostrada dei Fiori has the concession to manage:

- the stretch of the Savona-Ventimiglia motorway (A10), with an overall length of 113 km
- the 131 km stretch of the Torino-Savona motorway (A6)

<sup>43</sup> Directly controlled

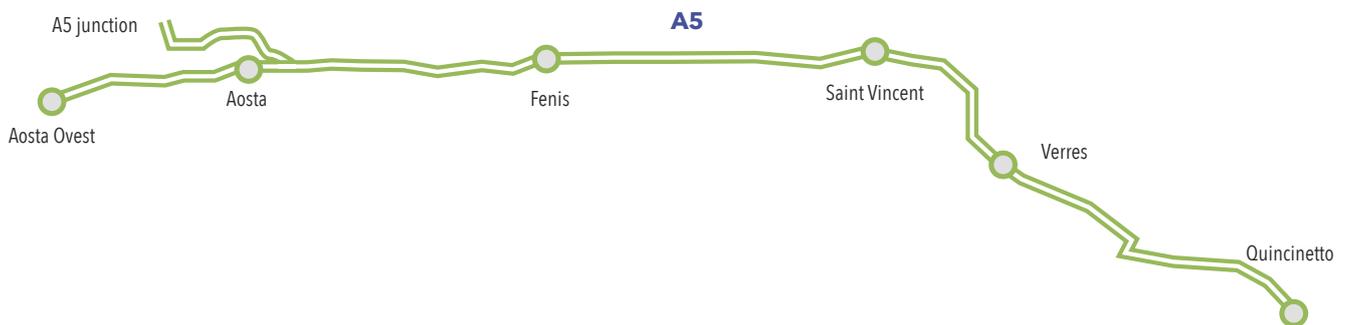
<sup>44</sup> Concession expired and managed by SATAP S.p.A on an extended terms basis



### Società Autostrada Ligure Toscana - SALT p.A.

The motorway company SALT has the concession to manage the following motorway stretches:

- A12 Sestri Levante-Livorno; Viareggio-Lucca; Fornola-La Spezia for a total of 154 km
- A15 La Spezia-Parma for a total of 182 km



### Società Autostrade Valdostane - SAV S.p.A.

The motorway company SAV has the concession to manage the A5 motorway stretch from Quincinetto to Aosta Ovest and the A5-SS 27 junction of the Gran San Bernardo road tunnel (A5).



### Autostrada Asti-Cuneo S.p.A.

The company Autostrada Asti-Cuneo has the concession to manage the A3378 stretch of the Asti-Cuneo motorway (A33), comprising two stretches totalling 78 km, connected in turn by a 20 km stretch of the Torino-Savona motorway (A6), from Marene to Massimini.



### Autovia Padana S.p.A.

The company Autovia Padana has the concession to manage the Piacenza-Cremona-Brescia stretch of the A21 motorway, for approximately 89 km, as well as the Fiorenzuola d'Arda branch, which connects the A21 with the Milano-Bologna motorway (A1).

The Company is also appointed to manage the Ospitaletto-Montichiari motorway link for a further 17 km, on a separate and temporary basis, on behalf of ANAS.

## THE GROUP AIMS TO BECOME A LEADER IN MANAGING MOTORWAY CONCESSIONS IN ITALY AND ABROAD



### VISION

To be a world-leading licensee company, excelling at motorway management.



### MISSION

To offer our global customers an outstanding travel experience, characterised by safe, comfortable driving, plus a high level of information and effective management of the infrastructure and emergencies.

During 2018, investments in motorway assets totalled €450 million, of which approximately €301 million for the acquisition of the concession of the Piacenza-Cremona-Brescia stretch of the A21 and €149 million for investments in the motorway infrastructure. The change in investments in motorway infrastructure made by the Group compared to the previous year (€190 million) is due to the substantial completion of works for the Torino-Milano stretch of the A4, offset by investments in the Piacenza-Cremona-Brescia stretch of the A21. Moreover, the poor weather conditions of the first few months of 2018 caused a slowdown, compared to forecasts, of the works in the developing site of the "Tirreno-Brennero plurimodal corridor" (the "TiBre") relative to the A15 stretch. The €149 million investment in motorway infrastructure refers to the SALT stretch of the A15 for €64 million, mainly for the development of the TiBre, the modernisation of viaducts to comply with legal requirements, for 21 million, and the modernisation of tunnels to comply with requirements in Legislative Decree 264/2006 for €11 million. To prevent animals wandering onto the motorway area, 14 km of new fencing and protection works were also installed.

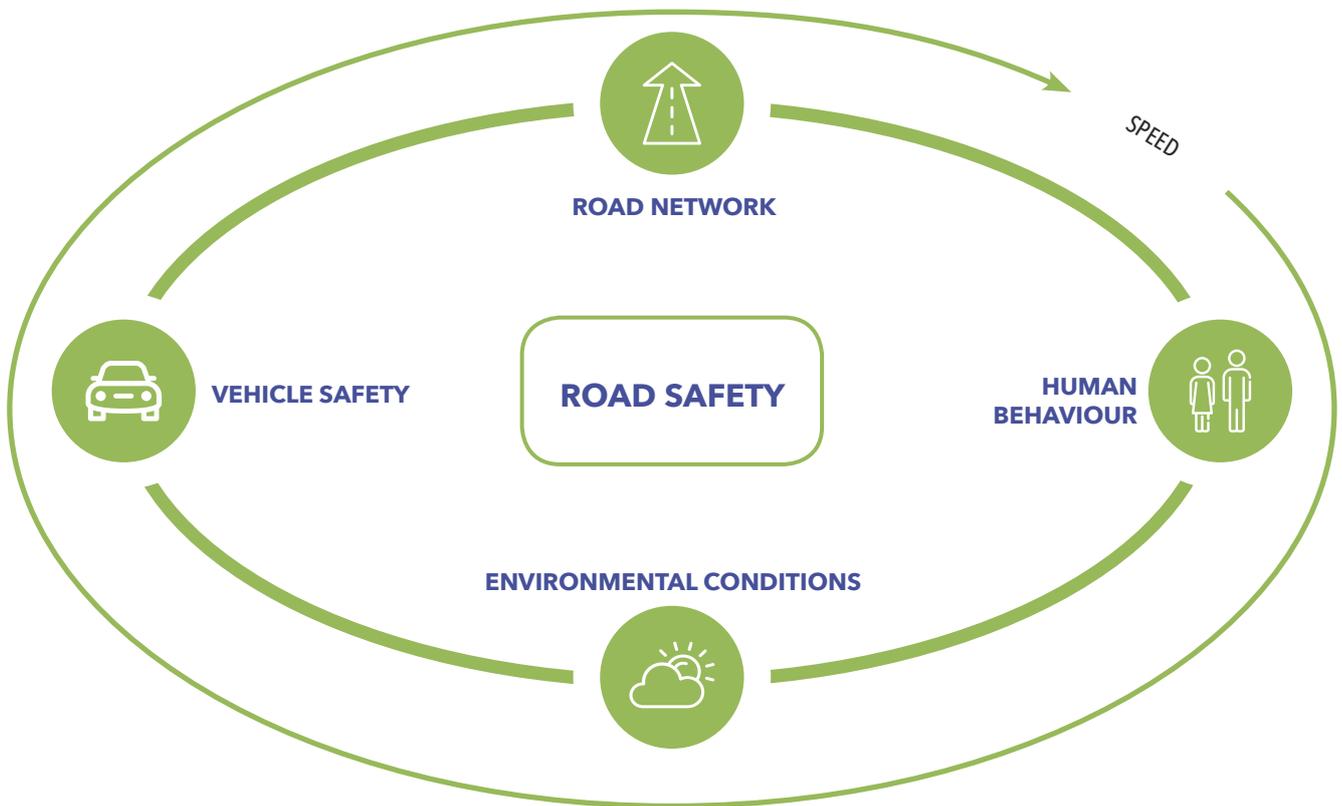
## OUR COMMITMENT TO ROAD SAFETY

The roads designed, built and managed by Group licensees aim to fulfil the need for the safe transit of people and goods. The complex and regulated road system calls for formal compliance with sector regulations, which is a qualifying part of the planning and management process.

In line with the guiding principles of the "Decade of Action for Road Safety 2011-2020" and of the Road Safety Manual of the World Road Association, it is clear that a systematic approach to road safety ("a safe system approach") can overcome the boundaries of formal regulatory compliance, recognising the need to integrate a whole host of aspects - from the technical to the psychological - that form the basis of user behaviour, in managing road safety.

SIAS Group licensees have been aware of the need to adopt this systemic approach for some time, and they do this through:

- Design and construction choices geared towards safety, as part of a cycle of technical and administrative efficiency, with measures that target the development and adaptation of the roads that are devised to incorporate the human factor in design criteria, in order to prevent accidents and mitigate consequences for people.
- careful maintenance of infrastructure. inspection technologies and methods adopted tend to establish the consistency and safety of the work and foresee its future deterioration, referring this to the conditions of use of the infrastructure which the work is a part of. Activities comprise inspections of bridges and viaducts, controls and monitoring of underground works and the overall management of road infrastructure.
- safe management of infrastructure, with careful monitoring of events on the network and use of feedback relating to managed motorways.
- public notices and promotion of safety through the Autostradafacendo safe driving campaign.



## MONITORING THE CONDITIONS OF MOTORWAY INFRASTRUCTURE

The Group's licensees have defined and adopted a method for the integrated process which monitors the conditions of infrastructure, provides diagnostics and defines necessary measures, to ensure the safety, functionality, sturdiness and durability of works over time.

The process is based on specific procedures that target the acquisition of information about the conditions of the infrastructure and developments over time, in order to understand the "current" conditions of works, reasonably predict future conditions and thus promptly and effectively plan necessary measures.

For this purpose, besides routine controls of concession agreements, internal "continual" monitoring and additional, in-depth periodic external controls are carried out, giving the Technical Department all results on infrastructure conditions, enabling the priorities of actions and their time-scale to be defined. The assessments made through this control system are then validated by an external expert.

After priorities have been confirmed, actions are planned and activities are then validated by another qualified, independent body. For each stage which requires the assistance of external experts, the companies are supported by highly qualified consultants, selected from the most outstanding in Italy and Europe.



After priorities for actions are defined, the projects are prepared (opex and capex) and, as provided for by applicable regulations, are validated by a competent person; capex activities are also approved by the Grantor or other competent organisations.

In close connection with this monitoring process, the Group is developing an industrial project to define an industrial standard for the safety of infrastructure which, thanks to a combination of the most advanced techniques and civil engineering plus applied mathematics, as well as innovative monitoring technologies and advanced cognitive cloud computing systems, will improve the quality and safety of works, extending their useful life and reducing management costs.

The methodology is therefore characterised by an integrated approach which is also innovative. This is because establishing values and specific indexes for infrastructure conditions is difficult, and so mathematical models and specific algorithms are used to measure any design inefficiencies and ageing, to enable the consequent planning of actions to ensure sustainability over time.

More specifically, the system will automate data collection and processing in order to standardise inspections and identify any

critical aspects. To this end, SHM (structural health monitoring) systems are used comprising high-quality installed sensors to monitor significant structural parameters, connected to the cloud, for data acquisition, processing and storage. The data are stored in the cloud, where real-time measurements of main structural parameters are compared with expected results, calculated using the structure mathematical model, to promptly identify any critical aspects of works.

At present, systems and apparatus have been installed on eight bridges of the network managed by the Group, with plans to increase this number to 100 during 2019, followed by the implementation of the system on all other managed structures.

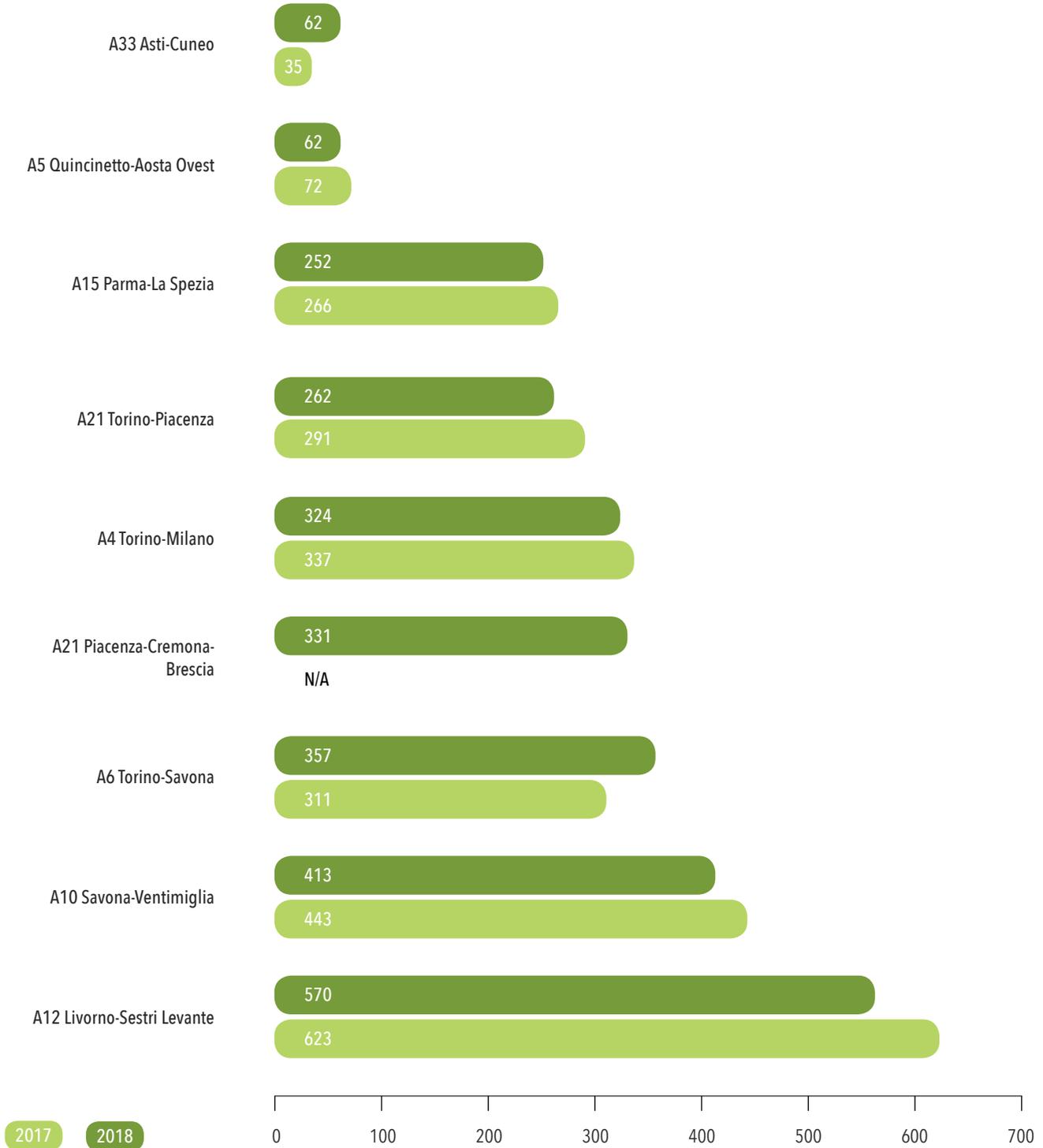
Considering the importance of the development of methodologies and technologies described above regarding Group infrastructure management, and considering the opportunities of the project in the safety industry, the Group will put its experience and competencies to use in the civil engineering sector.

Lastly, project partners include world leaders in the sectors of materials, components, systems and IT, as well as major universities in the field of engineering.





### NUMBER OF MOTORWAY ACCIDENTS ON THE SIAS NETWORK



In 2018, a total of 2,633 accidents on the network of Group licensee companies were recorded, of which 36 fatal accidents (including a fatal accident on the Piacenza-Cremona-Brescia stretch of the A21 before the concession agreement with the subsidiary Autovia Padana came into effect), with 1,286 injured persons and 44 deaths.

The graph shows the rate of fatal accidents on the SIAS network. The strong decrease in the rate reflects the Group's efforts to continually improve safety on its managed network.

### RATE OF FATAL ACCIDENTS ON THE SIAS NETWORK

(Rate for the years 1998-2018, no. of fatal accidents/mileage in millions of vehicles/km\*100)



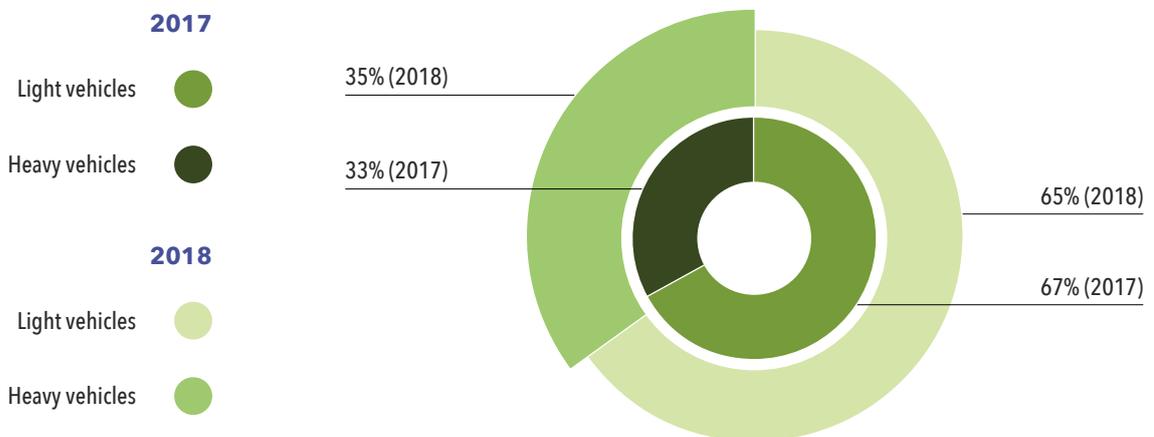
The following elements contributed:



Improvement in infrastructure safety

Development of the road safety campaign  
Autostradafacendo

### ACCIDENTS BY TYPE OF VEHICLE INVOLVED

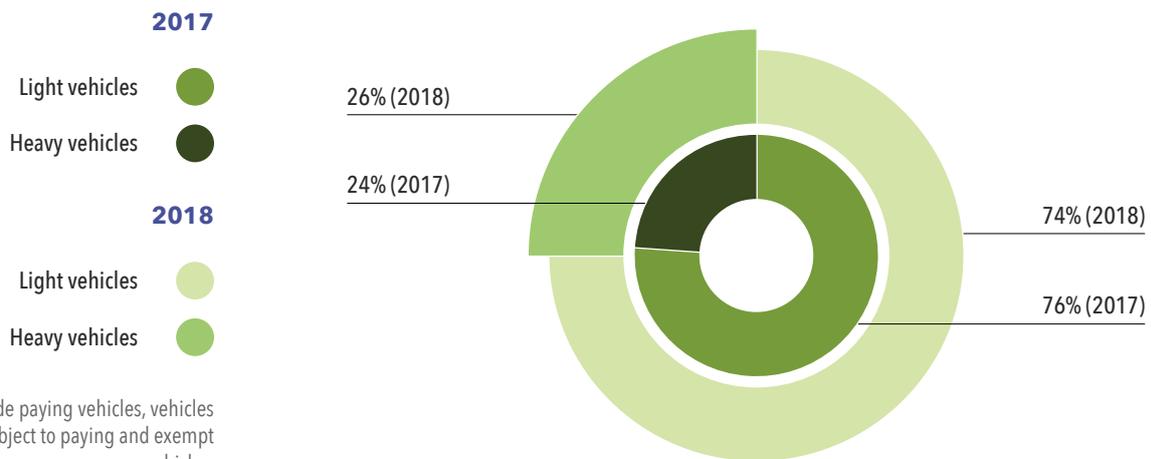


65% of vehicles involved in accidents are light vehicles.

## TRAFFIC DATA

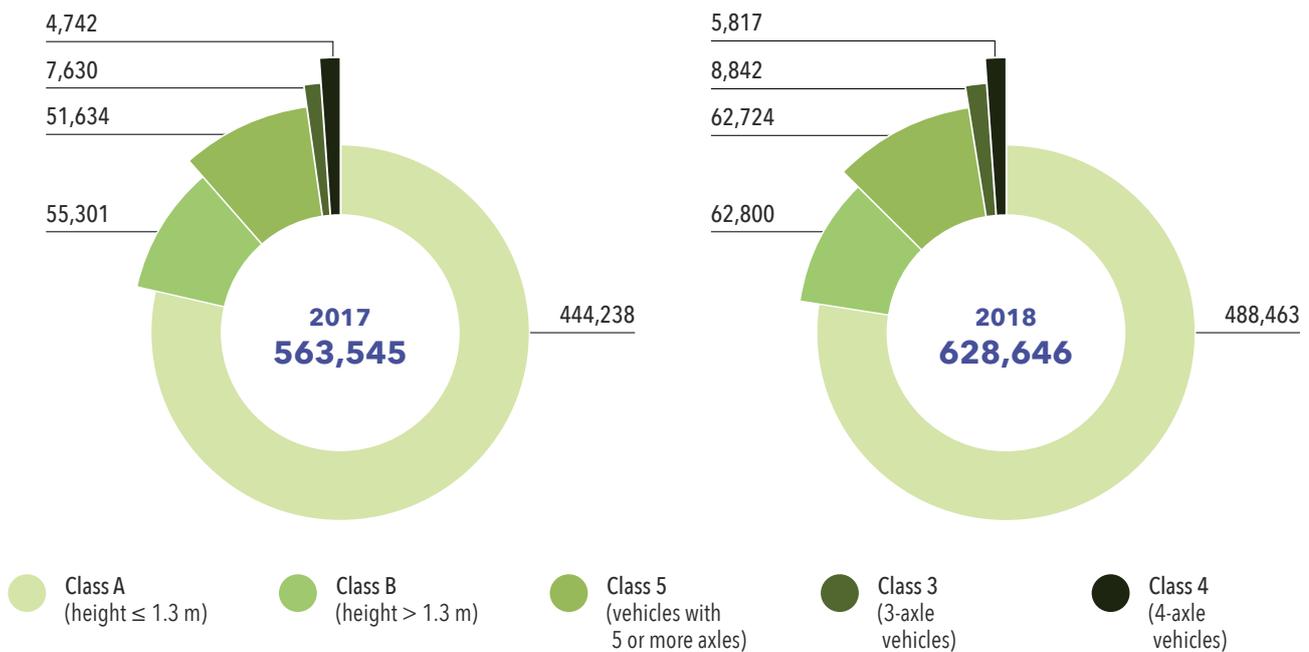
Graphs and data on traffic served daily by the Group's motorway licensee companies are shown below, indicating services provided to the public.

### PERCENTAGE OF JOURNEYS ASSESSED IN VEHICLES/KM<sup>45</sup>



<sup>45</sup> Include paying vehicles, vehicles subject to paying and exempt vehicles.

### AVERAGE ACTUAL DAILY VEHICLES BY TYPE OF VEHICLE<sup>46</sup>



<sup>46</sup> Include paying vehicles, vehicles subject to paying and exempt vehicles

The definition of vehicles/km refers to total km travelled by vehicles joining the motorway, in particular between the start and end of the stretch, and makes a distinction between actual vehicles, which are the number of all vehicle units, regardless of the category, joining the motorway and regardless of the km travelled.

## COOPERATION WITH EUROPEAN INSTITUTIONS

Technological progress over the last few decades has made it possible to improve the people's quality of life from numerous perspectives, including transport.

The Group operates on a daily basis to make a positive contribution to change.

In view of this, it is easy to see that mobility is a priority for Europe, as it has realised that technologies are vital for positive change in the transport system and for this reason has invested in developing Intelligent Transport Systems (ITS), integrating knowledge of telematics with transport engineering. The purpose of this combination is to improve the safety of driving and people, the security of vehicles and goods, quality, as well as the efficiency of passenger and goods transport systems, optimising the use of natural resources and respecting the en-

vironment. To deal with this challenge, the European Commission has promoted the creation of five European ITS corridors (Arc Atlantique, Crocodile, MedTIS, Next-ITS and Ursa Major) and the European ITS Platform, with project management overseen by SINA. The platform coordinates the corridors, which in turn promote cooperation among member states, the authorities and road operators and public and private sector partners, in order to promote the harmonisation of ITS systems and maximise the benefits that instead would have been at risk from fragmented approaches and different solutions for each individual country.

The European Union's aim is to make mobility more efficient, safe and inclusive, through the creation of a unified transport and communications network made available to every category of road user.>



### WORLD ROAD ASSOCIATION, UN ACTION ON ROAD SAFETY AND THE ROAD SAFETY MANUAL

The World Road Association is the oldest international organisation dealing with road engineering and strategies for road network management.

Road safety is an issue addressed by the international committees **C.1 National Road Safety Policies and Programmes** and **C.2 Design and Operations of Safer Road Infrastructure**.

At present, the C.1 committee has **72 members delegated by road administrations from some 50 countries on five continents**, including secretaries, working group leaders, full national members and correspondent members. Since 1 March 2016, Italy has been chair, through the ASTM-SIAS Group, represented by SINA, which has also been nominated for the next four-year period to chair this committee and the committee on tunnel safety.

Since the first meeting chaired by the Group, the Technical Committee C.1 has considered the UN's guidelines on sustainability.

A resolution of the UN general assembly in 2016 recognised the Road Safety Manual written by the World Road Association as "an important international effort focussed on road safety to offer guidelines to different-ranking officers on measures that can improve the safety of road infrastructure." This concept was confirmed in April 2018, with a new road safety resolution being made.

The Manual, already in its second edition, is based on an extensive range of knowledge and experience gained by Road Safety Association experts over the years. The version considers human fallibility and vulnerability and involves everyone (public authorities, automotive manufacturers, road users, regulatory authorities and others) in sharing responsibility for road safety results.



ing for roads, worldwide, such as the World Bank and the European Investment Bank. The committee chair (SINA) called the periodic meeting of the Steering Committee on 2 and 3 October 2018 to present the preliminary results obtained from the Technical Road Safety Committees, in order to update and improve the Road Safety Manual.

## AUTOSTRADAFACENDO AND PARTNERSHIPS WITH NATIONAL INSTITUTIONS

### 18th edition of the ICARO project

In 2018, the 18th edition of the ICARO project got underway. This national programme targets road safety education for secondary school students throughout Italy. The project is developed in coordination with the Ministry of the Interior and thanks to an agreement with the Ministry of Education, Universities and Research (MIUR), the Ministry of Infrastructures and Transport (MIT), the Department of Psychology of La Sapienza University, Roma and in conjunction with the Fondazione Ania, the Italian Cycling Federation, the company Autostrada del Brennero Spa, Enel green power and the Gavio Group, that has always contributed to promoting and raising awareness of road safety, also through the **Autostradafacendo.it** project.

The ICARO project, with teachers and students actively and continually taking part over the years in a high-level output, involves written storytelling projects, with students narrating real stories that have made them reflect on road safety.

In 2018, the topic selected by the project was distracted driving, in particular due to multi-tasking. The programme also broadcasts video tutorials that explain wrong behaviour and tackle the prevention of road accidents.

### Road safety day

The Group - an important partner of the ICARO project - attended the day, as it does each year, focussing on the central nature



ICARO sets off again from Spoleto



The Lecture Theatre of La Sapienza University was the venue for the road safety day

of social accountability policies. During the event, the development of the Autostradafacendo.it portal was praised, with new articles, videos and road safety messages, and the United Nations' decision to use the site contents for dissemination actions with a leaflet on the use of safety seats was announced.



Road accidents are the main cause of death in people under 30. To raise awareness of these issues, on 18 November 2018, the World Day of Remembrance for Road Traffic Victims, first held by the UN in 2005, took place at Roma University, with 800 students in attendance. The aim of the day is to provide a moment for reflection and to remember road traffic victims and their families. The Chief of Police and associations of road traffic victims also attended. During the morning, with the support of the Sapienza University foundation, the delicate issues of helping road traffic victims and prevention were addressed, targeting young people in particular as they are more likely to be involved in road accidents.

According to ISTAT figures, in 2017 174,933 road accidents occurred injuring persons, with 3,378 fatalities, up by 95 compared to the previous year, reversing the trend compared to 2016, when figures for fatalities recorded a drop. However, one piece of data seems to point to a step in the right direction: fatal accidents involving young people up to 29 years old totalled 668, down by 35 compared to 2016.

The operating director of the motorway company SALT represented Autostradafacendo at the event. Along with another eight licensees, this Company is promoting the Group's road safety project.

In 19 years, ICARO has got some 200,000 students involved, as well as making hundreds of thousands of contacts during events organised at theatres, in towns and on board the "Blue Bus" - the road police's travelling multi-media classroom.

During this day dedicated to road safety, a ceremony was also held to reward the most significant works, in line with the objective of ICARO 18, which envisages the development of narrative relative to a particular event and encourages reflection on the importance of road safety.

In 2009, ICARO became an EU project (Icarus) with the road police acting as the lead in the EU for road education.

## **AUTOSTRADAFACENDO AND COOPERATION WITH INTERNATIONAL ORGANISATIONS**

Various international organisations have opted to use the ASTM Group's safety campaign as a vehicle for their road safety campaigns, or to contribute to disseminating their own projects. These initiatives indicate the visibility of the Group at international level, with a commitment acknowledged by experts at European level. Three examples are given below.

### **The European police renews its commitment with EDWARD**

The road safety campaign EDWARD (European Day Without a Road Death) promoted by the European Road Police Network (TISPOL), with the Italian State Police as Chair since October 2016, was held again in 2018. This initiative, supported by the European Commission, is part of the European mobility week (17 to 23 September 2018) and its aim is to have a day, specifically 19 September 2018, with zero fatalities on European roads. The aim of EDWARD is to increase social awareness of fatalities and serious accidents on European roads and inform road users of the European goal to reduce the number of victims by 50% by 2020.

The aims are explained in full on the project's web page. Many entities supported the campaign, visiting the site and joining the project by committing to respect the highway code with a view to decreasing accidents in Europe. An interactive map was created, and local-level initiatives can be entered after registering. The map has a link to the European Commission and may be consulted on the project's website.

### Videos on safe driving in French tunnels

The French Ministry (CETU), in the context of the French working party of road tunnel operators (Groupe de Travail Francophone des Exploitants de Tunnels Routiers), presented three videos of the web series "Tunnel mode d'emploi" (Tunnels: how to use them). The videos are for general information purposes, to inform French drivers on how to behave in tunnels.

### Vision Zero Academy: a Swedish project

The Swedish government, whose Vision Zero road safety policy has a long tradition, organised an international course held in Gothenburg. In 1997, the Swedish Parliament adopted Vision Zero as its road traffic policy, with the aim of reducing the number of victims or serious injuries on the national road transport system to zero. Sweden decided to put its 20 years of experience in adopting strategies and actions based on the Vision Zero principle to good use in a training course.

The course was organised by the Swedish transport department, partnered by various industrial and research players. The course was for government authorities, industries, councils, NGOs, academic institutions and other bodies, as well as managers of various international organisations with responsibility for public health and safety, working directly or indirectly on road safety problems.



Tunnel safety: new videos by the French Ministry are available online

## MANAGING EMERGENCIES

The Group is committed to managing all types of risks and emergencies as efficiently as possible, to ensure transit on its motorway stretches in all situations and in the case of any type of event.

Main emergency situations refer to snow, flooding, fire and landslides. In 2018, a total

of 79 events concerning snow (lasting approximately 1,265 hours) were managed, using 1,084 vehicles and around 29,756 tonnes of fluxing agents (salt and chlorides). During 2018, six flooding events were also managed, using 22 items of equipment. All Group licensees have an operating unit that users may contact in the event of emergencies, and over 1,481 SOS points along the entire motorway network.



**APPROXIMATELY** <sup>712</sup>

**KM  
OF MOTORWAY WITH A DRAINING/  
SOUND-ABSORBING ROAD SURFACE**

## EMERGENCY SITUATIONS ON GROUP STRETCHES

TYPE OF EVENT	2017	2018
	no. of events/duration	no. of events/duration
Snow events (hours of snow)	760	1,265
Flooding (no. of events)	3	6
Landslides (no. of events)	-	1
Fires (no. of events)	41	46

## QUALITY POLICIES AND MANAGEMENT

Quality management within the Group focuses on bringing together the different competencies of the Group's companies that plan, build and manage infrastructure networks. Behind this approach is a careful definition of the objectives of the Group and its companies, which are pursued

through strategic and operational guidelines that cover monitoring plans and indicators controlled by each company on a regular basis. Customer satisfaction and in particular motorway user satisfaction, are flanked by other objectives targeting innovation, technological development, robust and long-lasting relations with Stakeholders, the development of side industries and businesses connected with infrastruc-

ture and a careful choice of suppliers and business partners in Italy and abroad. Each company has its own quality management system that is consistent with a common value chain and with regulatory, management and technical standards defined at a Group level, but which also takes into account the specific business segments each company operates in.

Promoting these diversities represents additional added value for the Group, as does the empowerment of human resources working in the Group's various companies and a focus on occupational health and safety. Particular attention is paid to integrating the quality management system with the compliance programme and other management systems.

## **CUSTOMER SATISFACTION PROCEDURES**

The Group, in compliance with the objectives of the quality policy adopted, is committed to monitoring quality perceived by users of its own motorway infrastructure. To this end, the Group's licensee companies carry out customer surveys on a regular basis and the results are analysed and used internally to identify strengths and weaknesses, plan improvement actions and follow them up.

These surveys generally consist of questionnaires that are made available on the websites of licensee companies or handed out, by specially trained personnel, at service stations along the motorway section managed. The Group, acknowledging the added value, promotes the systematic adoption and consolidation of these tools,

by various licensees, also attempting to standardise the methods, in order to make results as comparable as possible.

The considerable wealth of information obtained from surveys is used by Group licensees to further understand changes in the context and in motorway user needs and expectations, and to steer decision-making processes affecting Perceived Quality as effectively and efficiently as possible, based on facts and measurements.

Other more modern approaches to interaction with customers will soon be adopted for the entire motorway network managed by Group licensees, including for example the possibility to send messages using mobile apps, to report information, and ideas for improvement or innovation based on direct experience of the service.

## **MOTORWAY TOLLS**

The Group's main source of income is from motorway tolls that customers pay to use the infrastructure. The motorway tolls that customers must pay are calculated by multiplying the number of km travelled on the Group's network by the rate, which is specific for each concession. The rate is governed based on an agreement which each Group licensee company has signed with the Ministry of Infrastructure and Transport (MIT), that awarded the concession, and which is updated according to indications in MIT decrees. The rates policy of Group licensee companies is therefore subject to compliance with numerous constraints, which therefore rule out any discretionary application by the companies and guarantee the transparent, uniform adoption of rates for customers.

# CONSTRUCTION

The ASTM Group operates in the construction sector through Itinera, a national and international developer of major infrastructure and civil and industrial engineering projects.

**MAJOR  
INFRASTRUCTURE**  
OVER 100 KM OF TUNNELS  
OVER 1,000 KM OF ROADS AND RAILWAYS



**€630 MILLION  
OF REVENUES IN 2018\***

\*Source: Consolidated financial statements of the Itinera Group at 31 December 2018

**€5 BILLION  
BACKLOG**



**APPROXIMATELY 6,000\*  
EMPLOYEES AND STAFF**

\*Source: Consolidated financial statements of the Itinera Group at 31 December 2018

## IN THE WORLD

ABU DHABI  
ALGERIA  
ARMENIA  
AUSTRIA  
BOTSWANA  
BRAZIL  
DENMARK

DUBAI  
ITALY  
KENYA  
KUWAIT  
NORWAY  
OMAN  
QATAR

ROMANIA  
SAUDI ARABIA  
SOUTH AFRICA  
SWEDEN  
USA  
ZAMBIA

With know-how and experience gained through over 75 years of operations in Italy and worldwide, Itinera, wholly consolidated by ASTM, is a leading player in Italy in the development of major infrastructure (roads, motorways, railways, underground railways), and civil and industrial buildings (ports, airports, hospitals, universities, shopping centres), and also involved in the development of greenfield concession projects.

Today, the Group is a leader in major works in Northern Europe, Africa, the Middle East and Latin America, as well as the United States, where it operates through one of the leading transport infrastructure companies in the metropolitan area of New York.

#### ITINERA AIMS TO BECOME A LEADER IN INFRASTRUCTURE 4.0



##### VISION

**To be one of the best infrastructure companies in Italy, recognised for our outstanding solutions that deliver a wide range of infrastructure products for the global market (infrastructure 4.0) and to give our global customers quality, innovative and timeless solutions in compliance with timelines and quality.**



##### MISSION

**Itinera has always pursued ambitious objectives in synergy with the Group. The Group's dimensions and technical and professional skill sets mean the company can guarantee its customers (from both the public and private sectors) prestigious results in terms of quality works and compliance with development times. Itinera is aware that its work contributes to developing the mobility of people and goods and to improving the daily life of everyone.**

## BUSINESS SEGMENTS

### INFRASTRUCTURE ROADS AND RAILWAYS



### RAILWAY AND UNDERGROUND STATIONS



### AIRPORTS

### HOSPITALS



### PUBLIC AND INDUSTRIAL BUILDINGS

Management systems are gradually supplemented to optimise existing synergies and in order to achieve continual improvement in line with Stakeholder expectations and the Group's strategy, Itinera adopted an integrated Quality, Environment, Safety, Risk Management, Sustainability and Social Responsibility Policy in 2015. Moreover, in 2017 the Abu Dhabi branch adopted a Quality, Environment, Health and Safety Management System conforming to ISO 9001:2015, ISO 14001:2015, BS OHSAS 18001:2007 and ISO 31000:2009.

The Policy sets out the company priorities and future objectives in line with the Integrated Management System, of which the main ones are outlined below:

- ensuring the satisfaction of users and all main Stakeholders, at all times
- guarantee the effectiveness and efficiency of all company processes with a view to their continual improvement and product quality
- protecting workers and contractors, mitigating health and safety risks as far as possible
- minimising the impact of operations on the environment

This policy, which is periodically revised to ensure its adequacy, is promoted, disseminated and communicated within the company, to all employees.

## **ITINERA AND SAFETY AT WORK SITES**

Itinera S.p.A. has developed and gradually adopted an Integrated Management system in accordance with ISO 9001, ISO 14001, OHSAS 18001, SA8000 and ISO 31000, with a specific focus on controlling safety at all op-

erating sites (work sites, head offices, warehouses and plants). Further improvements to performance were made, also thanks to experience gained recently including international contracts with high standards, such as the Reem Mall in Abu-Dhabi and the Storstrøm Bridge in Denmark.

Moreover, the Management Systems Department conducts inspections of operating areas, on a regular basis, in order to analyse the implementation and application status of the Management System, as well as the implementation status of actions to manage non-conformities. These inspections are an important opportunity to benchmark and dialogue with various operating scenarios. The results of these audits are recorded in audit reports and system records, and any findings (non-conformities, observations and comments) are managed through documented action plans.

## **TRAINING COURSES**

Itinera pays the utmost attention to the ongoing training of its employees, at all levels. During 2018, approximately 39,965 training hours were delivered. In addition to mandatory training courses, the company selected a group of employees to receive training in order to become safety information and safety officers, to raise awareness of safety issues and increase safety-related skills in the company.

Moreover, during 2018 a specific "BIM" (Building Information Modelling) course was held for 12 specialised employees, for a total of 1,152 hours. The goals of the training are to improve the professional expertise of technicians in the field of building and construction industry digitalisation, in an increasingly competitive national and international context.

## COMMITMENT TO QUALITY, THE ENVIRONMENT, HEALTH AND SAFETY

With the commitment of all its personnel, ITINERA implemented its own Quality Management System conforming to UNI EN ISO 9001 in 2002, which is maintained on an ongoing basis.

Itinera also considers it of primary importance to safeguard the health and safety of workers, aiming to comply with applicable legal requirements and to take action at all times to continually improve working conditions.

Itinera has adopted an occupational health and safety management system certified to OSHAS 18001:2007.

Itinera promotes respect for the environment, considering it as a qualifying and rewarding part of each project and targets its own activities to respect these principles, considering the need for a correct use of natural resources.

For this reason, Itinera pays particular attention to developments in national and European environmental law and has adopted an environmental management system conforming to ISO 14001: 2015.

During 2017, all certification was updated according to the latest editions of standards. Moreover, a specific company organisation chart with powers concerning safety and the environment and a consequent reorganisation of the sector has made it possible to achieve a greater organisational level.



### GENERAL PRINCIPLES IN THE COMPANY'S CODE OF ETHICS

Itinera carries out its activities in compliance with national and international laws, and to achieve its objectives, it adopts the following principles:

- compliance with all laws and regulations in force in countries where the company operates
- honesty, transparency and reliability
- compliance with the most stringent rules of behaviour in relations with the Public Administration sector, conform-

- ing entirely to institutional functions
- professionalism, loyalty, fairness and good faith
- respect for employees and other collaborators, and people in general
- environmental protection and safety, also with reference to the work place
- compliance with procedures for using the IT tools adopted by the Company
- protecting health and the environment

In 2018, Itinera obtained the 2018 update to ISO 31000 certification relative to risk analysis.



## STORSTRØM BRIDGE

In October 2017, Itinera was awarded the contract, signed in February 2018 with the Danish Road Directorate of the Ministry of Transport, for the design and development of the new Storstrøm Bridge in Denmark.

The new bridge will be 6.5 km long and 24 m wide, and will have a two-lane road, dual high-speed railway tracks and a pedestrian/cycle lane. Once completed, the new Storstrøm Bridge will be Denmark's third longest bridge.

Itinera will construct the new bridge as leader, with a 99.98% stake in a joint venture with the companies Condotte d'Acqua and Grandi Lavori Fincosit. The new Storstrøm Bridge will connect the islands of Zealand and Falster in the Baltic Sea, replacing the

old bridge, situated further east, dating from 1937 and no longer able to withstand current traffic volumes, which will be demolished.

The new bridge, in pre-stressed pre-cast reinforced concrete will be approximately 6.5 km long (including the deck length of 3.8 km and the two access ramps), 24 m wide and will have a two-lane route with expected traffic volumes of approximately 8,000 vehicles/day, two tracks for high-speed passenger and goods trains (the Copenhagen-Hamburg line), and a pedestrian/cycle lane. The 44 spans of the access viaducts will have an 80 m clearance, while the two guyed central spans will each be 160 m long. The works will be completed in the second half of 2022.



# ENGINEERING

**GUARANTEEING THE  
BEST SERVICE TO  
CUSTOMERS**



**ENGINEERING  
A KEY FACTOR FOR  
MOBILITY**

**€38 MILLION  
OF REVENUES IN 2018\***

\* IAS IFRS data at 31 December 2018 including intercompany relations

**SINA**



**GUARANTEEING A MORE EFFICIENT INFRASTRUCTURE  
LIFECYCLE**

**ENGINEERING IS A KEY FACTOR FOR MOBILITY AND  
MOBILITY OPERATORS**

The ASTM Group is active in control and maintenance engineering for infrastructure, through its subsidiary SINA. The company has consolidated its know-how since the 1960s, through the engineering and full-scale testing of its own-design safety barriers, partnering the most important and qualified research centres and testing laboratories/sites over the years including: Milano Polytechnic's Transport Systems Research Laboratory (LAST), the CSI-IMQ Centre in Bollate, Milano and TRANSPOLIS (formerly LIER) based in Lyon. The company manages the study, promotion, design and supervision during the construction stage of new works in the major transport infrastructure sector. It is also specialised in engineering for active and passive safety systems (safety barriers, tunnel systems).

In this field, it uses specific operating procedures to study the most appropriate and advanced technical and design solutions for restraint systems, which are then tested using calculation and numerical simulation models. The operation process culminates in crash tests on the device prototype, which are carried out according to applicable national and European standards (EN 1317), at authorised testing sites/laboratories. The purpose of these tests is to certify the designed system, so it may receive CE marking from a Notified Body.

On this basis, SINA restraint products/systems, all with CE marking, have been developed and continually implemented, with around twenty available in 2018. Moreover these products/systems have a different

**SINA AIMS TO CONTINUE AS A CENTRE OF EXCELLENCE FOR THE GROUP AND AT THE SAME TIME TO COMPETE ON THE MARKET IN ITALY AND ABROAD**



**VISION**

To be a leading engineering company in Italy, recognised for the excellence of our solutions developed for the market in Italy and abroad.



**MISSION**

To give our global customers the highest quality engineering and cost-effective technical solutions for roads, tunnels and bridges worldwide.

Regarding environmental protection, SINA has technologically advanced equipment and a laboratory for environmental testing. The company has gained significant experience in determining pollutants

caused by road, railway and airport traffic, in noise pollution and in air, water and ground quality.

SINA manages its studies and the design and supervision of measures for an optimal installation of its infrastructures and relative systems, to protect the environment during the construction and operating stages. In particular, it is specialised in:

- environmental studies and planning
- clean-ups and waste management
- environmental monitoring
- work site audits
- archaeological studies and surveys
- specialist studies on noise pollution

performance class (up to maximum restraint levels), depending on the intended use, and also include solutions combining safety barriers with sound-absorbing panels for bridges/viaducts. The close link between the study and design of restraint systems and design of systems to replace/modernise safety barriers has generated a virtuous cycle that can optimise devices based on needs identified during the design and development of new installations, and generate know-how and tools for the simulations typically carried out during the study stage, also to certify the compliance of some specific installations with regulations and good practices.

In 2018, SINA's activities concerned, in particular, specialist studies and acoustic pollution planning.

SINA produced Action Plans pursuant to Legislative Decree 194/2005 for motorway stretches managed under concession by SAV, SATAP, AdF, SALT and the Tangenziale Est Esterna. SINA continued to plan noise mitigation actions (including detailed noise studies), as required in the implementing

sections of Recovery Plans pursuant to the Decree of the Ministry for the Environment of 29 November 2000 for the operators SAV, SALT, AdF and Autovia Padana.

As part of noise abatement, viaduct water management and tunnel modernisation projects, SINA oversaw the planning conformity assessments and, in the case of interference with protected areas or sites of EU importance, prepared specific landscape and environmental impact reports. As part of more complex technical/economic feasibility projects for section A and the operational project for section B of Lot 2.6 of the Asti-Cuneo connection (A33), as well as the operational project for the alternative route to the SP 357 R provincial road near the town of Noceto, SINA oversaw the definition of the environmental framework, preventive architecture, the acoustic study and planning of mitigation measures including work site areas, the definition of projects to restore and recover work site areas, the planning of landscape actions, the preparation of the Environmental Monitoring Plan and environmental management system for work sites and management of materi-



als. Regarding activities to develop the first lot of the motorway junction between the Autocamionale della Cisa (A15) and the Autostrada del Brennero (A22), services as Environmental Director were carried out throughout 2018 by SINA (supervising correct environmental monitoring, adoption of the Environmental Management System and Land Use Plan). During 2018, Environmental Monitoring concerned in particular the A4 motorways, where lot 1.4.2. post-work surveying was carried out and post-work surveying of lot 2.3 (Novara Est-Milano stretch) was also started, as well as the A12, where Environmental Monitoring of Ongoing Works was carried out to monitor works on the new junction between the A12 and the Via Aurelia (SS 1) near the Livorno toll station.

Activities continued during the year to plan and develop local, geographic information systems to support environmental monitoring and project studies on road safety and accidents.

A multi-disciplinary approach was adopted, by maintaining specialist competencies in various environmental sectors, to ensure continual, fully comprehensive alignment with regulations and best industry practices in each sector, as well as the integration of contributions.

In particular, during 2018, SINA invested in gaining expertise in the Envision sustainability protocol. SINA has a wide range of technologically advanced equipment and a laboratory with apparatus for environmental testing. In particular, the company has gained significant experience in determining pollutants caused by road, railway and airport traffic, in noise pollution and in air, water and ground quality. Besides scheduled equipment renewal, a laboratory was set up during 2018 to identify routine biological indices as part of environmental monitoring plans (IBE, QBS, etc.). Activities also continued to assess and certify the compliance of noise abatement barriers on the A10, A4 and A12 motorways with project requirements, mandatory regulations and mitigation objectives.

## TECHNOLOGY AND PLANT ENGINEERING



**€93 MILLION OF  
REVENUES IN 2018\***

\* IAS IFRS data at 31 December 2018 including intercompany relations

**427 EMPLOYEES**

**SINELEC  
EUROIMPIANTI**

**DESIGN AND  
DEVELOPMENT OF  
COMPLETE SYSTEMS FOR TOLL  
COLLECTION**





The ASTM Group is active in telecommunications and traffic management system through the subsidiary SINELEC. SINELEC is a company specialised in the study, design, installation and maintenance of advanced systems for mobility and transport data management, for motorway operation and enhanced safety. Main activities include:

- design, development and maintenance of toll collection systems
- design, development and maintenance of user information systems through variable message signs, the detection of weather and traffic data, remote emergency service provision, advanced video surveillance and access control systems dynamic vehicle weighing systems
- design, development and maintenance of enforcement systems
- design, development and maintenance of infrastructure monitoring systems
- design, development and maintenance of isofrequency radio networks, fibre-optic communication systems, copper backbones and remote control and technological systems in general
- design, development and maintenance of operating control centres and supervision systems
- management of motorway systems that are open, closed and interconnected in plant engineering terms and in terms of data acquisition, control and processing

- the development of specialised applications for mobility systems
- outsourced data processing services, with the provision of in-housing and hosting services
- toll management systems (hardware and software) for road tunnels and bridges

## TOLL COLLECTION SYSTEMS

Since 2011, SINELEC has been active in the design and development of complete toll collection systems. Installed at 900 points throughout Italy, SINELEC's toll collection system has been designed to manage users of the European Electronic Toll System (EETS). Regarding data processing, SINELEC developed a more "open" platform from the 1990s onwards, to record and process motorway tolls, which is still successfully used by 12 Italian licensee companies and managed on a "Software as a Service" basis at the Data Centre in Tortona (Alessandria). The system developed by SINELEC is an example of Italian excellence in the sector. Italy's national association of motorway licensee companies (AISCAT) awarded SINELEC, in a joint venture with Autostrade Tech, a contract in 2013 for the design, development and three-year operation of the Segment Central System for processing motorway toll data based on actual mileage and the integration of future suppliers of EETS services with the



Italian toll collection system, as required by the Commission Decision 2009/750/EC of 6 October 2009.

Special attention has been paid to developing parts of the system affected by new processes and new needs (e.g. the EETS), and eliminating some obsolete components.

SINELEC has also gained long-term experience in the maintenance of toll collection systems, operating on a daily basis with its own systems, recently installed at numerous Italian sites, and with systems supplied by the company Autostrade per l'Italia S.p.A.

The service is provided through teams of highly specialist engineers working at various sites, who guarantee a 24/7 service. The maintenance teams have cutting-edge equipment and can use laboratories at all operating sites with the latest instruments to measure, control and carry out simulations on operated systems.

Consolidated experience in the sector enables the company to efficiently run systems covering 1,500 km of motorway, providing a cost-effective, quality service.

SINELEC has worked with Autostrade Tech to develop the first open toll collection system in Italy in Free Flow Multilane mode, installed on the Autostrada Pedemontana Lombarda (A36), Tangenziale di Como (A59) and Tangenziale di Varese (A60). The system enables users to pay tolls without having to transit through a toll station, avoiding queues. The toll collection points which are located in the direction of travel have:

- a vehicle classification system
- a DSRC (Dedicated Short Range Communications) detection system conforming to ETSI EN 2006741;
- a photo tolling system recording the vehicle number plate and transit context



## REMOTE CONTROL SYSTEM FOR TUNNELS

Over the last few years, ANAS has increased its focus on the type of technologies installed in road tunnels and on the need for correct management during ordinary operations and in emergencies. In this context, the three-year STIG project (for an Integrated Remote Control System for Tunnels) is being developed by Sinelec in partner-

ship with Tecnositaf. The development of these systems will harmonise and integrate all standalone SCADA (Supervisory Control And Data Acquisition) systems to display and manage alarm signals of departmental operating rooms. This configuration, which is preliminary to plant maintenance activities, will become a part of the functions of modern, efficient Operating Rooms, in order to guarantee a centralised management of several road networks and provide ongoing support for decisions.



## VERGILIUS PLUS FINE SYSTEM

SINELEC was recently awarded a three-year public contract for the acquisition of ANAS's Vergilius Plus system to install on the entire Italian network. Vergilius Plus will be used to identify the average speed of all vehicles

on a specific stretch of road, in all weather conditions, and give fines to drivers who exceed the limits. The aim is to increase road and motorway safety.

SINELEC, in partnership with Tecno SITAF, will deal with the planning, approval and implementation and maintenance of the system on the entire ANSA road network.



### SMART ROAD

In 2018, SINELEC, as the lead company in a joint venture including Autostrade Tech and Alpitel was awarded the first smart road public tender called by ANAS for the Mediterranean Motorway (A2).

The initiative focuses on the development of an advanced technological infrastructure along the A2 motorway stretch between Morano Calabro (Cosenza) and Lamezia Terme (Catanzaro) for a total of around 130 km, and aims to increase safety and driver comfort, optimise the management of traffic and extraordinary critical events, as well as enable interoperability between connected vehicles and infrastructure which is preparatory to the gradual introduction of self-driving vehicles.

The joint venture will be responsible for adopting the technological innovations necessary to provide future C-ITS (co-operative intelligent transport system) services based on V2I (vehicle-to-infrastructure) and V2V (vehicle-to-vehicle) communication enabled by the IoT (Internet of Things) and 5G, as well as all basic infrastructure necessary to manage

communication (fibre-optic network), and power (stations powered by renewable sources) on the smart road.

The initiative will be energy-sustainable, thanks to the construction of "green islands" to generate electricity from renewable sources to use to power the new technological infrastructure and promote the transit of electric vehicles.

SINELEC, as lead company of the joint venture, was also awarded the contract for the ANAS smart road on the Grande Raccordo Anulare (A90) and Roma-Aeroporto di Fiumicino (A91).

The project will adopt specific, innovative digital solutions to optimise traffic management and increase metropolitan motorway safety which, like the A90 and A91, have to face high traffic inflows and outflows in urban areas, on a daily basis.

Smart systems will also be adopted to monitor road infrastructure, through IoT platforms providing information necessary to power innovative decision-making tools.





**Focus**

# ECORODOVIAS

Source: EcoRodovias Group  
2017 Sustainability Report  
(excluding revenues and market  
capitalisation)

ASTM S.p.A. and SIAS S.p.A. have joint control of EcoRodovias Infraestrutura e Logística S.A. ("EcoRodovias"), a company operating in Brazil in the motorway concessions sector.



**R\$5.2 BILLION\***  
MARKET CAP AT 28.12.2018

\*Equal to €1.2 billion



**OVER 3,500**  
ECORODOVIAS EMPLOYEES



**913**  
BUSINESS PARTNERS TRAINED  
IN ETHICS



**5** ELECTRIC CARS  
PURCHASED AND TESTED FOR  
USE IN THE TRAFFIC INSPECTION  
FLEET



**43,000**  
HOURS OF TRAINING



**OHSAS 18001**  
100% OF GROUP LICENSEES ARE  
CERTIFIED IN OCCUPATIONAL  
SAFETY



**OVER 3** MILLION KWH  
REDUCTION IN ELECTRICITY  
CONSUMPTION OF THE  
MANAGED NETWORK +  
ECOPORT



**R\$2.5 MILLION\***  
INVESTED IN INFRASTRUCTURE AND  
SERVICES FOR PEDESTRIANS,  
MOTORWAY USERS AND COMMUNITIES

\*Equal to €600,000



**100%**  
OF THE WORKFORCE HAS  
ATTENDED AN ANTI-  
CORRUPTION COURSE



**ECOVIVER** A COMPANY PROGRAMME DELIVERING TRAINING ON  
ENVIRONMENTAL ISSUES SUCH AS WATER, ENERGY AND WASTE. IN 2017, 257  
STATE SCHOOLS IN 20 CITIES, INVOLVING 17,734 STUDENTS, TOOK PART IN THE  
PROGRAMME

EcoRodovias's portfolio includes 10 motorway concessions<sup>47</sup> for a total of 2,649 km of network and a port (EcoPorto), located in eight different Brazilian states.

Infrastructure is situated along the main commercial corridors of regions in the south and south-east of the country.

EcoRodovias is also listed on the Bovespa stock market in São Paulo, which ended 2018 with revenues equal to 2.5 billion Reais.<sup>48</sup>

With reference to events related to the investigation conducted by the Federal Prosecu-

tor's Office of the State of Paraná concerning the two former managers of Ecovia Caminho do Mar and Rodovia das Cataratas - Eco-cataratas, subsidiaries of EcoRodovias, for possible offences of corruption and money laundering committed in the past, and reported in the 2018 draft financial statements approved by the Board of Directors of EcoRodovias on 14 March 2019, see the section "Other information" of the Notes to the Consolidated Financial Statements of the ASTM Group.

Further information is available on the company's website:  
[www.ecorodovias.com.br](http://www.ecorodovias.com.br)

<sup>47</sup>Of which 3 assigned at the start of 2018

<sup>48</sup>From a company press release



## VALUES, POLICIES AND PRINCIPLES

To guarantee an ethical behaviour when carrying out its operations, the Group has established a number of ad hoc initiatives and policies.

The company Code of Conduct is revised at regular intervals and disseminated through training and awareness campaigns. The Code includes information on conflicts of interest, company reputation and the fight against corruption.

The Group's Ethics Committee is responsible for managing issues relative to ethics and integrity, investigating any accidents, recommending corrective actions and checking reports received from parties concerned on potential breaches of the Code.

On a daily basis, the Compliance Programme and Anti-Corruption Programme contribute to reducing the Group's exposure to risk.



## CORPORATE SUSTAINABILITY INDEX (ISE)

EcoRodovias's actions were included, for the eighth year running, in the portfolio of ISE (Corporate Sustainability Index). The purpose of this index is to reflect the return of

a portfolio of shares from companies recognised for their commitment to the social and sustainability dimensions, while promoting best practices on the Brazilian market.

# HALMAR GROUP



In July 2017, Itinera acquired a controlling interest in Halmar International LLC, one of the top five companies in the metropolitan area of New York, operative in the engineering sector and development of transport infrastructure (roads, motorways, airports, railways, underground railways, bridges and viaducts) and one of the most respected on the East Coast of the United States.

The acquisition of Halmar has made it possible for the Group to become operative on the US market in the major works sector - with its massive investments for the modernisation of existing roads and bridges and projects for the construction of new infrastructure.

In this context, Itinera and Halmar will work as EPC (Engineering, Procurement & Construction) Contractors and as promoters of new PPP (Private Public Partnerships) which many US states are launching to support planned infrastructure programmes.

Projects awarded to Halmar between 2017 and 2018 include:

- Planning and construction of a third railway line of approximately 17 km on the Long Island Rail Road (LIRR), which will increase the capacity of the railway service along the corridor connecting Manhattan with the entire island.
- Work as part of the Enhanced Stations Improvements Project, to redevelop and complete six underground stations: White Plains, Port Chester, Riverdale, Harlem 125th, Crestwood and Yonkers.

Improvements include the reconstruction of technological plants, including LED lighting, the construction of new platforms, pedestrian walkways and noise abatement barriers.

- The complex project for the underground railway in Alexandria, Virginia. The Potomac Yard Metrorail station will be developed for the yellow and blue metropolitan railway lines, in an area with a

considerable commercial and residential development in Alexandria, covering a surface area of approximately 9,000 m<sup>2</sup> with two 800 m platforms.

- Planning and construction of the Kew Garden road node in New York, overseeing 100% of the works. The Kew Garden road node is a very important strategic junction for New York as it connects John F Kennedy International Airport (JFK) and La Guardia Airport (LGA). The road junction, built in 1930 and subsequently

remodulated in 1960, will be modernised with improvements to existing operating and structural shortcomings.

The acquisition of the controlling equity in Halmar marks the debut by Itinera - already active today in Europe, the Middle East, Africa and Latin America - on the US infrastructure market, making it possible to create a larger and more structured group capable of responding successfully to the enormous investments envisaged in the USA, especially in the transport sector.





# Annexes



# Annexes by business sector

## CONCESSIONS SECTOR

### OUR RESPONSIBILITY TOWARDS PEOPLE

#### BREAKDOWN OF STAFF BY TYPE OF CONTRACT (PERMANENT VERSUS TEMPORARY) AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Temporary	70	28	98	96	48	144
Permanent	1,411	436	1,847	1,541	502	2,043
<b>Total</b>	<b>1,481</b>	<b>464</b>	<b>1,945</b>	<b>1,637</b>	<b>550</b>	<b>2,187</b>

#### BREAKDOWN OF PERSONNEL BY PROFESSION (FULL-TIME VS. PART-TIME) AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Full-time	1,195	247	1,442	1,303	299	1,602
Part-time	286	217	503	334	251	585
<b>Total</b>	<b>1,481</b>	<b>464</b>	<b>1,945</b>	<b>1,637</b>	<b>550</b>	<b>2,187</b>

#### EMPLOYEES AND OTHER COLLABORATORS BY GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Employees	1,481	464	1,945	1,637	550	2,187
Other collaborators	3	1	4	-	-	-
<b>Total</b>	<b>1,484</b>	<b>465</b>	<b>1,949</b>	<b>1,637</b>	<b>550</b>	<b>2,187</b>

**GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND GENDER**

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	31	6	37	29	5	34
Middle managers	43	13	56	44	13	57
Office workers	1,143	437	1,580	1,267	520	1,787
Manual workers	264	8	272	297	12	309
<b>Total</b>	<b>1,481</b>	<b>464</b>	<b>1,945</b>	<b>1,637</b>	<b>550</b>	<b>2,187</b>

**PROTECTED CATEGORIES**

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	-	-	-	-	-	-
Middle managers	1	-	1	-	-	-
Office workers	72	25	97	77	27	104
Manual workers	10	1	11	11	1	12
<b>Total</b>	<b>83</b>	<b>26</b>	<b>109</b>	<b>88</b>	<b>28</b>	<b>116</b>

**OCCUPATIONAL ACCIDENTS AND DISEASES**

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Occupational diseases	-	-	-	-	-	-
Accidents	31	8	39	31	7	38
<i>of which fatal</i>	-	-	-	-	-	-

**TYPE OF ACCIDENTS INVOLVING GROUP EMPLOYEES BY GENDER**

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Workplace accidents	29	6	35	25	4	29
Accidents while travelling to and from work	2	2	4	6	3	9

## HEALTH AND SAFETY INDEXES

	2017			2018		
	Men	Women	Total	Men	Women	Total
Lost day rate	0.36	0.43	<b>0.38</b>	0.46	0.18	<b>0.39</b>
Occupational disease rate	-	-	-	-	-	-
Absentee rate	4.02	4.93	<b>4.22</b>	5.63	8.91	<b>6.39</b>
Injury rate	13.68	13.01	<b>13.53</b>	13.17	10.32	<b>12.54</b>

## ABSENCES AND LOST DAYS

NO. OF DAYS	2017			2018		
	Men	Women	Total	Men	Women	Total
Absence	12,128	4,184	<b>16,312</b>	18,811	9,061	<b>27,872</b>
Lost days	874	291	<b>1,165</b>	1,179	140	<b>1,319</b>

## GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND AGE GROUP

NO. OF PEOPLE	AT 31 DECEMBER 2017				AT 31 DECEMBER 2018			
	<30	30-50	>50	Total	<30	30-50	>50	Total
Executives	-	6	31	<b>37</b>	-	7	27	<b>34</b>
Middle managers	-	16	40	<b>56</b>	-	16	41	<b>57</b>
Office workers	35	685	860	<b>1,580</b>	52	750	985	<b>1,787</b>
Manual workers	11	153	108	<b>272</b>	13	169	127	<b>309</b>
<b>Total</b>	<b>46</b>	<b>860</b>	<b>1,039</b>	<b>1,945</b>	<b>65</b>	<b>942</b>	<b>1,180</b>	<b>2,187</b>

## NEW HIRES

NO. OF PEOPLE	2017					2018				
	<30	30-50	>50	Total	Turnover %	<30	30-50	>50	Total	Turnover %
Men	46	102	36	<b>184</b>	<b>12.42%</b>	63	205	135	<b>403</b>	<b>24.6%</b>
Women	26	53	18	<b>97</b>	<b>20.91%</b>	44	103	50	<b>197</b>	<b>35.8%</b>
<b>Total</b>	<b>72</b>	<b>155</b>	<b>54</b>	<b>281</b>	<b>14.45%</b>	<b>107</b>	<b>308</b>	<b>185</b>	<b>600</b>	<b>27.4%</b>

**LEAVERS**

NO. OF PEOPLE	2017					2018				
	<30	30-50	>50	Total	Turnover %	<30	30-50	>50	Total	Turnover %
Men	38	103	99	240	16.21%	47	99	101	247	15.1%
Women	24	55	21	100	21.55%	34	48	33	115	20.9%
<b>Total</b>	<b>62</b>	<b>158</b>	<b>120</b>	<b>340</b>	<b>17.48%</b>	<b>81</b>	<b>147</b>	<b>134</b>	<b>362</b>	<b>16.6%</b>

**RATIO BETWEEN BASIC SALARY OF WOMEN AND MEN BY EMPLOYMENT CATEGORY**

AVERAGE BASIC SALARY	2017		2018	
	Ratio of women/men		Ratio of women/men	
Executives	0.91		0.73	
Middle managers	0.94		0.89	
Office workers	0.85		0.88	
Manual workers	0.93		1.02	
<b>Total</b>	<b>0.91</b>		<b>0.87</b>	

**HOURS OF TRAINING**

NO. OF HOURS	2017		2018	
	no. of hours	Hours per capita	no. of hours	Hours per capita
<b>Total</b>	<b>10,294</b>	<b>5.29</b>	<b>16,059</b>	<b>7.34</b>

# CONCESSIONS SECTOR

## OUR RESPONSIBILITY TOWARDS THE ENVIRONMENT AND LOCAL AREAS

### ENERGY CONSUMPTION

SOURCE	2017	2018
	Total	Total
Natural gas (m <sup>3</sup> /000)	1,000	1,084
Heating fuel (l/000)	576	520
Diesel fuel (l/000)	1,984	2,049
Fuel oil (l/000)	-	-
Petrol (l/000)	2	2
Electricity (kWh/000)	83,452	87,868
<i>of which purchased</i>	82,978	87,149
<i>of which from photovoltaics</i>	622	720
<i>put on the photovoltaic network</i>	427	559
LPG (l/000)	55	75

### CO<sub>2</sub> emissions [tCO<sub>2</sub>e] - SCOPE 1

SOURCE	2017	2018
Natural gas	2,046.04	2,217.54
Heating fuel	1,710.75	1,545.73
Diesel fuel	5,301.65	5,475.11
Fuel oil	-	-
Petrol	4.37	4.49
Biomass	-	-
LPG	84.22	113.93
<b>Total</b>	<b>9,147.03</b>	<b>9,356.80</b>

**CO<sub>2</sub> emissions [tCO<sub>2</sub>] - SCOPE 2 LOCATION-BASED**

	2017	2018
<b>Total</b>	<b>31,116.68</b>	<b>32,680.75</b>

**CO<sub>2</sub> emissions [tCO<sub>2</sub>] - SCOPE 2 MARKET-BASED**

	2017	2018
<b>Total</b>	<b>39,829.35</b>	<b>41,831.36</b>

**WATER WITHDRAWAL [m<sup>3</sup>]**

	Unit of measurement	2017	2018
		Volume	Volume
Water mains	m <sup>3</sup>	84,408	86,591
Withdrawal from rivers	m <sup>3</sup>	732	-
Withdrawal from the aquifer	m <sup>3</sup>	23,933	87,941
Other	m <sup>3</sup>	-	-
<b>Total water</b>	<b>m<sup>3</sup></b>	<b>109,073</b>	<b>174,532</b>

**WASTE BY DISPOSAL METHOD**

DISPOSAL METHOD	2017				2018			
	Hazardous	Non-hazardous	Total	Total (%)	Hazardous	Non-hazardous	Total	Total (%)
Recycling [t]	13	2,926	<b>2,939</b>	<b>85.5%</b>	52	3,440	<b>3,492</b>	<b>86.4%</b>
Energy recovery [t]	-	-	-	<b>0.0%</b>	-	72	<b>72</b>	<b>1.7%</b>
Landfill [t]	22	449	<b>471</b>	<b>13.7%</b>	33	446	<b>479</b>	<b>11.9%</b>
Other [t]	-	29	<b>29</b>	<b>0.8%</b>	-	-	-	<b>0.0%</b>
<b>Total</b>	<b>35</b>	<b>3,403</b>	<b>3,439</b>	<b>100.0%</b>	<b>86</b>	<b>3,958</b>	<b>4,044</b>	<b>100.0%</b>

# CONSTRUCTION SECTOR

## OUR RESPONSIBILITY TOWARDS PEOPLE

### BREAKDOWN OF STAFF BY TYPE OF CONTRACT (PERMANENT VERSUS TEMPORARY) AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Temporary	7	1	8	144	58	202
Permanent	619	73	692	1,550	151	1,701
<b>Total</b>	<b>626</b>	<b>74</b>	<b>700</b>	<b>1,694</b>	<b>209</b>	<b>1,903</b>

### BREAKDOWN OF PERSONNEL BY PROFESSION (FULL-TIME VS. PART-TIME) AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Full-time	622	63	685	1,676	180	1,856
Part-time	4	11	15	18	29	47
<b>Total</b>	<b>626</b>	<b>74</b>	<b>700</b>	<b>1,694</b>	<b>209</b>	<b>1,903</b>
<i>of which joint operations</i>	.	.	.	560	61	621

### EMPLOYEES AND OTHER COLLABORATORS BY GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Employees	626	74	700	1,694	209	1,903
Other collaborators	-	-	-	3,666	16	3,682
<b>Total</b>	<b>626</b>	<b>74</b>	<b>700</b>	<b>5,360</b>	<b>225</b>	<b>5,585</b>

## GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	39	3	42	76	6	82
Middle managers	48	4	52	136	11	147
Office workers	208	66	274	479	162	641
Manual workers	331	1	332	1,003	30	1,033
<b>Total</b>	<b>626</b>	<b>74</b>	<b>700</b>	<b>1,694</b>	<b>209</b>	<b>1,903</b>

## PROTECTED CATEGORIES

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	-	-	-	-	-	-
Middle managers	-	-	-	-	-	-
Office workers	3	4	7	2	4	6
Manual workers	14	-	14	15	1	16
<b>Total</b>	<b>17</b>	<b>4</b>	<b>21</b>	<b>17</b>	<b>5</b>	<b>22</b>

## OCCUPATIONAL ACCIDENTS AND DISEASES

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Occupational diseases	2	-	2	3	-	3
Accidents	30	-	30	29	-	29
<i>of which fatal</i>	-	-	-	1	-	1

## TYPE OF ACCIDENTS INVOLVING GROUP EMPLOYEES BY GENDER

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Workplace accidents	24	-	24	25	-	25
Accidents while travelling to and from work	6	-	6	4	-	4
<b>Total</b>	<b>30</b>	<b>-</b>	<b>30</b>	<b>29</b>	<b>-</b>	<b>29</b>

## HEALTH AND SAFETY INDEXES

	2017			2018		
	Men	Women	Total	Men	Women	Total
Lost day rate	0.81	0.22	<b>0.76</b>	0.43	0.01	<b>0.38</b>
Occupational disease rate	0.36	-	<b>0.33</b>	0.27	-	<b>0.24</b>
Absentee rate	5.80	1.34	<b>5.37</b>	4.07	1.33	<b>3.77</b>
Injury rate	27.34	-	<b>24.72</b>	13.08	-	<b>11.59</b>

## ABSENCES AND LOST DAYS

NO. OF DAYS	2017			2018		
	Men	Women	Total	Men	Women	Total
Absence	8,048	198	<b>8,246</b>	12,531	494	<b>13,025</b>
Lost days	902	27	<b>929</b>	971	4	<b>975</b>

## GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND AGE GROUP

NO. OF PEOPLE	AT 31 DECEMBER 2017				AT 31 DECEMBER 2018			
	<30	30-50	>50	Total	<30	30-50	>50	Total
Executives	-	11	31	<b>42</b>	-	23	59	<b>82</b>
Middle managers	-	26	26	<b>52</b>	1	84	62	<b>147</b>
Office workers	2	176	96	<b>274</b>	109	365	167	<b>641</b>
Manual workers	3	132	197	<b>332</b>	150	503	380	<b>1,033</b>
<b>Total</b>	<b>5</b>	<b>345</b>	<b>350</b>	<b>700</b>	<b>260</b>	<b>975</b>	<b>668</b>	<b>1,903</b>

## NEW HIRES

NO. OF PEOPLE	2017					2018				
	<30	30-50	>50	Total	Turnover %	<30	30-50	>50	Total	Turnover %
Men	1	23	21	<b>45</b>	<b>7.19%</b>	231	657	328	<b>1,216</b>	<b>104.6%</b>
Women	0	1	1	<b>2</b>	<b>2.70%</b>	37	80	21	<b>138</b>	<b>93.24%</b>
<b>Total</b>	<b>1</b>	<b>24</b>	<b>22</b>	<b>47</b>	<b>6.71%</b>	<b>268</b>	<b>737</b>	<b>349</b>	<b>1,354</b>	<b>103.4%</b>

**LEAVERS**

NO. OF PEOPLE	2017					2018				
	<30	30-50	>50	Total	Turnover %	<30	30-50	>50	Total	Turnover %
Men	2	35	53	90	14.38%	14	83	55	152	13.1%
Women	-	1	1	2	2.70%	-	3	2	5	3.4%
<b>Total</b>	<b>2</b>	<b>36</b>	<b>54</b>	<b>92</b>	<b>13.14%</b>	<b>14</b>	<b>86</b>	<b>57</b>	<b>157</b>	<b>12.0%</b>

**RATIO BETWEEN BASIC SALARY OF WOMEN AND MEN BY EMPLOYMENT CATEGORY**

AVERAGE BASIC SALARY	2017		2018	
	Ratio of women/men		Ratio of women/men	
Executives	2.00		0.72	
Middle managers	0.96		1.11	
Office workers	0.71		0.87	
Manual workers	-		0.87	
<b>Total</b>	<b>1.76</b>		<b>1.06</b>	

**HOURS OF TRAINING**

NO. OF HOURS	2017		2018	
	no. of hours	Hours per capita	no. of hours	Hours per capita
<b>Total</b>	<b>5,594</b>	<b>7.99</b>	<b>40,007</b>	<b>7.16</b>

# CONSTRUCTION SECTOR

## OUR RESPONSIBILITY TOWARDS THE ENVIRONMENT AND LOCAL AREAS

### ENERGY CONSUMPTION

SOURCE	2017	2018
	Total	Total
Natural gas (m <sup>3</sup> /000)	125	1,281
Heating fuel (l/000)	-	81
Diesel fuel (l/000)	2,499	3,852
Fuel oil (l/000)	320	852
Petrol (l/000)	5	938
Electricity (kWh/000)	2,986	13,467
<i>of which purchased</i>	2,985	9,943
<i>of which from photovoltaics</i>	-	48
<i>put on the photovoltaic network</i>	-	-
LPG (l/000)	-	840

### CO<sub>2</sub> emissions [tCO<sub>2</sub>e] - SCOPE 1

SOURCE	2017	2018
Natural gas	255.69	2,621.65
Heating fuel	-	241.99
Diesel fuel	6,677.16	10,291.31
Fuel oil	811.61	2,161.59
Petrol	11.53	2,163.44
Biomass	-	-
LPG	-	1,276.06
<b>Total</b>	<b>7,756.0</b>	<b>18,756.04</b>

**CO<sub>2</sub> emissions [tCO<sub>2</sub>] - SCOPE 2 LOCATION-BASED**

	2017	2018
<b>Total</b>	<b>1,119.38</b>	<b>4,888.93</b>

**CO<sub>2</sub> emissions [tCO<sub>2</sub>] - SCOPE 2 MARKET-BASED**

	2017	2018
<b>Total</b>	<b>1,432.80</b>	<b>5,397.67</b>

**WATER WITHDRAWAL [m<sup>3</sup>]**

	Unit of measurement	2017	2018
		Volume	Volume
Water mains	m <sup>3</sup>	15,717	83,071
Withdrawal from rivers	m <sup>3</sup>	15,000	7,610
Withdrawal from the aquifer	m <sup>3</sup>	4,320	9,558
Other	m <sup>3</sup>	-	56,456
<b>Total water</b>	<b>m<sup>3</sup></b>	<b>35,037</b>	<b>156,695</b>

**WASTE BY DISPOSAL METHOD**

DISPOSAL METHOD	2017				2018			
	Hazardous	Non-hazardous	Total	Total (%)	Hazardous	Non-hazardous	Total	Total (%)
Reuse [t]	-	46,679	<b>46,679</b>	<b>15.2%</b>	5	117,730	<b>117,735</b>	<b>40.3%</b>
Recycling [t]	10	259,774	<b>259,794</b>	<b>84.7%</b>	12	169,771	<b>169,783</b>	<b>58.1%</b>
Incineration [t]	-	-	-	<b>0.0%</b>	-	1,190	<b>1,190</b>	<b>0.4%</b>
Landfill [t]	31	263	<b>294</b>	<b>0.1%</b>	11	2,049	<b>2,060</b>	<b>0.7%</b>
Other [t]	-	-	-	<b>0.0%</b>	210	1,121	<b>1,331</b>	<b>0.5%</b>
<b>Total</b>	<b>41</b>	<b>306,716</b>	<b>306,757</b>	<b>100.0%</b>	<b>238</b>	<b>291,861</b>	<b>292,099</b>	<b>100.0%</b>

# ENGINEERING SECTOR

## OUR RESPONSIBILITY TOWARDS PEOPLE

### BREAKDOWN OF STAFF BY TYPE OF CONTRACT (PERMANENT VERSUS TEMPORARY) AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Temporary	3	1	4	4	-	4
Permanent	174	70	244	177	68	245
<b>Total</b>	<b>177</b>	<b>71</b>	<b>248</b>	<b>181</b>	<b>68</b>	<b>249</b>

### BREAKDOWN OF PERSONNEL BY PROFESSION (FULL-TIME VS. PART-TIME) AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Full-time	176	69	245	181	64	245
Part-time	1	2	3	-	4	4
<b>Total</b>	<b>177</b>	<b>71</b>	<b>248</b>	<b>181</b>	<b>68</b>	<b>249</b>

### EMPLOYEES AND OTHER COLLABORATORS BY GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Employees	177	71	248	181	68	249
Other collaborators	-	-	-	-	-	-
<b>Total</b>	<b>177</b>	<b>71</b>	<b>248</b>	<b>181</b>	<b>68</b>	<b>249</b>

**GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND GENDER**

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	18	3	21	18	2	20
Middle managers	24	2	26	24	2	26
Office workers	135	66	201	139	64	203
Manual workers	-	-	-	-	-	-
<b>Total</b>	<b>177</b>	<b>71</b>	<b>248</b>	<b>181</b>	<b>68</b>	<b>249</b>

**PROTECTED CATEGORIES**

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	-	-	-	-	-	-
Middle managers	-	-	-	-	-	-
Office workers	11	3	14	7	2	9
Manual workers	-	-	-	-	-	-
<b>Total</b>	<b>11</b>	<b>3</b>	<b>14</b>	<b>7</b>	<b>2</b>	<b>9</b>

**OCCUPATIONAL ACCIDENTS AND DISEASES**

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Occupational diseases	-	-	-	-	-	-
Accidents	1	-	1	3	3	6
<i>of which fatal</i>	-	-	-	-	-	0

**TYPE OF ACCIDENTS INVOLVING GROUP EMPLOYEES BY GENDER**

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Workplace accidents	1	-	1	3	2	5
Accidents while travelling to and from work	-	-	-	-	1	1

## HEALTH AND SAFETY INDEXES

	2017			2018		
	Men	Women	Total	Men	Women	Total
Lost day rate	0.03	-	<b>0.02</b>	0.08	0.95	<b>0.32</b>
Occupational disease rate	-	-	-	-	-	-
Absentee rate	3.99	4.01	<b>4.00</b>	2.99	4.45	<b>3.40</b>
Injury rate	3.29	-	<b>2.37</b>	9.75	26.67	<b>14.28</b>

## ABSENCES AND LOST DAYS

NO. OF DAYS	2017			2018		
	Men	Women	Total	Men	Women	Total
Absence	1,589	688	<b>2,277</b>	1,182	677	<b>1,859</b>
Lost days	8	-	<b>8</b>	24	116	<b>140</b>

## GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND AGE GROUP

NO. OF PEOPLE	AT 31 DECEMBER 2017				AT 31 DECEMBER 2018			
	<30	30-50	>50	Total	<30	30-50	>50	Total
Executives	-	9	12	<b>21</b>	-	6	14	<b>20</b>
Middle managers	-	17	9	<b>26</b>	-	15	11	<b>26</b>
Office workers	9	153	39	<b>201</b>	13	150	40	<b>203</b>
Manual workers	-	-	-	-	-	-	-	-
<b>Total</b>	<b>9</b>	<b>179</b>	<b>60</b>	<b>248</b>	<b>13</b>	<b>171</b>	<b>65</b>	<b>249</b>

## NEW HIRES

NO. OF PEOPLE	2017					2018				
	<30	30-50	>50	Total	Turnover %	<30	30-50	>50	Total	Turnover %
Men	3	3	0	<b>6</b>	<b>3.39%</b>	5	8	2	<b>15</b>	<b>8.29%</b>
Women	1	0	0	<b>1</b>	<b>1.41%</b>	3	1	2	<b>6</b>	<b>8.57%</b>
<b>Total</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>7</b>	<b>2.82%</b>	<b>8</b>	<b>9</b>	<b>4</b>	<b>21</b>	<b>8.37%</b>

**LEAVERS**

NO. OF PEOPLE	2017					2018				
	<30	30-50	>50	Total	Turnover %	<30	30-50	>50	Total	Turnover %
Men	1	17	7	25	14.12%	1	7	3	11	10.00%
Women	0	18	4	22	30.99%	1	2	4	7	6.08%
<b>Total</b>	<b>1</b>	<b>35</b>	<b>11</b>	<b>47</b>	<b>18.95%</b>	<b>2</b>	<b>9</b>	<b>7</b>	<b>18</b>	<b>7.17%</b>

**RATIO BETWEEN BASIC SALARY OF WOMEN AND MEN BY EMPLOYMENT CATEGORY**

AVERAGE BASIC SALARY	2017		2018	
	Ratio of women/men		Ratio of women/men	
Executives	0.99		0.84	
Middle managers	1.10		0.89	
Office workers	1.00		0.98	
Manual workers	-		-	
<b>Total</b>	<b>0.59</b>		<b>0.83</b>	

**HOURS OF TRAINING**

NO. OF HOURS	2017		2018	
	no. of hours	Hours per capita	no. of hours	Hours per capita
<b>Total</b>	<b>1,279</b>	<b>5.16</b>	<b>6,158</b>	<b>24.73</b>

# ENGINEERING SECTOR

## OUR RESPONSIBILITY TOWARDS THE ENVIRONMENT AND LOCAL AREAS

### ENERGY CONSUMPTION

SOURCE	2017	2018
	Total	Total
Natural gas (m <sup>3</sup> /000)	8	9
Heating fuel (l/000)	-	-
Diesel fuel (l/000)	247	245
Fuel oil (l/000)	-	-
Petrol (l/000)	-	-
Electricity (kWh/000)	878	871
<i>of which purchased</i>	878	871
<i>of which from photovoltaics</i>	-	-
<i>put on the photovoltaic network</i>	-	-
LPG (l/000)	0	0

### CO<sub>2</sub> emissions [tCO<sub>2</sub>e] - SCOPE 1

SOURCE	2017	2018
Natural gas	16.52	17.75
Heating fuel	-	-
Diesel fuel	660.43	654.67
Fuel oil	-	-
Petrol	-	-
Biomass	-	-
LPG	-	-
<b>Total</b>	<b>676.94</b>	<b>672.42</b>

**CO<sub>2</sub> emissions [tCO<sub>2</sub>] - SCOPE 2 LOCATION-BASED**

	2017	2018
<b>Total</b>	<b>329.38</b>	<b>326.63</b>

**CO<sub>2</sub> emissions [tCO<sub>2</sub>] - SCOPE 2 MARKET-BASED**

	2017	2018
<b>Total</b>	<b>421.60</b>	<b>418.09</b>

**WATER WITHDRAWAL [m<sup>3</sup>]**

	Unit of measurement	2017	2018
		Volume	Volume
Water mains	m <sup>3</sup>	2,478	5,164
Withdrawal from rivers	m <sup>3</sup>	-	-
Withdrawal from the aquifer	m <sup>3</sup>	-	-
Other	m <sup>3</sup>	-	-
<b>Total water</b>	<b>m<sup>3</sup></b>	<b>2,478</b>	<b>5,164</b>

**WASTE BY DISPOSAL METHOD**

DISPOSAL METHOD	2017				2018			
	Hazardous	Non-hazardous	Total	Total (%)	Hazardous	Non-hazardous	Total	Total (%)
Landfill [t]	-	24	24	44.7%	1	19	20	40.4%
Other [t]	-	30	30	55.3%	-	30	30	59.6%
<b>Total</b>	<b>-</b>	<b>54</b>	<b>54</b>	<b>100.0%</b>	<b>1</b>	<b>49</b>	<b>50</b>	<b>100.0%</b>

# TECHNOLOGY SECTOR AND OTHER AREAS

## OUR RESPONSIBILITY TOWARDS PEOPLE

### BREAKDOWN OF STAFF BY TYPE OF CONTRACT (PERMANENT VERSUS TEMPORARY) AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Temporary	25	1	26	28	4	32
Permanent	342	47	389	379	50	429
<b>Total</b>	<b>367</b>	<b>48</b>	<b>415</b>	<b>407</b>	<b>54</b>	<b>461</b>

### BREAKDOWN OF PERSONNEL BY PROFESSION (FULL-TIME VS. PART-TIME) AND GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Full-time	365	44	409	404	48	452
Part-time	2	4	6	3	6	9
<b>Total</b>	<b>367</b>	<b>48</b>	<b>415</b>	<b>407</b>	<b>54</b>	<b>461</b>

### EMPLOYEES AND OTHER COLLABORATORS BY GENDER

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Employees	367	48	415	407	54	461
Other collaborators	3	3	6	1	1	2
<b>Total</b>	<b>370</b>	<b>51</b>	<b>421</b>	<b>408</b>	<b>55</b>	<b>463</b>

**GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND GENDER**

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	16	4	20	23	5	28
Middle managers	21	2	23	27	4	31
Office workers	216	42	258	229	45	274
Manual workers	114	-	114	128	-	128
<b>Total</b>	<b>367</b>	<b>48</b>	<b>415</b>	<b>407</b>	<b>54</b>	<b>461</b>

**PROTECTED CATEGORIES**

NO. OF PEOPLE	AT 31 DECEMBER 2017			AT 31 DECEMBER 2018		
	Men	Women	Total	Men	Women	Total
Executives	-	-	-	-	-	-
Middle managers	-	-	-	-	-	-
Office workers	4	2	6	5	2	7
Manual workers	5	-	5	5	-	5
<b>Total</b>	<b>9</b>	<b>2</b>	<b>11</b>	<b>10</b>	<b>2</b>	<b>12</b>

**OCCUPATIONAL ACCIDENTS AND DISEASES**

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Occupational diseases	-	-	-	-	-	-
Accidents	7	-	7	10	-	10
<i>of which fatal</i>	-	-	-	-	-	-

**TYPE OF ACCIDENTS INVOLVING GROUP EMPLOYEES BY GENDER**

NO. OF CASES	2017			2018		
	Men	Women	Total	Men	Women	Total
Workplace accidents	4	-	4	6	-	6
Accidents while travelling to and from work	3	-	3	4	-	4

## HEALTH AND SAFETY INDEXES

	2017			2018		
	Men	Women	Total	Men	Women	Total
Lost day rate	0.55	-	<b>0.49</b>	0.21	-	<b>0.18</b>
Occupational disease rate	-	-	-	-	-	-
Absentee rate	1.75	2.60	<b>1.85</b>	2.13	4.92	<b>2.45</b>
Injury rate	10.64	-	<b>9.57</b>	14.48	-	<b>12.98</b>

## ABSENCES AND LOST DAYS

NO. OF DAYS	2017			2018		
	Men	Women	Total	Men	Women	Total
Absence	1,382	263	<b>1,646</b>	1,757	539	<b>2,296</b>
Lost days	345	-	<b>345</b>	138	-	<b>138</b>

## GROUP EMPLOYEES BY EMPLOYMENT CATEGORY AND AGE GROUP

NO. OF PEOPLE	AT 31 DECEMBER 2017				AT 31 DECEMBER 2018			
	<30	30-50	>50	Total	<30	30-50	>50	Total
Executives	-	8	12	<b>20</b>	-	13	15	<b>28</b>
Middle managers	-	13	10	<b>23</b>	1	18	12	<b>31</b>
Office workers	14	177	67	<b>258</b>	12	185	77	<b>274</b>
Manual workers	13	82	19	<b>114</b>	14	89	25	<b>128</b>
<b>Total</b>	<b>27</b>	<b>280</b>	<b>108</b>	<b>415</b>	<b>27</b>	<b>305</b>	<b>129</b>	<b>461</b>

## NEW HIRES

NO. OF PEOPLE	2017					2018				
	<30	30-50	>50	Total	Turnover %	<30	30-50	>50	Total	Turnover %
Men	4	15	8	<b>27</b>	<b>7.36%</b>	7	39	20	<b>66</b>	<b>16.2%</b>
Women	0	1	2	<b>3</b>	<b>6.25%</b>	1	12	3	<b>16</b>	<b>29.6%</b>
<b>Total</b>	<b>4</b>	<b>16</b>	<b>10</b>	<b>30</b>	<b>7.23%</b>	<b>8</b>	<b>51</b>	<b>23</b>	<b>82</b>	<b>17.8%</b>

**LEAVERS**

NO. OF PEOPLE	2017					2018				
	<30	30-50	>50	Total	Turnover %	<30	30-50	>50	Total	Turnover %
Men	3	20	10	33	8.99%	2	10	12	24	5.9%
Women	1	3	1	5	10.42%	1	2	1	4	7.4%
<b>Total</b>	<b>4</b>	<b>23</b>	<b>11</b>	<b>38</b>	<b>9.16%</b>	<b>3</b>	<b>12</b>	<b>13</b>	<b>28</b>	<b>6.1%</b>

**RATIO BETWEEN BASIC SALARY OF WOMEN AND MEN BY EMPLOYMENT CATEGORY**

AVERAGE BASIC SALARY	2017		2018	
	Ratio of women/men		Ratio of women/men	
Executives	0.54		0.75	
Middle managers	1.06		0.96	
Office workers	0.89		1.08	
Manual workers	-		-	
<b>Total</b>	<b>0.88</b>		<b>1.14</b>	

**HOURS OF TRAINING**

NO. OF HOURS	2017		2018	
	no. of hours	Hours per capita	no. of hours	Hours per capita
<b>Total</b>	<b>2,961</b>	<b>7.13</b>	<b>6,446</b>	<b>13.98</b>

# TECHNOLOGY AND PLANT ENGINEERING

## OUR RESPONSIBILITY TOWARDS THE ENVIRONMENT AND LOCAL AREAS

### ENERGY CONSUMPTION

SOURCE	2017	2018
	Total	Total
Natural gas (m <sup>3</sup> /000)	29	32
Heating fuel (l/000)	-	-
Diesel fuel (l/000)	864	913
Fuel oil (l/000)	-	-
Petrol (l/000)	-	-
Electricity (kWh/000)	671	660
<i>of which purchased</i>	671	660
<i>of which from photovoltaics</i>	-	-
<i>put on the photovoltaic network</i>	-	-
LPG (l/000)	-	-

### CO<sub>2</sub> emissions [tCO<sub>2</sub>e] - SCOPE 1

SOURCE	2017	2018
Natural gas	60.13	65.74
Heating fuel	-	-
Diesel fuel	2,308.00	2,439.23
Fuel oil	-	-
Petrol	-	-
Biomass	-	-
LPG	-	-
<b>Total</b>	<b>2,368.13</b>	<b>2,504.98</b>

**CO<sub>2</sub> emissions [tCO<sub>2</sub>] - SCOPE 2 LOCATION-BASED**

	2017	2018
<b>Total</b>	<b>251.63</b>	<b>247.58</b>

**CO<sub>2</sub> emissions [tCO<sub>2</sub>] - SCOPE 2 MARKET-BASED**

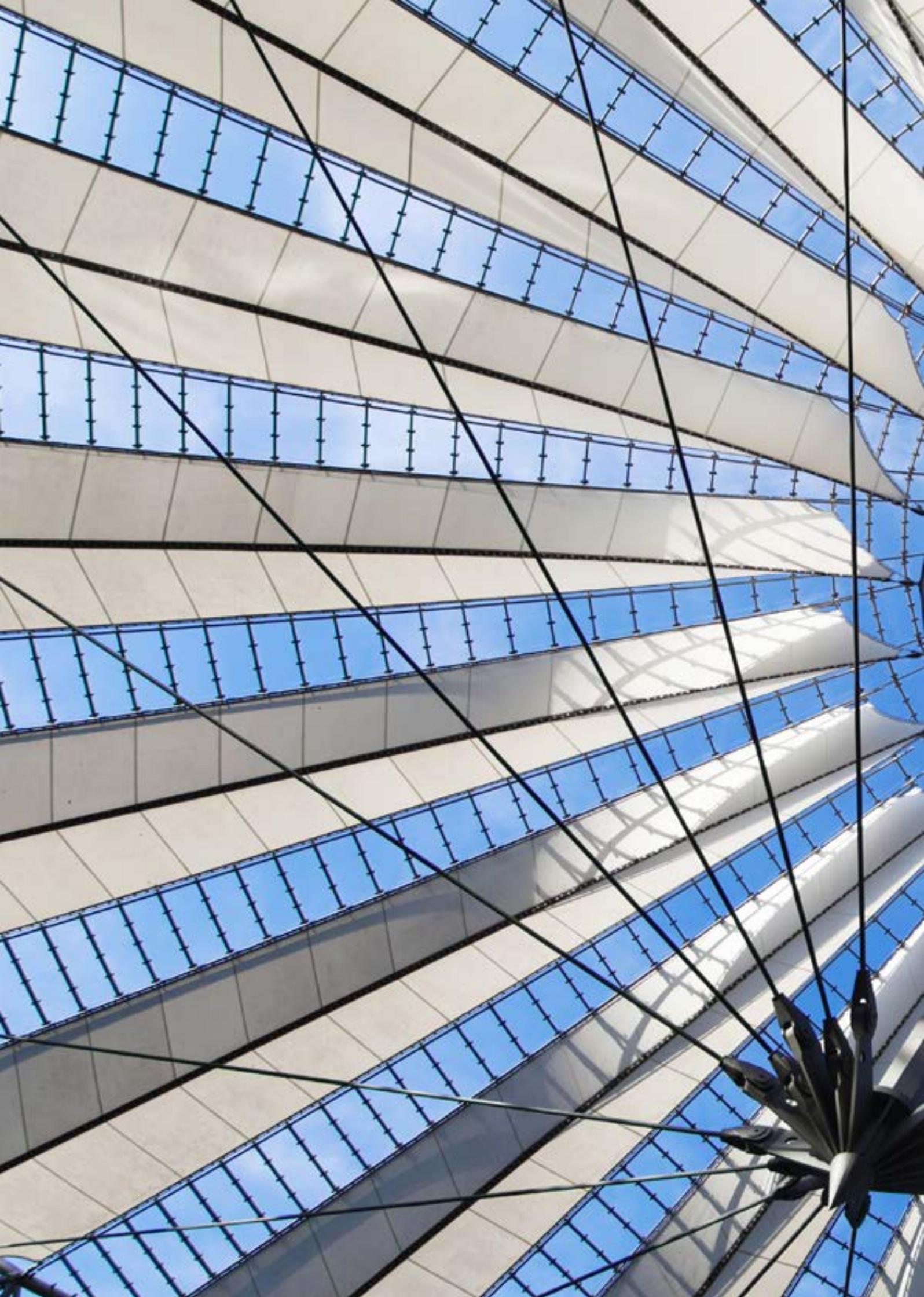
	2017	2018
<b>Total</b>	<b>322.08</b>	<b>316.9</b>

**WATER WITHDRAWAL [m<sup>3</sup>]**

	Unit of measurement	2017	2018
		Volume	Volume
Water mains	m <sup>3</sup>	1,284	1,222
Withdrawal from rivers	m <sup>3</sup>	-	-
Withdrawal from the aquifer	m <sup>3</sup>	-	-
Other	m <sup>3</sup>	-	-
<b>Total water</b>	<b>m<sup>3</sup></b>	<b>1,284</b>	<b>1,222</b>

**WASTE BY DISPOSAL METHOD**

DISPOSAL METHOD	2017				2018			
	Hazardous	Non-hazardous	Total	Total (%)	Hazardous	Non-hazardous	Total	Total (%)
Recycling [t]	4	72	76	77.6%	8	94	101	94.4%
Incineration [t]	-	-	-	0.0%	1	-	1	0.9%
Landfill [t]	12	11	23	22.4%	-	5	5	4.7%
<b>Total</b>	<b>16</b>	<b>83</b>	<b>99</b>	<b>100.0%</b>	<b>9</b>	<b>98</b>	<b>107</b>	<b>100.0%</b>





# TABLE OF THE BOUNDARY OF MATERIAL TOPICS FOR THE ASTM GROUP

MATERIAL TOPICS	MATERIAL TOPICS GRI STANDARDS	BOUNDARY OF MATERIAL ASPECTS	ASTM'S ROLE
<b>Economic/financial sustainability</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 201: Economic performance (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Transparency in governance</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Local employment</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 202: Market presence (2016)</li> <li>• GRI 203: Indirect economic impacts (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> <li>• Suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> <li>• Indirect - Related to ASTM Group activities through business relations</li> </ul>
<b>Supplier qualification procedures</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 204: Procurement practices (2016)</li> <li>• GRI 414: Supplier social assessment (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Anti-corruption</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 205: Anti-corruption (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Energy consumption and GHG emissions</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 302: Energy (2016)</li> <li>• GRI 305: Emissions (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> <li>• Electricity suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> <li>• Indirect - Related to ASTM Group activities through business relations</li> </ul>
<b>Efficient use of natural resources and materials</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 301: Materials (2016)</li> <li>• GRI 303: Water (2016)</li> <li>• GRI 306: Effluents and waste (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Management of infrastructural and social/environmental risks</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 307: Environmental compliance (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Occupational health and safety</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 403: Occupational health and safety (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Equal opportunities and work conditions</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 402: Labour/management relations (2016)</li> <li>• GRI 405: Diversity and equal opportunity (2016)</li> <li>• GRI 406: Non-discrimination (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Employee development and training</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 401: Employment (2016)</li> <li>• GRI 404: Training and education (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>

MATERIAL TOPICS	MATERIAL TOPICS GRI STANDARDS	BOUNDARY OF MATERIAL ASPECTS	ASTM'S ROLE
<b>Child labour and human rights</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 408: Child labour (2016)</li> <li>• GRI 409: Forced or compulsory labour (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> <li>• Suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> <li>• Indirect - Related to ASTM Group activities through business relations</li> </ul>
<b>Management of relations with the local area and communities</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 413: Local communities (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Road safety</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> <li>• Motorway users, with reference to driving behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> <li>• Indirect - Connected to ASTM Group activities</li> </ul>
<b>Impact on the landscape</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Privacy</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> <li>• GRI 418: Customer privacy (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Impact of new technologies</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> <li>• Universities and research centres</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> <li>• Indirect - Related to ASTM Group activities through business relations</li> </ul>
<b>Service quality</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Traffic and emergency management</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Transport</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Accessibility to services and customer satisfaction</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Land management</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>
<b>Noise pollution</b>	<ul style="list-style-type: none"> <li>• GRI 103: Management approach (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• ASTM Group</li> </ul>	<ul style="list-style-type: none"> <li>• Direct - Caused by the ASTM Group</li> </ul>

# GRI CONTENT INDEX

## GENERAL STANDARD STATEMENT

GRI STANDARD	DESCRIPTION OF GENERAL STANDARD STATEMENTS	PAGE	NOTES
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<b>Organisational profile</b>			
102-1	Name of the organisation	4	
102-2	Main brands, products and/or services	12; 14	
102-3	Headquarters	12	
102-4	Geographic areas of operations	14	
102-5	Ownership and legal form	12	
102-6	Markets served	14; 16	
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102-9	Supply chain	46-49	
102-10	Significant changes to the organisation and its supply chain	4	
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102-14	Statement from senior decision-maker	2-3	
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102-18	Governance structure	19-20	
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GRI STANDARD	DESCRIPTION OF GENERAL STANDARD STATEMENTS	PAGE	NOTES
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102-40	List of Stakeholders	30	
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102-42	Identifying and selecting Stakeholders	30	
102-43	Approach to Stakeholder engagement	30-31	
102-44	Key topics and concerns raised	31-32	
<b>Reporting practices</b>			
102-45	Entities included in the Consolidated Financial Statements	4; 13; 16	
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102-47	List of material topics	32	
102-48	Restatements of information	4	
102-49	Changes in reporting	4	
102-50	Reporting period	4	
102-51	Date of most recent report	4	
102-52	Reporting period	4	The Sustainability Report is published annually.
102-53	Contact point for questions regarding the report	8	
102-54	Claims of reporting in accordance with the GRI Standards	4	
102-55	GRI content index	174-182	
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## SPECIFIC STANDARD STATEMENTS

GRI STANDARD	DESCRIPTION SPECIFIC STANDARD STATEMENTS	PAGE	NOTES
<b>Economic/financial sustainability</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	38-39	
GRI 103-3	Evaluation of the management approach	4-8; 38-39	
<b>GRI 201: Economic performance (2016)</b>			
GRI 201 -1	Direct economic value generated and distributed	39-40	
<b>Local employment</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	41-43; 53; 95-96	
GRI 103-3	Evaluation of the management approach	4-8; 44-45; 58	
<b>GRI 202: Market presence (2016)</b>			
GRI 202 -2	Proportion of senior management hired from the local community	58	
<b>GRI 203: Indirect economic impacts (2016)</b>			
GRI 203-2	Significant indirect economic impacts	41-45; 95-96	
<b>Supplier qualification procedures</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	46-48	
GRI 103-3	Evaluation of the management approach	4-8; 46-48	
<b>GRI 204: Procurement practices (2016)</b>			
GRI 204 -1	Proportion of spending on local suppliers	46	
<b>GRI 414: Supplier social assessment (2016)</b>			
GRI 414-1	New suppliers that were screened using social criteria	48	
<b>Anti-corruption</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	25	
GRI 103-3	Evaluation of the management approach	4-8; 8; 25	

GRI STANDARD	DESCRIPTION SPECIFIC STANDARD STATEMENTS	PAGE	NOTES
<b>GRI 205: Anti-corruption (2016)</b>			
GRI 205-3	Confirmed incidents of corruption and actions taken		During 2018, no cases of corruption were reported concerning companies included in the scope of consolidation of this Report.
<b>Energy consumption and GHG emissions</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	78-80; 82; 85	
GRI 103-3	Evaluation of the management approach	4-8; 78-80; 82; 85	
<b>GRI 302: Energy (2016)</b>			
GRI 302-1	Energy consumption within the organisation	81	
<b>GRI 305: Emissions (2016)</b>			
GRI 305-1	Direct (Scope 1) GHG emissions (GHG)	82	
GRI 305-2	Energy indirect (Scope 2) GHG emissions	82	
<b>Efficient use of natural resources and materials</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	46-47; 78-79; 83; 85	
GRI 103-3	Evaluation of the management approach	4-8; 46-47; 78-79; 83; 85	
<b>GRI 301: Materials (2016)</b>			
GRI 301-1	Materials used	47	
<b>GRI 303: Water (2016)</b>			
GRI 303-1	Water withdrawal by source	83-84	
<b>GRI 306: Effluents and waste (2016)</b>			
GRI 306-2	Waste by type and disposal method	86	
<b>Management of infrastructural and social/environmental risks</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	23; 30-32; 172-173	
GRI 103-2	Management approach and its components	21-24; 33-35; 79	
GRI 103-3	Evaluation of the management approach	4-8; 21-24; 33-35; 79	
<b>GRI 307: Environmental compliance (2016)</b>			
GRI 307-1	Non-compliance with environmental laws and regulations	79	



GRI STANDARD	DESCRIPTION SPECIFIC STANDARD STATEMENTS	PAGE	NOTES
<b>Employee development and training</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	35; 59; 69-71	
GRI 103-3	Evaluation of the management approach	4-8; 59; 69-71	
<b>GRI 401: Employment (2016)</b>			
GRI 401-1	New employee hires and employee turnover	57-58	
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	66	
<b>GRI 404: Training and education (2016)</b>			
GRI 404-1	Average hours of training per year per employee	70	
<b>Occupational health and safety</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	34; 72-74	
GRI 103-3	Evaluation of the management approach	4-8; 72-74	
<b>GRI 403: Occupational health and safety (2016)</b>			
GRI 403-2	Type of injury and injury rate, occupational diseases, lost days and absenteeism and number of work-related fatalities	72;73	
<b>Equal opportunities and work conditions</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	56; 61; 66-68	
GRI 103-3	Evaluation of the management approach	4-8; 61	
<b>GRI 402: Labour/management relations (2016)</b>			
GRI 402-1	Minimum notice periods regarding operational changes		The minimum notice period for workers and their representatives regarding organisational changes that could significantly impact them is established in compliance with laws applicable in the country where the group operates and, where applicable, with National Collective Bargaining Agreements.

GRI STANDARD	DESCRIPTION SPECIFIC STANDARD STATEMENTS	PAGE	NOTES
<b>GRI 405: Diversity and equal opportunity (2016)</b>			
GRI 405-1	Diversity of governance bodies and employees	19; 63-64	
GRI 405-2	Ratio of basic salary and remuneration between women and men	67	
<b>GRI 406: Non-discrimination (2016)</b>			
GRI 406-1	Incidents of discrimination and corrective actions taken	61	No cases of discrimination were reported in 2018.
<b>Child labour and human rights</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	25-26; 48; 49	
GRI 103-3	Evaluation of the management approach	4-8; 49	
<b>GRI 408: Child labour (2016)</b>			
GRI 408-1	Operations and suppliers at significant risk for incidents of child labour	49	
<b>GRI 409: Forced or compulsory labour (2016)</b>			
GRI 409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	49	
<b>Management of relations with the local area and communities</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	95-97	
GRI 103-3	Evaluation of the management approach	4-8; 95-97	
<b>GRI 413: Local communities (2016)</b>			
GRI 413-2	Operations with significant actual and potential negative impacts on local communities		No operations with significant actual and potential negative impacts on local communities were reported.
<b>Road safety</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	33; 108-119	
GRI 103-3	Evaluation of the management approach	4-8; 108-119	

GRI STANDARD	DESCRIPTION SPECIFIC STANDARD STATEMENTS	PAGE	NOTES
<b>Privacy</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	26	
GRI 103-3	Evaluation of the management approach	4-8; 26	
<b>GRI 418: Customer privacy (2016)</b>			
GRI 418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data		<p>During 2018, no cases of breaches of privacy or the loss of customer data were reported. On 8 and 20 October 2018, the IT system of the stretch of the Autocamionale della Cisa (A15) was affected by two cyber-attacks by unidentified subjects, that resulted in a data breach. The events were promptly notified to the Data Authority, pursuant to article 33 of Regulation (EU) 2016/679 and a complaint was filed against unknown persons with the Judicial Authorities .</p>
<b>Transparency in governance</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	19-20	
GRI 103-3	Evaluation of the management approach	4-8; 19-20	
<b>Impact on the landscape</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	90-94	
GRI 103-3	Evaluation of the management approach	4-8; 90-94	
<b>Impact of new technologies</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	133-137	
GRI 103-3	Evaluation of the management approach	4-8; 133-137	

GRI STANDARD	DESCRIPTION SPECIFIC STANDARD STATEMENTS	PAGE	NOTES
<b>Service quality</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	120-121	
GRI 103-3	Evaluation of the management approach	4-8; 120-121	
<b>Traffic and emergency management</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	33; 113-114; 120	
GRI 103-3	Evaluation of the management approach	4-8; 113-114; 120	
<b>Transport</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	85	
GRI 103-3	Evaluation of the management approach	4-8; 85	
<b>Access to services and customer satisfaction</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	120-121	
GRI 103-3	Evaluation of the management approach	4-8; 120-121	
<b>Noise pollution</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	88-89	
GRI 103-3	Evaluation of the management approach	4-8; 88-89	
<b>Land management</b>			
<b>GRI 103: Management approach (2016)</b>			
GRI 103-1	Explanation of the material topic and its boundary	30-32; 172-173	
GRI 103-2	Management approach and its components	90-93	
GRI 103-3	Evaluation of the management approach	4-8; 90-93	

**INDEPENDENT AUDITOR'S REPORT  
ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3,  
PARAGRAPH 10 OF LEGISLATIVE DECREE No. 254 OF DECEMBER 30, 2016 AND  
ART. 5 OF CONSOB REGULATION N. 20267/2018**

**To the Board of Directors of  
ASTM S.p.A.**

Pursuant to article 3, paragraph 10, of the Legislative Decree no. 254 of December 30, 2016 (hereinafter "Decree") and to article 5 of the CONSOB Regulation n. 20267/2018, we have carried out a limited assurance engagement on the Consolidated Non-Financial Statement of ASTM S.p.A. and its subsidiaries (hereinafter "ASTM Group" or "Group") as of December 31, 2018 prepared on the basis of art. 4 of the Decree, and approved by the Board of Directors on March 27, 2019 (hereinafter "NFS" or "Sustainability Report").

**Responsibility of the Directors and the Board of Statutory Auditors for the NFS**

The Directors are responsible for the preparation of the NFS in accordance with articles 3 and 4 of the Decree and "Global Reporting Initiative Sustainability Reporting Standards" established in 2016 by GRI – Global Reporting Initiative (hereinafter "GRI Standards"), which they have identified as reporting framework.

The Directors are also responsible, within the terms established by law, for such internal control as they determine is necessary to enable the preparation of NFS that is free from material misstatement, whether due to fraud or error.

The Directors are moreover responsible for defining the contents of the NFS, within the topics specified in article 3, paragraph 1, of the Decree, taking into account the activities and characteristics of the Group, and to the extent necessary in order to ensure the understanding of the Group's activities, its trends, performance and the related impacts.

Finally, the Directors are responsible for defining the business management model and the organisation of the Group's activities as well as, with reference to the topics detected and reported in the NFS, for the policies pursued by the Group and for identifying and managing the risks generated or undertaken by the Group.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the compliance with the provisions set out in the Decree.

**Auditor's Independence and quality control**

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our auditing firm applies International Standard on Quality Control 1 ("ISQC Italia 1") and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

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Sede Legale: Via Tortona, 25 - 20144 Milano | Capitale Sociale: Euro 10.328.220,00 i.v.

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**Auditor's responsibility**

Our responsibility is to express our conclusion based on the procedures performed about the compliance of the NFS with the Decree and the GRI Standards. We conducted our work in accordance with the criteria established in the *"International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information"* (hereinafter "ISAE 3000 Revised"), issued by the *International Auditing and Assurance Standards Board (IAASB)* for limited assurance engagements. The standard requires that we plan and perform the engagement to obtain limited assurance whether the NFS is free from material misstatement. Therefore, the procedures performed in a limited assurance engagement are less than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised, and, therefore, do not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures performed on NFS are based on our professional judgement and included inquiries, primarily with company personnel responsible for the preparation of information included in the NFS, analysis of documents, recalculations and other procedures aimed to obtain evidence as appropriate.

Specifically we carried out the following procedures:

1. Analysis of relevant topics with reference to the Group's activities and characteristics disclosed in the NFS, in order to assess the reasonableness of the selection process in place in light of the provisions of article 3 of the Decree and taking into account the adopted reporting standard.
2. Analysis and assessment of the identification criteria of the consolidation area, in order to assess its compliance with the Decree.
3. Comparison between the financial data and information included in the NFS with those included in the consolidated financial statements of the ASTM Group.
4. Understanding of the following matters:
  - business management model of the Group's activities, with reference to the management of the topics specified by article 3 of the Decree;
  - policies adopted by the entity in connection with the topics specified by article 3 of the Decree, achieved results and related fundamental performance indicators;
  - main risks, generated and/or undertaken, in connection with the topics specified by article 3 of the Decree.

Moreover, with reference to these matters, we carried out a comparison with the information contained in the NFS and the verifications described in the subsequent point 5, letter a) of this report.

5. Understanding of the processes underlying the origination, recording and management of qualitative and quantitative material information included in the NFS.

In particular, we carried out interviews and discussions with the management of ASTM S.p.A. and with the employees of the main companies of ASTM Group, and we carried out limited documentary verifications, in order to gather information about the processes and procedures which support the collection, aggregation, elaboration and transmittal of non-financial data and information to the department responsible for the preparation of the NFS.

In addition, for material information, taking into consideration the Group's activities and characteristics:

- at the parent company's and subsidiaries' level:
  - a) with regards to qualitative information included in the NFS, and specifically with reference to the business management model, policies applied and main risks, we carried out interviews and gathered supporting documentation in order to verify its consistency with the available evidence;
  - b) with regards to quantitative information, we carried out both analytical procedures and limited verifications in order to ensure, on a sample basis, the correct aggregation of data.
- for the following companies Itinera S.p.A., S.A.T.A.P. S.p.A., SALT p.A., Autostrada dei Fiori S.p.A., SINELEC S.p.A., SINA S.p.A. which we selected based on their activities, their contribution to the performance indicators at the consolidated level and their location, we carried out site visits, during which we have met their management and have gathered supporting documentation with reference to the correct application of procedures and calculation methods used for the indicators.

## Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the NFS of the ASTM Group as of December 31, 2018 is not prepared, in all material aspects, in accordance with article 3 and 4 of the Decree and the GRI Standards.

DELOITTE & TOUCHE S.p.A.

Signed by  
**Franco Amelio**  
Partner

Milan, Italy  
April 24, 2019





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