

World  
forum on  
Road Safety - wp.1



Today's challenges to Road Safety:  
Impaired Driving – what do the numbers  
show and how can we reduce fatalities  
today?

March 8th, 2022

# Road safety and Impaired Driving - Key facts in Italy

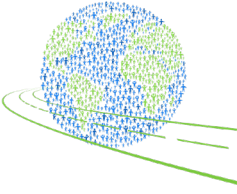
Roberto Arditi – SINA S.p.A. (ASTM Group)



**SINA**  
ASTM GROUP

FOR

**SUSTAINABLE  
DEVELOPMENT GOALS**



**SINA is the engineering of ASTM industrial Group. The Group is active in the field of motorway network management in concession, from design to building of main infrastructures and the technology applied to mobility**

*SINA S.p.A., incorporated in 1962, is part of the ASTM group and is active in the engineering of large-scale infrastructure. SINA's mission is to achieve analysis, design, construction and management of new projects in the fields of road networks, telecommunications, road and rail transportation, maintenance engineering of transportation infrastructures.*

*ASTM is an industrial Group operating in the sectors of motorway management, large infrastructure engineering and construction projects, and transport and mobility technology.*

*The Group is the second largest toll road operator in the world with approximately 4,900 km of road managed through concessions in Italy, Brazil (through EcoRodovias) and the UK.*

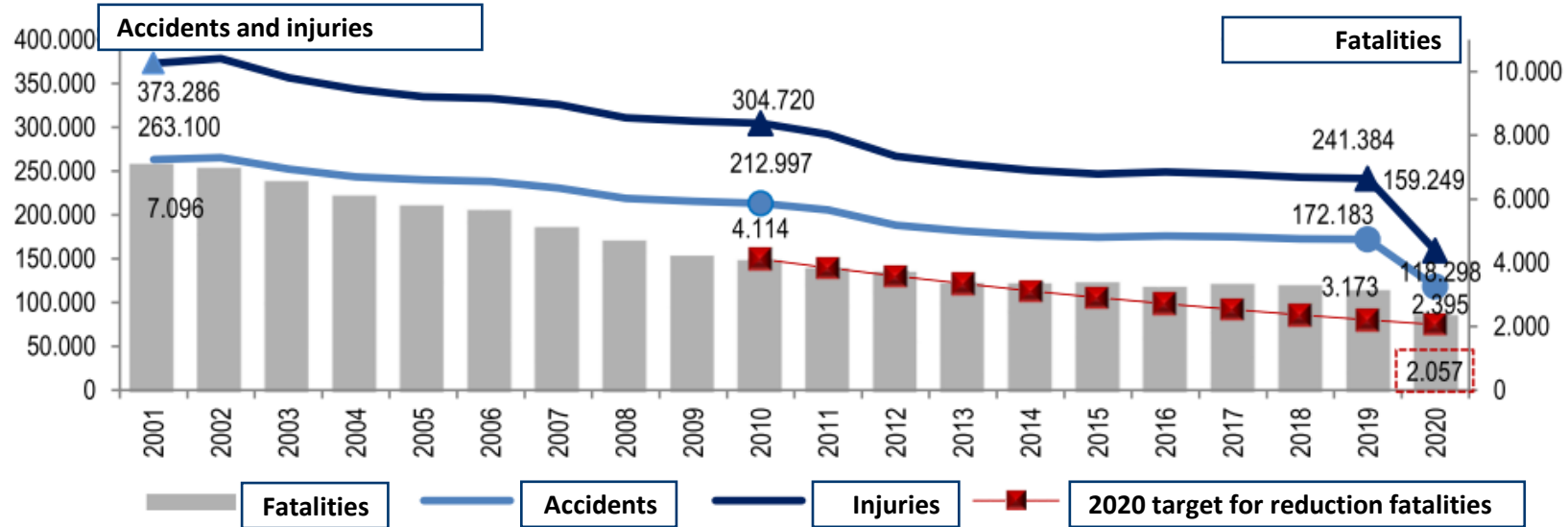
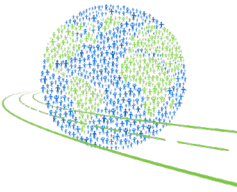


**ASTM operates in Italy about 1.420 km of the trans-European Road network.**

# 1 | Road safety in Italy

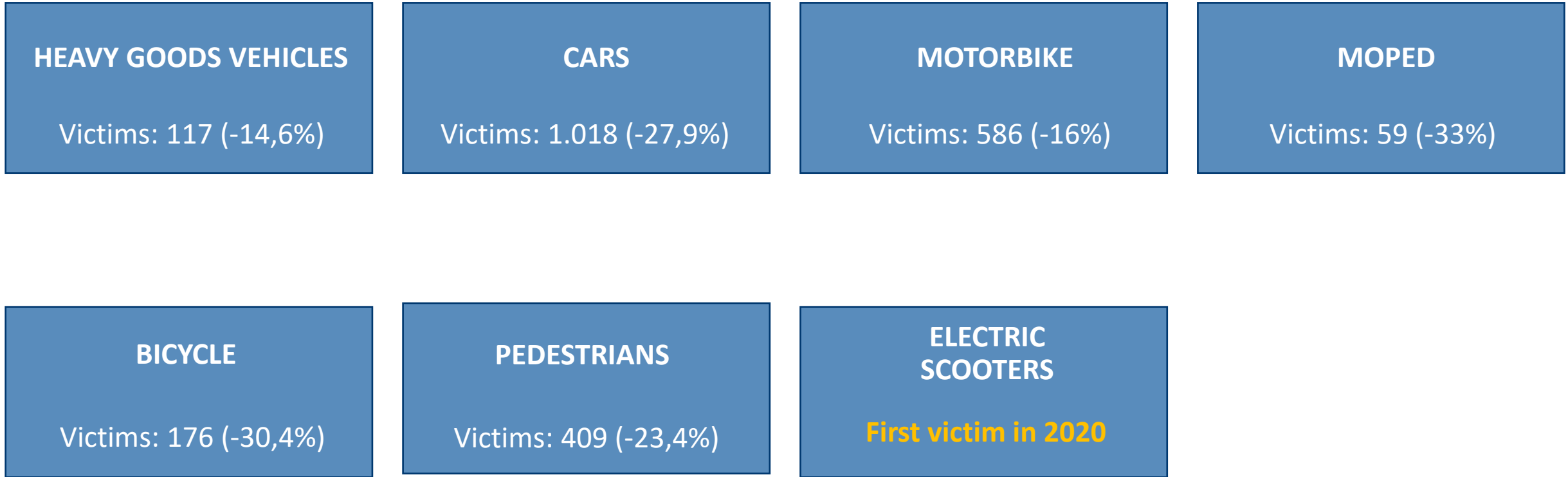
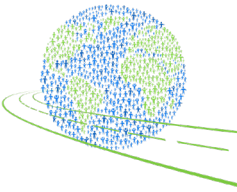


# Road accidents in Italy 2001-2020

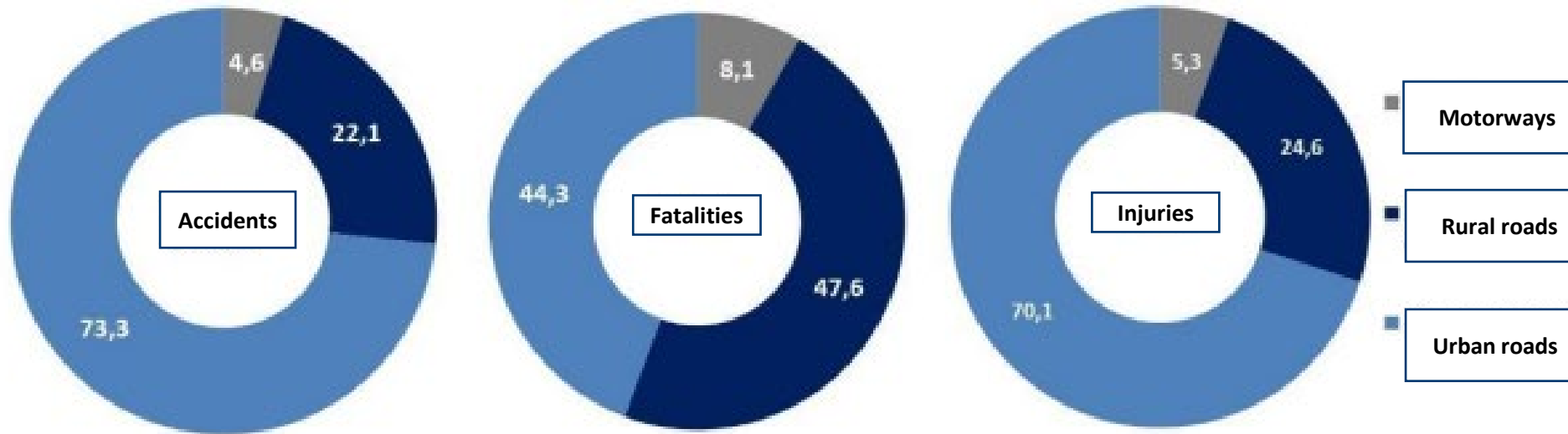
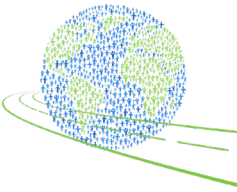


	2020	Reduction on 2019 (COVID)
<b>Accidents</b>	118.289	-31,30%
<b>Fatalities</b>	2.395	-24,50%
<b>Injuries</b>	159.249	-34,00%
<b>of which are seriously injured</b>	14.120	-20,00%

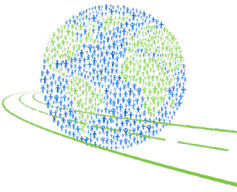
Source ISTAT 2021



# Road accidents in Italy by type of road: year 2020 (Percentage)







Reduction of fatalities: 2020 vs. 2010*	
EU	-36,50%
Italy	<b>-41,80%</b>
Reduction of fatalities: 2020 vs. 2019	
EU	-17,20%
Italy	<b>-24,50%</b>

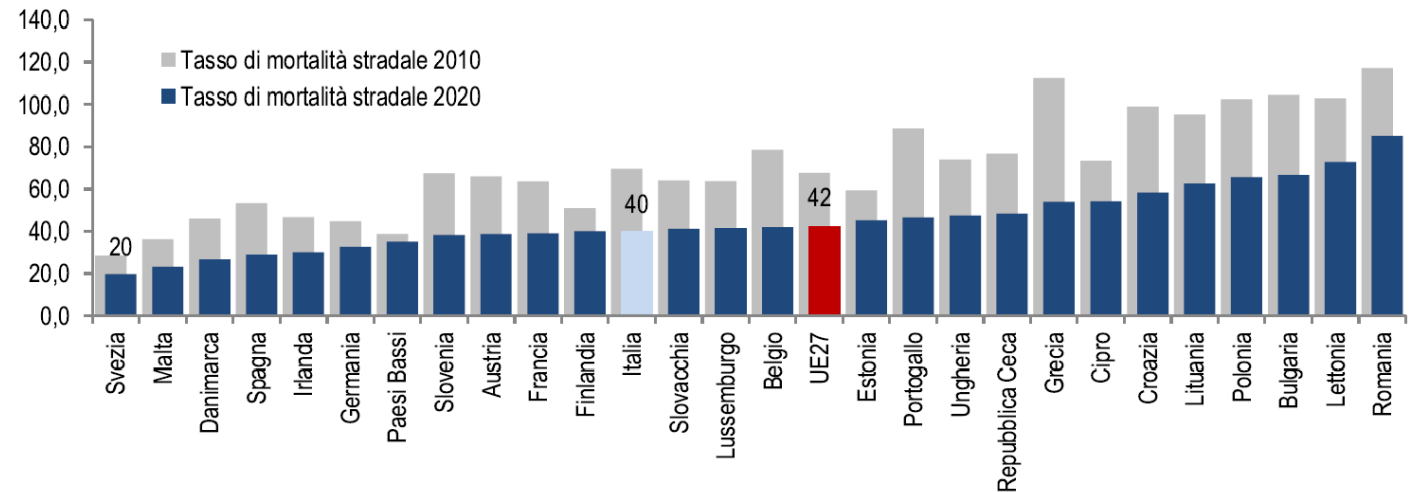
	Road deaths rate (deaths per million inhabitants)	
	2020	2010
EU	42,3	67,6
Italy	40,3	69,5

Italy is currently to the **12th place** in the European ranking since it scored 16th in 2019

\* benchmark year for road safety

Source ISTAT 2021

TASSO DI MORTALITÀ STRADALE NEI PAESI EUROPEI (UE27) (a). Anno 2010 e 2020

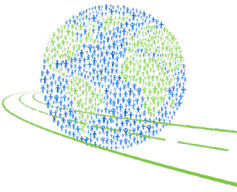


a) Morti per milione di abitanti; Fonte: European Transport Safety Council, Annual PIN report. Year 2021 - <https://etsc.eu/15th-annual-road-safety-performance-index-pin-report/>

# 2 | Impaired driving







- The issue of **alcohol and drug-related road accidents** is a key topic for road safety and moreover a topic with a strong media impact.
- The National Italian Institute of Statistics (ISTAT) performed **surveys on road accidents with injuries**. These reports made available a rich set of information, including alcohol-related events. Nevertheless, ISTAT considers that information gaps still remain in the practice and collected figures could be underestimated.
- In order to provide alternative assessment elements, **other official sources of data** were also considered, and the contents and information potential were examined.

In particular, as is customary for some years now, information on **violations of the highway code** provided by carabinieri and traffic police have been considered.

- Although the absolute figure still appears to be underestimated, the analysis of the indicators is an important element for the study of time series.



## Some Data

In 2021, **9,371 drivers** were sanctioned for drink driving (Traffic Police Report, 2022). **Traffic accidents** are the **leading cause of death for young people** aged **18 to 24**.

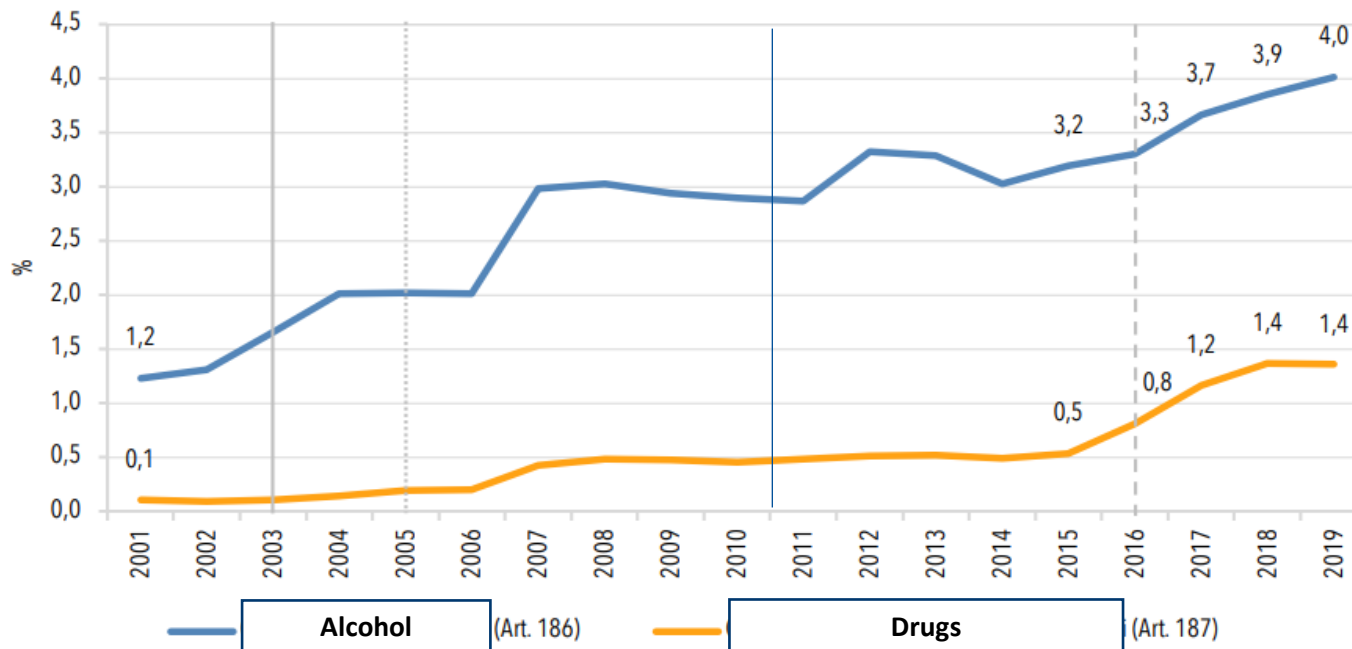
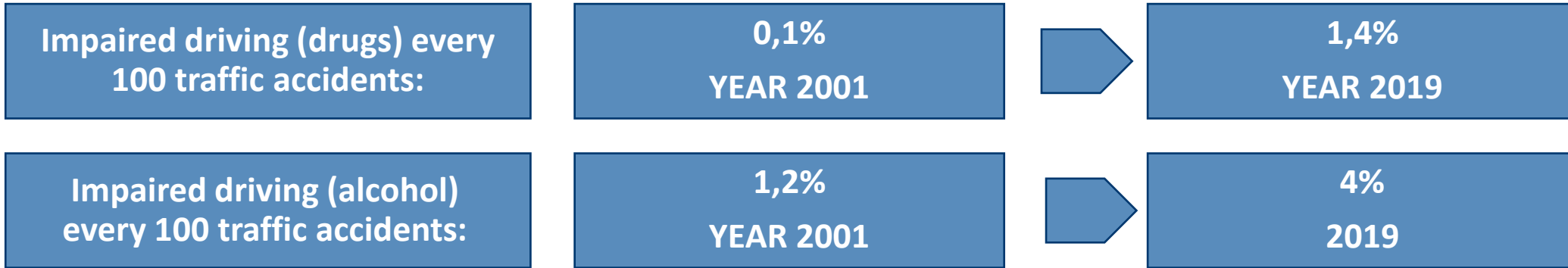
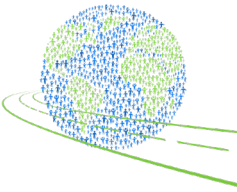
According to studies of the National Institute of Health, 25% of these fatalities are a consequence of **alcohol abuse** (ISS, 2019).

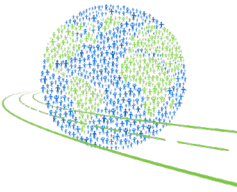


In 2021, **798** drivers were reported for driving **under the influence of drugs** (Traffic Police Report, 2022). Controls in 2019 highlighted **cannabinoids** as the most commonly consumed substance among drivers aged **18 to 27** (ISS, 2019).

**Medicines** are the **second substance after cannabis** found in the analysis of impaired drivers in the event of a **road accident** (Federconsumatori, 2018).

# Percentage of yearly traffic accidents: accidents with two vehicles only and impaired driver vs. yearly accidents



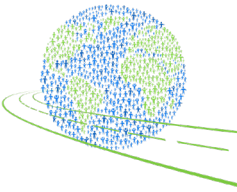


In 2019, penalties for incorrect driving behavior, in general, increased by 6.7% as enforced by Traffic Police, Carabinieri and the Local Police of main municipalities.

The following table shows penalties enforced for impaired driving.

Numbers of penalties	2017	2018	2019	
Art. 186 (alcohol)	41.476	39.208	42.485	+ 8,4% 2019 vs. 2018
Art. 187 (drugs)	5.289	5.404	5.340	-1,2% 2019 vs. 2018

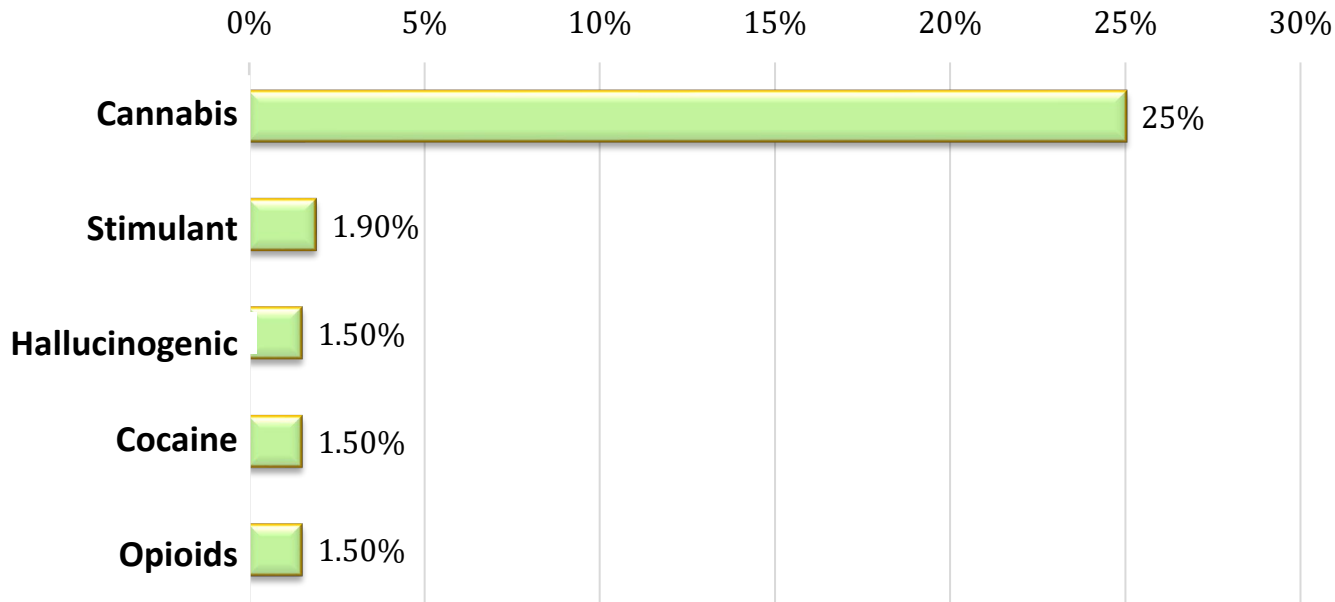
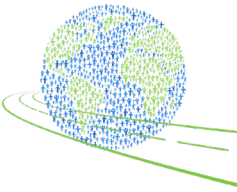
## Penalties enforced for impaired driving: by age and time (percentage) Year 2019



		Art. 186 - Alcohol	Art. 187 - Drugs
<b>Age of the driver</b>	≤ 17	0,2	0,8
	18-24	19,0	22,9
	25-32	26,4	26,9
	≥ 33	54,4	49,2
	dont'know	0	0,2
<b>Time of the day</b>	22.00-06.00	77,5	48,0
	07.00-14.00	15,4	27,9
	15.00-21.00	7,2	24,1

# Consumption of psychoactive substances in the student population

(Annual report to Parliament on drug addiction, 2021)



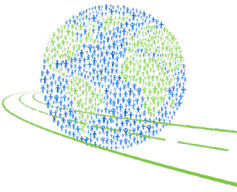
## THC – primary cannabinoid

- Sleepiness
- Mood alteration
- Impaired motor coordination
- Alteration of perception/attention
- Alteration of reaction times

## CBD – «non-intoxicating» molecule

- Sleepiness
- Dizziness
- Mood alteration
- Muscle heaviness





## Ministry of the health: alcohol abuse increased during lockdown (+6.5% men, +5.6% women)



*Ministero della Salute*

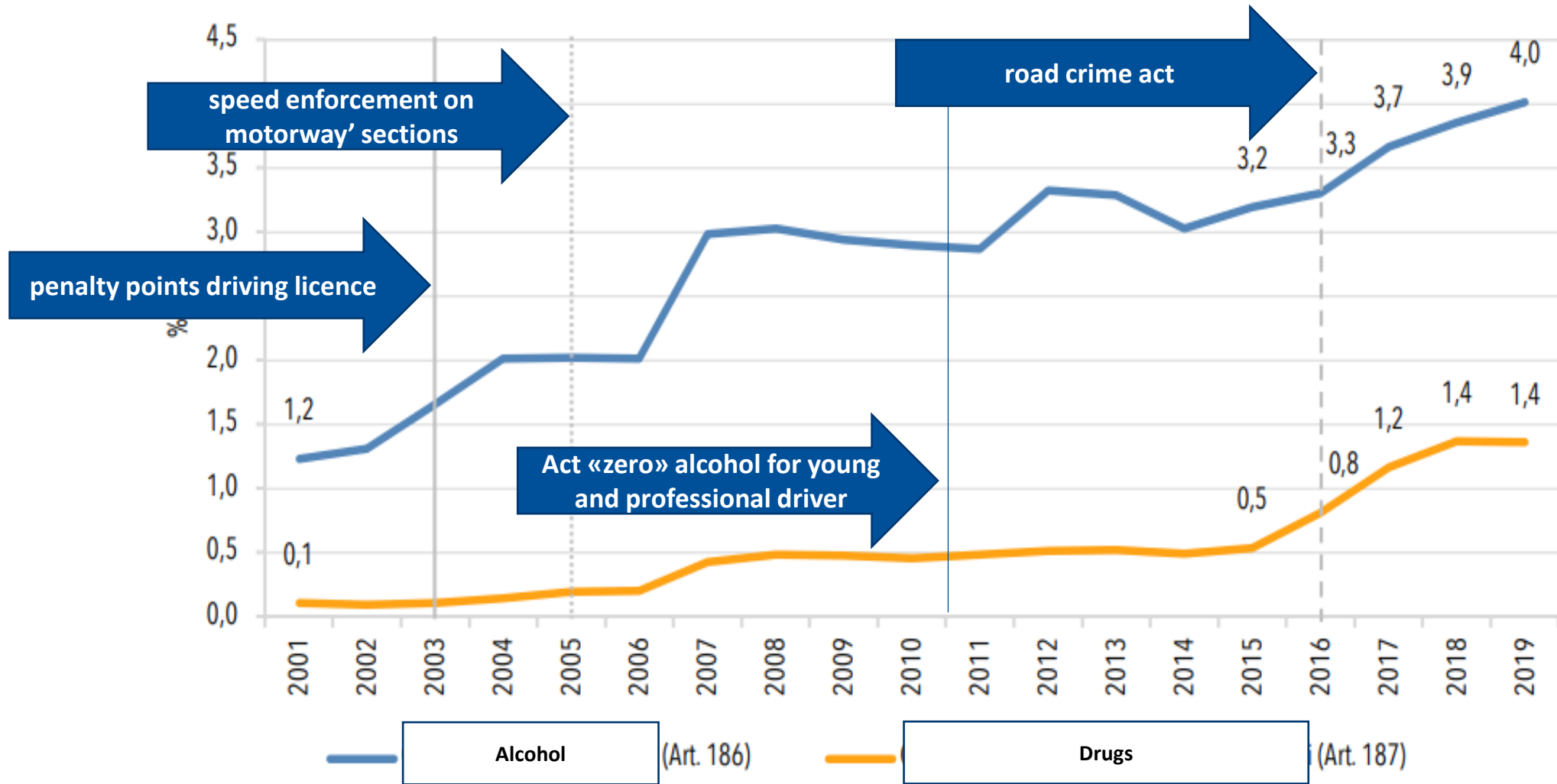
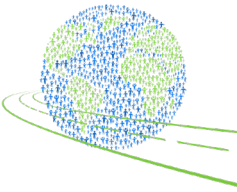
### Alcol, Sottosegretario Costa: "Dal 15 al 17 marzo seconda Conferenza Nazionale a Roma"

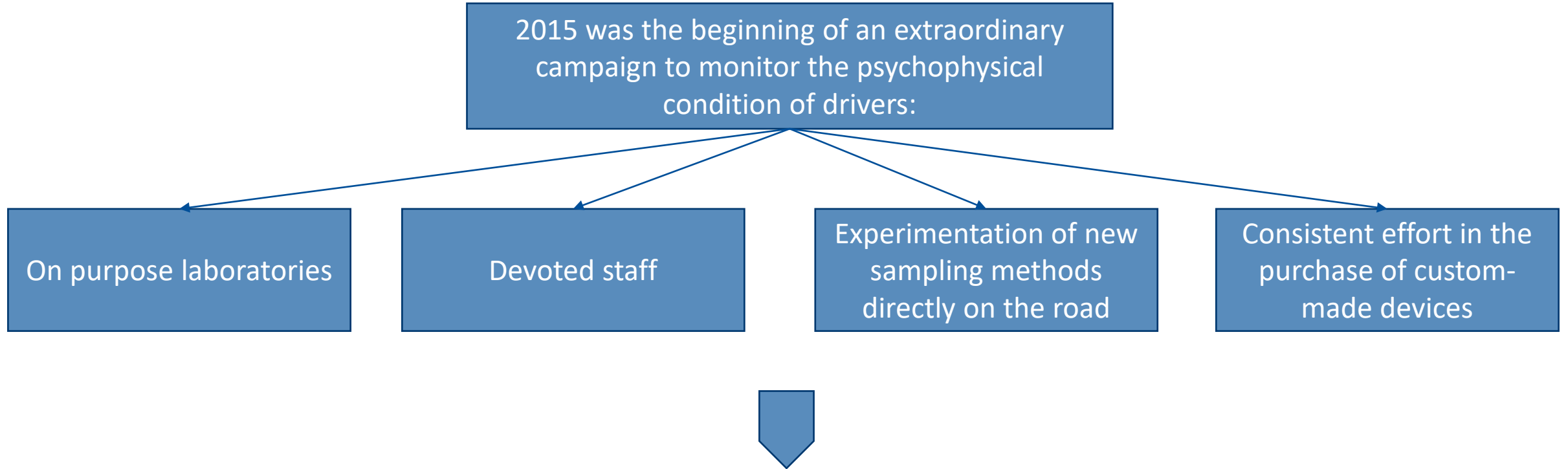
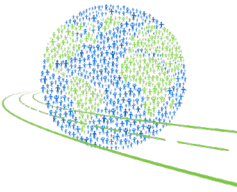
“La prossima Conferenza Nazionale Alcol, giunta al secondo appuntamento, si terrà a Roma dal 15 al 17 marzo. Avrà come titolo ‘Informare, educare, curare: verso un modello partecipativo ed integrato dell’alcolologia italiana’”. Ad annunciarlo il Sottosegretario di Stato alla Salute Andrea Costa, delegato dal Ministro Roberto Speranza alla prevenzione, al monitoraggio e ai percorsi terapeutici connessi al fenomeno delle dipendenze. “Ho fortemente voluto - spiega il Sottosegretario - questa iniziativa per fornire una risposta concreta alle esigenze di pazienti e famiglie, attraverso l’ottimizzazione del lavoro in rete di tutti gli attori che operano nel campo dell’alcolologia. Era doveroso e fondamentale promuovere un confronto tra istituzioni, enti locali e associazioni, che mancava da più di 10 anni, soprattutto a seguito del preoccupante incremento, in particolare tra i giovani, del fenomeno dell’abuso da bevande alcoliche durante il lockdown. Secondo gli ultimi dati dell’Istituto Superiore di Sanità, infatti, nel corso del 2020 si è osservato un aumento del 6,5% per gli uomini e del 5,6% per le donne che hanno avuto un consumo a rischio. Basti pensare che, per esempio, per la prima volta, le giovani consumatrici a rischio (14-17enni) superano per numerosità i loro coetanei”. La Conferenza, promossa dal Ministero della Salute (dalle Direzioni Generali della Prevenzione sanitaria e della Comunicazione) in collaborazione con le Regioni, sarà organizzata sia in presenza presso l’Auditorium del Ministero della Salute, nella sede di via Giorgio Ribotta 5, sia in modalità streaming sui canali ufficiali del Ministero della Salute. Interverranno, tra gli altri, i rappresentanti delle associazioni di auto mutuo aiuto, delle Regioni, dell’Anci, degli operatori del settore, delle società scientifiche, dell’Istituto Superiore di Sanità (Iss) e di altre Istituzioni. Le sessioni tematiche saranno quattro: “Gli interventi di prevenzione in ambito scolastico e l’aggancio precoce dei giovani vulnerabili”; “L. 125/01. L’integrazione del lavoro tra Servizi per le Dipendenze/Alcolologie e le CML in tema di guida. Stato dell’arte e prospettive future.”; “La Formazione”; “Le Reti Curanti”. Al termine della tre giorni verrà prodotto un documento condiviso con le proposte operative emerse dalla discussione nei tavoli di lavoro.

# 3 | Prevention and actions against impaired driving: highlights



# Legislation vs. percentage of yearly traffic accidents with impaired driver





**2015-2018** (peak in 2017 with 80 provinces involved throughout the national territory)

Drivers checked: 128,426 of which:

Drink-driving: 7,797 (6.1%)

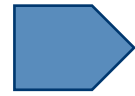
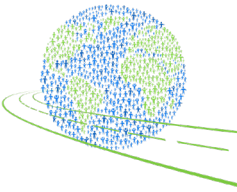
Under the influence of narcotic substances: 2,904 (1.6%)

**2019** (48 provinces involved throughout the national territory)

Drivers checked: 37,924 of which:

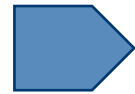
- Drink-driving: 2,481 (6.5%)

- Drugs: 595 (1.6%)

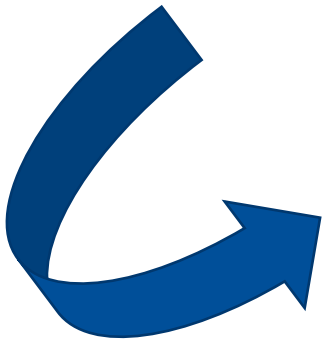


An initiative born from the collaboration between the State Police and the Ministry of Education and Research, a project aimed at making school transport safe

# ICARO



It is the most important road education campaign aimed at students and all Italian schools. More than 200,000 students have benefited from the ICARO training on road safety. Born from a project of the State Police in collaboration other ministries, the University of Rome – La Sapienza and key national stakeholders including the ASTM Group.



In **2022** ICARO decided to create a training course that focuses on the risks of **impaired driving (drugs and alcohol)**.



# Autostradafacendo.it

Autostrada Asti - Cuneo S.p.A.



Autostrada dei Fiori S.p.A.



Tronco A10  
Tronco A6

SALT p.A.



SATAP S.p.A.



Tronco A4  
Tronco A21

SAV S.p.A.



ATIVA S.p.A.



Brebemi S.p.A. A35



SOCIETÀ DI PROGETTO  
BREBEMI SPA

SITAF S.p.A.



Tangenziale Esterna S.p.A.



SINA S.p.A.



**United Nations Global Road Safety Week, 6-12 May 2013**

- We do not speed
- We do not drink and drive
- We always wear seatbelts
- We always wear a helmet when riding a two-wheeler
- We never use the mobile phone while driving
- We stop to allow pedestrians to cross the road
- We pay special attention to children on the road

**We drive by the rules**

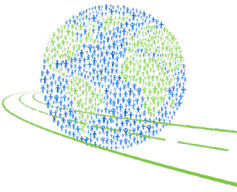
United Nations Global Road Safety Week, 2013-2015

**Nazioni Unite - Settimana Mondiale della Sicurezza Stradale, 6-12 maggio 2013**

- Non eccediamo nella velocità
- Non guidiamo se abbiamo bevuto alcolici
- Indossiamo sempre le cinture di sicurezza
- Mettiamo sempre il casco quando guidiamo un ciclomotore
- Non usiamo il cellulare mentre guidiamo
- Diamo la precedenza ai pedoni quando attraversano la strada
- Facciamo particolare attenzione ai bambini sulla strada

**Recordo il nostro patto per la sicurezza stradale della Nazione Unite 2013-2015**



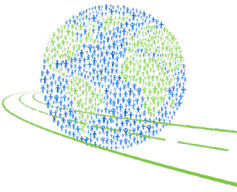


70 behaviors: each of which has a dedicated cartoon and a message of legality and safety easily understandable and easy to remember



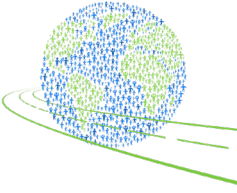


# Some Autostradafacendo.it cartoons concerning impaired driving

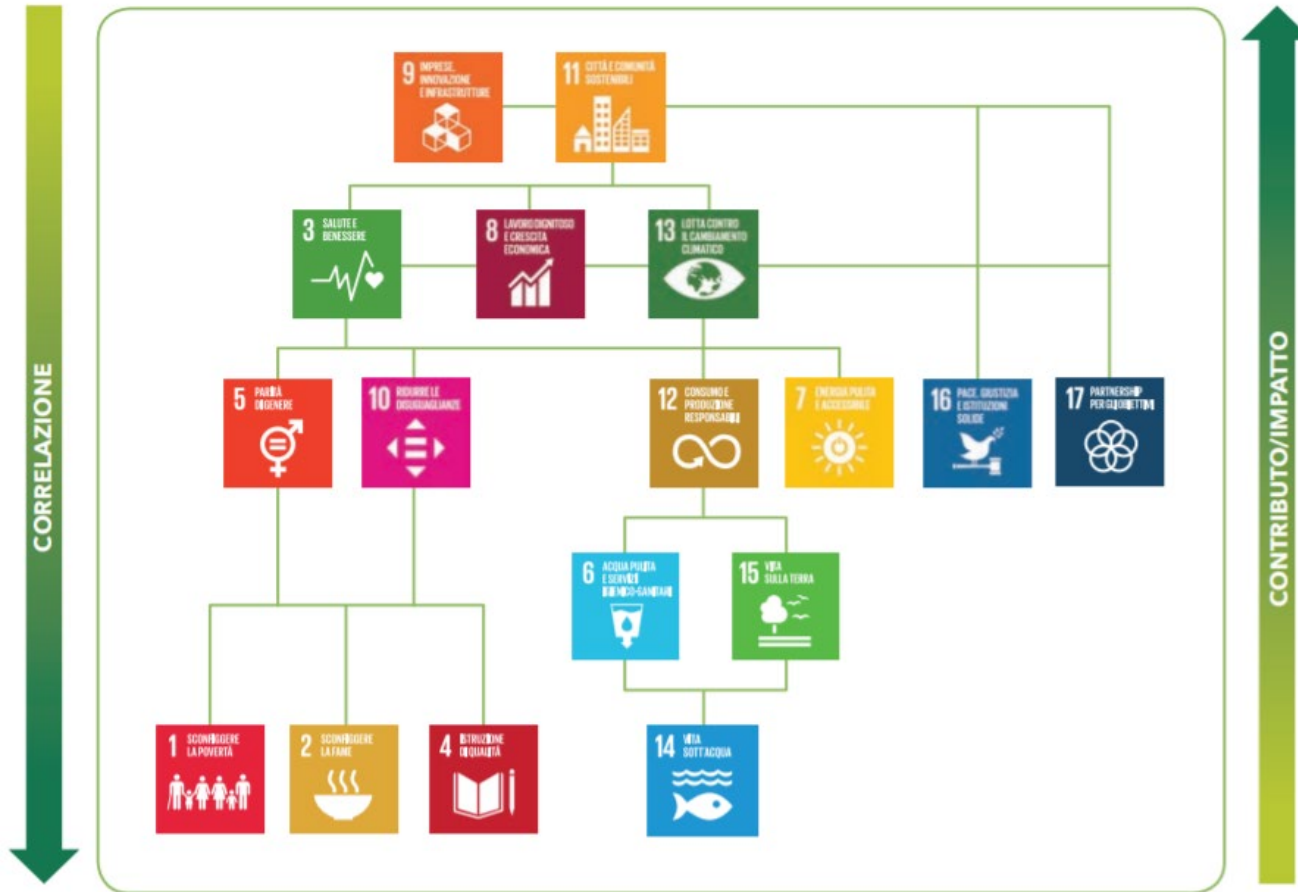


# 4 | Motorways of the ASTM Group towards environmental sustainability





The ASTM Group has defined its own strategic guidelines with a view to creating shared value for all Stakeholders in the medium-long term by improving its contribution to the achievement of the 17 Sustainable Development Goals (SDGs) of the United Nations by 2030:

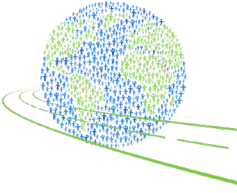


Among the most relevant SDGs for the Group:

- SDG 9** - Building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation
- SDG 11** - Making cities and human settlements inclusive, safe, resilient and sustainable
- SDG 3** - Ensuring health and well-being for all and for all age
- SDG 8** - Fostering lasting, inclusive and sustainable economic growth, full and productive employment and decent work for all
- SDG 13** - Promoting action, at all levels, to combat climate change



# The sustainability targets of the ASTM Group



1°

European motorway operator to obtain approval of targets from the **Science Based Targets initiative (SBTi)**

-25%

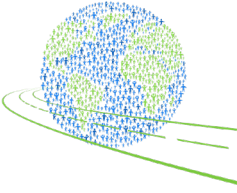
**Direct GHG emissions**  
(the so-called "Scope 1 & 2" emissions) by 2030

-13%

**Indirect GHG emissions**  
(the so-called "Scope 3" emissions) by 2030

The targets were integrated into the Group's financial strategy with the placement of three Sustainability-Linked Bonds (SLB) for a total of €3 billion, which ended in November 2021.

The ASTM initiatives will contribute, among others, to the achievement of our targets.

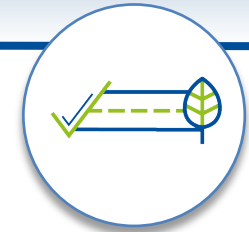


AREAS

## I. Digitalization of Infrastructures

## II. Resilient Infrastructure

## III. Environmental sustainability



OBJECTIVES

- Increased safety for the user
- Improved quality of service
- Increased efficiency of operational management

- Longer service life
- Better ability to respond to climate change
- Lower costs for all stakeholders

- Reduced impact on the territory
- Reduced risks for the management of the infrastructure
- Capability to respond to the effects of climate change and its consequences





*#movingtothefuture*



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