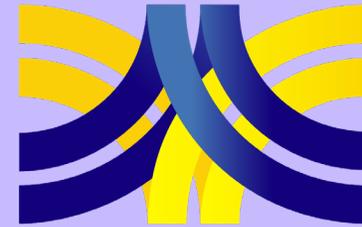


# 49<sup>th</sup> ASECAP DAYS

*Decarbonizing Road Infrastructure : Challenges,  
Perspectives and Actions in Tough Economy*

**ASECAP DAYS**

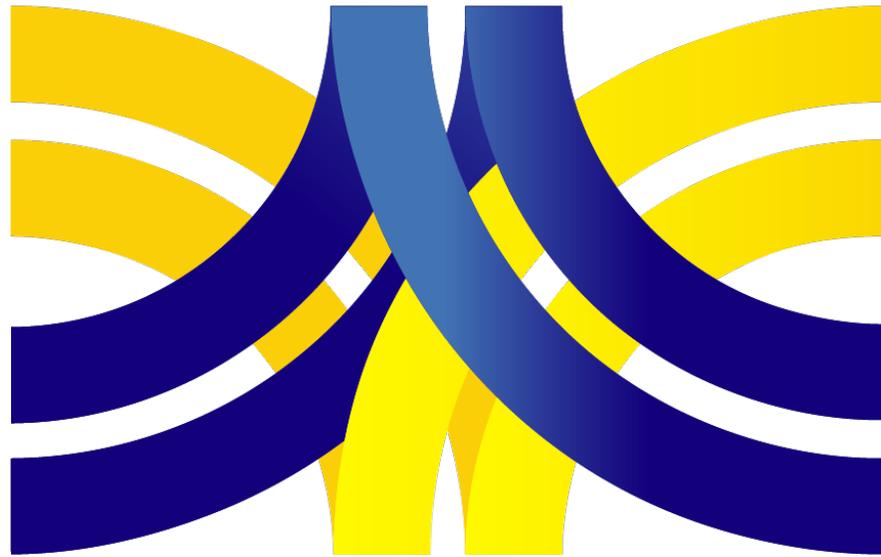


**BRUSSELS 2022**



Hotel Marriott Grand Place, Brussels  
24 – 25 November 2022

**ASECAP DAYS**



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# CO<sub>2</sub> Neutralization: the green repopulation

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**autostrade** // per l'italia

- Autostrade per l'Italia's Strategic Transformation Plan, launched in January 2020, is based on seven fundamental pillars: all-round safety, operational excellence, digitalization, reaffirmation of core values, centrality of people and customers throughout the customer journey, mobility and sustainable development.
- The dissemination of the Plan is entrusted to "Next a 360°", a programme that in 8 chapters describes the transformation projects
- These include **Next To ESG**, which is constant and transversal to all projects and transformation initiatives, in line with the Group's desire to place **sustainability at the heart of the path of change**.



Becoming a best practice in line with the Sustainable Development Goals (SDGs) of the 2030 Agenda by involving all sectors in a process that includes:

- integrated management of the infrastructure by strengthening its resilience and security;
- reduction of the Group's environmental impact with the Net Zero objective by 2050;
- strengthening the sustainability governance system and building a staff that values diversity and talent;
- a new relationship with the customer to make the travel experience safer, more interconnected and enjoyable

### Key figures and highlights

**21**  
Anno di costituzione del sistema di Governance della Sostenibilità

**100%**  
Consumi energia elettrica Autostrade per l'Italia coperti da fonti rinnovabili

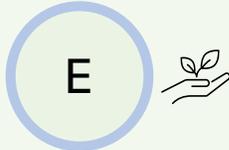
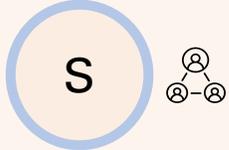
**-41%**  
Emissioni tCO<sub>2</sub>e Scope 1 e 2 vs 2020

**59%**  
Fornitori contrattualizzati e in albo valutati ESG, obiettivo 100% al 2022

**93%**  
Rifiuti destinati a processi di recupero/riciclo/riutilizzo

**A2 Robust**  
Rating ESG di Moody's ESG Solutions

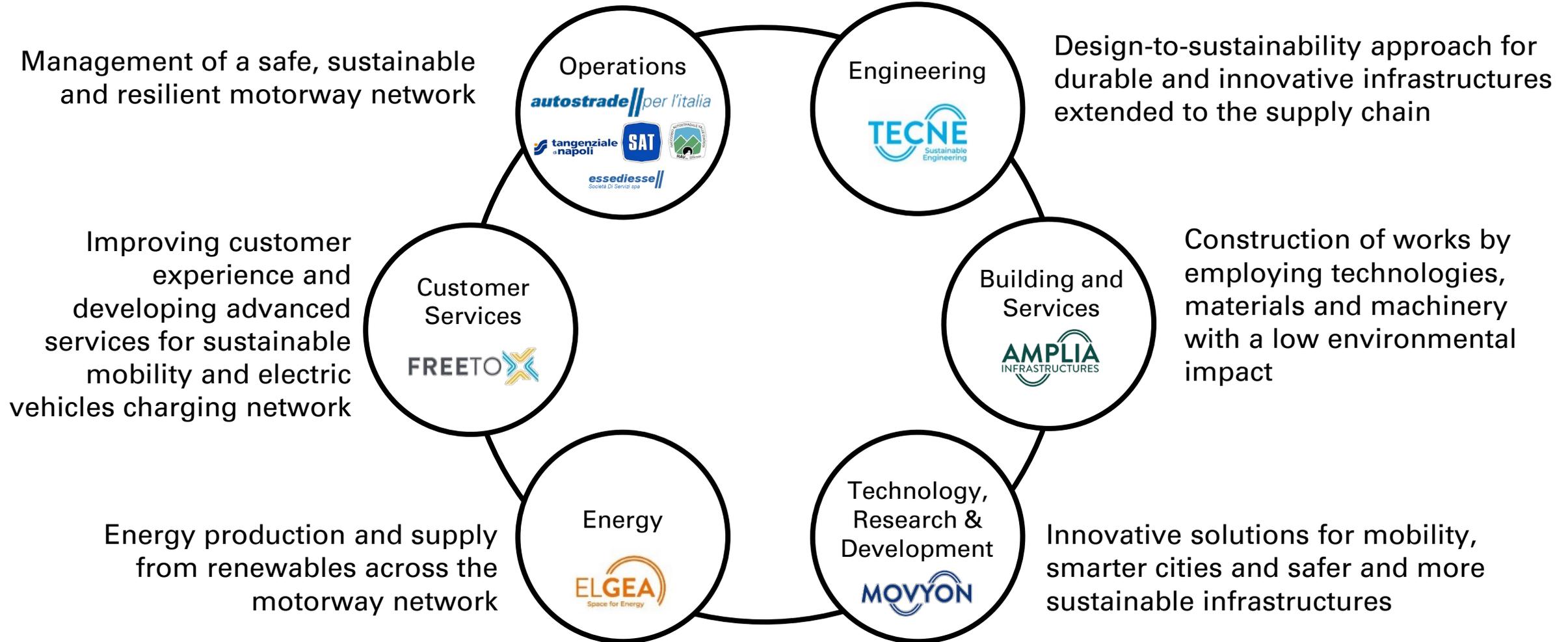
# ASPI's Commitment to sustainable development

	Commitments	Material topics <sup>1</sup>	SDGs
	<ul style="list-style-type: none"> <li>Decarbonize the ASPI Group by zeroing its carbon footprint through an SBTi<sup>2</sup> approach</li> <li>Reducing the environmental impacts resulting from infrastructure construction and management</li> </ul>	Climate change	
		Protection of natural resources (circularity/ biodiversity)	
	<ul style="list-style-type: none"> <li>Leading the design, development and management of a safe, sustainable and resilient network</li> <li>Strengthening HR strategies by focusing on diversity, justice, inclusion and development</li> <li>Contributing to the social well-being of the communities in which the Group operates</li> </ul>	Occupational health and safety	
		Infrastructure and traffic safety	
		Diversity & Inclusion	
		Focus and development of resources	
		Support for local communities	
		Customer satisfaction	
	<p>Guaranteeing full integration of the ESG principles in the company business model</p>	Business Ethics & Integrity	
		Privacy and Cybersecurity	
		Supply chain	
		Innovation and digitization	

Guidelines defined for each material topic

1. Material topics defined in the 2021 materiality analysis. The topics are being updated. 2. Net Zero commitment consistent with the level of decarbonization required to maintain global temperature rise to 1.5 ° C compared to pre-industrial temperatures (as written in the " Intergovernmental Panel on Climate Change's Special Report on Global Warming of 1.5 ° C )

# ASPI Group's Approach to Sustainability



# Green Repopulation Project – Executive Summary

## CONTEXT: ASPI and the NET ZERO strategy

- In line with the **Net Zero** ambition and the objectives of limiting global warming to 1.5° above pre-industrial levels by 2050, ASPI has launched decarbonisation process. CO2 emission reduction targets have therefore been defined and certified by **SBTi (Science Based Target initiative)\*** in 2022 and also be used to achieve the rating issued by the "**Carbon Disclosure Project**" (CDP)\*\*.
- The initiatives to achieve the targets are classified according to three different levels of priority:
  - 1) initiatives to reduce emissions (e.g. energy efficiency, self-production, green energy purchase);
  - 2) **emission neutralization initiatives (e.g. green repopulation project);**
  - 3) remaining compensatory measures (e.g. purchase of carbon credits).

## GREEN REPOPULATION PROJECT: Business case development and project continuation

- In this context, the **Green Repopulation Project** is one of the initiatives identified to neutralize emissions. The initiative provides for the planting of **60 hectares spread over 41 sites**, consisting of unused spaces in service areas, areas around junctions, toll stations and motorway carriageways. The project covers 7 regions (15 provinces and 37 municipalities), with a total investment of **approximately € 3.5 million**.
- At the end of 2021, a business case was carried out at the Prenestina Est service area, which allowed the technical and economic definition of the project requirements.
- Overall, the project will allow an average absorption of at least **360 tonnes of CO2/year (\*\*\*)**.
- **Further benefits of the project are a positive impact on air quality and an improvement of the landscape and the territory.**

(\* ) SBTi is a joint initiative between the Carbon Disclosure Project (CDP), the United Nations Global Compact, the World Resources Institute (WRI) and WWF, with the aim of encouraging companies to set CO2 reduction targets consistent with the goal of limiting global warming to 1.5/2 degrees above pre-industrial levels.

(\*\*) CDP (formerly the Carbon Disclosure Project) is the global disclosure system for managing the environmental impacts of the private sector, the most important and widespread reporting system providing environmental information and data to investors and the market.

(\*\*\*) The calculation of the CO2 absorbed is linked to the growth time of plants and considers the following assumptions : during the growth phase, between 2023 (year of completion of the project) and 2030, an absorption of 900 tonnes of CO2 per year, after 2030, when the plants are mature, an absorption of approximately 3,327 tonnes of CO2 per year

# Green Repopulation Project – Business Case

## 1-Approach

- 1) Identification of disused areas through the "Heritage" function
- 2) Drafting of the Reforestation Plan which developed:
  - Analysis of the areas proposed for reforestation (location, urban uses, land uses, constraints; any administrative authorisations required).
  - Calculation of the expected amount of CO2 absorbed
  - Cartographic representation and through the use of AGE company tool of the areas identified for reforestation;
  - Definition of criteria and technical specifications for the implementation of reforestation measures



## 2-Business Case



- A business case was completed in 2021 at the Prenestina est service area (Rome).
- The intervention included:
  - ✓ the planting of 1,850 trees on an area of about 1.5 hectares with a CO2 absorption of 7 t CO2/year
  - ✓ Plant species: *Acer campestre*, *Quercus pubescens*, *Fraxinus ornus*, *Quercus frainetto*, *Quercus cerris*, *Carpinus orientalis*
- Forest types: considering the constraints imposed on the area due to the proximity of the motorway, two forest types were taken into account, which differ in the species of trees chosen.
  - ✓ Type T1 includes first and second size tree species reaching a maximum height of 18 - 25 m, and has been used in the innermost part of the area, at a minimum distance from the motorway of 25 m.
  - ✓ Type T2 is characterised by the presence of hornbeam and manna ash, third-size trees reaching a maximum heights ranging between 8 and 12 m; this type of planting was used in the part of the project area closest to the motorway, keeping a minimum distance of 13 m from it.



## 3-Proposed investment plan 2022-2023



The numbers of the plan:

- 41 sites in 7 regions and 15 provinces
- 60 hectares

Following the Business Case an average market value of 57 k€/ hectare (net value) was determined for interventions including design, construction, work supervision and maintenance for the first service years. This value was used to determine the overall investment plan.



CO2 absorption amounting to at least 360 t CO2/year

## 3) Business Case Development

# Green Repopulation Project – Implementation Plan

## Project Implementation

MACRO PHASES	2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Business Case								
Design		[Blue bar spanning Q2-Q3 2022]						
Award of works (Agreement)		[Blue bar spanning Q2-Q3 2022]						
Works and implementation <sup>(1)</sup>					[Blue bar spanning Q1-Q4 2023]			

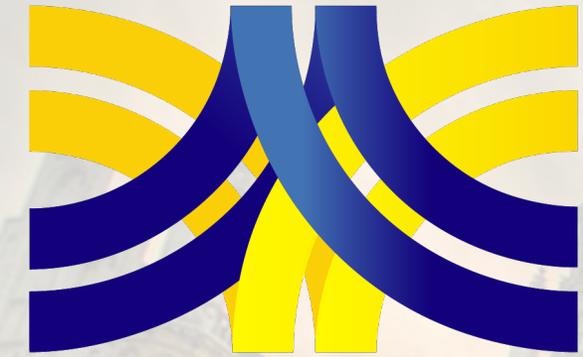
## CO<sub>2</sub> Absorption Forecast

Site	1 y	12 y	50 y
Prenestina Est	7	84	350
...	...	...	...
<b>Total tons</b>	<b>360</b>	<b>4320</b>	<b>18000</b>



*(1) In general, planting activities do not require specific authorisation procedures or constraints to be met. Specifically, the forestation plan carried out revealed 8 out of 41 sites require a landscape authorisation.*

**ASECAP DAYS**



**BRUSSELS 2022**

# THANK YOU FOR YOUR ATTENTION

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