



Investing in Abruzzo Automotive: state of the art and opportunities



2024

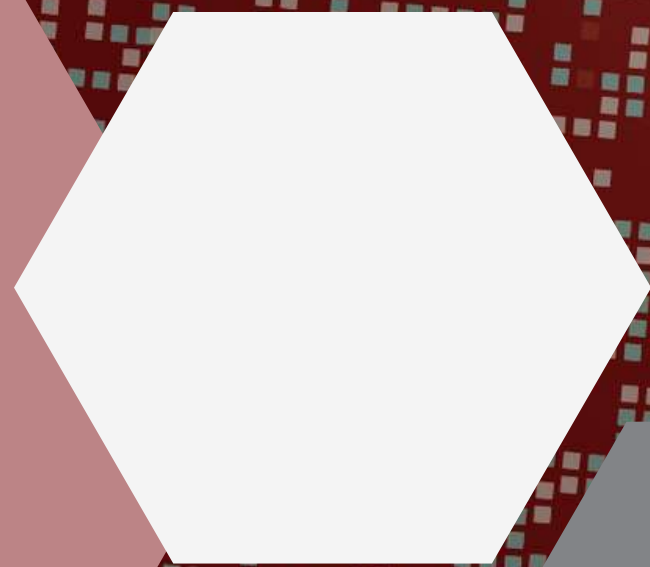


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- The Abruzzo regional context
- Accessibility of the territory
- Improvements on territory
- Industrial Hubs
- Automotive innovation programme
- The Automotive Innovation Pole
- Investment incentives
- Automotive Innovation Hub: collaborations
- Contacts



AUTOMOTIVE: The Abruzzo regional context



AUTOMOTIVE: The Abruzzo regional context

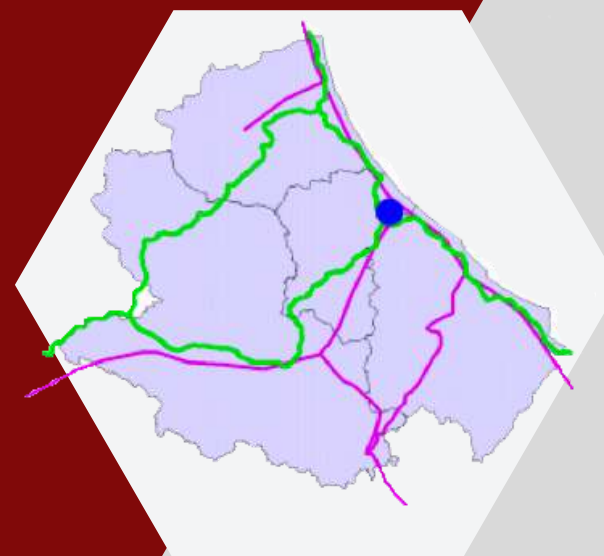
ABRUZZO REGION: AN OPPORTUNITY
FOR THE AUTOMOTIVE SECTOR



Green
&
Welcoming



Industrialized
&
Full of Innovation



Accessible



Rich of Opportunities



Green Region of Europe, in the heart of Italy

- Area dedicated to nature is 1/3 of the region
- Offers 3 National parks, a Regional park and Protected reserves
- Gran Sasso mountains (2.912 asl)
- Adriatic Coast: 133 kms



Abruzzo, a region with a strong environmental vocation



Highly industrialised Region

- Industrialisation rate: 27%,
- Higher than the national average

Abruzzo, a region with a strong industrial vocation



ACCESSIBILITY OF THE TERRITORY

ABRUZZO: easily accessible from/to all over Europe



AIR CONNECTIONS

- International Airport (Pescara)
- Ryanair's hub
- 15 destinations (2023)



MOTORWAYS

- A14 (Bologna à Taranto)
- A24 & A25 (Abruzzo - Rome)



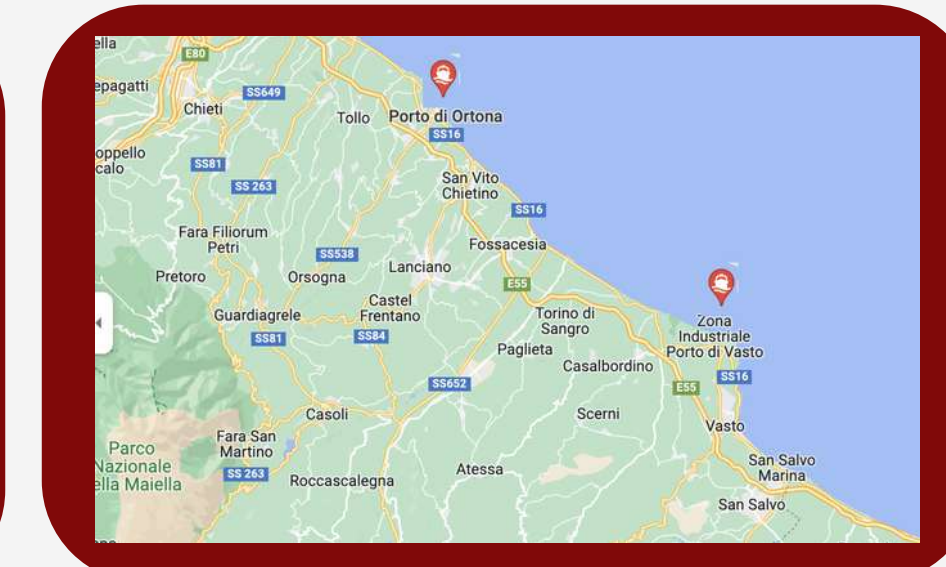
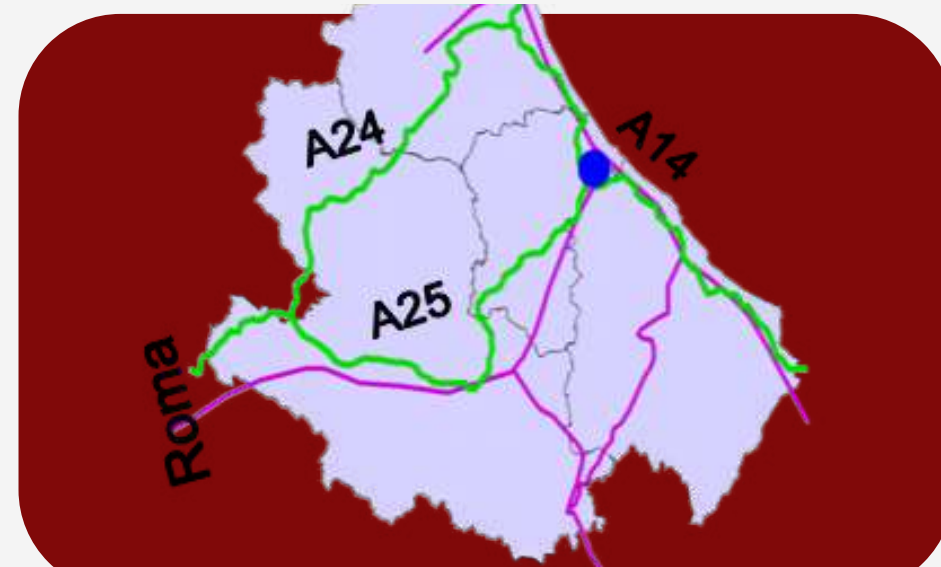
RAILWAYS

- North - South (Bologna - Lecce)
- East - West (Crossing Sangro Valley)



PORTS

- Ortona
- Vasto





ABRUZZO: easily accessible connections even by train with Northern Italy and Europe



Trans European Network Transport



ACCESSIBILITY OF THE TERRITORY

**ABRUZZO: easily accessible
connections also to the port of
Salerno**

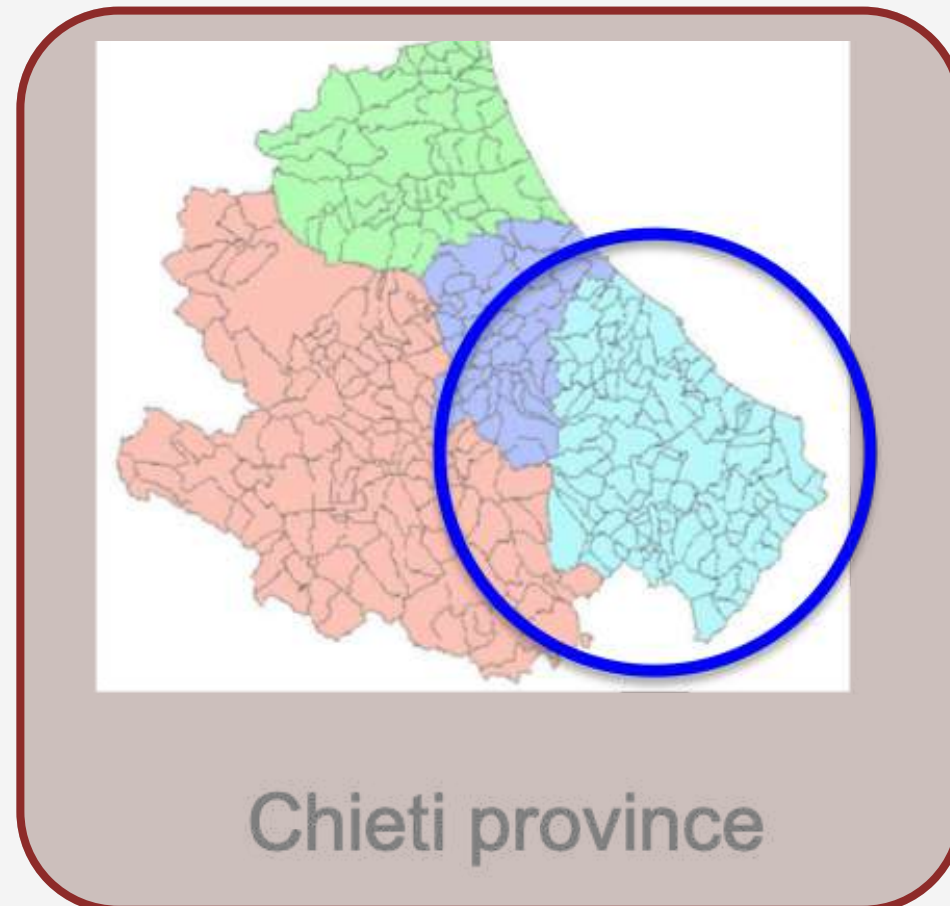


Adriatic-Tirreno road link: 4-hour journey time



ACCESSIBILITY OF THE TERRITORY

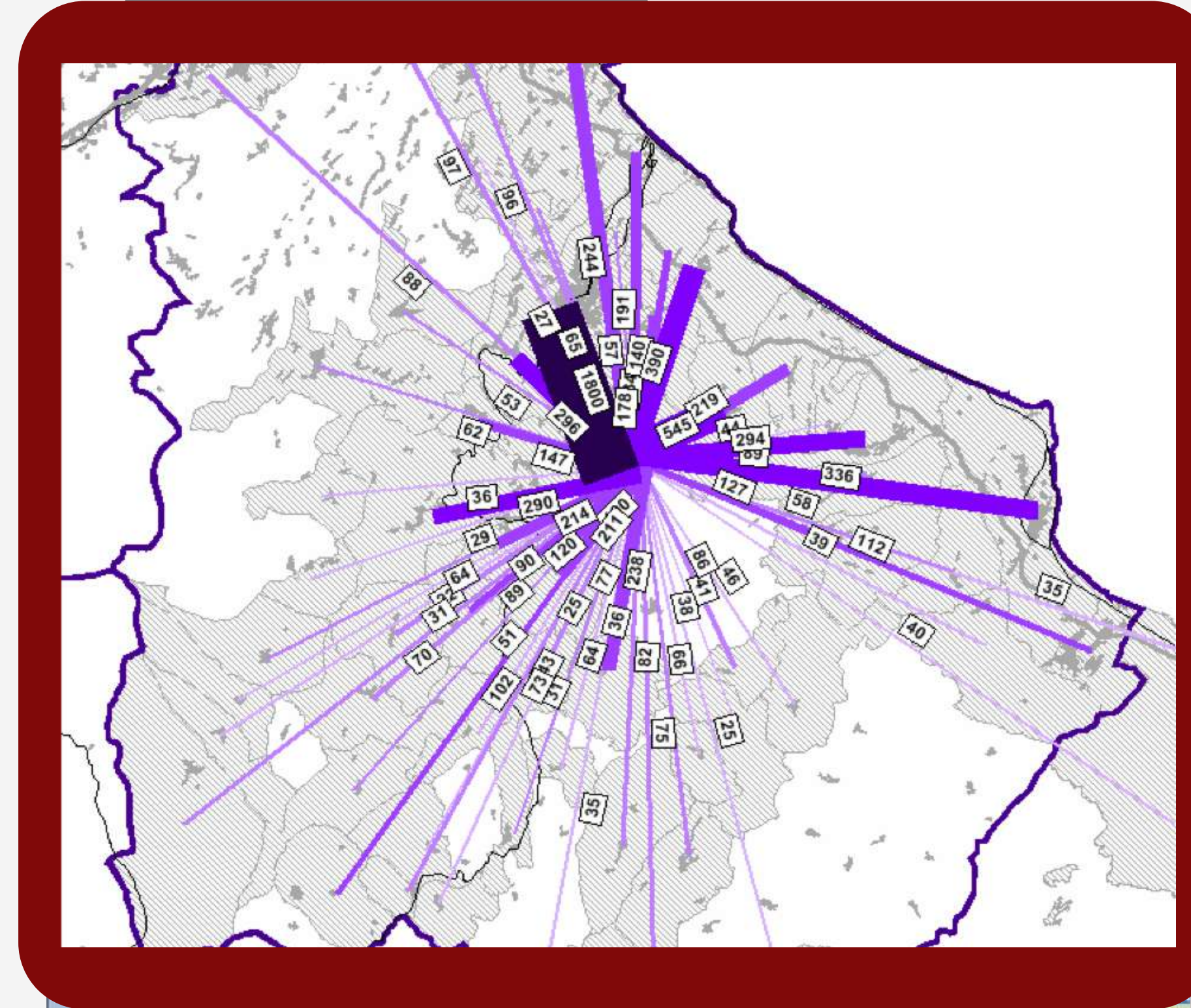
VAL DI SANGRO IN THE ABRUZZO REGION





ACCESSIBILITY OF THE TERRITORY

EFFECTIVE AND EFFICIENT PUBLIC
CONNECTIONS FOR WORKERS TO
THE INDUSTRIAL AREA OF THE VAL
DI SANGRO





IMPROVEMENTS ON TERRITORY: Ongoing actions



IMPROVEMENTS ON TERRITORY: Ongoing actions

TRANSPORTS & LOGISTICS

ROAD SYSTEM

- "FONDOVALLE SANGRO" CONSTRUCTION: Tender: closed assigned to the company "De Santis", Rome
Budget : 214 MiO/€
Activity : ongoing and will end in 2025
- "CIRCULAR ROAD" CONSTRUCTION (industrial area): Activity
- VAL DI SANGRO INDUSTRIAL DISTRICT: improvement of the road surfaces
Surfaces improvement
Ordinary and extraordinary maintenance of roads (lighting, guard rails, vertical signs, etc.)

PASSENGER TRANSPORT

- OPTIMIZATION OF FLOWS to industrial areas to solve congestion
- ELECTRIFICATION OF THE RAILWAY line from/to the industrial area to extend service to people (already completed).

RAIL

- NEW EXCHANGE AT FOSSACESIA/TORINO DI SANGRO railway station to speed up the arrival and departure of products transported
- UPGRADE OF THE SALETTI VAL DI SANGRO FREIGHT PLATFORM

ENERGY

ENERGY SUPPLY

- Actions have been taken :
- a. development of renewable energy sources



IMPROVEMENTS ON TERRITORY: Sangro freeway

The completion of the Sangro highway (the estimated cost of which is approximately 214 Meuro) is in the tender process. The entry into operation is scheduled for 2025





IMPROVEMENTS ON TERRITORY: Freight transport service of Sangritana

- Conventional Services
- Intermodal Services
- Shunting services and Assets
- Customized Services
- All-Inclusive Railway Planning TtT (terminal to terminal)
- Completion of DtT, TtD and DtD (Door to Terminal, Terminal to Door and Door to Door) services
- Train loading and unloading management
- Wagon sourcing
- UTI rental





IMPROVEMENTS ON TERRITORY: Logistics platform Saletti- Fossacesia

- Funding for the production area of Saletti, in Paglieta
- A railway logistics platform in which two more tracks are planned to the three already existing
- It will be used to transport goods to and from the industries.
- It will become essential for connections between the south and north of Italy
- Capable of accommodating 750-metre trains, functional for the logistics of the industrial hub of Val di Sangro towards the Mediterranean and Europe.





IMPROVEMENTS ON TERRITORY: Implementation of the renewable energy supply chain

- New initiatives promoted by the Regional Agency for Productive Activities (Arap), intended to manage every project in renewable energy
- The mission of "ARAP ENERGIA" will be focused on the production of renewable energy, from photovoltaic to wind, from hydroelectric to hydrogen





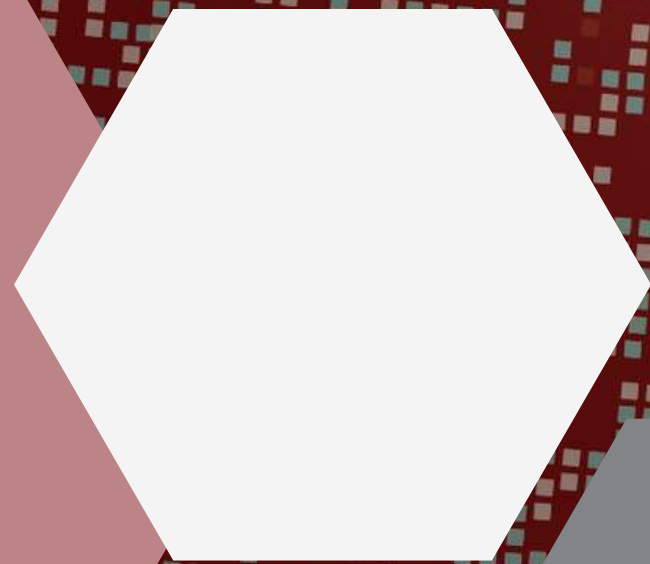
IMPROVEMENTS ON TERRITORY: Experimental hydrogen production plant

- In Abruzzo, three hydrogen production plants will be financed with funds from the Pnrr.
- They will be financed for an amount of 20,131,496 euros.
- Among them, the project of Arap, the regional company for production activities





INDUSTRIAL HUBS




Automotive supply chain



23.000
People
(o/w 85% in Chieti district)



€ 8 billion
Turnover



27%
Industrialisation rate:
(Higher than the national average)



48%
Of the Exports



13%
GDP industry of
Abruzzo Region

- Companies: Big, medium & small
- Sector: Automotive and mechanical engineering
- Includes: Sub-suppliers, component manufacturers and engineering companies

Production chain



**Stellantis Europe Spa Atessa suppliers:
660 companies, of which 50 installed in Abruzzo**



PEOPLE :

11.000 employees, of which 5.500 Stellantis Atessa

**Honda Italia Industriale Suppliers,
43 companies, of which 19 installed in Abruzzo**



PEOPLE :

1.700 employees in Abruzzo, of which 900 Honda Atessa plant



TECHNOLOGICAL EXCELLENCE OF OTHER COMPANIES



Electric engines



**Production of
molds, cold-hot
forming and
new materials**



**Light
commercial
vehicle
outfitting**



**Production of
molds and
cold-hot
forming**



PEOPLE: 10.000 employees in Abruzzo

Other Industrial hub: UNIVERSITY OF L'AQUILA AND RADIOLABS

Contribution to the realization of technological roadmaps and the creation of an industrial research community inclusive of new skills to grasp the unprecedented transformation facing the transport sector

MISSION

- Innovation and technology transfer
- Enabling technologies 'satellite-based' for autonomous driving
- Laboratories for supporting validation & certification



COMMUNICATIONS

- 5G - 6G - Satellite
- FRMCS – V2X
- Intelligence Defined Networks



GEO LOCALIZATION

- High Accuracy High Integrity Applications
- Multi sensors and Hybrid systems
- INDOOR



CYBER SECURITY

- Secure communications
- Resilient GNSS signal processing
- Intelligent defined security



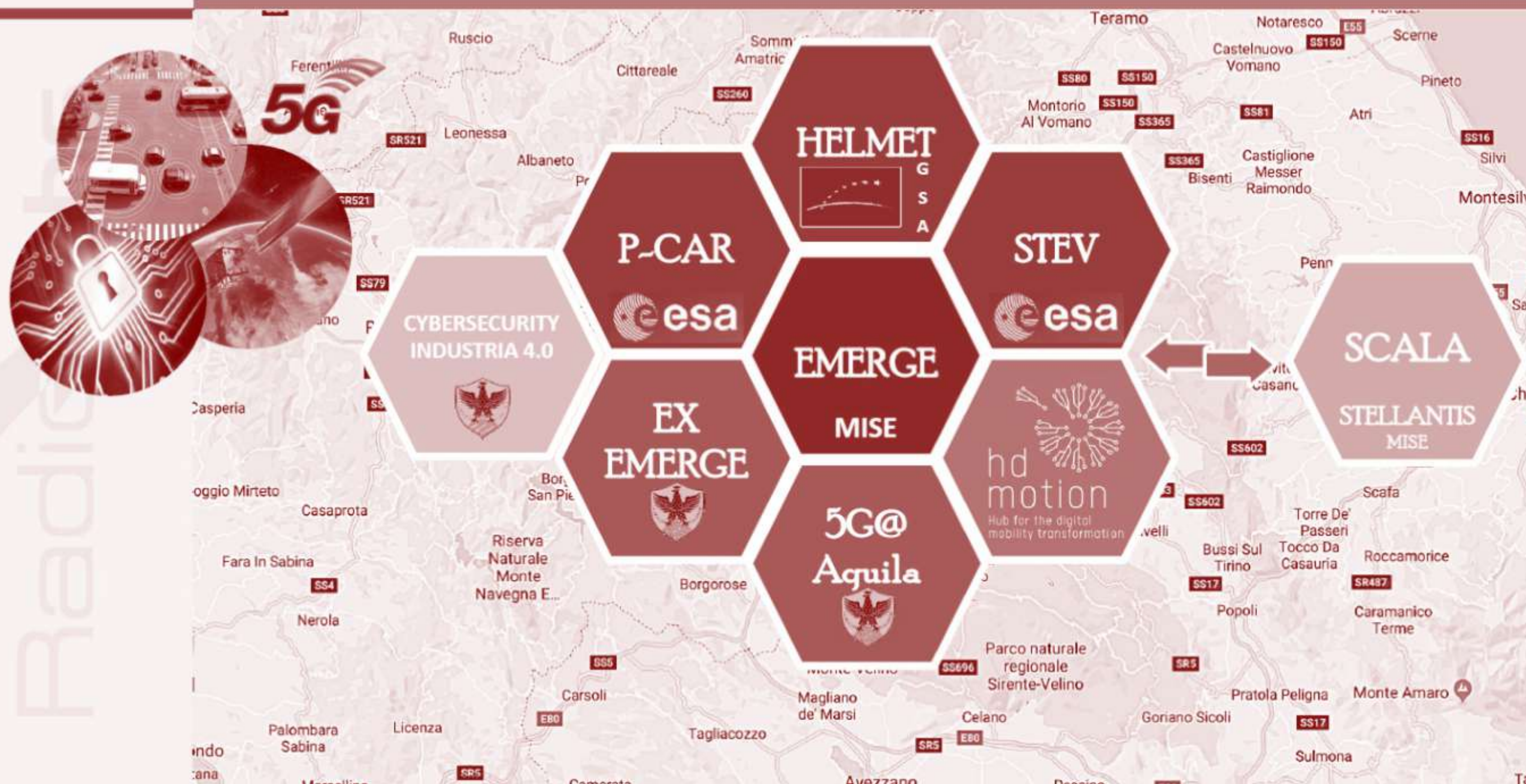
PEOPLE : high skilled resources

First European Laboratory for validating geo-localization technologies

European Hub satellite-based technology

Radiolabs

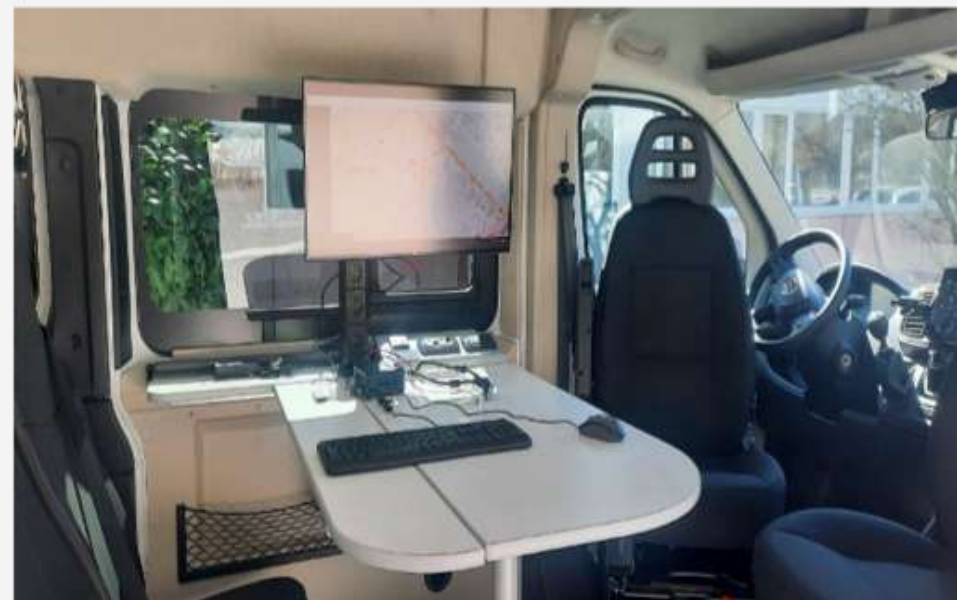
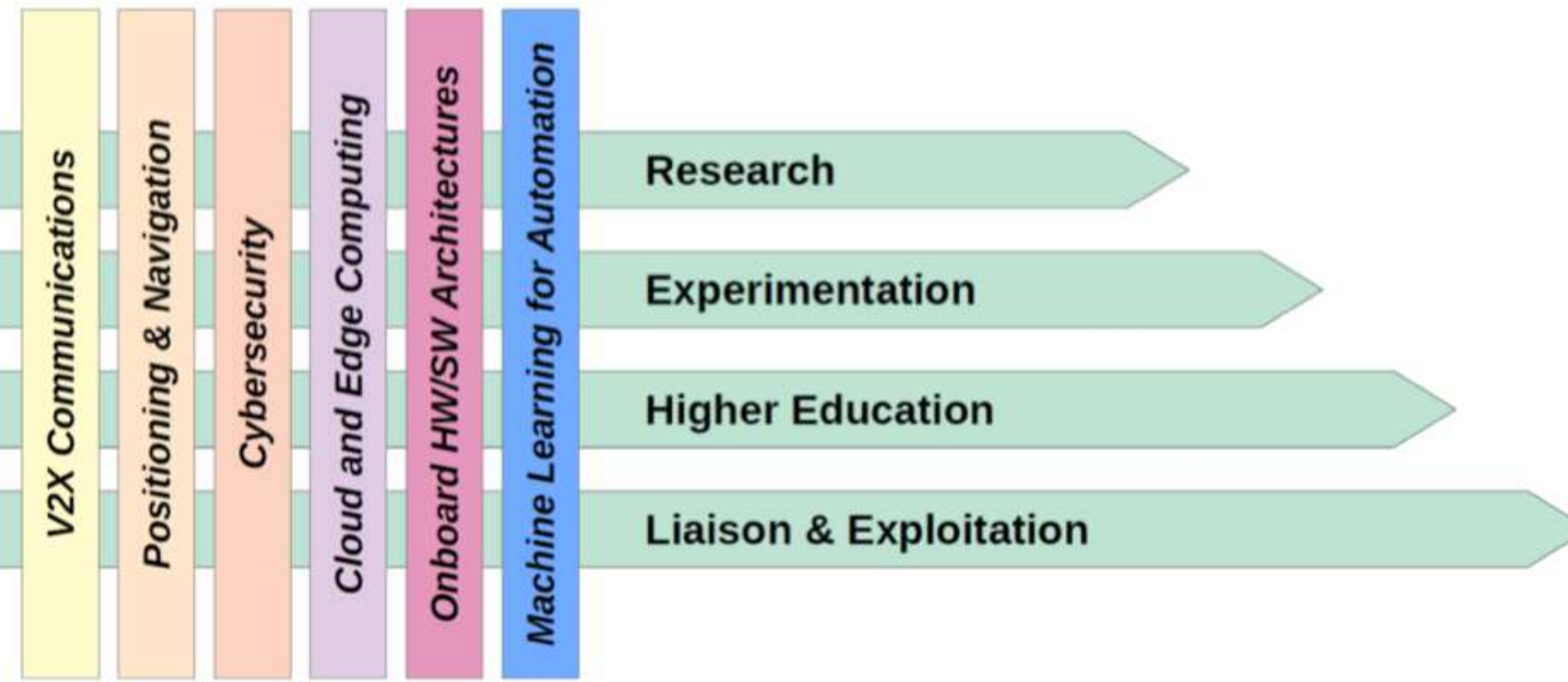
Automotive INITIATIVES in Abruzzo



+ 10 M€ R&D projects

University of L'Aquila Centre of Excellence (Ex Emerge)

Centre of EXcellence (EX) on Connected, Geolocalized and Cybersecure vehicles
(EX-EMERGE)



Other Industrial hub: UNIVERSITY OF L'AQUILA AND RADIOLABS



Circular Economy project at UNIVAQ (Chem. Eng.):

- TREASURE [Home - Treasure \(treasureproject.eu\)](http://treasureproject.eu)
- PEACOC [PEACOC Project \(peacoc-h2020.eu\)](http://peacoc-h2020.eu)
- PASSENGER [IMDEA Nanociencia coordinates the PASSENGER project: enabling a more sustainable and green Europe | News | CORDIS | European Commission \(europa.eu\)](https://cordis.europa.eu/project/object/101018441)
- NEW-RE [Project New-RE - Erion](https://cordis.europa.eu/project/object/101018441)
- LIFE INSPIRE (dal 1 Sett. 2023)
- VITALITY (in progress)



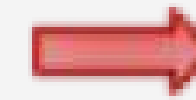
Projects with main focus on the recovery of:

- Lithium, graphite from Li batteries **(A)**
- Indium - LCD **(B)**
- Silver from flexible printed circuit boards **(C)**
- Au, Ag and base metals from PCB **(D)**
- Rare Earths (REE) from permanent magnets **(E)**
- Pd, Pt, Rh from automotive spent catalysts **(F)**

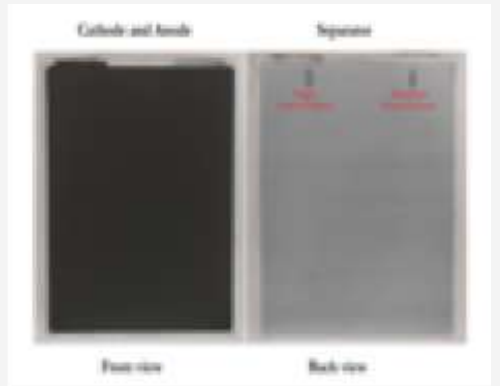


Patents:

- Gold-REC 1 (precious and base metals from PCB)
- Gold-REC 2 (PGM recovery from PCB and catalysts)
- Hydro-REE (REE from permanent magnets)



A



B



C



D



E



F



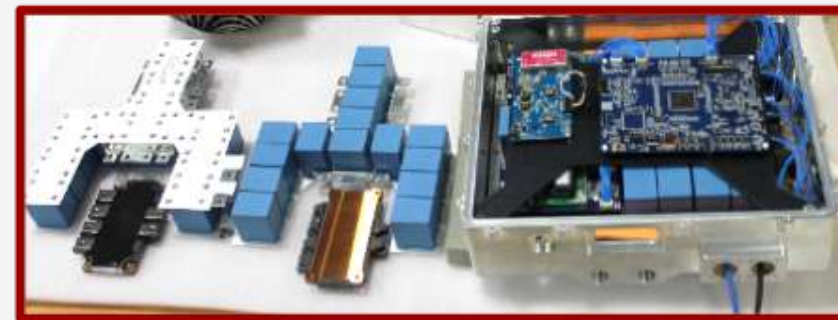
University of L'Aquila

Laboratory of Electrical Engineering

Power Converters, Electrical Machines and Electrical Drives, Power and Energy Measurements, Characterization and Testing of Components and Systems, for Automotive and Aerospace Industry.



ing.elettrica@univaq.it

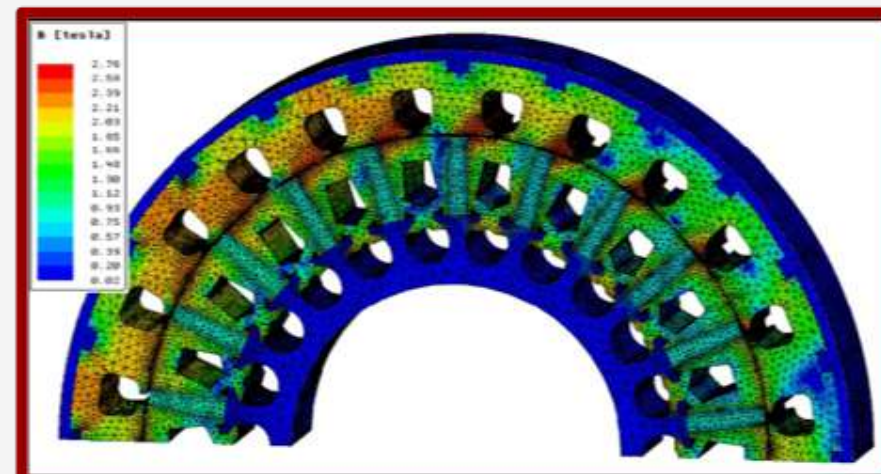


**Induction motors
(aluminum or copper rotor)**

PM Synchronous motors

Reluctance Synchronous motors

Switched Reluctance motors



R&D on electrical drives for automotive and aerospace applications featuring SiC technology and modular architecture:

Modelling and simulation;

HW architecture definition;

Sizing and selection of electronic components;

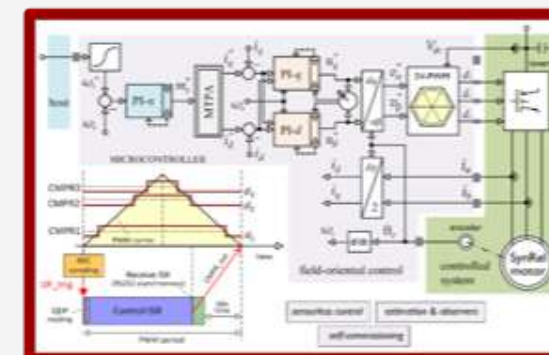
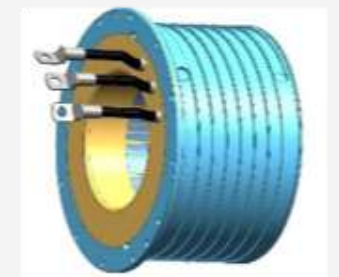
Electrical machines integration.

Mathematical model of the electrical machines

Optimum motor control algorithm;

HW-SW integration and real-time control systems

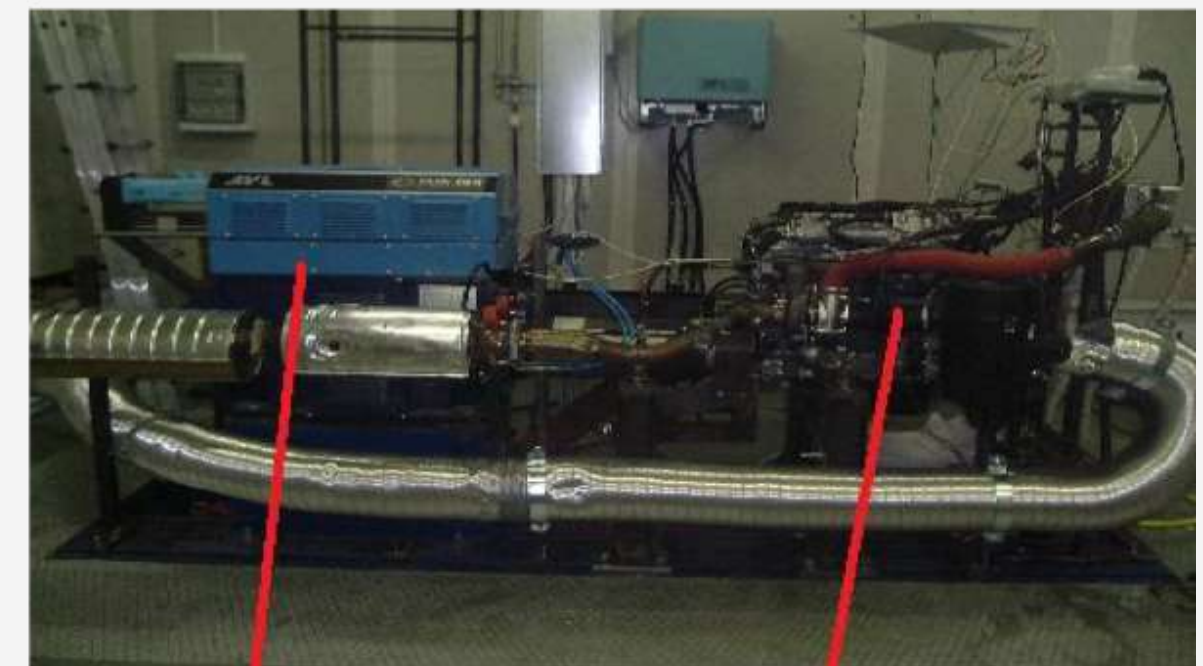
Algorithm for sensorless and self commissioning



University of L'Aquila

ENGINES/ENERGY: EXPERIMENTAL FACILITIES

Prototypes & testing labs



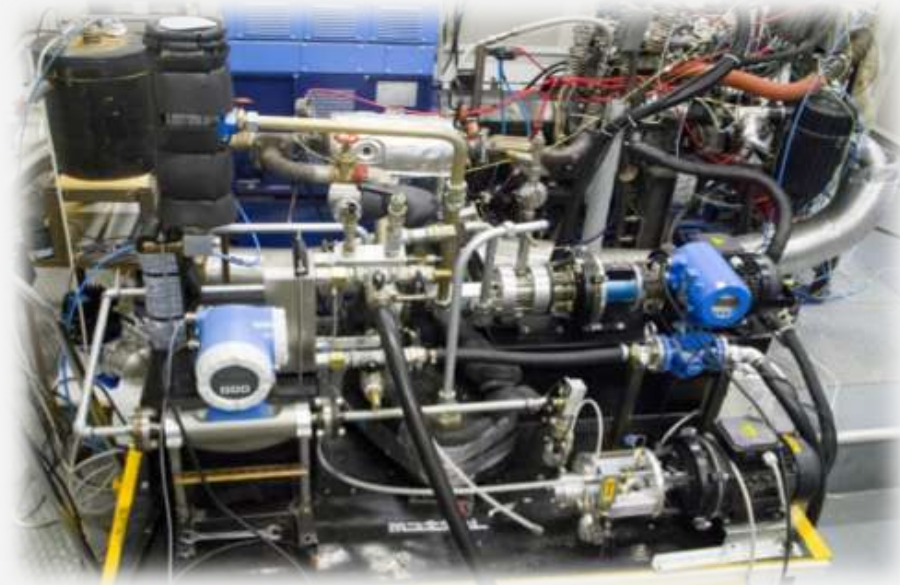
DINAMO AVL APA 100

PROPULSORE IVECO FIC

University of L'Aquila

ENGINES/ENERGY: EXPERIMENTAL FACILITIES

Prototypes & testing labs

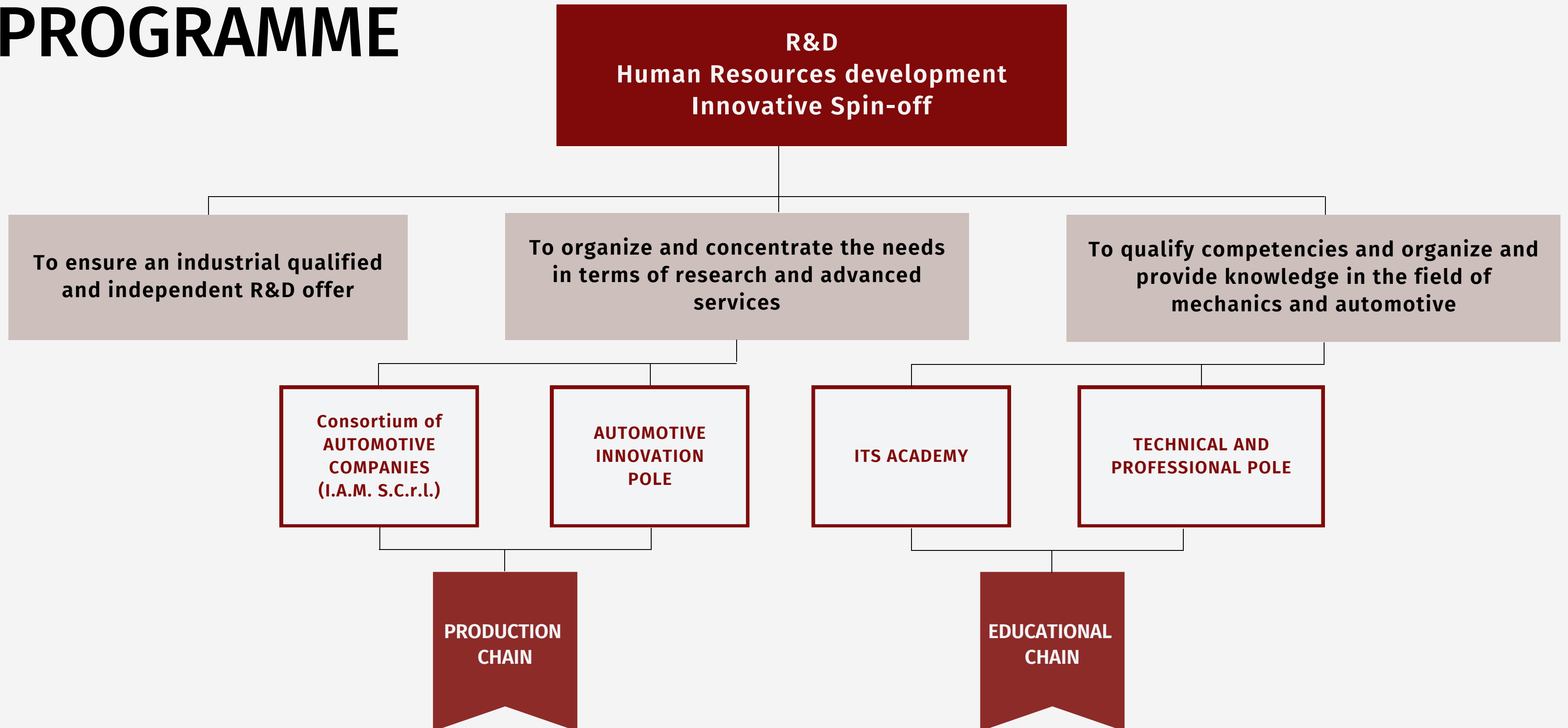




AUTOMOTIVE INNOVATION PROGRAMME

AUTOMOTIVE INNOVATION PROGRAMME

From dependence
to COLLABORATION...





THE AUTOMOTIVE INNOVATION POLE



AUTOMOTIVE
INNOVATION POLE

AUTOMOTIVE INNOVATION HUB: A LONG HISTORY



2008

About **50 COMPANIES**
of which most in Abruzzo



2024

CREATION

Why?

The **Automotive sector in Abruzzo**
is the **engine** of **region's development**



To encourage **INTERACTION** between the enterprises and to contribute
to **TECHNOLOGY TRANSFER, NETWORKING** and to spread **INFORMATION** among them.

- Develop an Automotive System related to the LCVs
- Increase Skills and improve the spread of Knowledge
- Consolidate internationalized Companies through innovation, flexibility and quality of products, systems and processes
- Support Interaction and Synergies between different industrial sectors
- Consolidate and strengthen Supply Chain to improve competitiveness
- Support Cooperative research
- Provide Assistance to the company
- Facilitate relations with Institutions



AUTOMOTIVE INNOVATION POLE

Innovation Pole are foreseen by the European Community (2006/C 323/01). A Pole is a clustering of independent enterprises (SMEs, LEs and research bodies, start up) active in a particular sector.

MISSION

Encourage the interaction between the different actors, the mutual exchange of knowledge and experiences, as well to contribute to the technological transfer, networking and dissemination of information

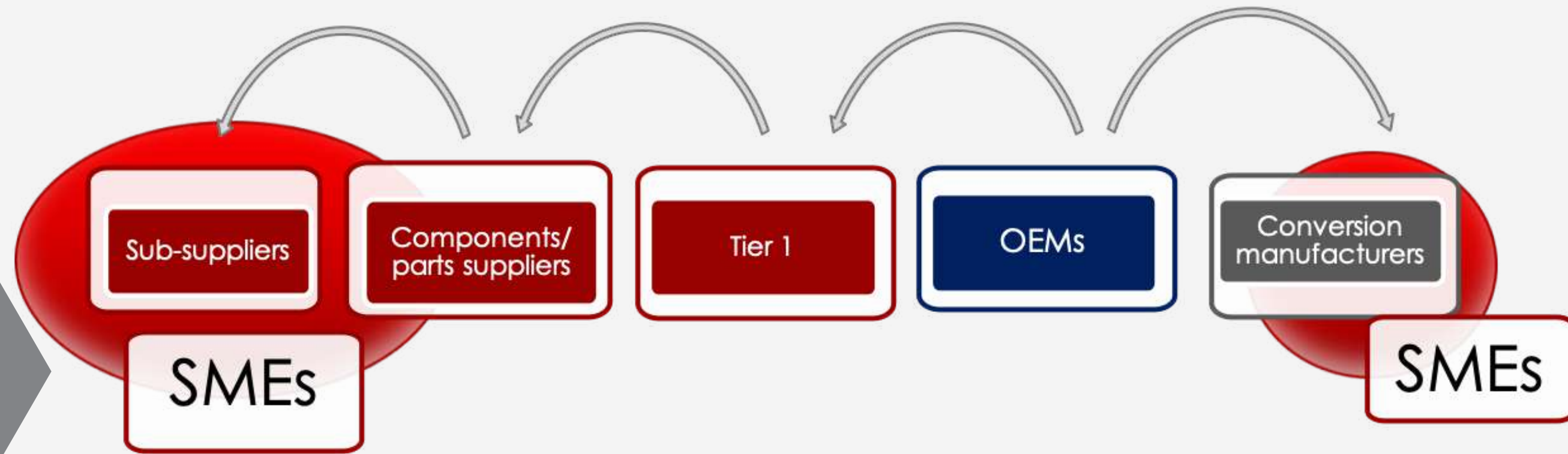
PARTNER

About 50 partners including enterprises of different sizes as well as research centres, the Engineering Department of the University of L'Aquila, ect.

Abruzzo Region (Operational headquarters)		46
IND	Large enterprise	11
ME	Medium enterprise	7
SE	Small enterprise	19
SES	Service provider	8
UNI	University	1
Other regions		6
IND	Large enterprise	4
ME	Medium enterprise	2
Total		52



SUPPLY CHAIN AND PARTNERS



Organogram

BOARD OF DIRECTORS

TECHNICAL STAFF

Roberto Cipollone
UNIVAQ



President of BofD



Raffaele Trivilino
DIRECTOR

Francesco Marfisi
TECNOMECC SUD



Giuseppe Ranalli
TECNOMATIC

Vice President



Roberta Stella
ADMINISTRATION
MANAGER

Enrico Pisino
CIM 4.0



Federica Rossetti
R&D PROJECT
MANAGER

Paolo Raschiatore
VISION DEVICE



Maria Onida
STELLANTIS



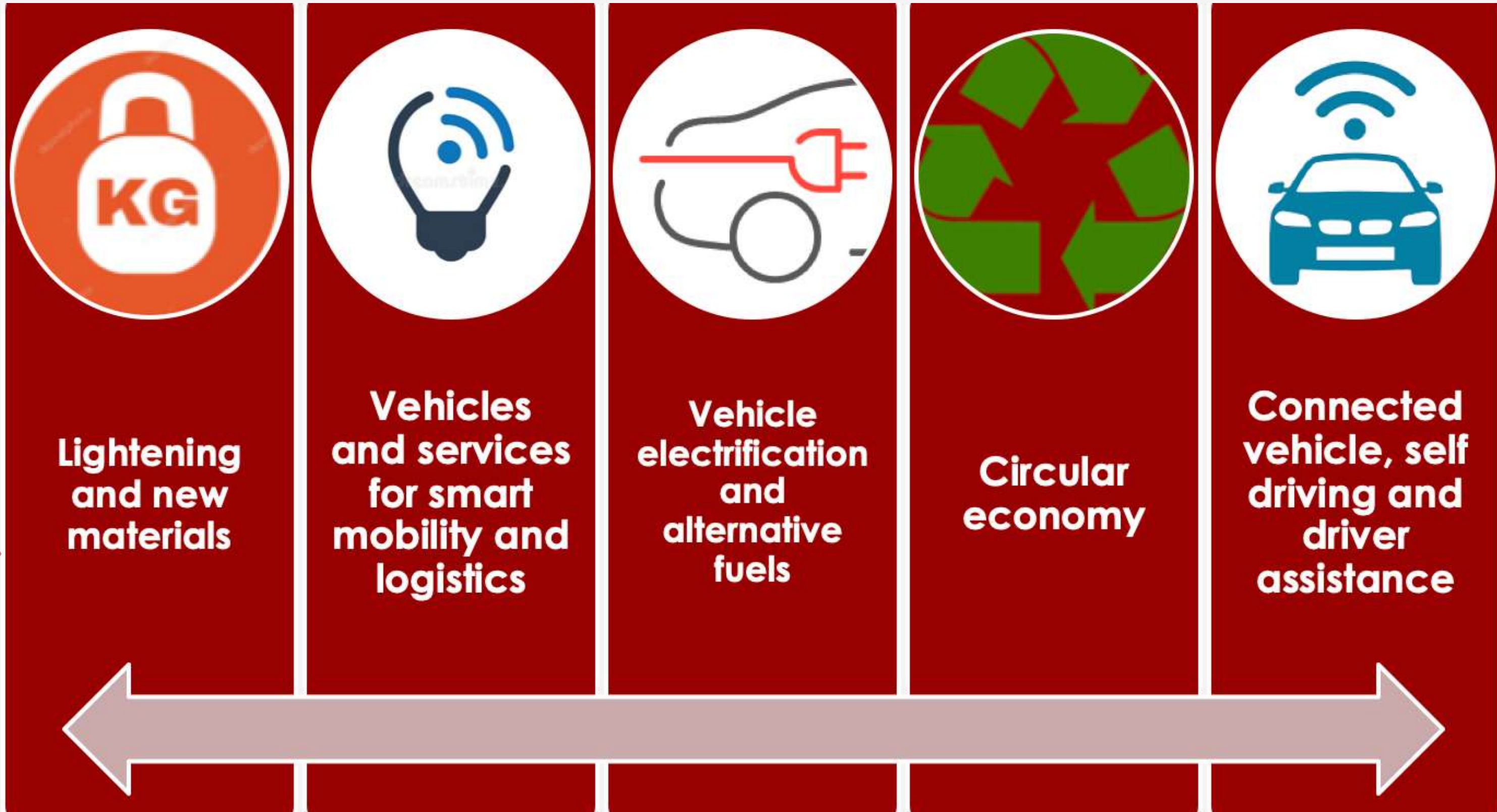
Daniela Di Cecco
COMMUNICATION
MANAGER

Marcello Vinciguerra
HONDA ITALIA INDUSTRIALE



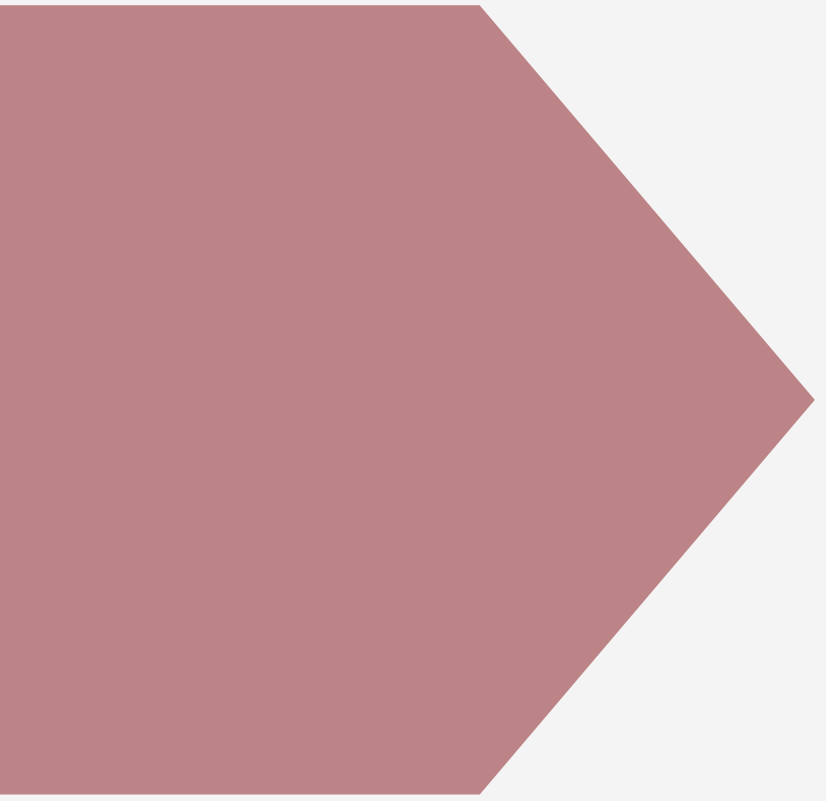
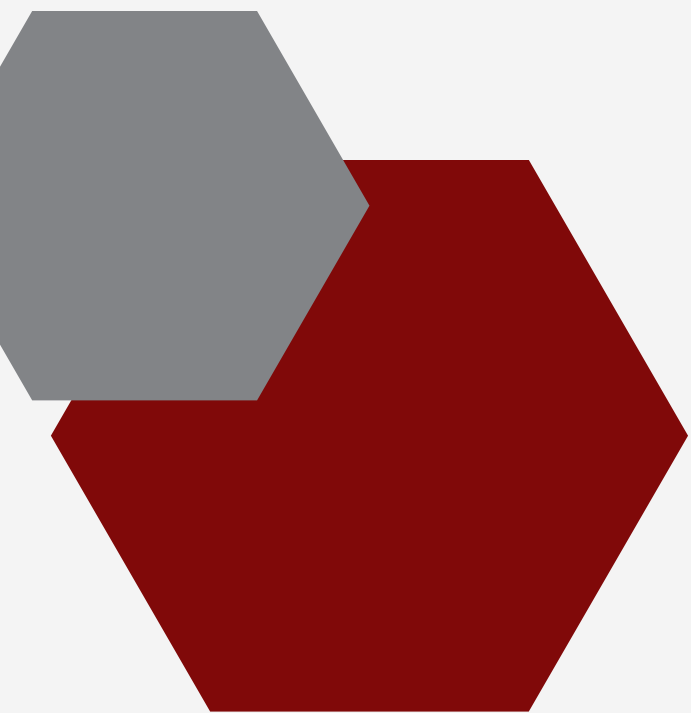
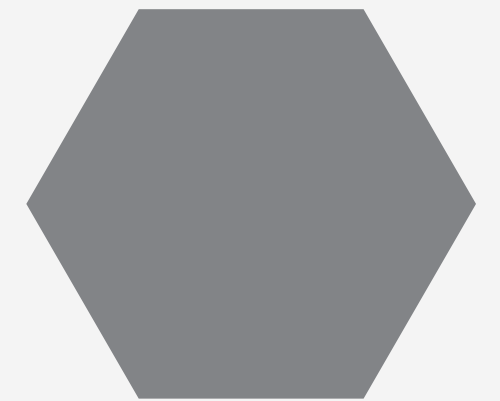
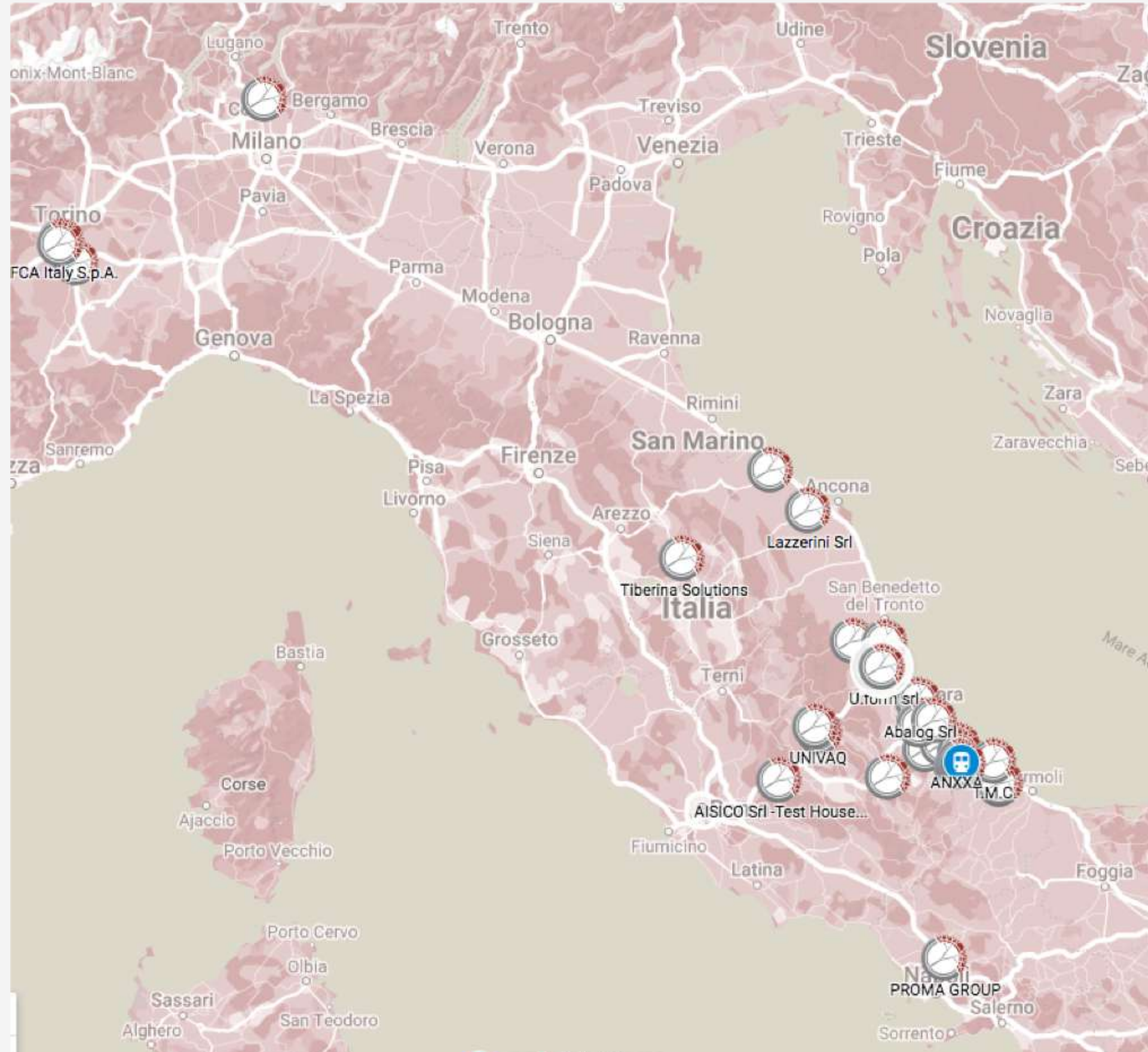


RESEARCH AND DEVELOPMENT AREAS 2022-27 (GREEN - SMART- INTERCONNECTED):

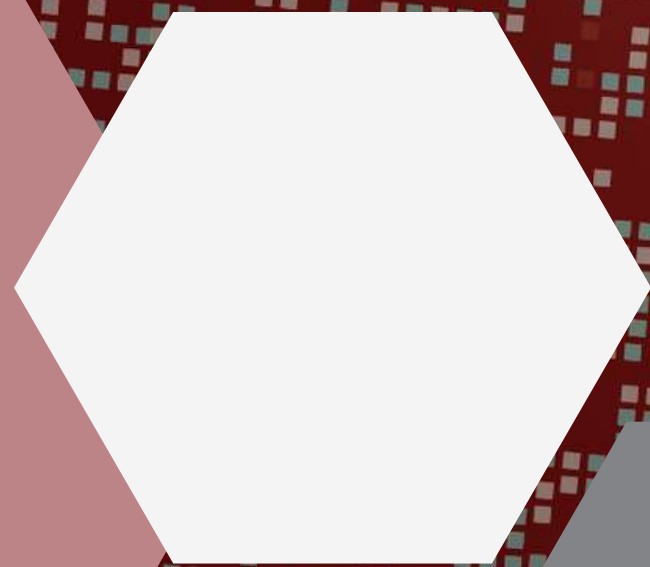


AUTOMOTIVE INNOVATION POLE

Partner geolocation - italy



INVESTMENT INCENTIVES





OPPORTUNITIES FOR PUBLIC FUNDING OF INVESTMENTS AND R&D

Regulatory references

Development Contract (special areas 107.3.C)

It is an agreement between the Ministry of Enterprises and Made in Italy (MIMIT), the Italian agency in charge of incentives, Invitalia, and one ("lead") or more ("other") companies implementing investments in manufacturing, environmental protection or energy efficiency projects.

- Incentives are available for companies implementing projects to:
- **set-up a new manufacturing plant (greenfield);**
- expand an existing one (expansion);
- diversify the existing production by developing new products (co-location);
- change the production process of an existing production unit (modernization).

The total minimum investment required is **€20 million**, excluding the infrastructure expenses.

Aid to large enterprises may be granted only for initial investment in a new economic activity in the area concerned; environmental protection (including energy efficiency) measures are eligible.

The contract can also be activated through the Programme Agreement, whose procedure can be used for investments that have a significant impact on the territory's competitiveness exceeding 50 million of investment

Incentives

Investment grants of up to 30% for small enterprises, 20% for medium-sized enterprises and **15% for large enterprises.**

Environmental investment grant of up to 45%.

Incentive for energy **efficiency investments of up to 35%.**

Incentive for **Research and development ranging from 25% to 50%** depending on the type of activity.



OPPORTUNITIES FOR PUBLIC FUNDING OF INVESTMENTS AND R&D


Regulatory references	Incentives
<p>Tax credit for investments (special areas 107.3.C and ZES) A tax credit was introduced for the years 2023 in favor of companies that purchase new capital goods for production facilities; In the ZES area, funding is also provided for the purchase or construction of structures</p>	<p>Maximum incentive of 30 per cent for small businesses (max. 3 million expenses), 20 per cent for medium businesses (max. 10 million expenses), and 15 per cent for large businesses (max. 15 million expenses)</p>
<p>Incentives for worker training to be defined according to specific needs</p>	
<p>Incentives for Research and development</p>	<p>Incentive for Research and development ranging from 25% to 50% depending on the type of activity.</p>



OPPORTUNITIES FOR SIMPLIFICATION SYSTEM IN ZES AREA

Administrative & logistic simplifications

- Reduced timeframe for obtaining benefits and permissions
- Strengthening of the infrastructure network
- Possibility of establishing duty-free zones



AUTOMOTIVE INNOVATION HUB: COLLABORATIONS

ITS ACADEMY



Two-years course with final Diploma

4 semesters (1800 hours)

About the 30% of the total hours amount spent into a company

50% of teacher coming from industrial world

Immediate assignment of each student to the reference company

PLACEMENT



+90%

within a year of high school diploma

COURSES

• 20 different professional courses activated

GRADUATES

**• 50/70 students graduated each year
• 2023: >100 students**



ITS ACADEMY

ACADEMY ACTIVITIES

(also in collaboration with GI)

Mixed structured training (even long-term) between professional skills and soft skills aimed at company personnel



DELIVERY MODE

In attendance

Remotely (e-learning platform)

Mixed mode

THE NATIONAL CLUSTER:

Means and systems for road and sea mobility



The Transportation 2020 Cluster has the main goal of creating a network between the different supply chains operating in the road, sea and rail transportation industry:

Guidelines and new systematic approaches focused on
The recovery of competitiveness of «Made in Italy» solutions

The Cluster will foster the strategies which aim at
enhance complementarities
facilitate solutions to common problems
expand the supply chain network following an intermodality approach

European strategic
vision and roadmap

MOVING PEOPLE AND GOODS IN A
ECO-FRIENDLY, ECONOMIC,
ERGONOMIC,
SAFE AND INTERCONNECTED WAY

COMPETENCE CENTER «CYBER 4.0»

The Automotive Innovation POLE (IAM) is among the members of Cyber 4.0



- The Cyber 4.0 Competence Center is dedicated to Cyber Security; was born within the University of Rome La Sapienza.
- It is one of the 8 Italian projects that have been recognized by the Ministry of Economic Development for what is one of the most qualifying objectives of the strategic activities of the Industry 4.0 Plan.
- It provides for an investment of around 15 million euros, 9 of which are dedicated to training and orientation activities; 37 private entities involved, together with all the universities of Lazio, leader of the La Sapienza project, and that of L'Aquila, but also to the CNR and INAIL; 150 professors, researchers and managers involved.

EDIH - EUROPEAN DIGITAL INNOVATION HUB

IAM is among the proponents of the "European Digital Innovation Hub Abruzzo and Molise - EDIH AMo"



- The Edih is made up of a team of 23 subjects.
- The challenge consists in facilitating the access for companies to the world of Industry 4.0 because it provides them, directly or through selected partners, services to introduce 4.0 technologies and develop digital transformation projects.

ECOSYSTEM OF INNOVATION "VITALITY"

- The Ministry of University and Research, as part of the National Recovery and Resilience Plan (PNRR), finances the creation of innovation ecosystems throughout the country. The innovation ecosystems are networks of universities, public research bodies (EPR), other highly qualified and internationally recognized public and private entities. Their activities are linked to higher education, applied research, innovation, on specific technological areas, defined on the basis of the specialization of the territory.
- The Automotive Innovation Pole joined the proposal. There are opportunities for automotive companies

CONTACTS WEB-SOCIAL COMMUNICATION

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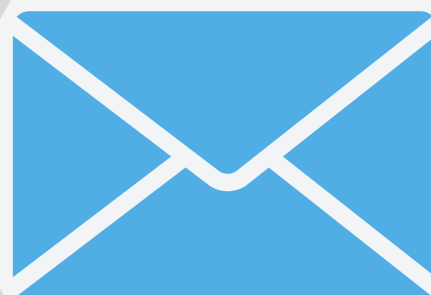
Polo Innovazione
Automotive



Polo Innovazione
Automotive



Polo Automotive



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