



AMET

*Your Engineering Partner*

Analisi virtuale e testing fisico per innovare  
nel settore dei trasporti

*Green mobility*

*21 February 2023*



# Overview

**AMET** is an innovative high-tech **engineering company**, active in mechanic and mechatronic products **design** and **testing**



## TORINO

Foundation AMET  
ITALY



## DETROIT

Subsidiary in  
USA

1999

2008

2013

2014



## KOSICE

Subsidiary in  
SLOVAKIA



## MODENA

Local Office in  
ITALY

# Markets



Automotive



Railways



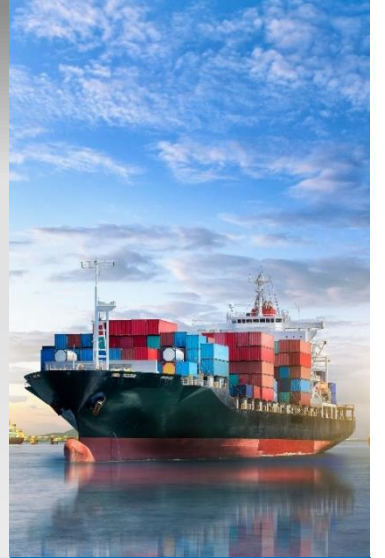
Aerospace



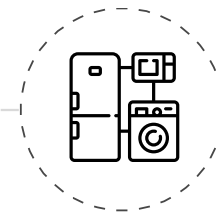
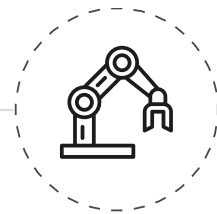
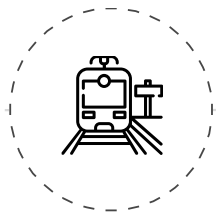
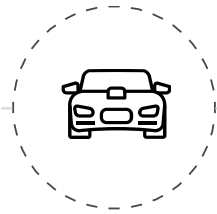
Robotics



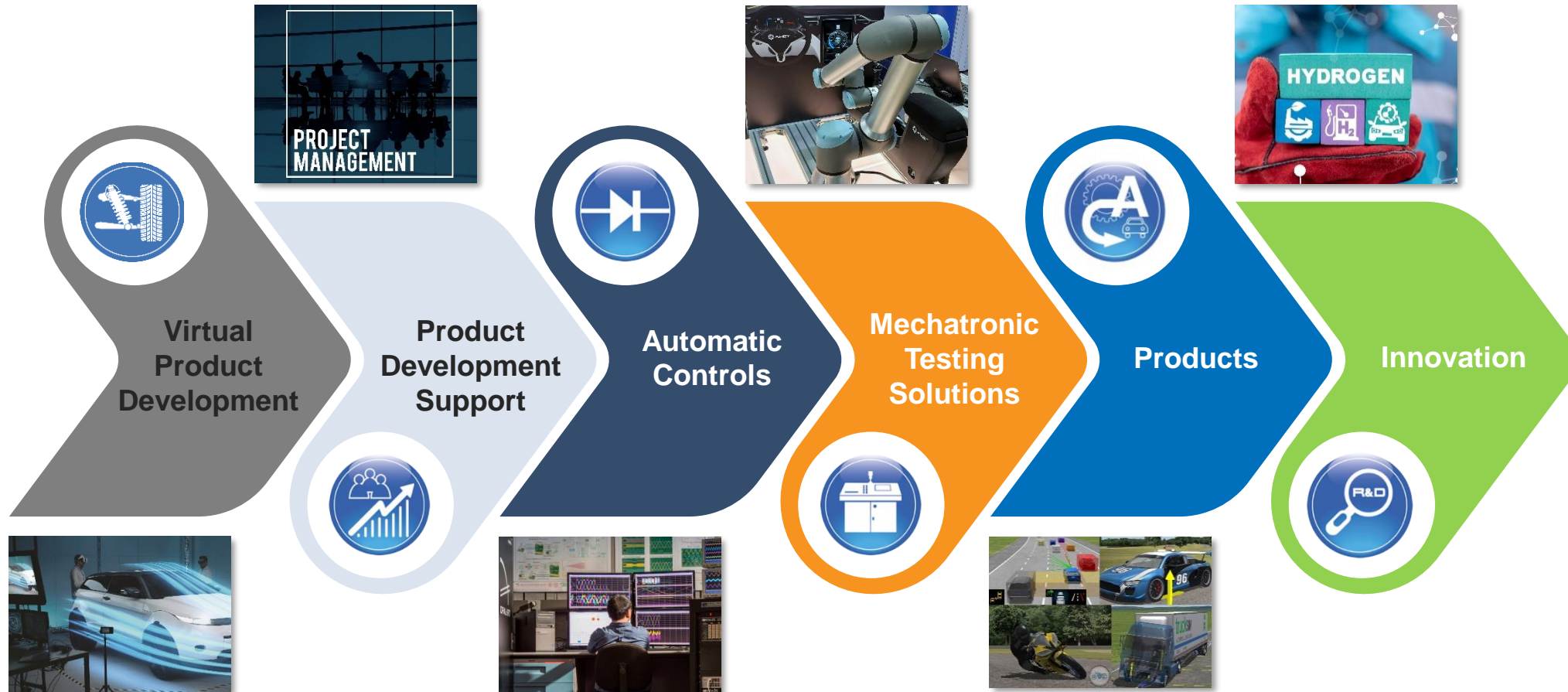
White Goods



Marine



# Competence Areas





# Products

Mechanical Simulation®   
Driving Simulation.

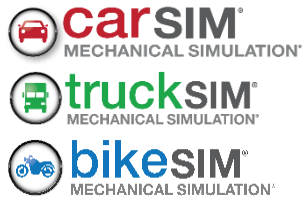
 **OPAL-RT**  
TECHNOLOGIES

**AVSIMULATION**

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**2002**

Software for Vehicle Dynamics & AD/ADAS development



**2003**

Real time simulation for rapid control prototyping and HIL



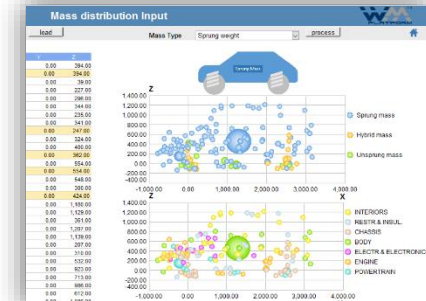
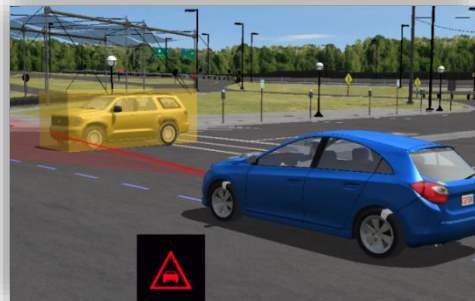
**2016**

Driving Simulation Platform for AD/ADAS  
Driver in the Loop

**SCANeR™studio**

**2017**

Performance Management Platform Life Cycle Assessment



# Innovation



AMET is involved in collaborative R&D activities at different levels:

- EU projects
- National projects
- Regional projects

AMET continuously collaborates with Universities and start up accelerators



AMET participates to two Piedmont innovation clusters and four Piedmont industrial clusters

Among our research interests:

- Sustainable and safe mobility
- Embedded systems

PMI Innovativa

registroimprese



# Funded Research Projects: EU & national technology clusters

FABRIC

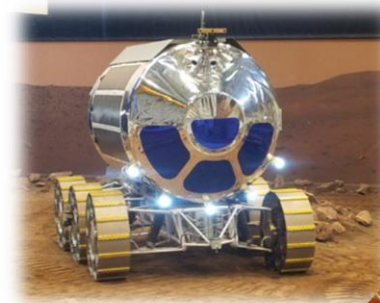


Electric/Hybrid vehicles



Industry 4.0

MOS-FC



SAPERRE

Space Advanced Project for Excellence in Research and Enterprise

SAFE & STRONG



Aerospace

Embedded Systems



Sustainable  
mobility



Smart  
Manufacturing  
Predictive  
Maintenance



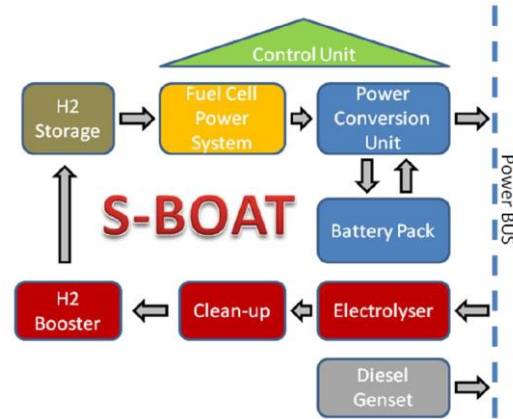


# Funded Research Projects: Regional Innovation Clusters of Piemonte



**HYSYVISION**

**H2FC**

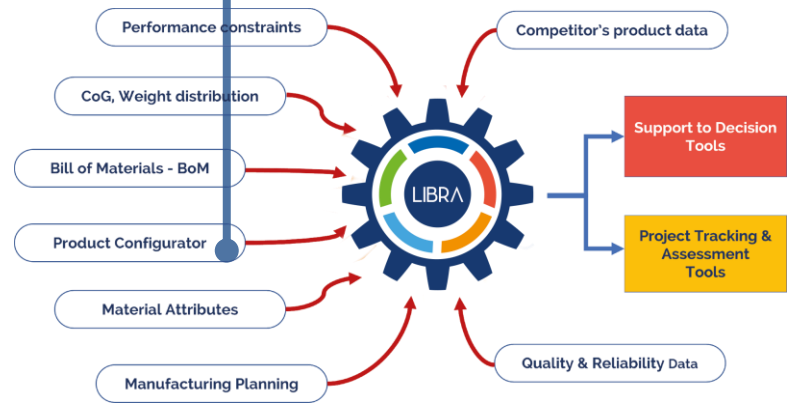
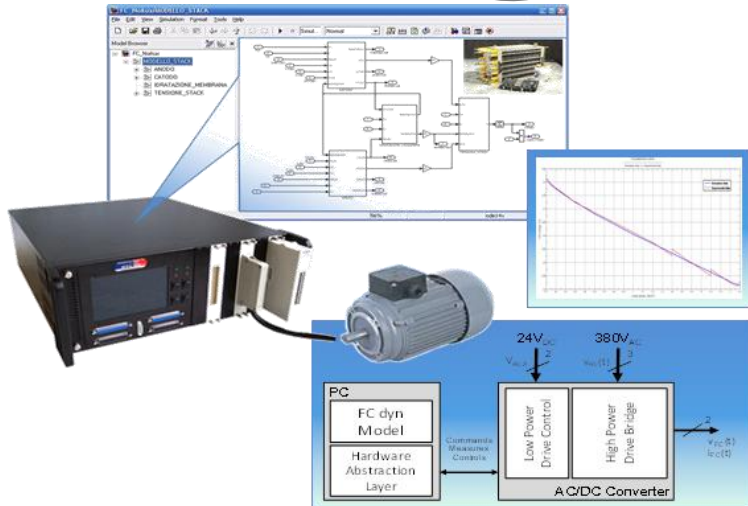


**Hydrogen**

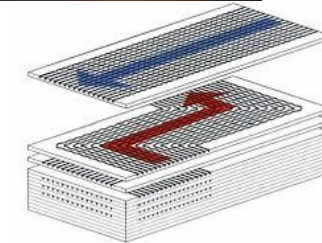
**Data Analysis**

**Energy Efficiency**

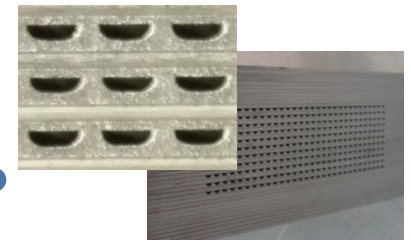
**Innovative Materials**



FC Real Time emulator



**Smart XL-PCHE**



Smart Manufacturing



# Topics of interest

## Simulations

- Vehicle Energy Consumption calculation
- Vehicle emissions calculation
- EM simulation for EMC/EMI

## Control Design

- Control logic design for energy management strategy, for FCEV (Fuel Cell Electric Vehicle) and vehicle with Hybrid Energy Storage Systems (HESS)
- Real Time simulations and control logic
- Energy efficiency in ADAS: control strategy in car-following scenario

## Mechatronic Testing Solutions

- Test benches design for electric vehicles and related energy storage systems
- Test benches from HIL to XIL



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Thank you for your attention