



**R&D institute, future mobilities  
towards energy transition.**



# VEDECOM : A SUSTAINABLE MOBILITIES COLLABORATIVE HUB



**90 employees**

**Researchers  
Engineers  
PhD Students  
Technicians**

**24 R&D projects**  
Including 9  
France2030 and 12  
European projects

**14  
Technological  
platforms**

**15 M€**  
Annual budget

# A PUBLIC PRIVATE RESEARCH HUB



**Public private partnership foundation**  
From Versailles Saint-Quentin-en-Yvelines (UVSQ) – Paris-Saclay University



Labelled **Institute for Energy Transition (ITE)** in 2014  
Member of **FIT – French Institutes of Technology** association which includes 15 institutes : 7 ITE (energy transition) et 8 IRT (technological research)



Set and supported within the **France 2030 framework**  
Evaluated by the National Research Agency (ANR)



Supports



Assists



Coordinates shared mobility roadmap



# At the center of a public / private ecosystem

## Companies

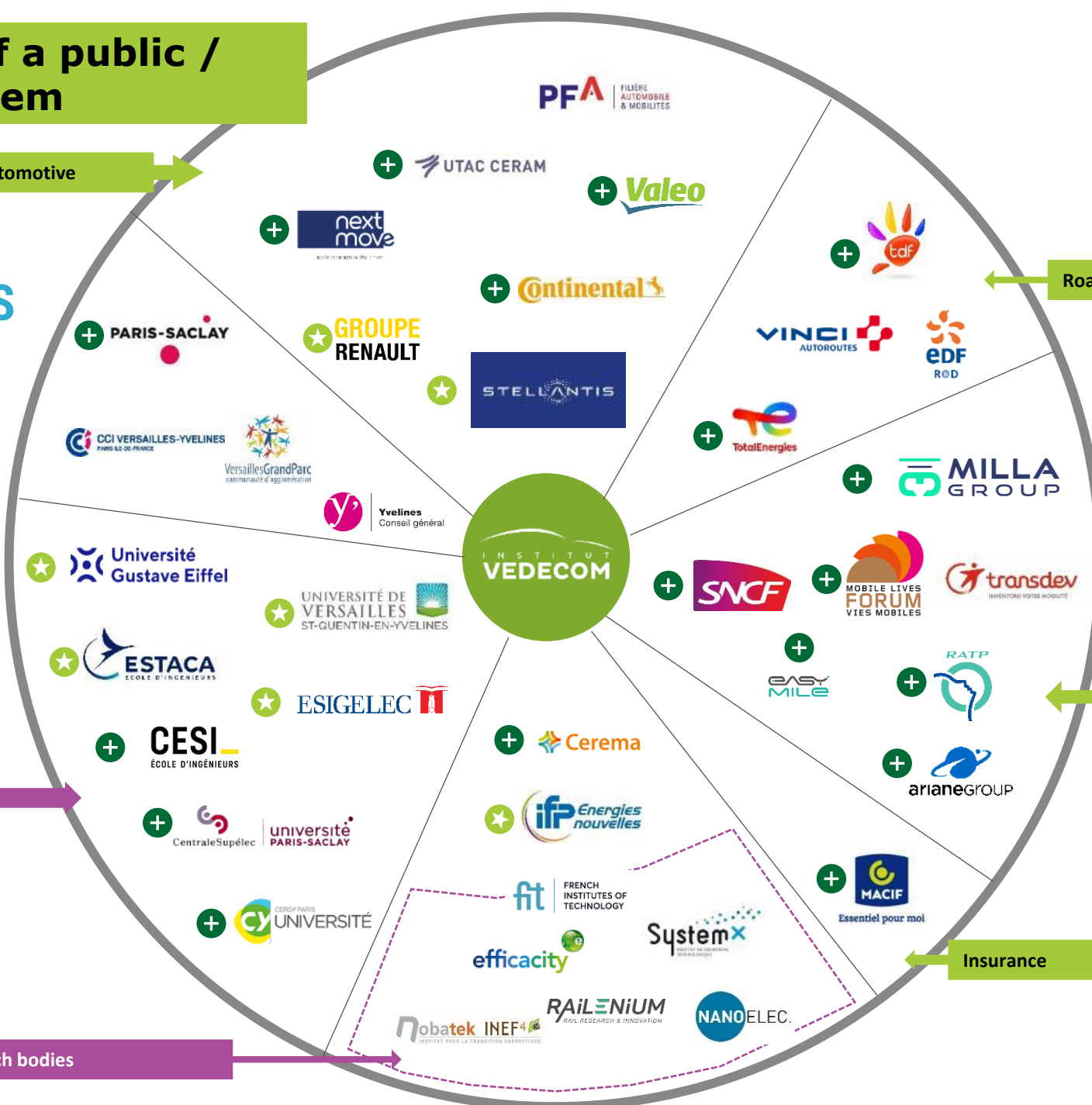
## TERRITORIES

- 25 members\***
- ★ 7 founding members
  - + Donating or associate members

## ACADEMICS

Universities and schools

Research bodies



## SUPPORT



# AN INTERDISCIPLINARY VISION AND STRUCTURE



DOMAINS



D1

ELECTRIFICATION



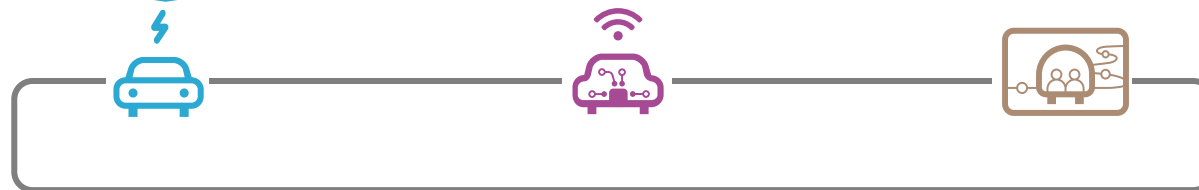
D2

AUTOMATED AND CONNECTED VEHICLES



D3

NEW SHARED AND ENERGY MOBILITY SOLUTIONS



ACTIVITIES

**Training programs**

**R&D & INNOVATION**  
Technological developments, collaborative projects and experimentations

**B2B**





● **New mobilities technico-economic analysis (LCA, CBA, optimization,...)**

● **New mobilities human factors**



● **Embedded and remote perception**

● **Driving assistance system validation (ADAS)**

● **Vehicle and environment connectivity**



● **EV charging systems and technologies**

● **Electrical Storage Systems**

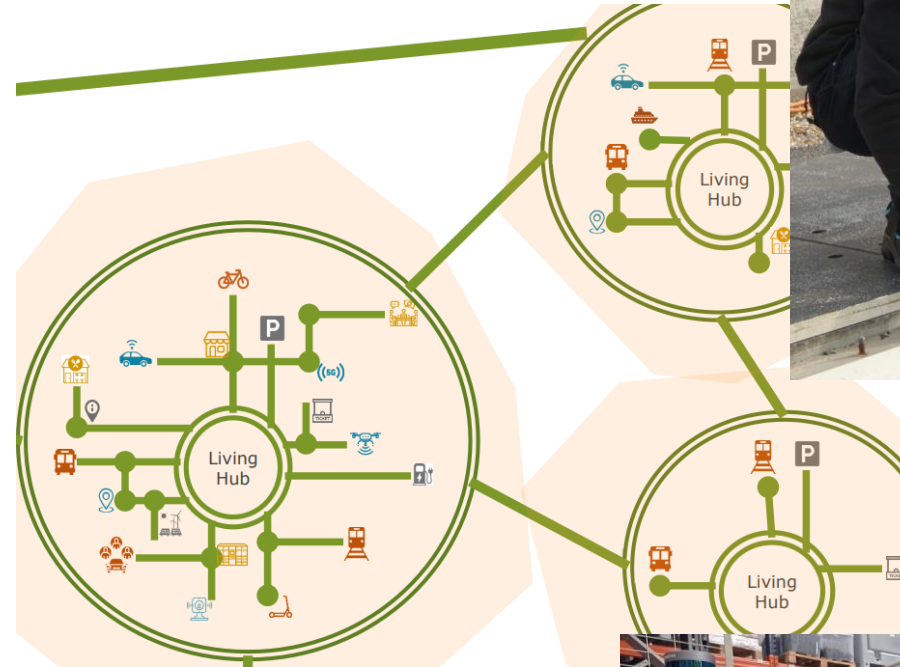
● **Energy efficiency**

## Current R&D topics within domains

## FOCUS ON LOGISTIC ACTIVITIES : OBJECTIVES

Accelerate energy transition through technical enablers and new services implementation and evaluation

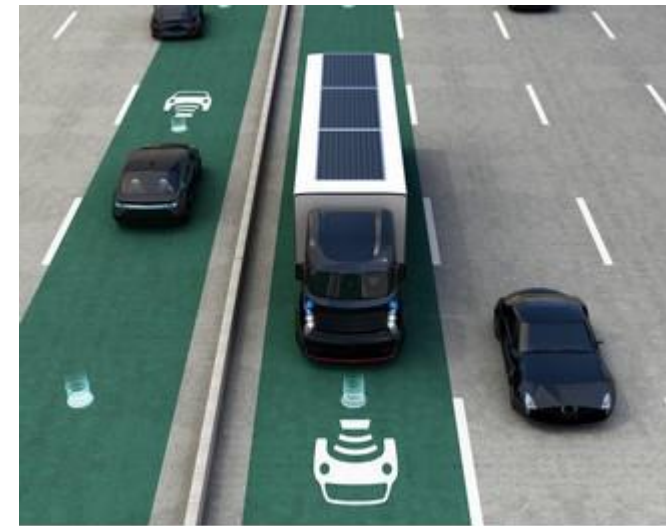
- Charging services and technologies
- Integrating logistics in mobility hubs
- Evaluation of automated logistic (delivery bots, automated delivery)



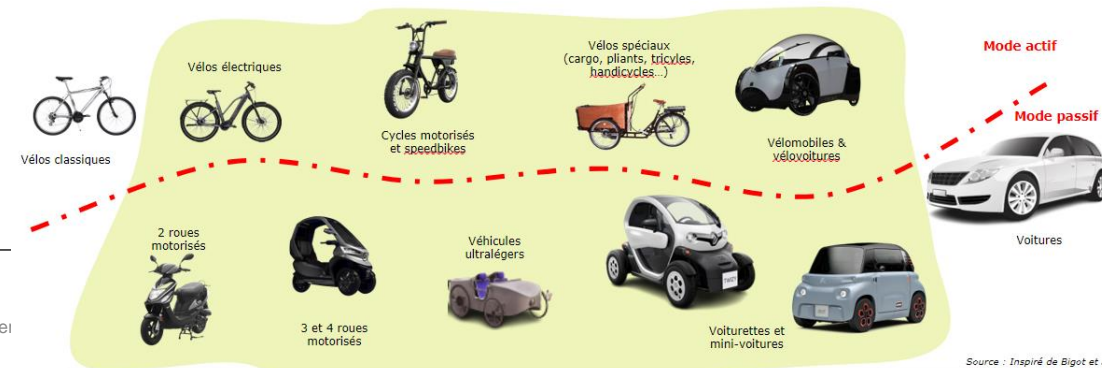
# FOCUS ON LOGISTIC ACTIVITIES : PERSPECTIVES

Broadening the scope from passenger cars to other vehicles :

- Implementation, test and deployment of charging solutions
- Megawatt charging : efficiency improvement
- ERS : high power dynamic inductive charging (towards 250kW)
- Micrologistics (intermediate vehicles as cargo bikes): barriers, incentives, evaluation



shutterstock.com · 404514907





# A SET OF PLATFORMS AND EXPERIMENTAL MEANS FOR APPLIED RESEARCH

Test tracks

Hall A  
1500 m2 of workshops and laboratories

A short loop

Experimentation

Idea

Simulation

Modelling

Prototyping

Design

mobiLAB

Workshops, labs and offices  
7100 m2

- VEDECOM : 5300 m2
- TRANSDEV Autonomous Transport Systems
- Gustave Eiffel University
- Nexter Robotics



# VEDECOM PLATFORMS



Interdisciplinary workshop



Virtual reality lab



Test track  
Urban area & highway



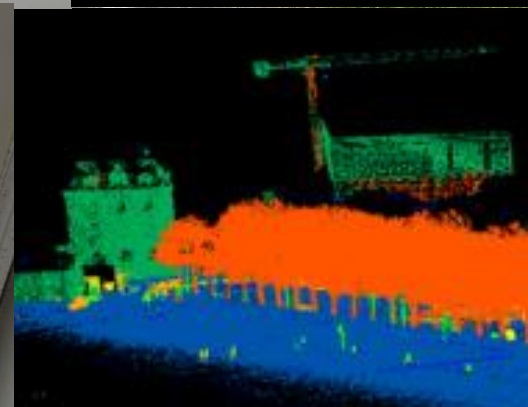
Power electronics lab and  
reliability



Induction charging tracks



Connectivity lab &  
Supervision



Digitalized test road