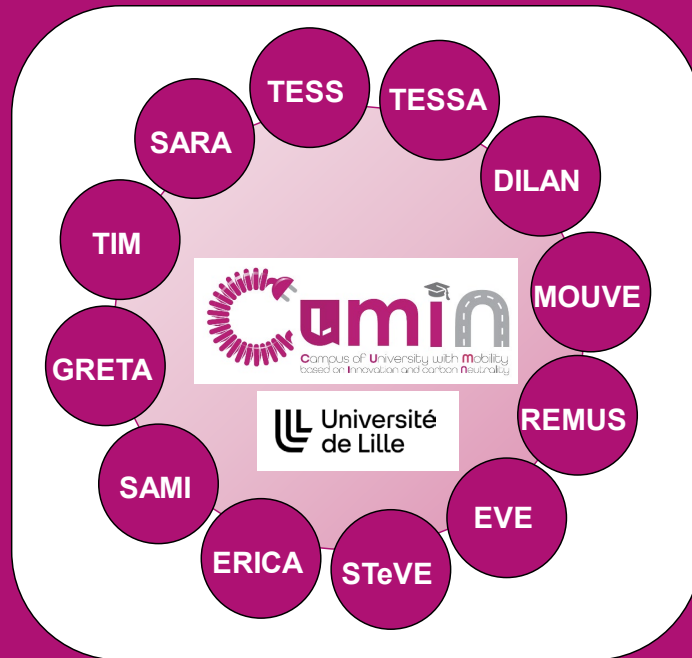




CUMIN – SARA & CHARLIE

<https://cumin.univ-lille.fr/>



## E-mobility in France, case of living lab

Eugénie MASCLEF,  
Alain BOUSCAYROL,  
Elodie CASTEX

# Outline

-  **E-mobility in France: an overview**
-  **The Living Lab approach to studying e-mobility**
-  **The Living Lab in practice: research methodology and key findings**
-  **Conclusion**



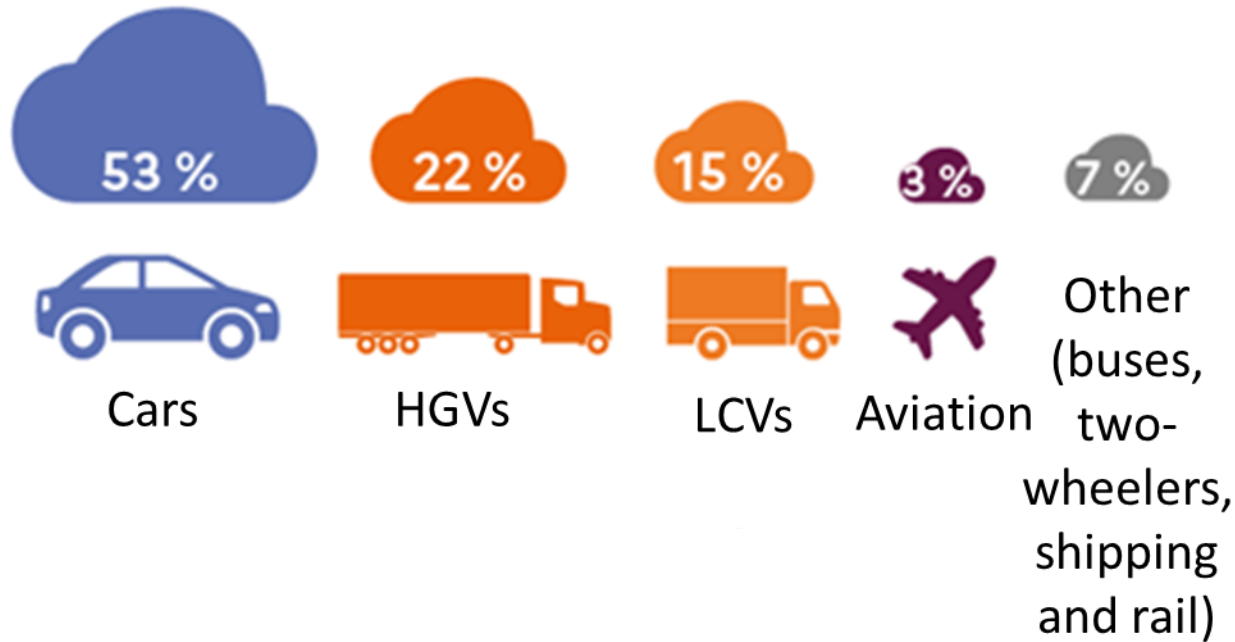
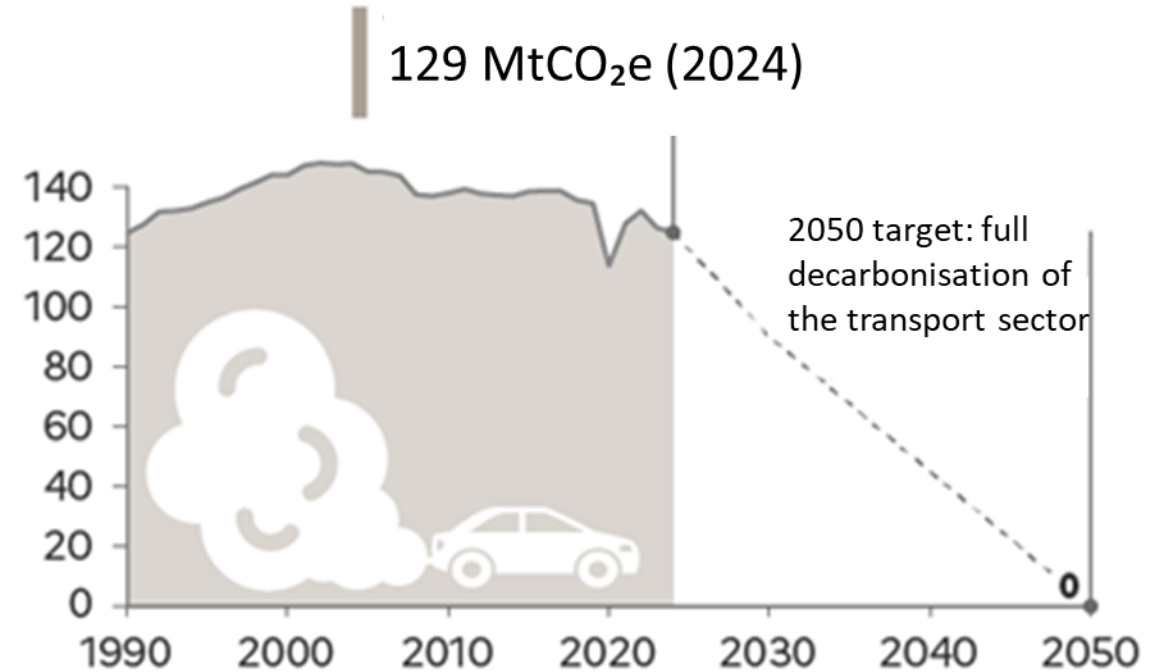
<https://cumin.univ-lille.fr/>

## E-mobility in France: an overview

# 1. E-mobility in France: an overview

In 2024, 34% of France's greenhouse gas emissions came from the transport sector

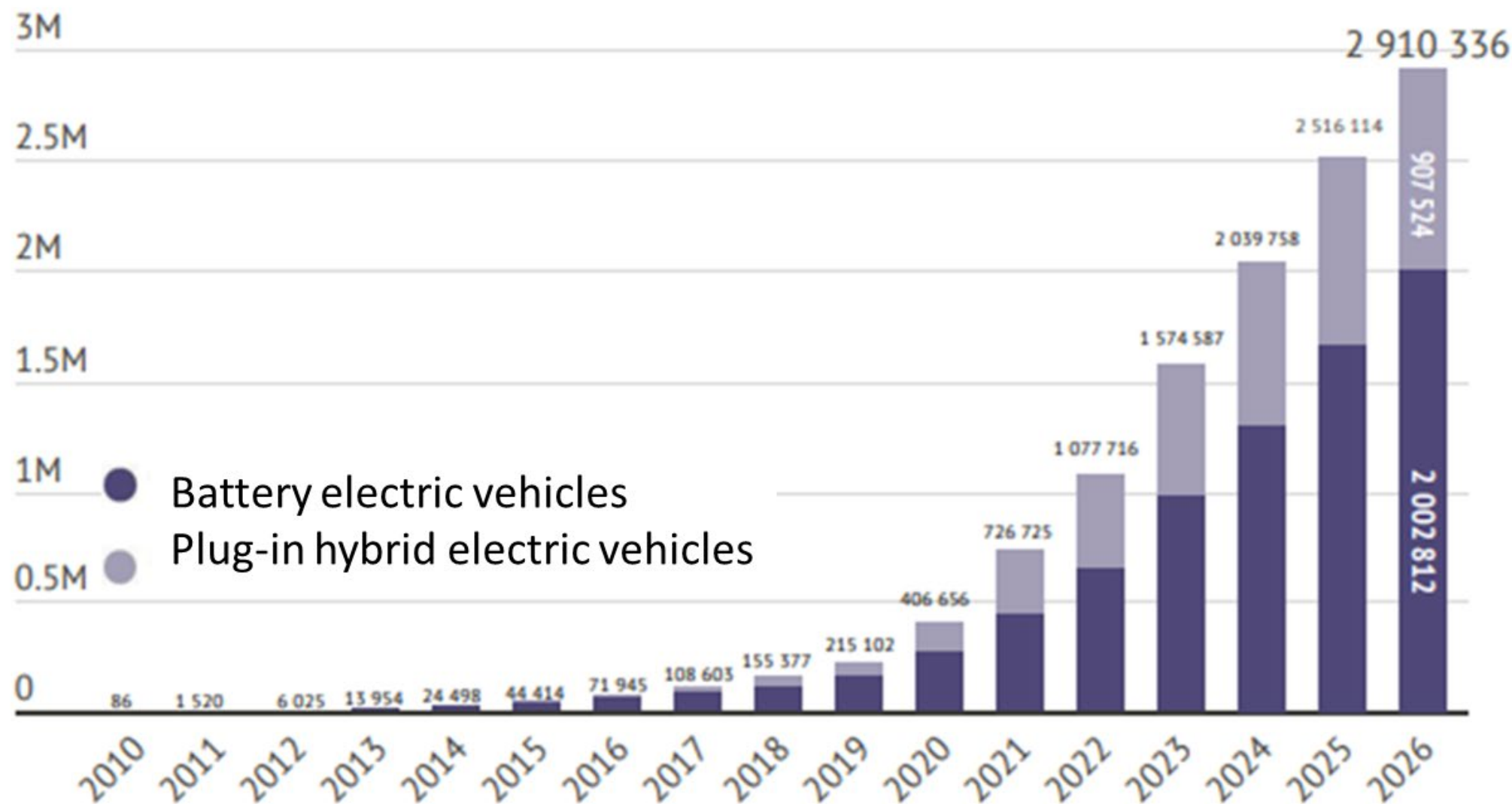
Domestic transport greenhouse gas emissions



Source : SDES, 2026

# 1. E-mobility in France: an overview

Evolution of the French passenger car fleet since January 2010



# 1. E-mobility in France: an overview

France's National Low-Carbon Strategy (SNBC : Stratégie Nationale Bas Carbone)

➤ National climate objective: carbon neutrality in 2050



1. Cleaner energy

*Decarbonising vehicle energy*



2. Vehicle efficiency

*Reducing energy consumption*



3. Travel demand

*Managing mobility needs*



4. Modal shift

*Public transport, walking, cycling*

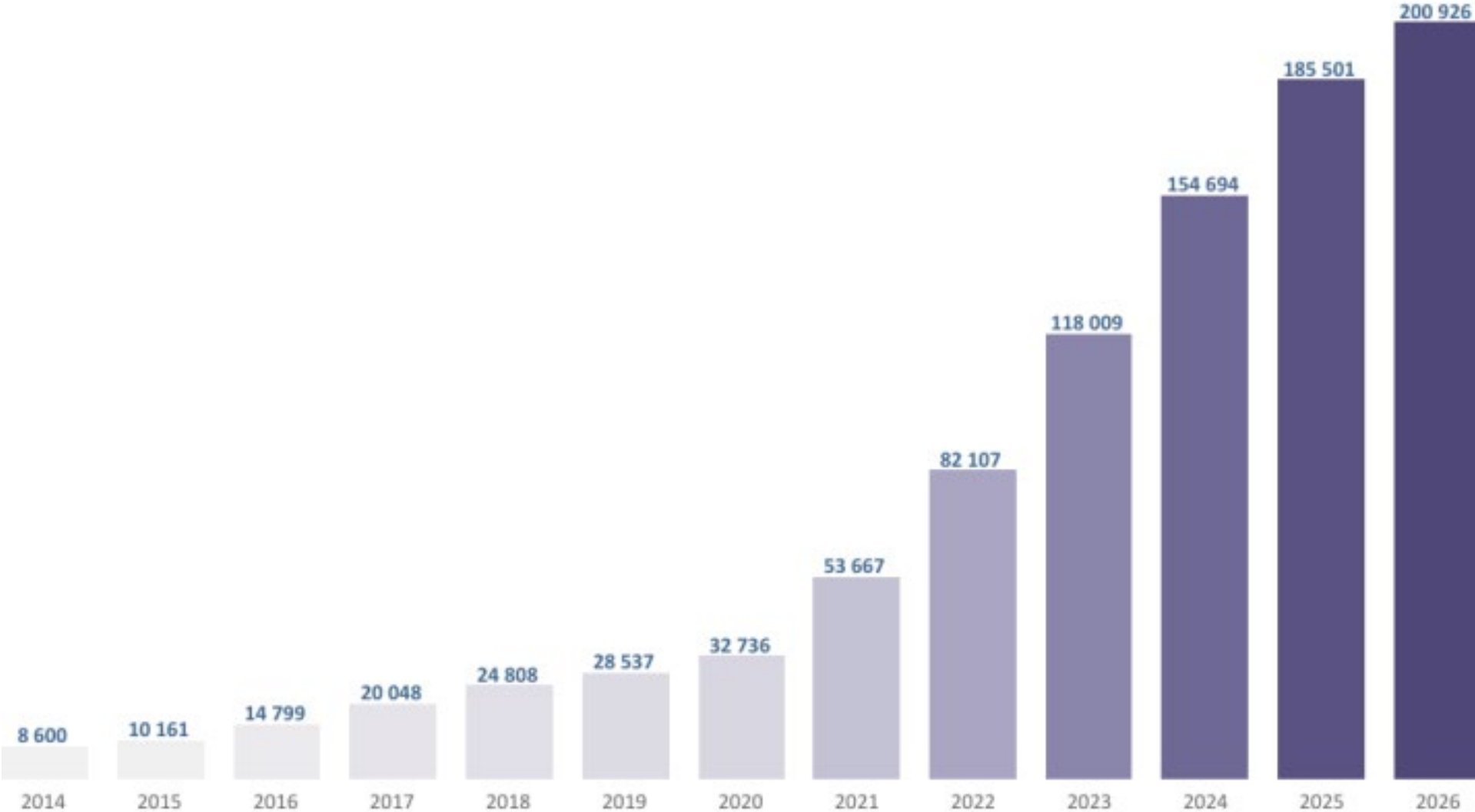


5. Better vehicle use

*Optimising passenger and freight transport*

# 1. E-mobility in France: an overview

Annual growth in the number of publicly accessible charging points





<https://cumin.univ-lille.fr/>

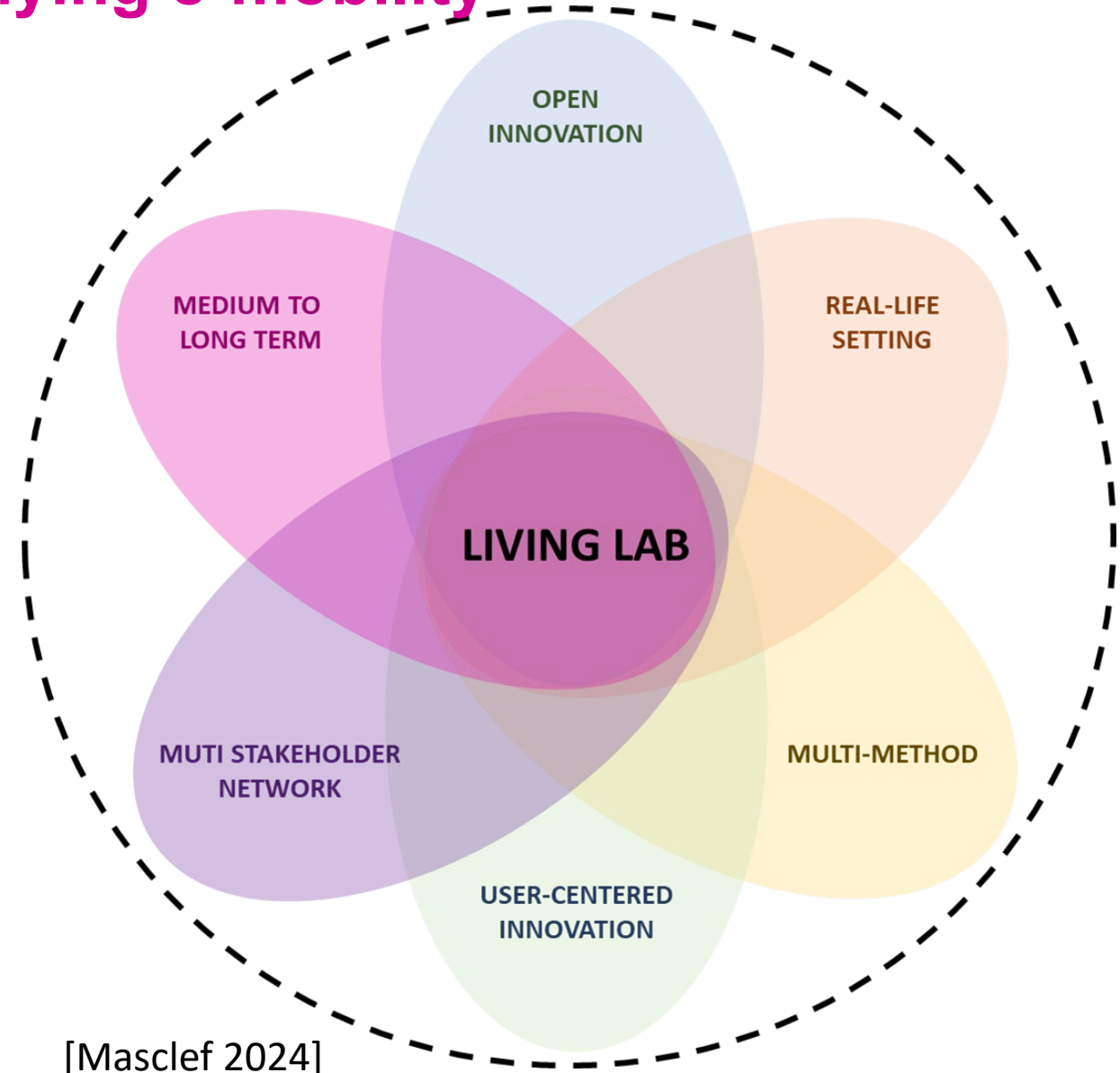
## The Living Lab approach to studying e-mobility

## 2. The Living Lab approach to studying e-mobility

Different forms of the Living Lab:

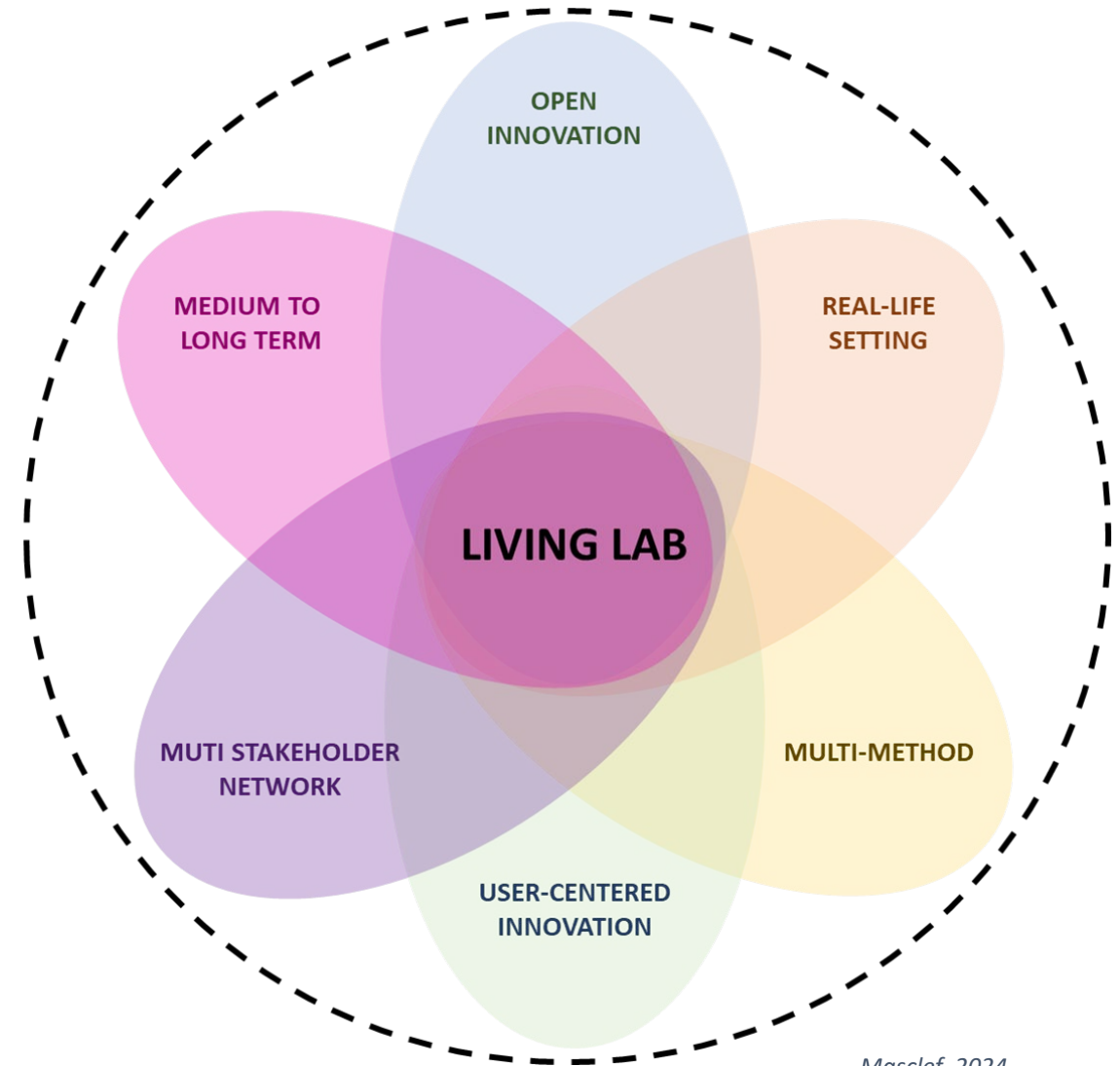
- an environment
- a methodology
- and an approach

The European vision of the Living Lab: an open innovation network



[Masclef 2024]

## 2. The Living Lab approach to studying e-mobility



Masclef, 2024



<https://cumin.univ-lille.fr/>

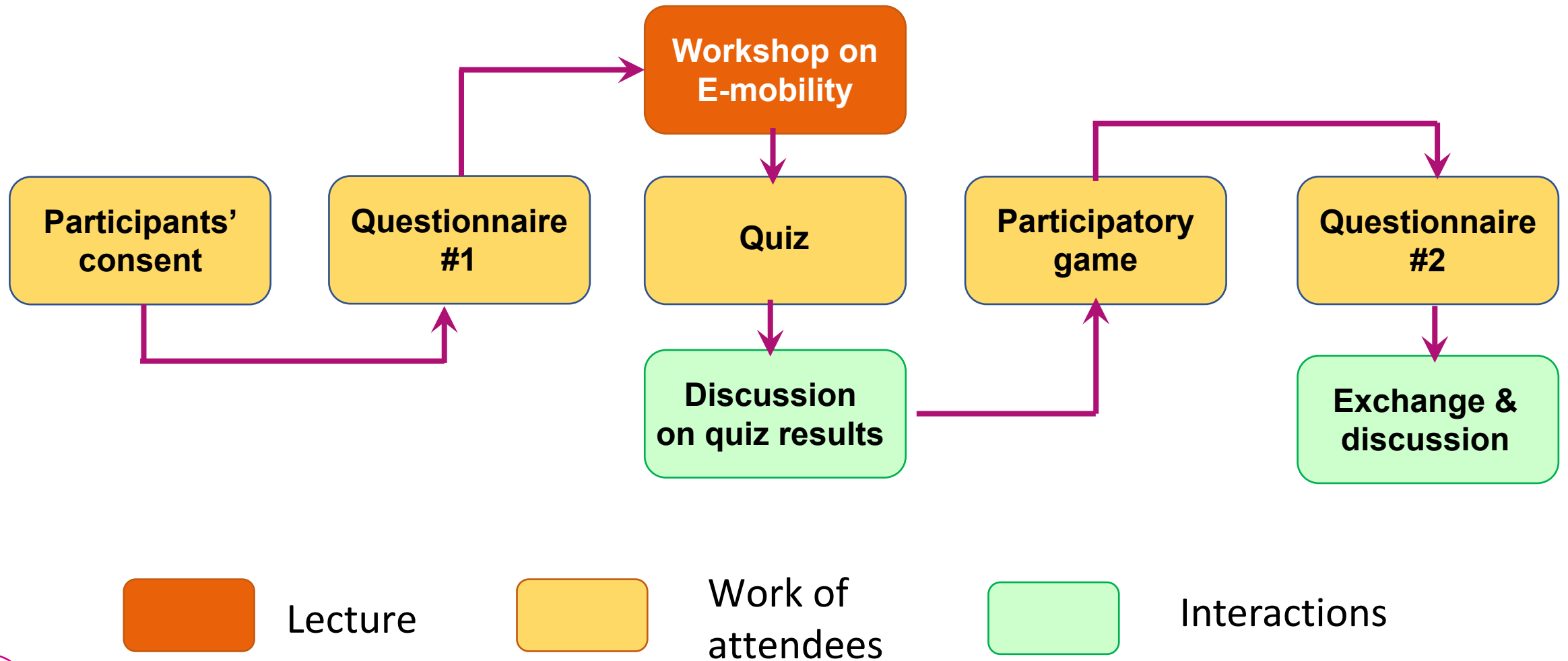
## The Living Lab in practice: research methodology and key findings

### 3. The Living Lab in practice: research methodology and key findings

- Social acceptability is a collective and evolving process, in which stakeholders assess, discuss, and define the minimum conditions for integrating a project (Masclef, 2025)
- Social acceptability is difficult to measure (Baba & Raufflet, 2018; Batellier & Maillé, 2017; Fleury-Larouche & Jean, 2017)
  - This calls for an innovative methodology

### 3. The Living Lab in practice: research methodology and key findings

Living Lab workshops, designed for both in-person and online formats, structured in 8 steps:



### 3. The Living Lab in practice: research methodology and key findings

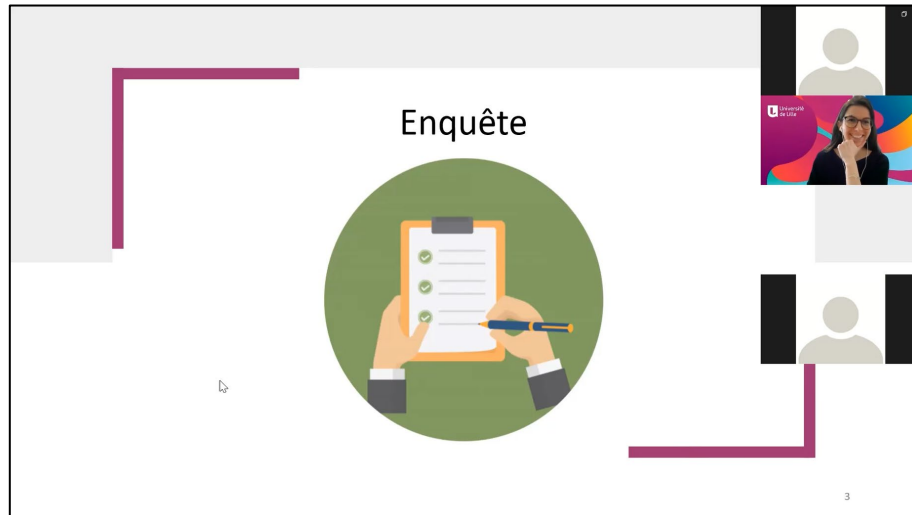
Four workshops were conducted:

- Two in-person
- Two online

Duration of each workshop: 2h30

Participants: 79 students

Administration of the second questionnaire online



Masclef, 2021

Photo of the setup during the in-person workshop  
on February 13th, 2024



Masclef, 2024

### 3. The Living Lab in practice: research methodology and key findings

#### Tested scenario:

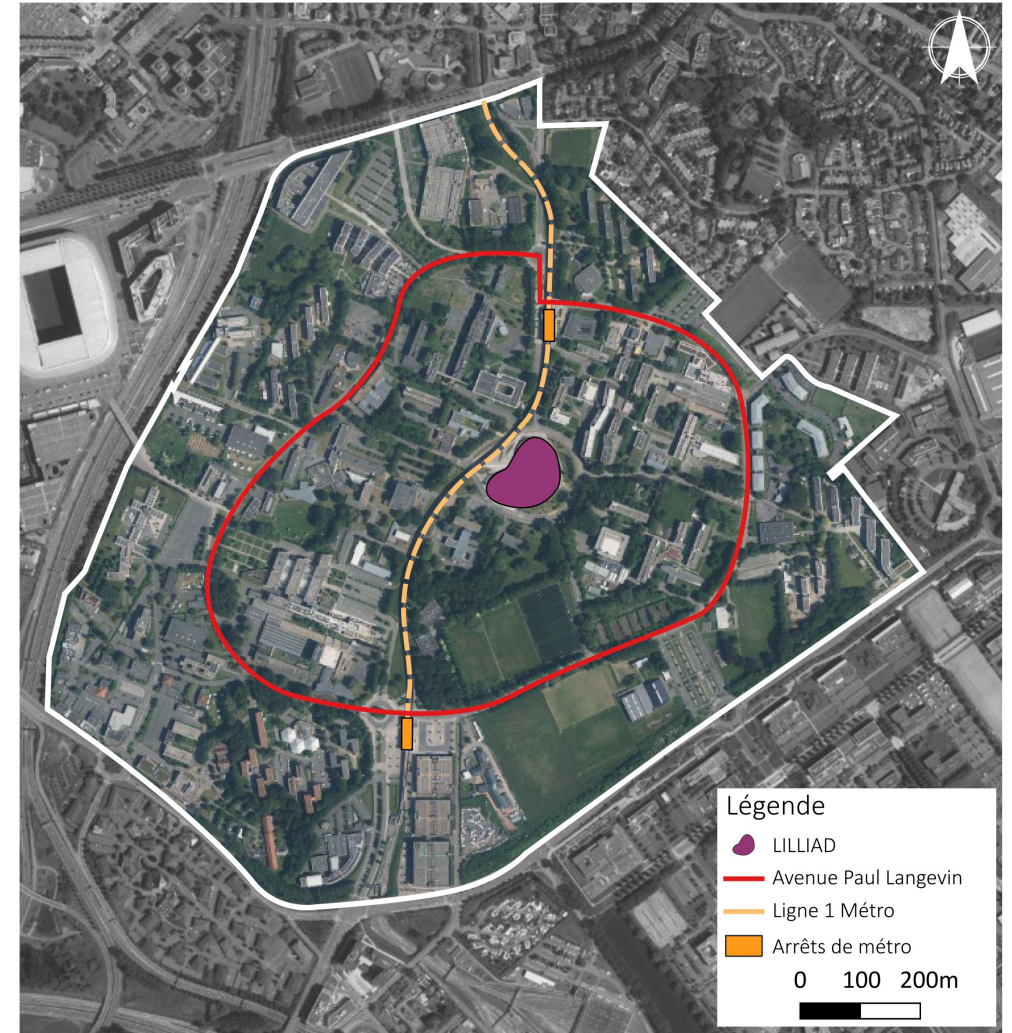
Closure of the Cité Scientifique campus to thermal vehicles, making the campus accessible only to electric vehicles

Barrier restricting access to Jean Perrin Avenue



Masclef, 2024

Cité Scientifique campus

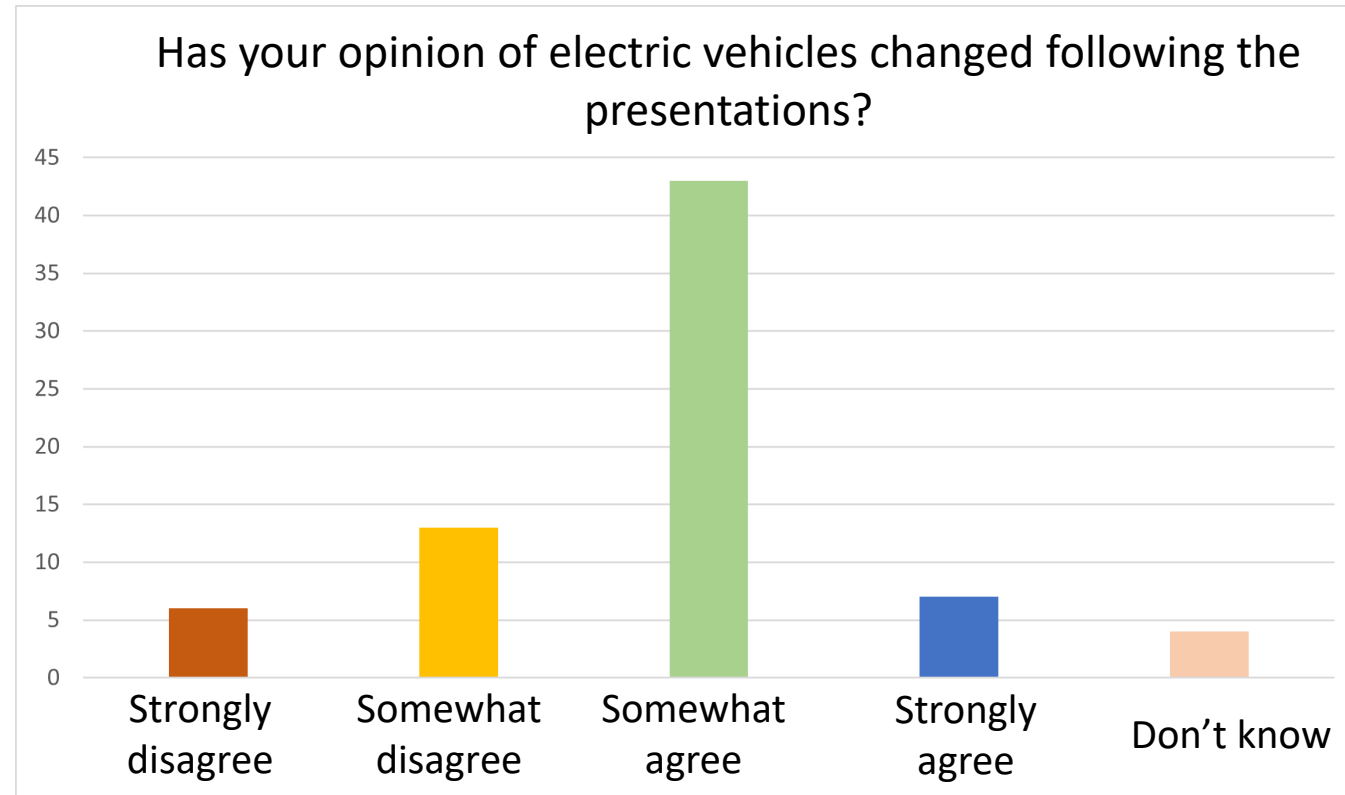


Réalisation : Masclef, 2025. Source : Photographie aérienne de 2023 disponible sur Géoportail, Direction de la Stratégie, de la Programmation Immobilière et de la Maîtrise d'Ouvrage, 2024

### 3. The Living Lab in practice: research methodology and key findings

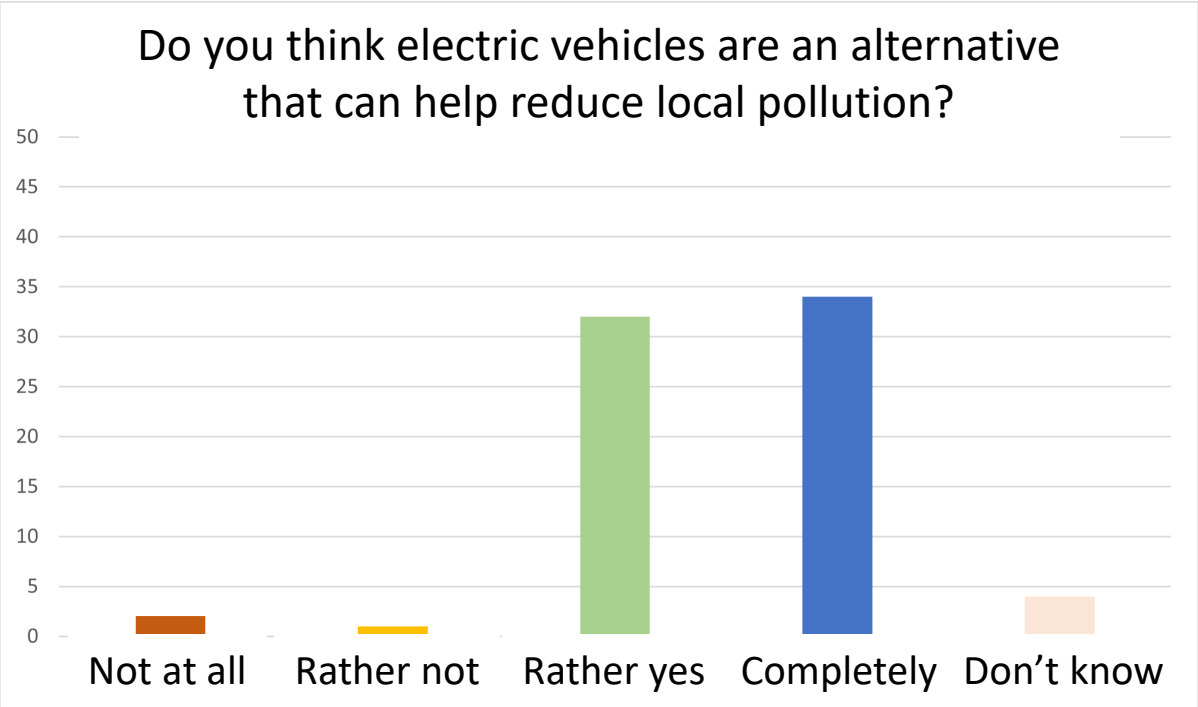
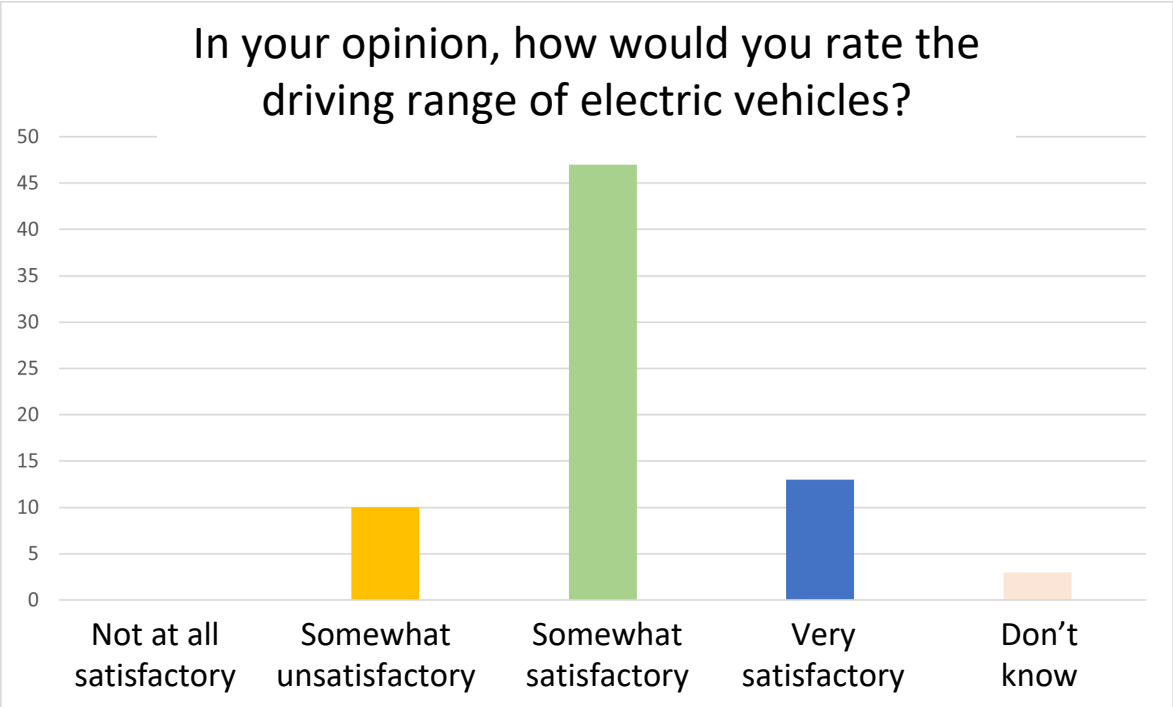
**Questionnaire #1 (beginning) and #2 (end) → assessment of the workshop impact**

*“I learned a lot about electric vehicles, especially through the explanations addressing common misconceptions, which helped me better understand how they work” – student quote*

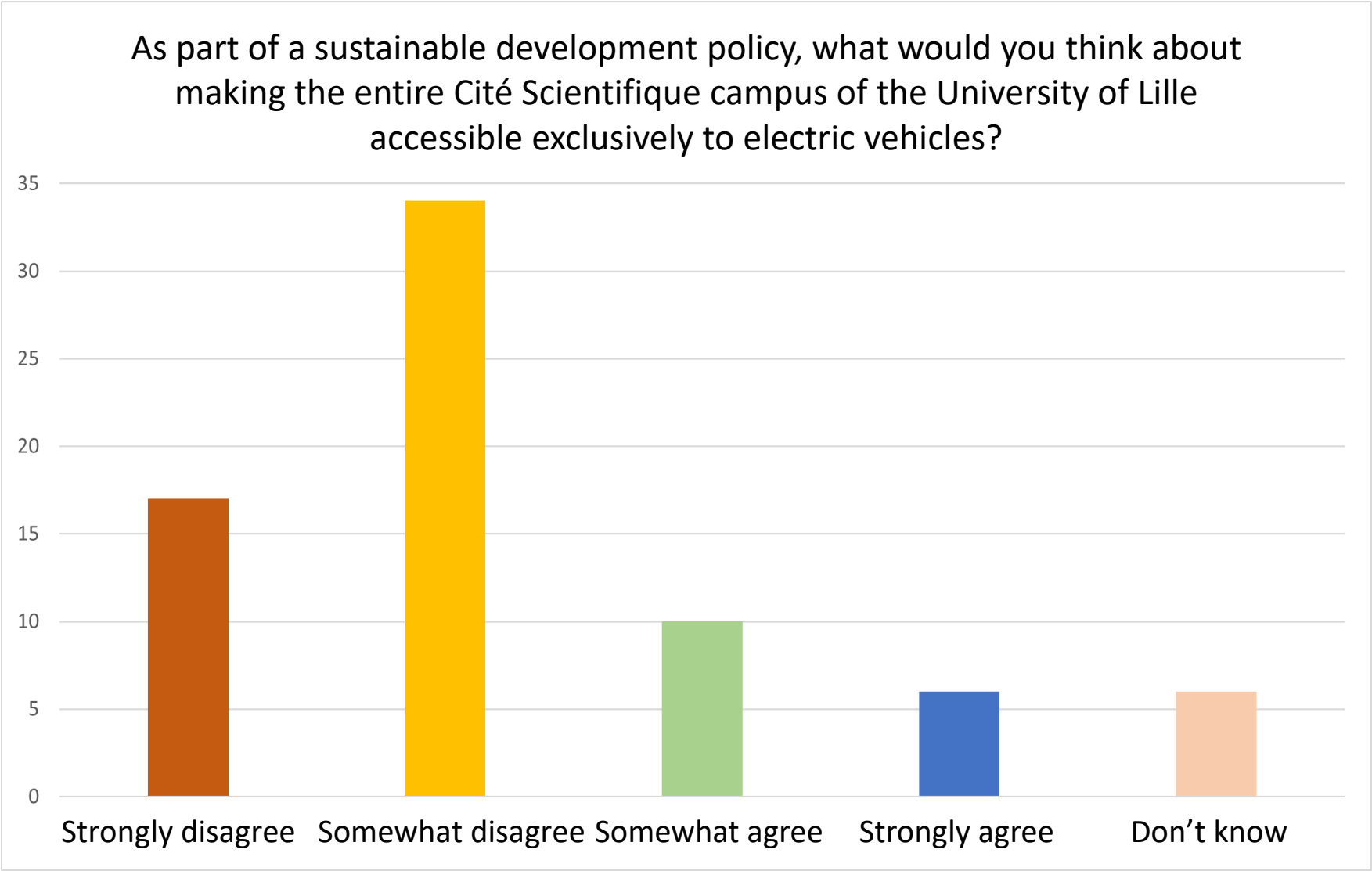


Masclef, 2025

### 3. The Living Lab in practice: research methodology and key findings



### 3. The Living Lab in practice: research methodology and key findings



### 3. The Living Lab in practice: research methodology and key findings

*“The surveys and the game make the consultation participatory, fun and dynamic. Participants stay active from the very first minute to the very last.” – student quote*

*“The highly interactive and participatory nature of the consultation makes it fun, engaging and far from boring. The consultation was organised in such a way that everyone had to contribute an idea, through fun activities or anonymous questionnaires. All the methods used made the session feel shorter and made it very informative [...]” – student quote*

*“The consultation helped me learn new things about electric vehicles. I also discovered an engaging and fun approach to consultation and research.” – student quote*

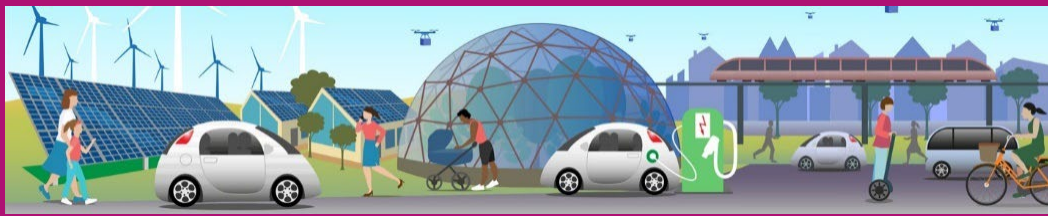


<https://cumin.univ-lille.fr/>

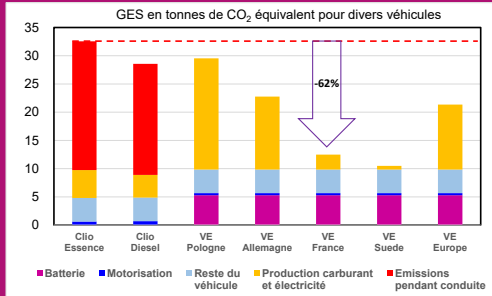
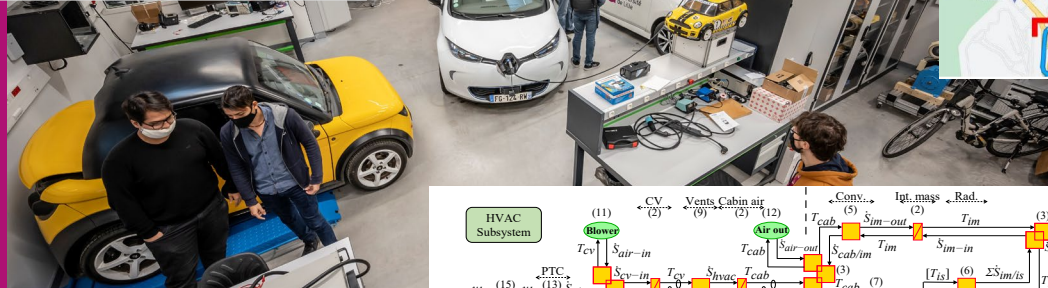
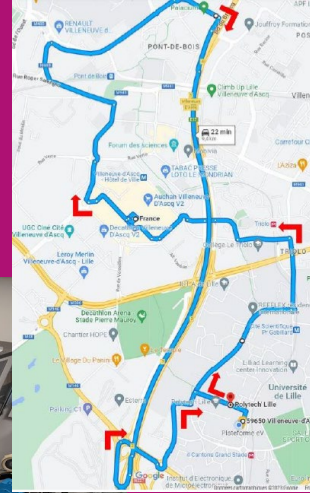
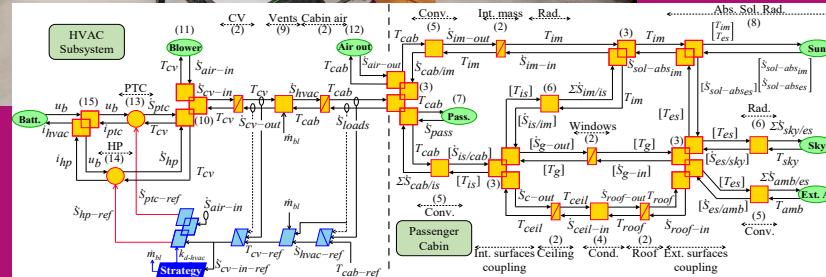
## Conclusion

# Conclusion

- **E-mobility in France:** a growing transition, with ongoing social and territorial challenges
- **The Living Lab approach:** a way to study the complex e-mobility system by combining different perspectives and involving users
- **The workshops:** testing the Living Lab approach to study the social acceptability of an e-mobility development project



<https://cumin.univ-lille.fr/>



Our university as  
an exciting living lab  
towards eco-cities  
through an innovative  
transdisciplinary  
framework !

