



# CUMIN - SARA

## Assessing the social acceptance of electric vehicles on a campus of university

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# Outline



**Introducing the research context**



**Addressing the methodology employed**



**Sharing some of our results so far**



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

# 1. Introduction

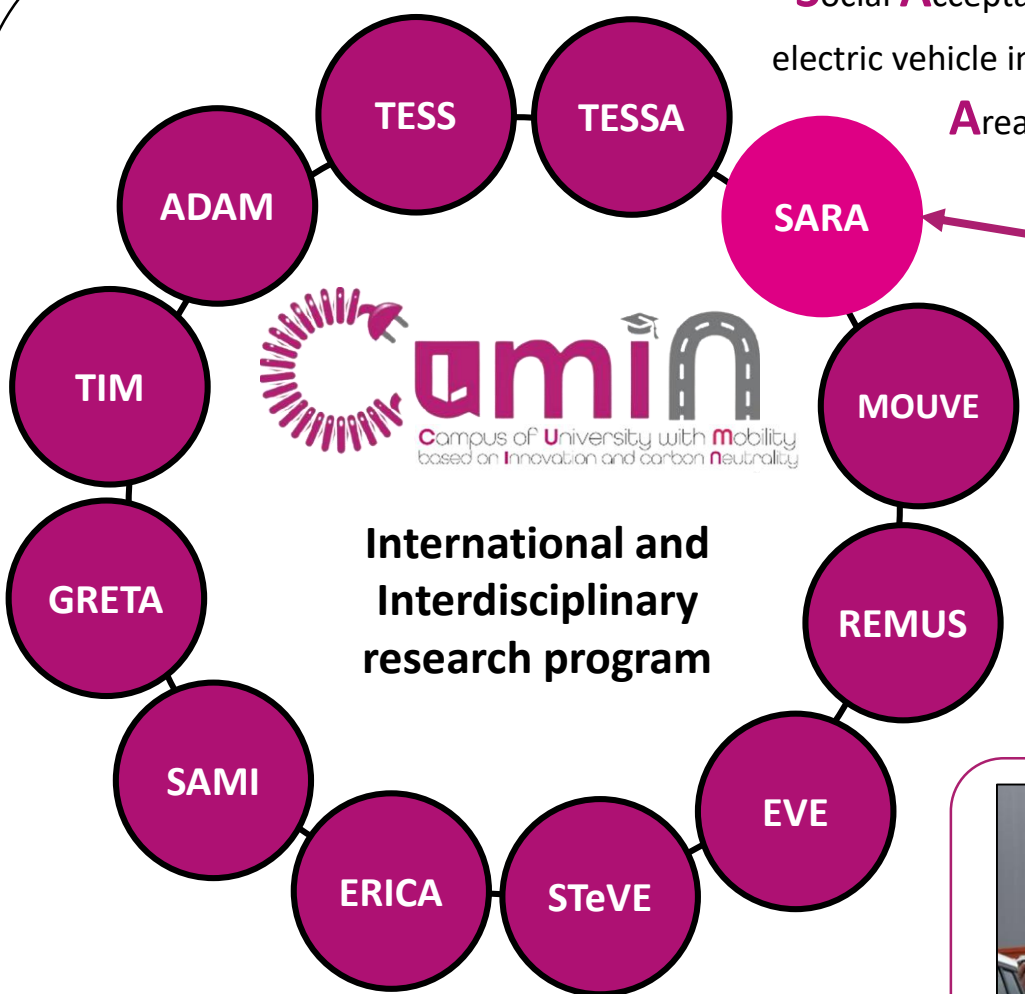


# Introductions

Social Acceptance of the electric vehicle in Restricted Area

Faculté des sciences économiques, sociales et des territoires

FACULTÉ DES SCIENCES ET TECHNOLOGIES



International and Interdisciplinary research program

Leading the SARA Project are

Pr. Elodie Castex  
TVES  
Urban Planning, Mobility and Transportation



&



Pr. Alain Bouscayrol  
L2EP  
Electronics, Electrical Engineering and Automation

Current members of the SARA team



Juncker Lucie  
Study Eng.  
Social Acceptance, Accessibility and Sensibilization to E-Mobility



Masclef Eugénie  
PHD Researcher  
Social Acceptance of the Electric Vehicle



# A few facts about our campus' GHG emissions



**50,7%** of mobility GHG emissions of Lille University are due to commuting (travels to and from campus) <sup>1</sup>



**The amount of thermal car users is higher** among our campus' students and staff than it is for other campuses of Lille University's staff and students (23% against 21% according to the latest survey) <sup>2</sup>



Our campus **GHG emissions** stemming from thermal car usage are **higher** than the average GHG emissions of Lille University : +267kg eq CO<sub>2</sub>/year for students and +168.5kg eq CO<sub>2</sub>/year for staff.

1



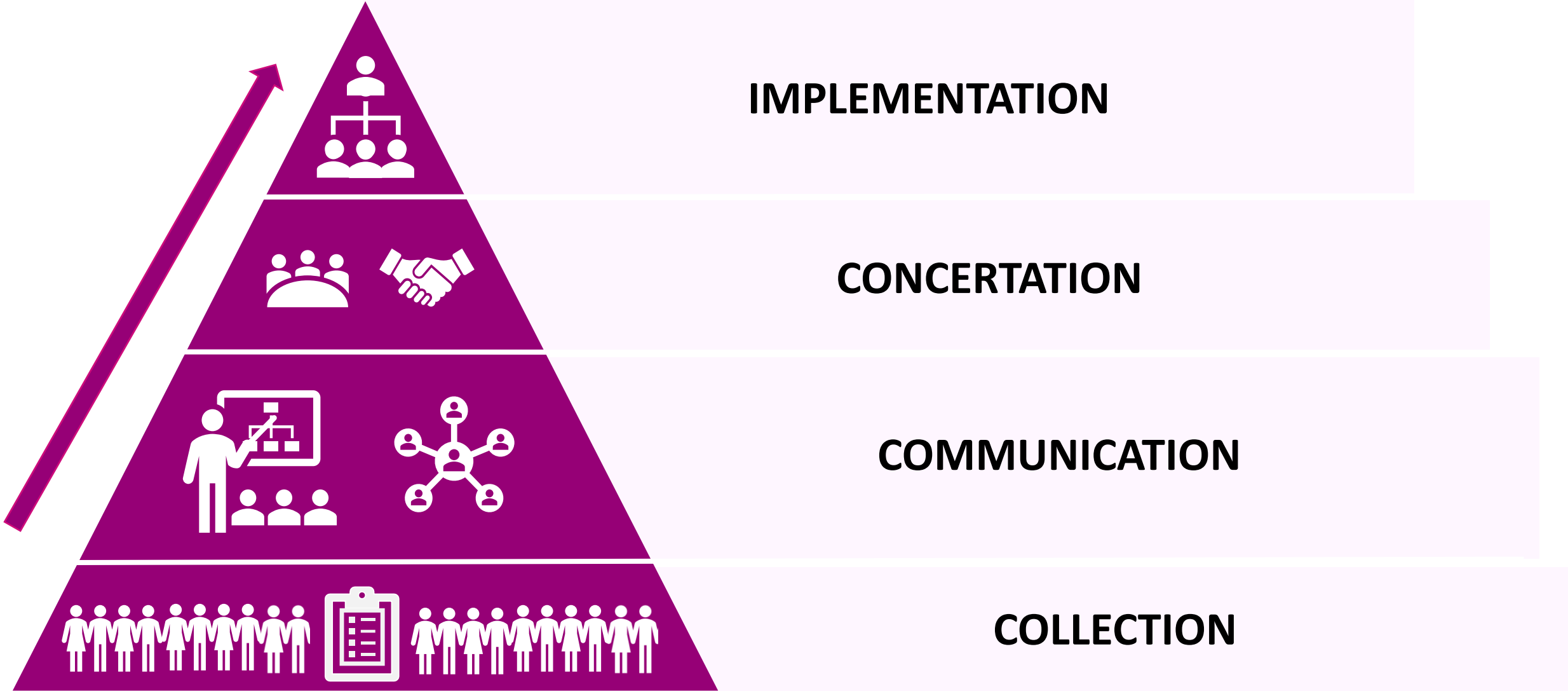
BEGES – U Lille – Année 2020 : Ademe.fr

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Direction du Développement Durable et de la Responsabilité Sociale – U Lille – Enquête de Mobilité 2023

# Defining : Integrating a bottom-up approach in energy transition



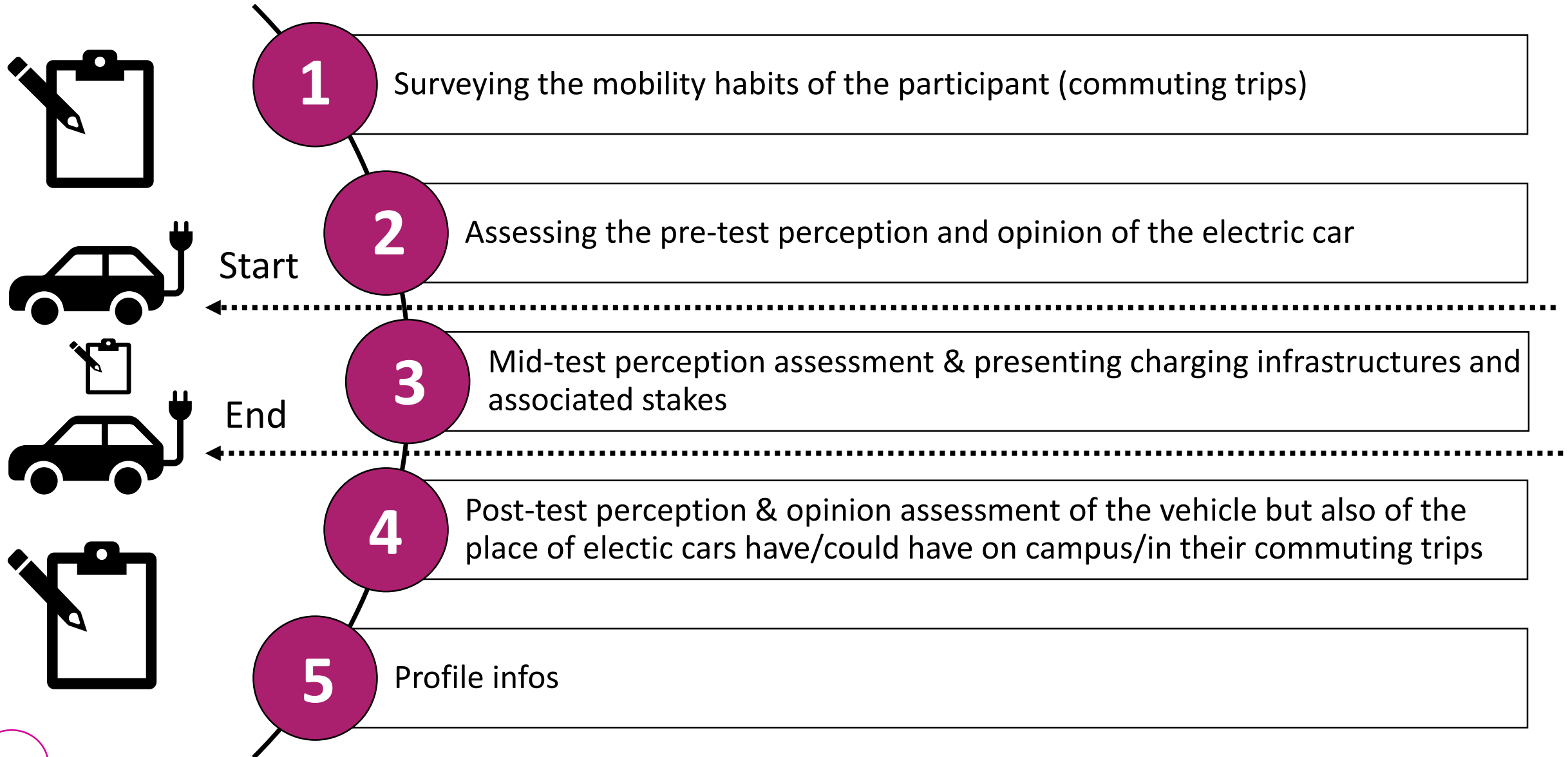


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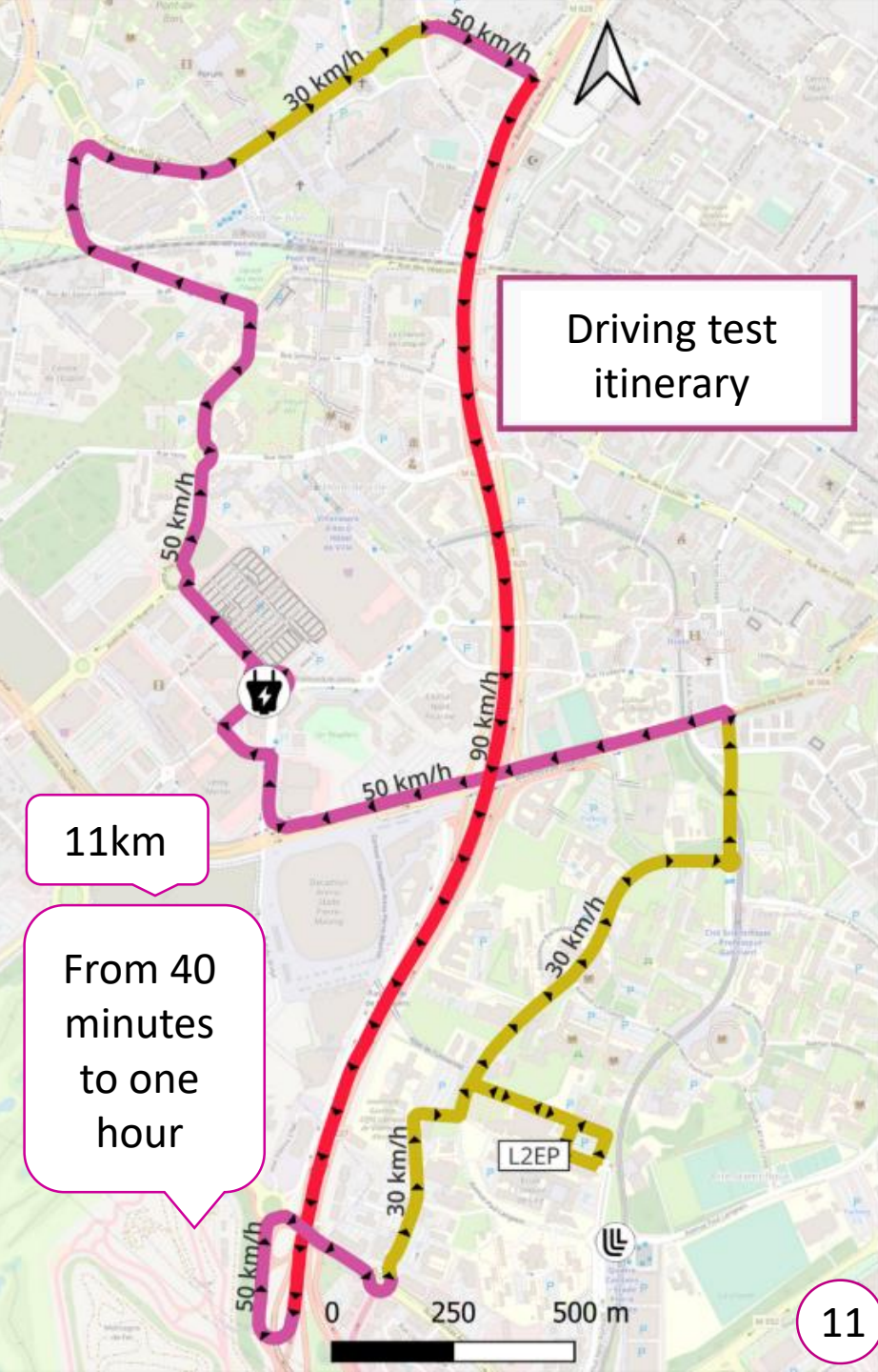
## 2. Methodology



# Structure of the questionnaire





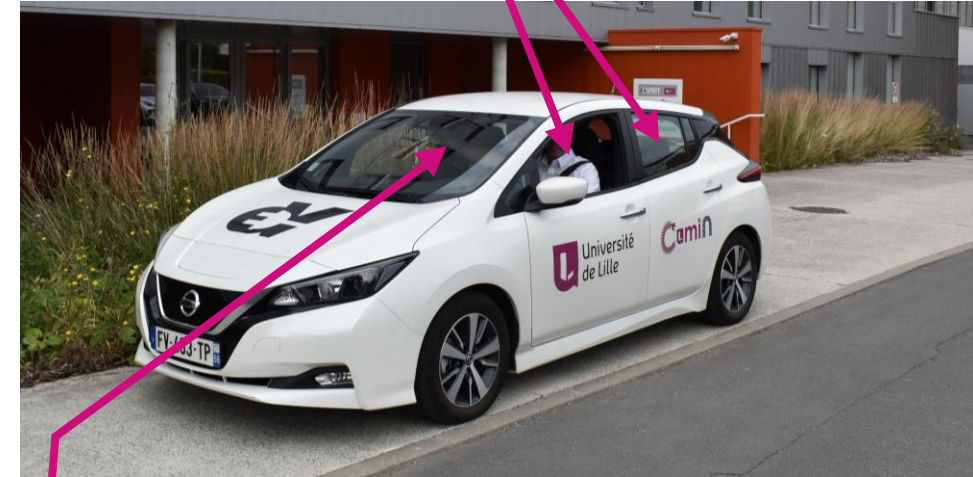


## Conditions of conduction of the survey



In the driver's seat : The volunteer

In the backseat : A platform engineer



*Nissan Leaf 2020 – 40 kW/h – Photo taken during an interview (SARA – CUMIN survey) in July 2023*

In the front passenger seat : Investigator (HSS engineer)

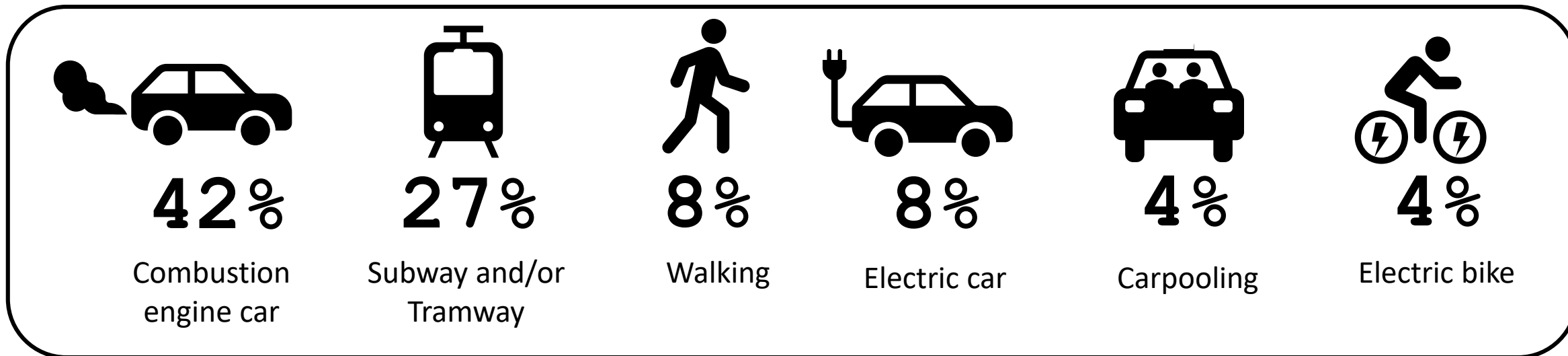
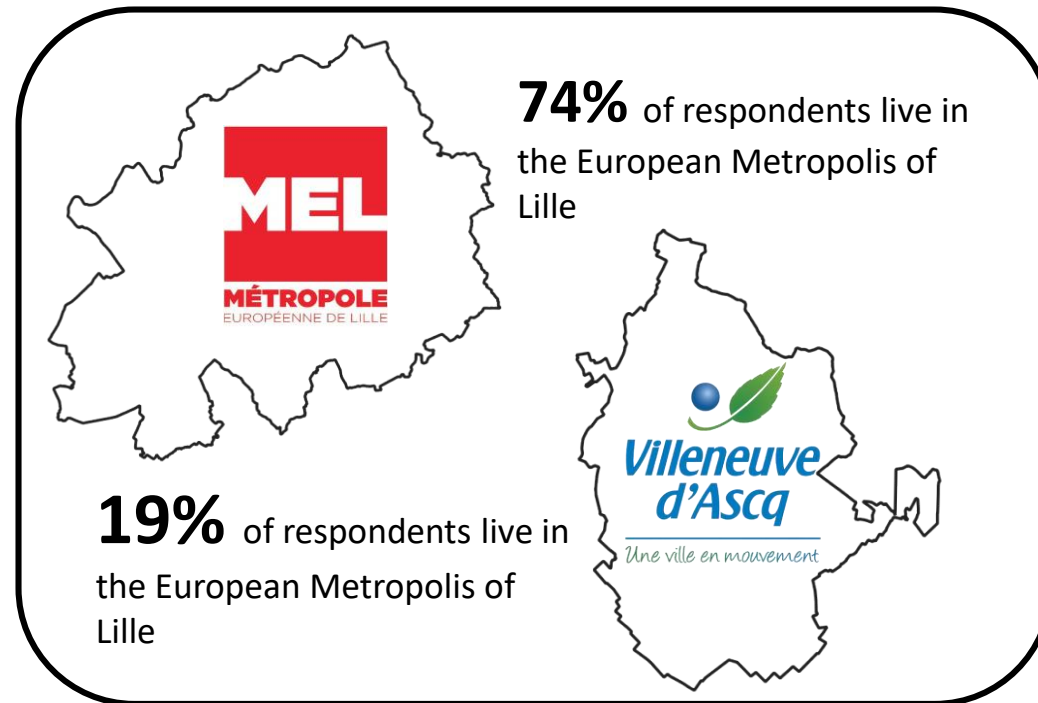
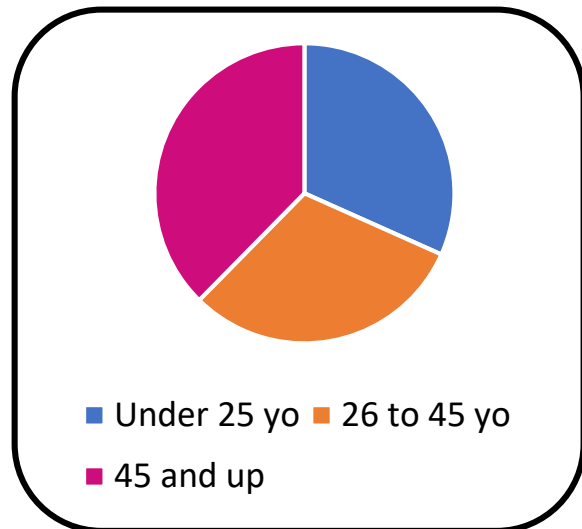
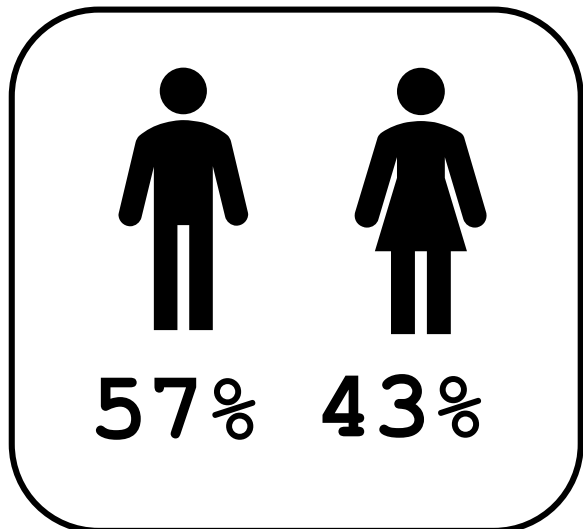


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### 3. Results so far

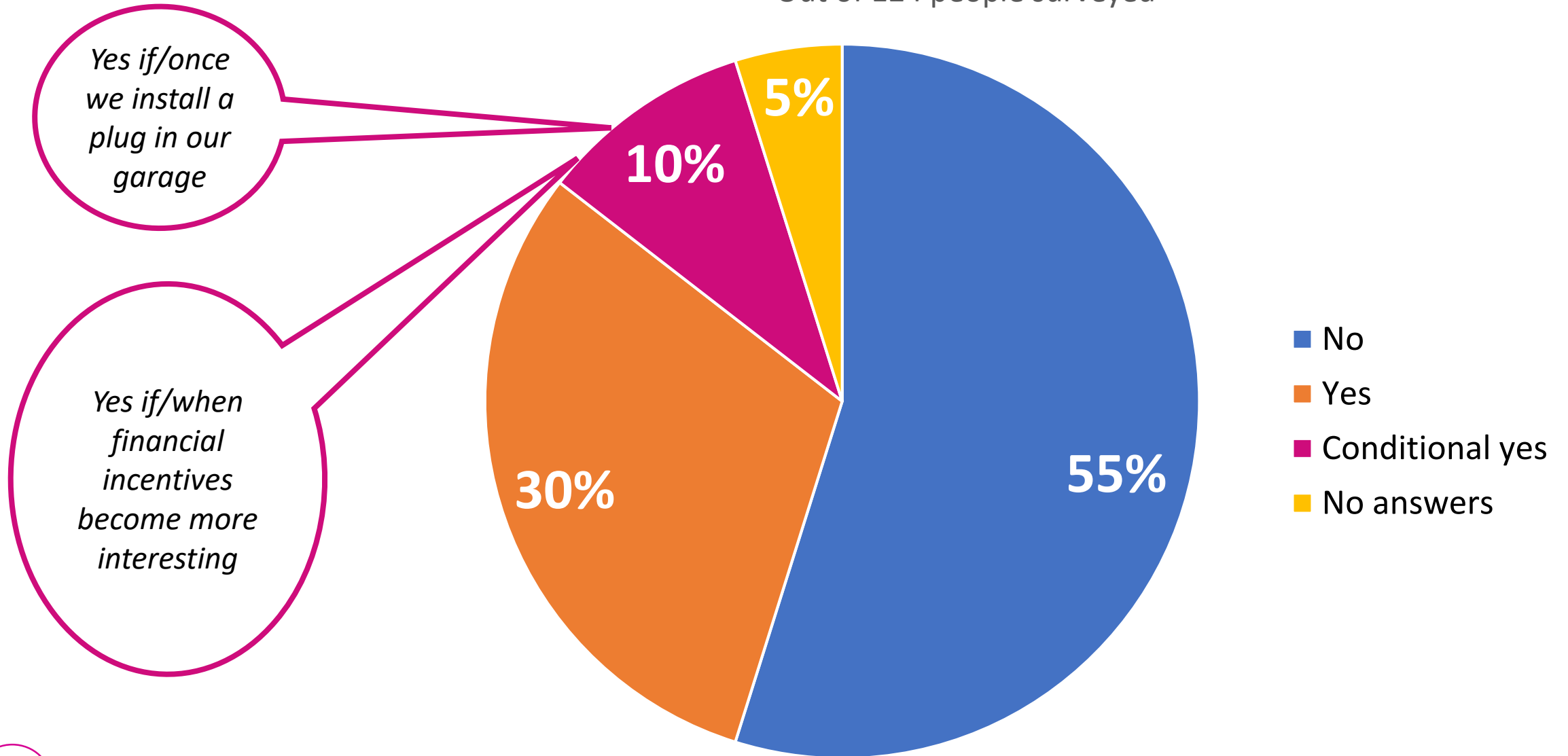


# Results: Panel presentation



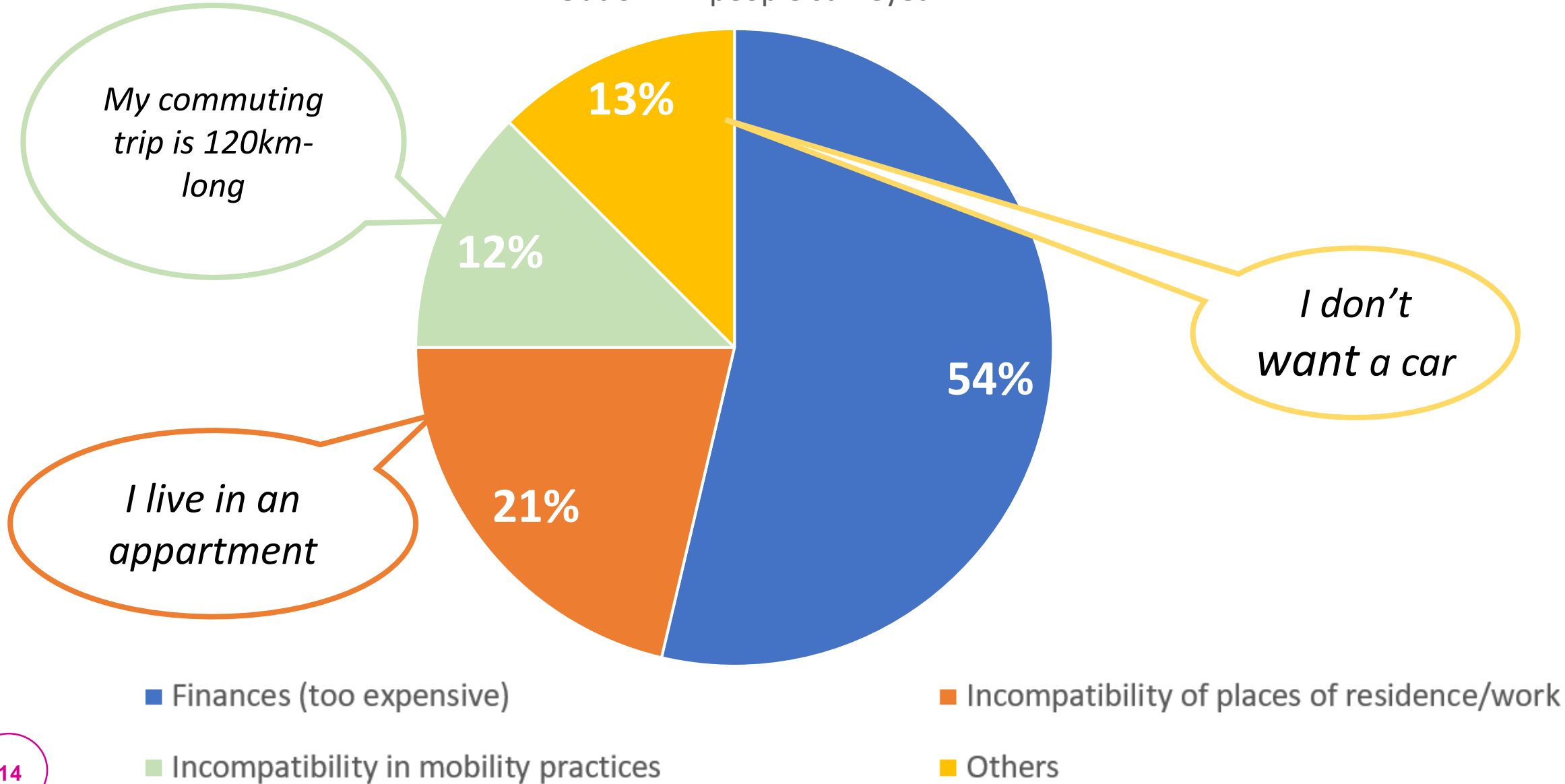
# Results: Capacity to acquire an electric vehicle

Out of 124 people surveyed



# Results: Barriers met when considering the acquisition of an electric vehicle

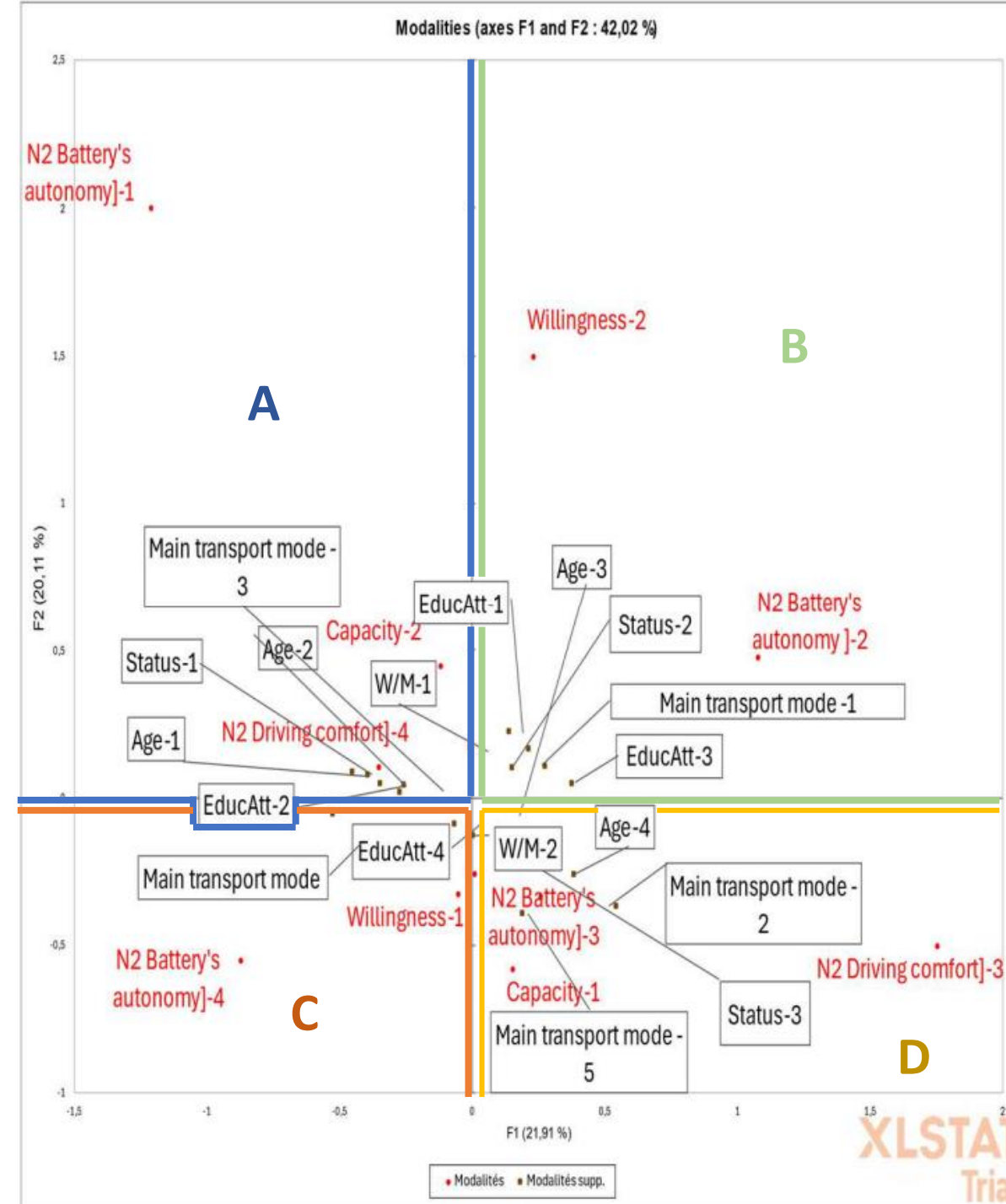
Out of 124 people surveyed



# Results: Multiple correspondences analysis

## Groupe B

- Find the driving range insufficient
- Liked the driving comfort
- Able to adopt and electric vehicle but not wanting to
- Between the ages of 40 and 50 yo
- Mostly commute through individual thermal cars
- Mostly administrative and technical staff



# Conclusion

## Their obstacles to switch to an electric car?

- High buying price
- Capacity/Incapacity to recharge at home and/or work
- Length and transport mode of commuting trips
- Others (personal convictions for instance)

## Degree of fulfilment of our objectives

- Testing EV could be a step for adoption
- We were able to **discern profiles**.
- Relevant information for future awareness actions

**Technical data:** about 20% on energy consumption for the same travel



CUMIN-DILAN

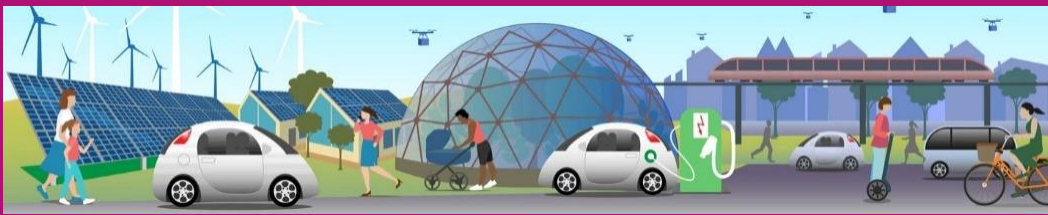
study of the traffic and driver influence

A survey on **e-bikes and e-scooters** has been conducted (90 respondents)

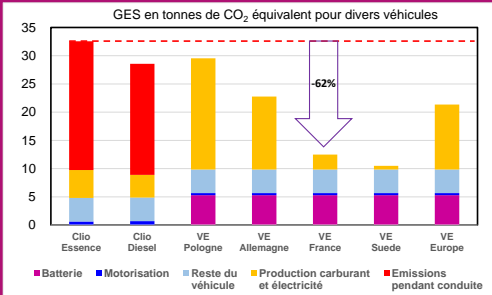


analysis next seminar

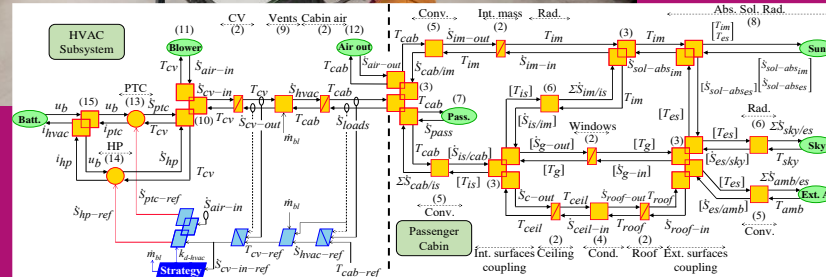
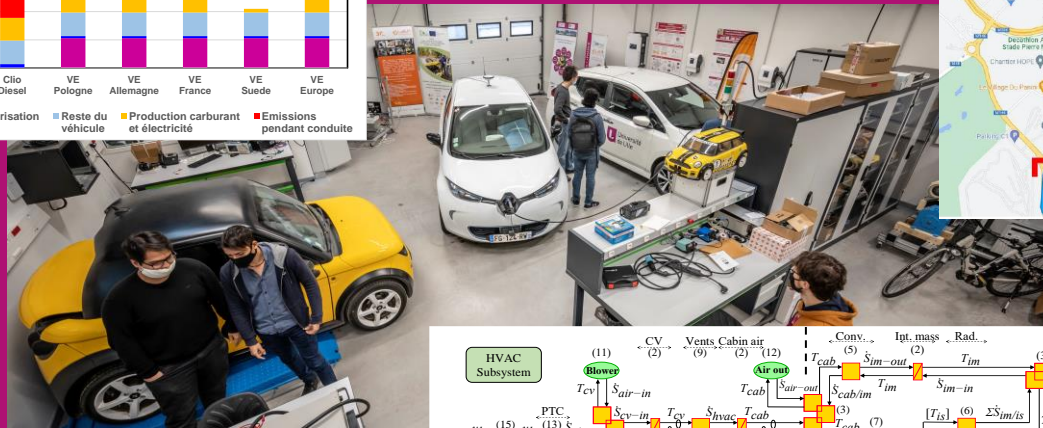




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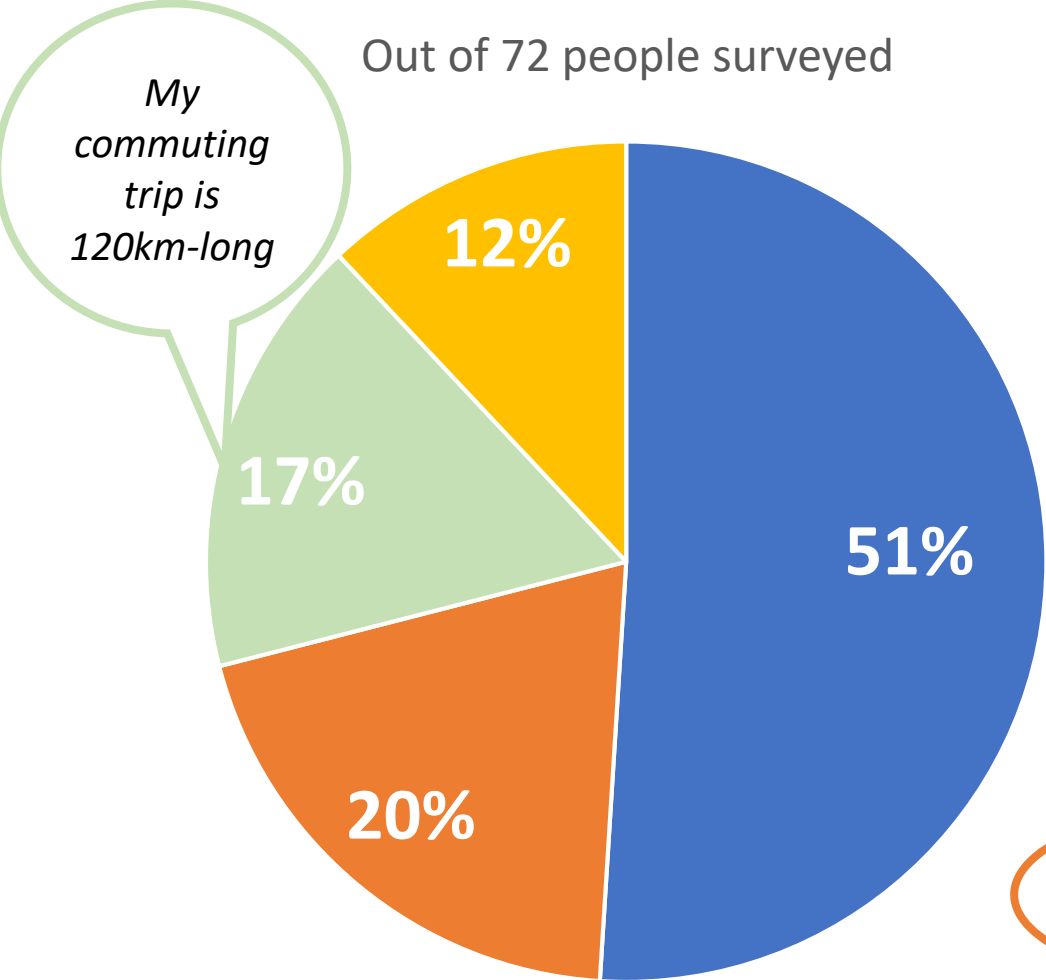
Our university as an exciting living lab towards eco-cities through an innovative transdisciplinary framework !



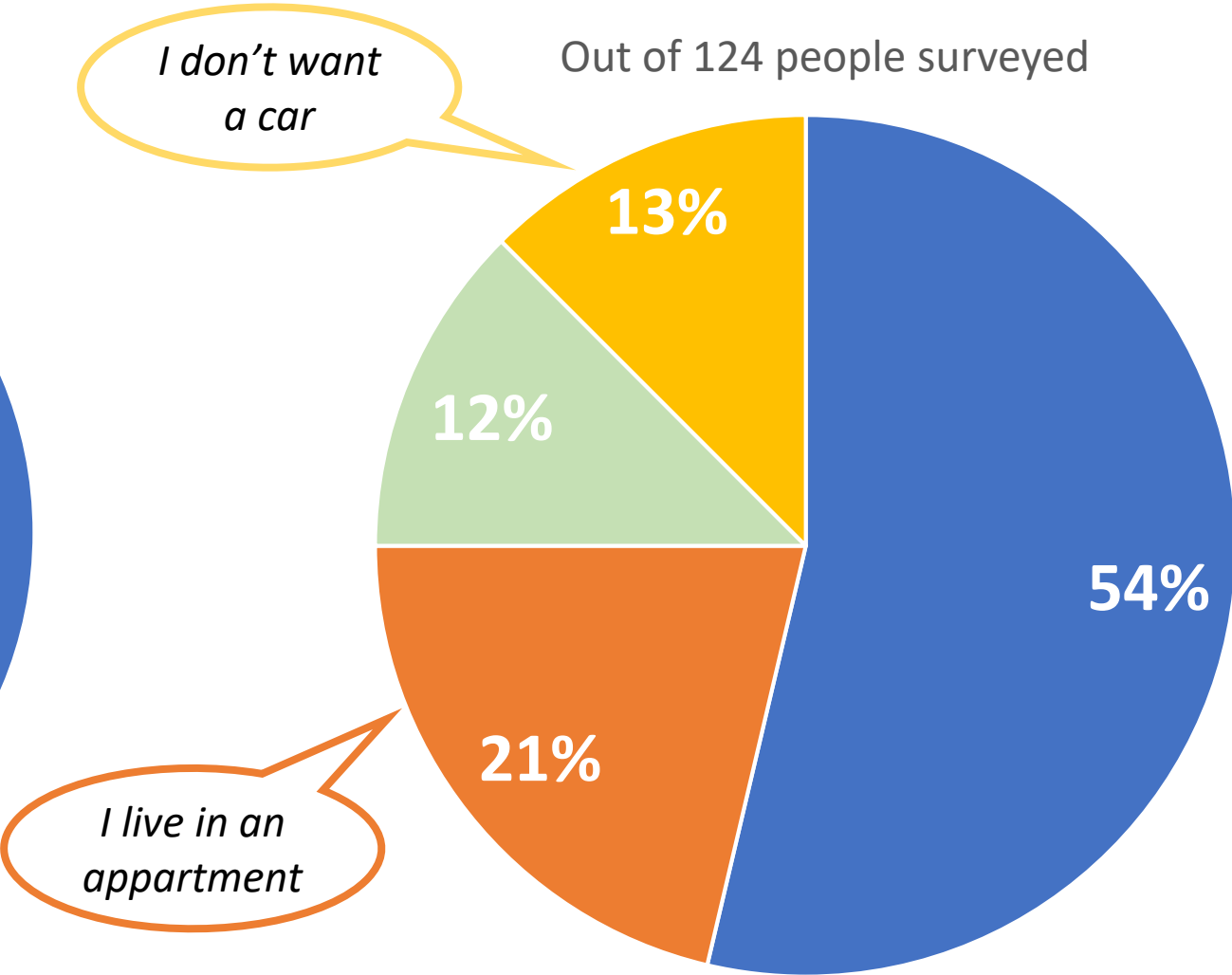


# Results: Barriers met when considering the acquisition of an electric vehicle

Out of 72 people surveyed



Out of 124 people surveyed



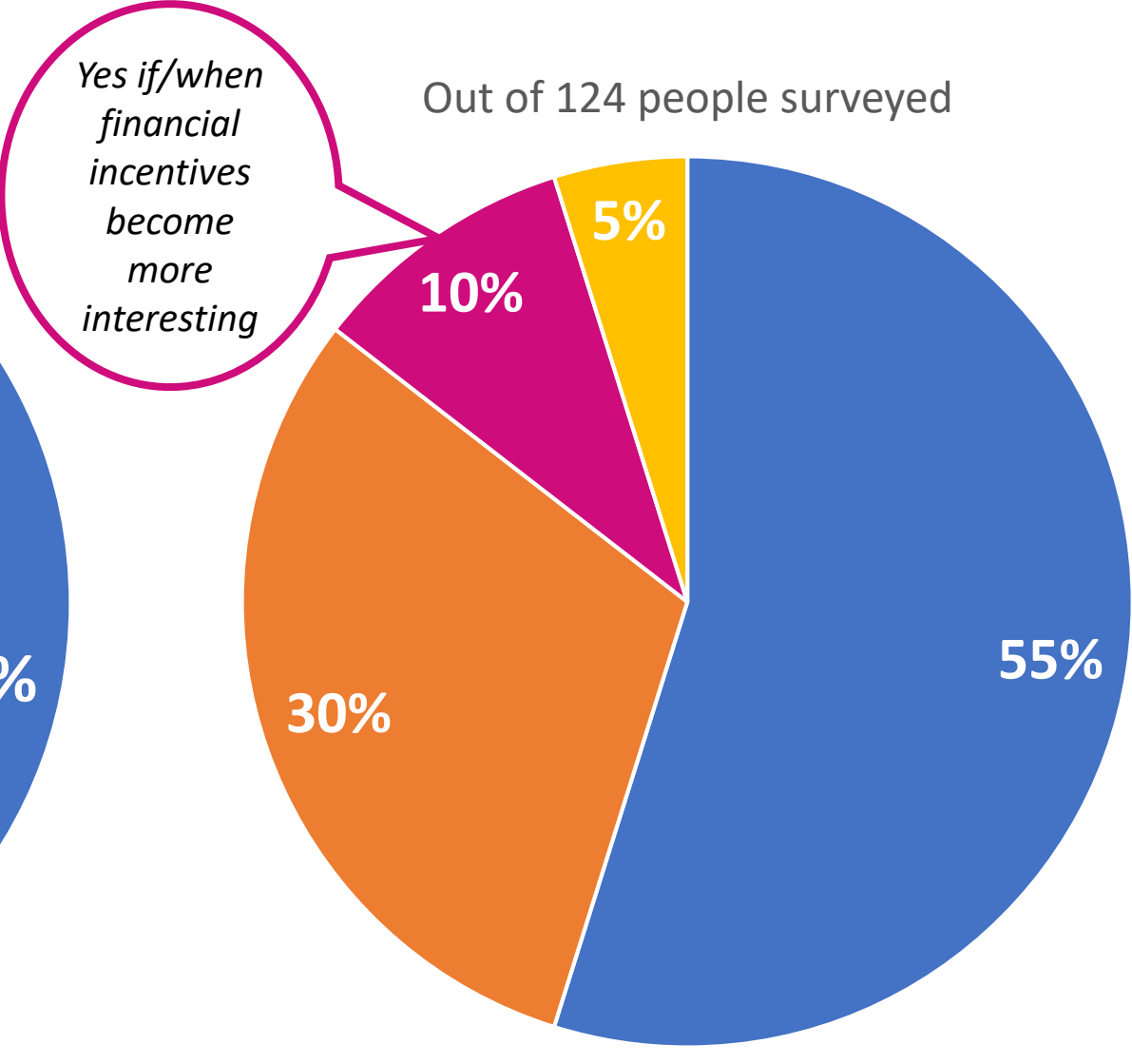
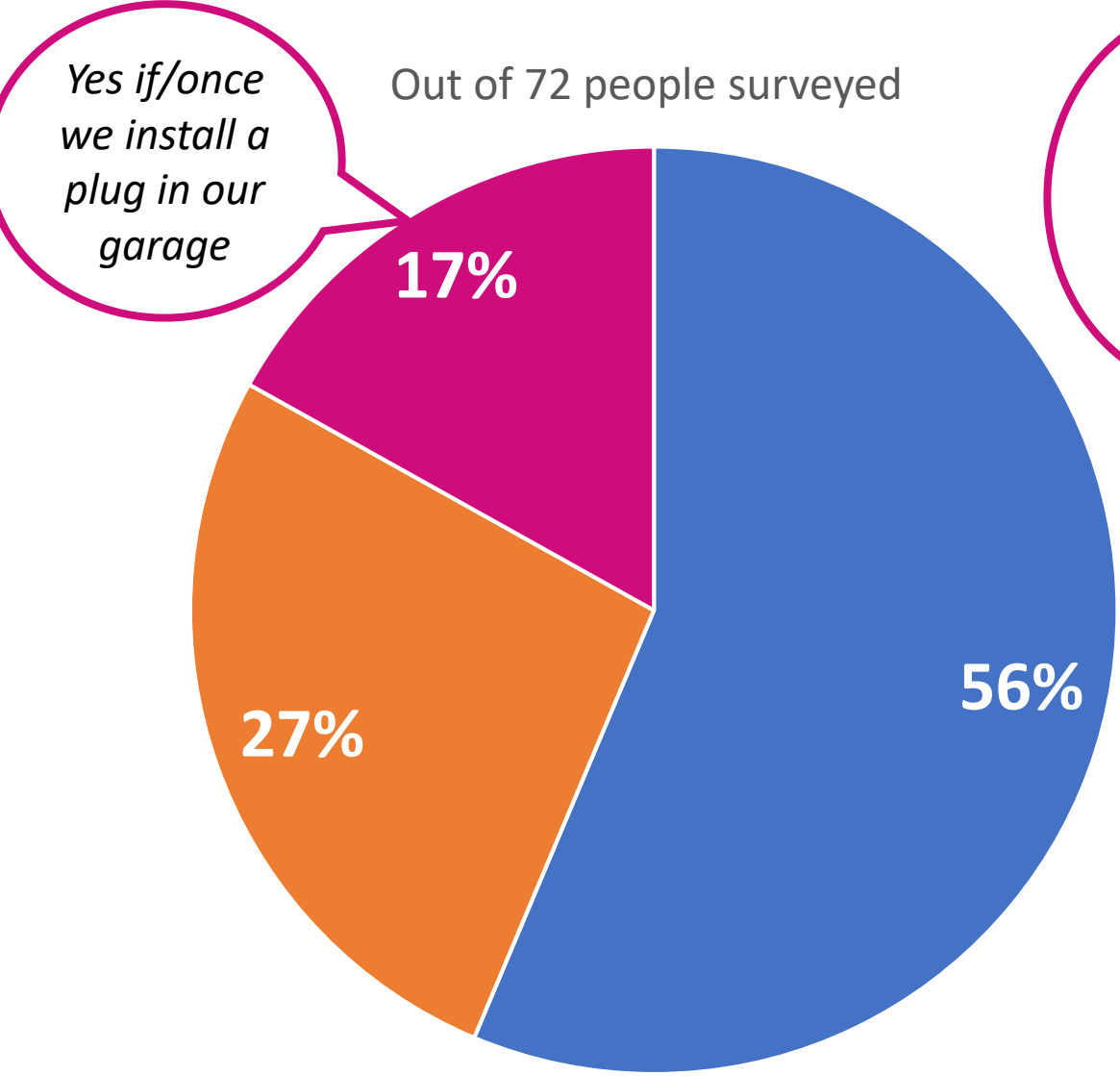
■ Finances (too expensive)

■ Incompatibility in mobility practices

■ Incompatibility of places of residence/work

■ Others

# Results: Capacity to acquire an electric vehicle



■ No ■ Yes ■ Conditional yes

■ No ■ Yes ■ Conditional yes ■ No answers