1 INTRODUCTION

The understanding of travel behaviour, and in particular citizens’ choices on how to perform their routinely trips, is a fundamental step towards the decarbonisation of the transport sector. **Travel mode choice** affects the level of greenhouse gases emissions, as well as local air pollution, noise and congestion produced by passenger cars. The quantification of how different social, economic, cultural and trip-related factors affect this choice is critical to account for households heterogeneity in the transition to low-carbon mobility.

2 OBJECTIVES

- Analyse how the probability of choosing a low-carbon travel mode is affected by factors related to:
  - Environmental Concerns
  - Trip Characteristics
  - Mode attributes
  - Satisfaction with Infrastructure
  - Socio-economic factors

3 METHODOLOGY

- A Survey representative of national population, over 5000 observations;
- 5 EU countries: Hungary, Italy, Norway, Poland and Spain;
- 2 destinations: Trip to Workplace (or University) and to the Grocery/Shopping
- 3 travel modes: private vehicle, public transport, active modes
- Variables of attributes, environmental concern and infrastructure satisfaction have been developed from Likert-scale attitudinal questions.
- Data has been analysed with a Multinomial Logistic Regression

4 PRELIMINARY RESULTS

- Overall, the impact of the factors on the two destinations is quite different
- Households seem to act consistently with their preferences
- Environmental concerns and environmental attributes of the mode affect travel mode choice
- Socio-economic factors highlight groups which might be target of specific policies, such as households with children and fulltime workers

5 NEXT STEPS

- Develop separated Urban and Rural Models
- Include availability of alternatives measures [e.g. fuel costs, public transport costs, geographical information]
- Create latent class based on attitudes and perceptions towards different policy measures, transport related problems and transport infrastructure

INFLUENCE ON CHOICE PROBABILITY