

(SOCIAL ACCEPTANCE OF ELECTRIFIED VEHICLES IN RESTRICTED AREAS))

26 August 2019

SARA Post-Doc Proposal

Summary: Study the private decision making of commuters in a campus community, with a focus on vehicle electrification.

Goal: Contribute to a plan for the *Cité Scientifique* to decarbonize the transportation of approximately 5,000 daily commuters. This research would help to understand the heterogeneity in commuter economics and preferences and enable better business models for charging infrastructure, better messaging to consumers, and targeted financial support.

Academic contribution: This research benefits from a detailed data gathering and analysis effort relating to the transportation needs and preferences of the 5,000 daily commuters at the University of Lille, *Cité Scientifique*. The analysis from this work can contribute to the literature on how differences between drivers (preferences, transportation needs, willingness-to-pay for various attributes, etc) affect the overall capability for transitioning to an electrified vehicle fleet (or other transportation options).

Details: The University of Lille has committed to decarbonizing its operations in the coming decade. This includes the carbon footprint of transportation to/from campus for students and personnel, which is the largest portion of the current emissions footprint of the *Cité Scientifique*. The CUMIN program is focused on this broader problem: decarbonizing the 5,000 daily automobile trips to/from campus. SARA, an element of CUMIN, is an interdisciplinary analysis of social, environmental, and economic acceptability of transitioning commuters from thermal vehicles to other transportation options (with a focus on EVs). We seek a Post-Doc Researcher to help with the economic and decision analytic elements of this research, helping to translate a commuter's set of preferences and requirements into an assessment of feasibility of different approaches for motivating behavioral change.

The project has both practical and academic elements and the ideal candidate would be interested in both. On the practical side, the results of SARA (when combined with other work under CUMIN) will be used create an implementation plan for the decarbonization of campus transportation. In the broader sense, lessons learned here can inform decarbonization of other campuses or cities. On the academic side, this research will contribute to understanding the diversity in private preferences and economics of EV adoption. The research will address a variety of questions, with significant overlap and interaction with other CUMIN projects: How do we identify a low-carbon transportation alternative that meets the individual needs of campus commuters? What messaging or policies from the University of Lille would be most effective in convincing them to adopt it? How quickly should we expect this transition to occur and how does it interact with other elements of campus decarbonization?

Application and Timing: Interested applicants should submit a Letter of Intent, a CV, and a relevant research article to Eric HITTINGER (<u>eric.hittinger@univ-lille.fr</u>), Alain BOUSCAYROL (<u>alain.bouscayrol@univ-lille.fr</u>) and Elodie CASTEX (<u>elodie.castex@univ-lille.fr</u>). We are seeking qualified applicants immediately. The position should be filled before the second half of 2020, but this could occur as soon as a candidate is selected.