



Séminaire conjoint / Joint Seminar

Chaire de logistique et de transport et Chaire de recherche du Canada en distributique/
Chair in Logistics and Transportation and Canada Research Chair in Distribution Management

Anaïssia Franca / Catherine Gosselin

Consortium de recherche et d'innovation en transport urbain au Canada (CRITUC)
Canadian Urban Transit Research and Innovation Consortium (CUTRIC)
Montréal, Canada



SUPPORTING THE ELECTRIFICATION OF RAPID TRANSIT PROJECTS BY MODELLING THE BUS ENERGY CONSUMPTION

Abstract: Bus Rapid Transit presents many advantages to serve public mobility, including a frequent service, short stops and quick commute. London Transit and the city of London in Ontario are in the process of planning the implementation and construction of two major Bus Rapid Transit Routes served by buses with dedicated lanes. These routes will provide a simple and quick connection from the four poles of the city to the downtown core. To make this commute as comfortable as possible for the passengers, improve overall air quality and reduce emissions, London Transit is currently considering fully electrifying the routes by deploying battery electric buses. The Canadian Urban Transit Research and Innovation Consortium (CUTRIC) performed an energy consumption analysis on these two routes using the planned schedule to assess the feasibility of electrifying them both using standardized overhead fast chargers. The results of this analysis, such as the electricity use, operational cost and emission reductions will be discussed during this talk. In this study, the driving cycles, topography and bus utilization were modelled using an in-house developed tool. First hand data from manufacturers and key stakeholders in other electrification projects were gathered to complete the study.

Anaïssia Franca is a Research Strategy Manager at CUTRIC. She manages and partakes in projects involving modelling and simulation, which includes developing tools collaboratively with OEMs to support transit agencies in their transition to alternative bus technologies – including battery electric, hydrogen fuel cell and RNG/CNG drivetrains. She holds a M.A.Sc. in Mechanical Engineering from the University of Victoria as well a B.Eng from the same university.

Catherine Gosselin is a researcher and project development officer in Quebec for CUTRIC-CRITUC. She co-leads the national smart vehicle project. She holds a B.Sc. in science education from the University of Sherbrooke, a B.Sc. in physics from the Université du Québec à Trois-Rivières (UQTR), a M.Sc. in physics from UQTR and is currently finishing a Ph.D. in in energy science and materials on the storage of hydrogen in iron-titanium alloys at UQTR. She also sits on the governing boards of her children's schools.

JEUDI / THURSDAY

18 octobre 2018 /
October 18th, 2018
14h00

Salle / Room 5441
Pavillon André-Aisenstadt
Université de Montréal

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