



EU-US Frontiers of Engineering Symposium
October 19-22, 2022
Bled, Slovenia

A systematic approach to electrification of the transport system in Gothenburg Municipality - the case of heavy-duty vehicles

Spyros Ntemiris

Business Region Gothenburg

Spyros.ntemiris@businessregion.se

Abstract

Business Region Gothenburg has been assigned with the mission to coordinate all the stakeholders around the electrification of local transport system for the City to meet its ambitious environmental goals. The local heavy vehicle fleet amounts several hundred vehicles which must become fossil-free by the end of 2023. The presentation shows how an electrification of public vehicle fleet can take place, what challenges the city has faced and how the way forward looks like. Insights from a parallel work within the private sector will also be presented. The work began with a major investigation of today's business as usual for the stakeholders that showed the conditions, needs and absolute requirements that must be met before analysing the potential for electrification. In addition, charging infrastructure must also be in place. This is a bit of "the chicken or the egg" causality dilemma, thus, a hand in hand approach for development is followed. Charging needs to take place on terminals, but also be supplemented with additional public charging modes. Furthermore, the presentation shows the process flow and method that has been followed and draws conclusions based on results from the two case-studies, both in public and private sector. Finally, learning outcomes are discussed regarding stakeholder engagement within a broader landscape of actors needed for the electrification transition.