

Sustainable Green City Logistics utilizing Sharing Economy

R. B. Poulsen and S.L. Søvsø

DTU Transport, Technical University of Denmark

INTRODUCTION

The world faces enormous problems when it comes to environmental issues. The transport in major cities plays a huge role in emission of greenhouse gasses. Congestion in these cities generates even more local air pollution, which causes health issues for the inhabitants. Denmark and The Technical University of Denmark are pioneers in sustainable and green solutions. Denmark is a country where bicycles play a huge role in commuting, 41 % of Copenhageners biked to and from work in 2013. In many years a company in Denmark called "*De Grønne Bude*" (The Green Delivery Guys), has practiced transport of goods by bicycle.

There is a huge potential in utilizing the bicycle culture for other purposes than just personal transportation.

CONCEPT

There is a growing trend for private consumers to use sharing economy services, like *AirBnB*, *Uber* and *GoMore*. By combining a sharing economy service with the bicycle culture, it is possible to solve some of the problems the major cities face.

The concept is a web-based service where private people and businesses can order a private cyclist to transport goods within the city. Every individual can sign up as a delivery person after being accepted. The person would be registered by the services he or she offers, such as size of the bag, carrier bicycle, normal bicycle etc. When registered as a deliverer one can be booked by companies or private persons to deliver goods. The deliverer is paid based on the distance when the goods are delivered. The payment will be wire transferred from the booker to the deliverer, and the service provider takes a percentage of the amount.

CONCLUSION

The vision for this concept is that it will reduce the congestion in major cities and thereby lower greenhouse gas emission and air pollution. Furthermore, this concept will hopefully also result in better mobility for companies and private persons. The companies will experience faster deliveries and lower costs, which will make the companies utilizing the service more competitive. This service will give private persons the opportunity to receive the goods they are not capable of getting themselves, especially the elderly and families who do not have time on a busy schedule.