Suitability of commercial transport for a shift to electric mobility with Denmark and Germany as use cases - DTU Orbit (08/12/2018)

Suitability of commercial transport for a shift to electric mobility with Denmark and Germany as use cases

This paper identifies commercial sectors suitable for a shift to electric mobility in Denmark and Germany by analysing daily driving distance. The paper concludes that construction, human health and other service sectors are the most suitable sectors for electric mobility because many vehicles are registered in these sectors and daily mileage is reasonably low. They should be primary target groups of specific policy measures to promote the use of electric vehicles. Both Denmark and Germany have incentives to promote the use of electric vehicles. Nevertheless, electric vehicles do generally not show economic benefits unless travel distance is high. However, today the travel range of large vans is an important barrier for electrification due to battery weight and the limitation of 3.5 tonnes gross vehicle weight for driving with a normal driving licence. The rule needs amendments for electric vehicles, as has been done in Germany. The paper recommends EU countries follow the German rule allowing EVs up to 4.25 tonnes to be driven with a class B licence, thereby potentially creating a market for big vans with long travel range.

General information
State: Published
Organisations: Department of Management Engineering, Transport DTU, Transport Modelling, German Aerospace Center, COWI AS
Contributors: Christensen, L., Klauenberg, J., Kveiborg, O., Rudolph, C.
Number of pages: 13
Publication date: 2017
Peer-reviewed: Yes

Publication information
Journal: Research in Transportation Economics
Volume: 64
ISSN (Print): 0739-8859
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Scopus rating (2017): CiteScore 1.11 SJR 0.73 SNIP 0.806
Web of Science (2017): Impact factor 0.992
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.42 SJR 0.857 SNIP 1.258
Web of Science (2016): Impact factor 0.781
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 1.13 SJR 0.656 SNIP 0.832
Web of Science (2015): Impact factor 0.75
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 1.23 SJR 0.872 SNIP 1.387
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 1.37 SJR 1.053 SNIP 1.454
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 0.89 SJR 0.662 SNIP 0.884
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 0.61 SJR 0.38 SNIP 0.559
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.319 SNIP 1.025
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.359 SNIP 0.255
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 0.159 SNIP 0.073
Scopus rating (2007): SJR 0.294 SNIP 0.034
Scopus rating (2006): SJR 0.174 SNIP 0