

## The economics of workplace charging - DTU Orbit (09/11/2017)

### The economics of workplace charging

To overcome the range-anxiety problem and further shortcomings associated with electric vehicles, workplace charging (WPC) is gaining increasing attention. We propose a microeconomic model of WPC and use the approach to shed light on the incentives and barriers employees and employers face when deciding on demand for and supply of WPC. It is shown that under market conditions there is no WPC contract an employer is willing to offer and at the same time the majority of employees is willing to accept. To overcome the lack of demand or underprovision of WPC we discuss various 'remedies', involving subsidies to charging facility costs and adjustments in electricity tariffs or loading technologies. We find that direct subsidies to WPC facilities or subsidies combined with specific energy price policies could be a way to foster WPC provision. In contrast measures on the employee side that may help to stimulate the demand for WPC turn out to be less feasible. Hence, our results suggest that in order to promote WPC it is more promising to support employers in offering WPC contracts than to provide employees an incentive to accept WPC contracts. The study therefore gives a rationale for public initiatives being undertaken to boost WPC provision, as e.g. in the case of the US.

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