

“DSOs enabling E-Mobility”

With Europe reducing greenhouse gas emissions and decarbonising the transport sector, electric vehicles are becoming a significant topic on the Energy Union’s agenda. From the perspective of Distribution System Operators (DSOs) - as grid facilitators – this creates a number of opportunities and challenges.

In this Fact Sheet GEODE looks at the evolving role of DSOs in e-mobility, analyses different models for building and operating charging infrastructure and puts forward some of the technical and economic challenges from a DSO perspective.

GEODE identifies the following key messages:

- E-mobility is an important part of the solution to decarbonise transport provided that there is enough fossil free production capacity available in the grid.
- Common technical standards must be put in place by all Member States.
- Interaction between the e-mobility and the electricity sector should be significantly enhanced.
- Best practice must be shared in how to identify the location of EVs and charging stations.
- It is important to increase customer awareness when purchasing new EVs - only through communicating with customers will the uptake of e-vehicles be enabled.
- If the charging points are an asset of the DSO, the business case would be more easily made as retailers would only have to support variable costs (energy).
- Until an economically viable model is reached, it might be an option that DSOs are allowed to invest, own and operate charging stations.
- DSOs need to have the possibility to influence the charging processes in order to minimize the impact on the distribution grid in order to fulfill its core task – maintaining grid stability at all times.
- DSOs should be allowed to have direct contact with customers and operators of charging stations as an appropriate tool for grid management.

Please read the full paper [here](#) and don’t hesitate to contact us for any further information.