

# The Danish Handbook in Planning og Establishing Charging Infrastructure

6. Miljöanpassade transporter, fordon och drivmedel

**Maja Vestergaard<sup>1</sup>**

<sup>1</sup> Ramboll

## Introduktion

In order to accelerate the introduction of EVs The Danish Road Directorate saw a need for a handbook on best practice on how to plan and establish EV charging infrastructure. Such a handbook needs to give the reader guidance on how to set goals, calculate demand for EV charging, mapping and prioritizing locations, and conduct the dialogue with relevant stakeholders. This paper highlights a number of relevant topics to consider for such a handbook and presents a practical example of the national handbook for Denmark.

## Metod

The Danish Road Directorate has decided that a handbook must be prepared in the planning and establishment of charging infrastructure. The project started in June 2021 and ended September 2022. The handbook now faces a revision. The purpose of this handbook is to provide municipalities and other players in the market with specific guidelines on how they can ensure the establishment of the necessary charging infrastructure in terms of planning, as well as guidelines on what conditions they must be aware of when tendering and setting up electric charging stations.

## Resultat

68% of Danes can park at their own property, which will often mean that they also could set up a charging box at home. Since the vast majority will at the same time be able to drive back and forth between workplace and leisure activities on a single charge, most Danes will not need to charge on publicly available charging infrastructure in everyday life. However, there are big differences between the different municipalities. This is also important for the given municipality's opportunities and role in the roll-out of charging infrastructure.

To have the necessary overview it is necessary for the municipality to look at which players could also set up charging infrastructure in the municipality. There are many different players in the roll-out of charging infrastructure, each with their areas of interest / areas in focus. The challenge is to get an overall overview of the various players in the municipality and their charging infrastructure / potential charging infrastructure.

With calculations of the need for charging infrastructure and the mapping of where other actors may set up charging infrastructure, the municipality can create an overview of where "gaps" occur in charging infrastructure and where there will be need for the municipality to support the roll-out of charging infrastructure to meet an expected need.

## Slutsats

Overall, it is the role of the municipalities to:

- Create the overview, plan, coordinate and ensure that the amount of charging infrastructure is adequate to the need.
  - This requires both calculations of the need and ongoing monitoring of existing charging infrastructure
- Support the emergence of charging stations where there are gaps in the charging infrastructure or insufficient charging infrastructure.
  - The municipality can co-finance where there is insufficient commercial interest
- Guide and help companies and housing associations that often need and often demand a helping hand.
- Facilitate collaborations between housing associations and companies and perhaps joint tenders
- Create dialogue and collaboration with the DSO on prioritization and planning of the expansion of the electricity grid.

**Referenser**

<https://vejregler.dk/h/7e0fba84-06dd-483b-898a-c7b3e3affaa1/ac359ff9cfba478b8f60cae21d0030dc?showExact=true>