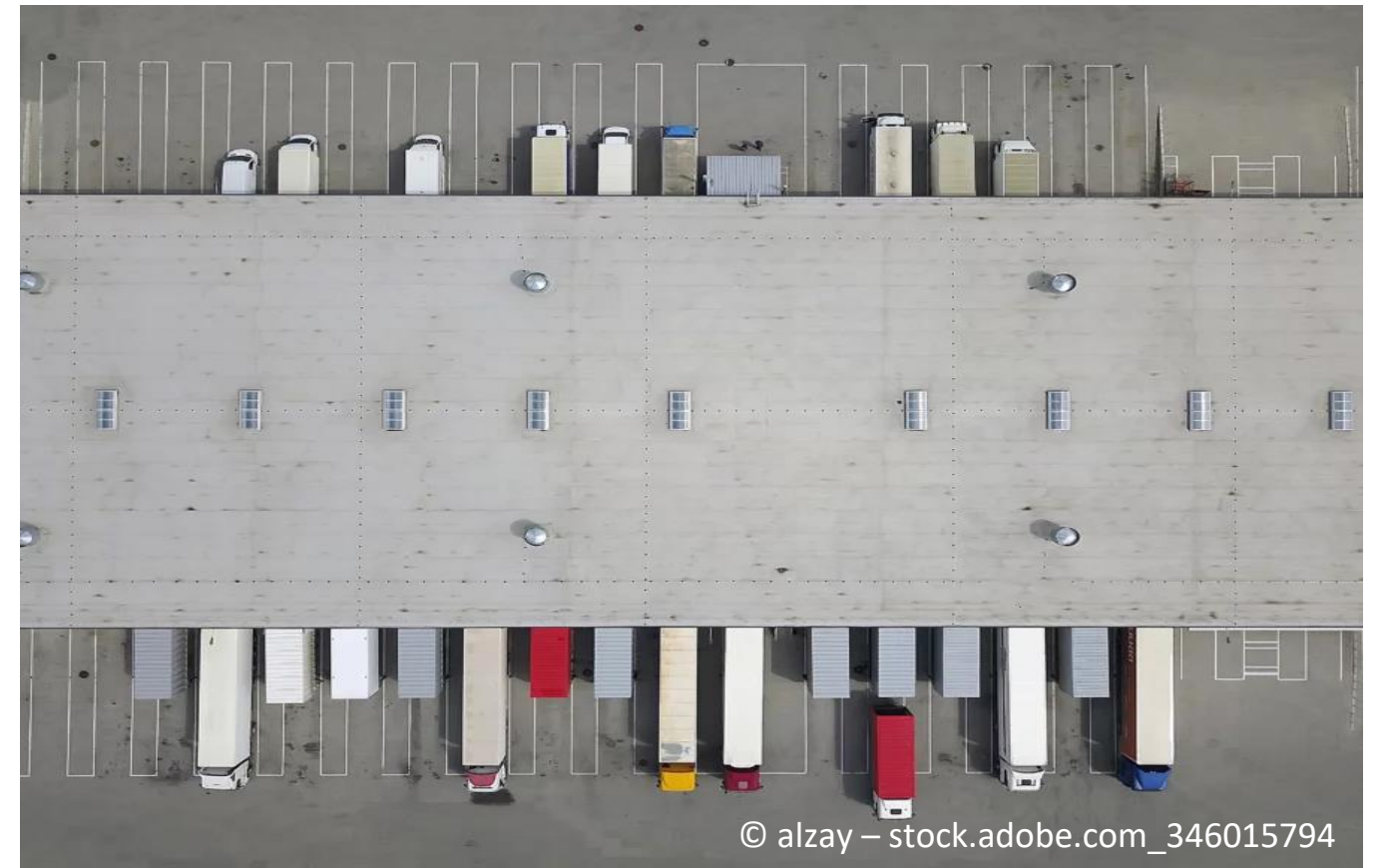


3

Electrification of fleets and depots



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Work module 3 examines the notion of connecting cars, public transport, commercial vehicles and logistics fleets to the infrastructure as modes of transport. The focus is on supplying energy through various infrastructures at one location – the multi-purpose mobility hub. A demonstration version of a multi-purpose mobility hub will be set up. The module analyses the usage profiles of different fleet types, and conducts technological assessments of infrastructures for vehicle energy supplies. This addresses the question of how fleets and infrastructures can be combined in terms of energy requirements, and operated at a technological, economic and cross-player level. It will examine the impacts of alternative drive technologies on logistics processes, as well as how new processes and process times are integrated into logistics management systems. Aspects relating to integration of the hub’s data will be examined by developing an independent charging management system. Ways of providing system services for the grid will be developed and tested – both through simulation and in test cases.

Aims

Power-supply grid

- Customised system services by using different energy-supply solutions for e-mobility
- Reduced grid load by combining fleet usage profiles

Mobility

- Co-ordinating different fleet types and energy sources with the energy-supply methods
- Developing methods for calculating energy requirements, potential flexibility and space for the multi-purpose mobility hub

Data

- Involving players, services and interfaces in data platforms for electromobility with a view to benefiting the grid
- Utilising and further developing independent charging management systems at the labs: EUREF, transfer area and mobility hub

The Mobility2Grid research campus is coordinated by the Mobility2Grid e.V. association.
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