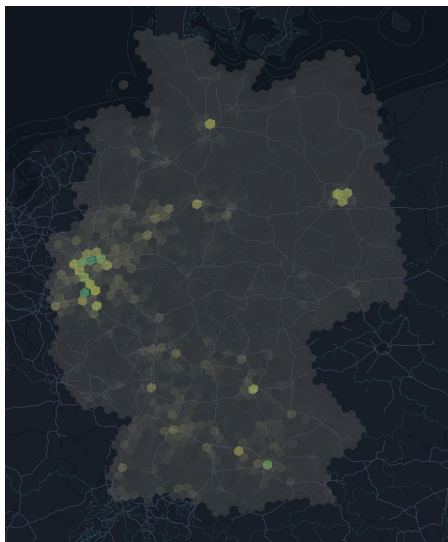


Supports the expansion of charging infrastructure for battery electric vehicles

Developed for:

- operators of public and private charging infrastructure
- real estate and property owners
- grid operators
- power plant operators
- public authorities and policymakers



The expansion of electric mobility requires an efficient and widely available charging infrastructure. This includes not only the siting of charging stations, but also the modification of the power grid. However, this is subject to a high degree of uncertainty, as the demand for charging will increase differently over space and time and grid capacities will have to be adapted accordingly. Along with these challenges, the coupling of the transport and energy systems also offers opportunities such as additional flexibility through time-shifted charging and feeding energy back to the grid.

The service *PowerForecastMapper (PFM)* analyses the charging demands of road-based passenger and freight vehicles as well as local rail passenger transport with high spatial and temporal resolution in various scenarios. Based on the utilization of the existing infrastructure, possible locations and configurations for additional charging points are identified. By examining the interactions with the energy system, the potential for peak load reduction and vehicle-to-grid coupling can be estimated.

Contact:

Jens Hellekes
[jens.hellekes\[at\]DLR.de](mailto:jens.hellekes[at]DLR.de)