

Concept Professional

Planning your ideal charging solution

Service description

Pos 1: Analysis of initial situation and objectives

- Project kick-off meeting via video with the project lead of The Mobility House
- Joint elaboration of the specific charging infrastructure requirements for one scenario
- Collection of the individual mobility profiles based on the relevant user groups and their characteristics (e.g., charging energy demand, vehicle downtimes)
- Evaluation of the electrotechnical situation considering the planned installation locations
- Acquisition of the site energy profile based on the historical electricity and power consumption

Goal: *Comprehensive acquisition of all relevant information for the development of the charging infrastructure design.*

Pos 2: Charging solution design

- Requirement-oriented investigation of the user behavior by aggregating individual driving profiles to a collective fleet profile of the entire charging infrastructure
- Simulation of charging events for a critical day to derive the necessary grid limit for the specific charging requirements, the site energy profile and the current power reserves
- Identification of the optimal charging strategy and definition of specifications for the charging hardware and software (e.g., required charging power, need for grid connection expansion, communication, use of load management)

Goal: *Identification of a charging solution suitable for the requirements including the optimal grid limit.*

Pos 3: Implementation planning

- Preliminary planning of the implementation based on existing site plans/electrical plans and the findings of the site analysis (e.g., placement and installation of the charging hardware, design of the sub-distribution and supply capacity)
- Estimation of the installation effort and cost indication
- Creation of an implementation checklist with an overview of the next steps of the charging infrastructure project

Goal: *Development of a recommendation for the responsible project manager of the implementation.*

Pos. 4: Additional information about charging electric vehicles

- Description of various roles for the operation of charging stations and their implications
- Overview of possible charging station types and connector types at the charging stations
- Assessment of the legal situation regarding electricity sales
- Summary of cost components of a charging solution

Goal: *Explanation of relevant aspects of the charging infrastructure for non-experts.*

Pos. 5: Recommendations for action

Summary of the results and recommendations for the optimal charging solution (hardware, software), the implementation and operation of the charging infrastructure including an overview of the expected total costs.

Goal: *Basis for a following detailed electrical planning, implementation and operation of the charging solution.*

Additional services to the Concept Professional

Service description

Site check by an authorized contractor of The Mobility House

- Detailed planning for one elaborated charging infrastructure scenario
- Preparation of a binding installation proposal

Site inspection by a project manager of The Mobility House

- Recommended for complex and large sites (e.g., installation of charging infrastructure at several subdistribution points planned)
- Project kick-off meeting including site inspection at your location

Consideration of multiple sites

- Consideration of several sites, which should be electrified

Ramp-up plan for the charging infrastructure

- Preliminary implementation planning including cost indication for future expansion stages of the charging solution

Simulation and comparison of additional charging scenarios

- Consideration of different charging scenarios (e.g., different number of charging stations and/or different charging station types, different mobility requirements)
- Comparison of the required power supply and costs of the different charging scenarios

Presentation of different billing options

- Presentation of possible billing options at the company site or in a residential property as well as for company cars at home and in public
- Recommendation of the suitable billing solution for your application

Consideration of the integration of renewable energy systems (PV & BHKW)

- Description of the most important aspects of the integration of renewable energy systems and electromobility (e.g., electricity supply)
- Recommendation for the integration for your site

Implementation strategies for residential properties

- Description of connection options for charging stations in residential properties
- Specification of future power requirements based on selected expansion stages
- Consideration of cost allocation to the ownership community and individual parking space tenants

Process oriented loading solutions for car dealerships

- Description of necessary process adjustments for various core areas due to electrification
- Display of possible extensions to the business model
- Cost-benefit consideration of public charging stations and fast charging stations

Video presentation of the concept results

- Presentation of the results of the concept and response to open questions
- One-hour appointment via video conference