

Checklist: Switch to electromobility for companies

Every company has individual mobility needs and requirements for its vehicle fleet. Nevertheless, most companies can benefit from electric mobility. However, the e-fleet requires somewhat different planning than a combustion engine fleet. For an optimal implementation, vehicles, necessary charging infrastructures and an optimised fleet management have to be taken into account.

1. Carry out a mobility analysis or have one carried out

The first step towards an e-fleet is usually to determine the individual mobility needs, i.e. total daily mileage, individual routes, planned or unplanned trips, parking situations during the day and at night. From this, among other things, an optimal mix of charging infrastructure in the depot, public charging points or employee charging (against remuneration) at home can be derived.

2. Compile an optimised fleet according to technical and economic aspects

<input type="checkbox"/>	Travel demand and range (average, frequency / distance of "spontaneous trips")
<input type="checkbox"/>	Personnel allocation of vehicles or open pool
<input type="checkbox"/>	Consideration of alternative mobility modules (bike sharing, public transport tickets, etc.)
<input type="checkbox"/>	TCO consideration (e.g. comparison of operating costs, residual values of e-vehicles vs. diesel) Compliance with the charging pole ordinance

3. The selection of an e-vehicle (aspects that should be taken into account when deciding to buy)

<input type="checkbox"/>	Range incl. buffer for winter/summer use (air conditioning, heating, battery capacity)
<input type="checkbox"/>	Energy-efficient air conditioning (steering wheel contact heating, seat heating)
<input type="checkbox"/>	Buying or renting a battery
<input type="checkbox"/>	Vehicle weight and payload
<input type="checkbox"/>	Charging plugs and adapters (CCS or CHAdeMO, Schuko emergency charging, AC and DC charging capacity)
<input type="checkbox"/>	Options and costs for customer service / maintenance
<input type="checkbox"/>	Insurance with special E-conditions
<input type="checkbox"/>	Possible subsidies from federal, state or regional governments

4. The use of e-vehicles

<input type="checkbox"/>	Technical know-how (kWh vs. kW, energy consumption, charging plugs/power/time)
<input type="checkbox"/>	Charging in the depot and at public charging points (charging cards and other authorisation options)
<input type="checkbox"/>	Locating charging stations (charging station finder, lists of "charging stations in the vicinity")
<input type="checkbox"/>	Raising awareness of "actual" ranges
<input type="checkbox"/>	Technical and financial framework for home charging
<input type="checkbox"/>	Energy-efficient driving behaviour

5. The right design of the e-parking area

<input type="checkbox"/>	Goals, target groups and intended use
<input type="checkbox"/>	Number and charging capacity suitable for the parking situation
<input type="checkbox"/>	Location of the charging pole (accessibility, restriction, gatekeeper)
<input type="checkbox"/>	Possibility of reservation for E-vehicles only
<input type="checkbox"/>	Collision protection
<input type="checkbox"/>	No (traffic) obstruction in the charging process (e.g. free access routes, visibility)
<input type="checkbox"/>	Colour marking and signposting of the parking area
<input type="checkbox"/>	Road safety (e.g. clearing snow)
<input type="checkbox"/>	Lighting and safety (e.g. can be used at any time during the night)
<input type="checkbox"/>	Energy supply (e.g. grid connection, energy management, reporting to the grid operator)
<input type="checkbox"/>	Involvement of protection and rescue forces, public order office, etc. (especially in public spaces)
<input type="checkbox"/>	Service providers (technical testing, hotline, maintenance)
<input type="checkbox"/>	Follow-up costs (maintenance costs, backend, securing of paths, etc.)
<input type="checkbox"/>	Possible subsidies from the federal, state or regional governments

6. The correct use of an e-parking system

<input type="checkbox"/>	Accessibility (internal use only or public access) Internal use only: LSV not relevant Public: LSV relevant, including standard and notification to Federal Network Agency
<input type="checkbox"/>	Costs for electricity supply (free of charge or against payment) Free of charge: roaming and calibration law not relevant Payment: LSV relevant, including ad hoc access
<input type="checkbox"/>	Instruction / training of persons on site (porters, caretakers, reception etc.)