



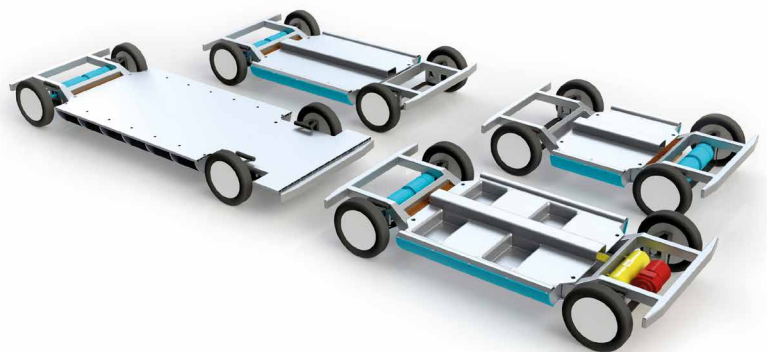
battery swapping for electric vehicles with standardised modules

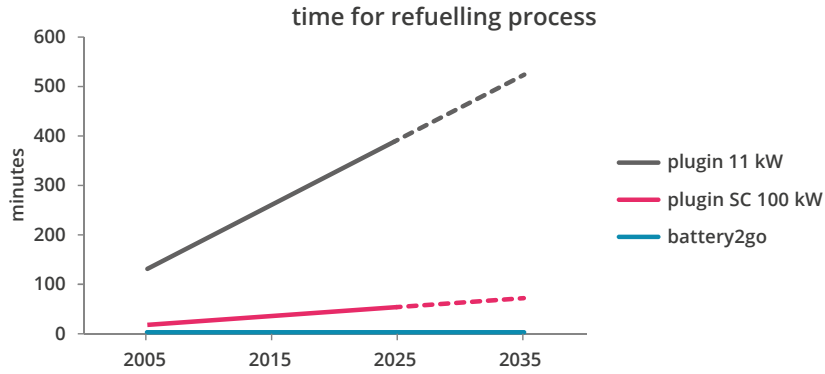
battery2go is a flexible and cost-effective fast fuelling system for electric vehicles. A fully automated swapping station provides the appropriate number of modules for every vehicle type, assembles them into a new vehicle battery and replaces it within 2 minutes. The driver can stay in the vehicle, the payment is wireless. The entire system is integrated in an air-conditioned container. The station's batteries can deliver up to 1 megawatt positive or negative operating reserve for the public grid on the medium voltage level.



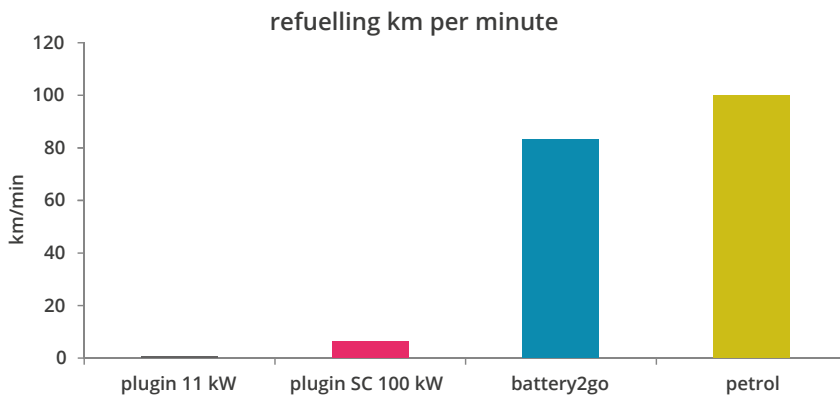
- + cost-efficient mass production of modules
- + decoupling of the battery and the vehicle life
- + simple integration of the latest battery technologies
- + fully automatic change in 2 minutes
- + guaranteed 100% range after refuelling
- + second life of the modules for energy storage
- + simplified recycling

- + full supply of more than 500 vehicles
- + about 100 battery modules per container
- + charging capacity up to 1 MW
- + grid stabilisation through energetic recovery
- + installation without civil engineering
- + scalable for each vehicle category
- + available for all vehicle manufacturers

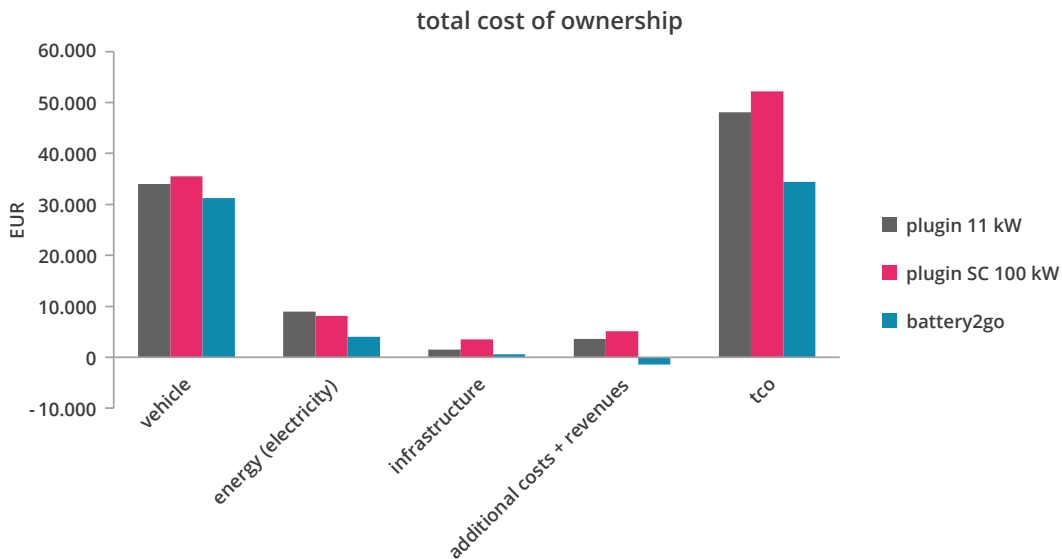




Assumption: increase of the battery capacity up to 100 kWh per vehicle by 2025



Assumptions: Vehicle with 50 kWh battery, 5-6 minutes per refuelling (petrol)



Assumptions: vehicle price without battery: 18.000 EUR, battery capacity: 50 kWh, battery costs 300 EUR/kWh, electricity costs: 30 ct/kWh private, 15 ct/kWh commercial, mileage per year: 15.000 km, infrastructure costs for one 11 kW home charging station installed: 1.500 EUR/vehicle, infrastructure costs for fast charging stations and 10% supply: 2000 EUR/ vehicle, infrastructure costs for battery2go station: 600 EUR/vehicle, infrastructure maintenance costs: 4% per annum, reduced depreciation with battery2go: 3.000 EUR/vehicle, additional revenues from second life of the modules: 10% of battery price for plugin, 5% for SC plugin, 25% for battery2go, reduced recycling costs battery2go: 3% of the battery price