



ELECTRIC POWERTRAINS OFFER LESS REVENUE AND PROFIT POTENTIAL IN AFTER-SALES

The traditional after-sales business in mobility and transport is highly profitable. Profit margins of >30% contribute to the financial success of OEMs. The transition to an electric world will impact that traditional business model: A full electric powertrain comes with less complexity, with a lower number of components and reduced wear and tear. These differences create major challenges for today's manufacturers. They are forced to define strategies to counteract the expected decline in revenue and profits.

NOT ONLY PASSENGER CAR, BUT ALSO COMMERCIAL VEHICLE AND OFF-ROAD OEMs WILL BE AFFECTED

The question is not whether, but which segments and at what market shares will electric powered vehicles exist by 2025, 2030, and beyond. Largest volumes are foreseen in small and compact passenger vehicles, but also larger cars and light duty applications are increasingly in focus for OEMs. According to recent FEV Consulting studies, even the (regional-haul) heavy duty transportation sector shows an increasing attractiveness for electric solutions (use-case fit; TCO competitiveness; "green" image; political drivers).

FEV CONSULTING HELPS ITS CUSTOMERS DEFINETHE RIGHT ELECTRIC AFTER-SALES STRATEGY

All manufacturers should have a clear understanding of their individual electrification strategy and the related impact on their after-sales business. FEV Consulting helps manufacturers define the right approach by answering the following key questions:

- How large will the evolving gap be in terms of revenue and profits?
- Which attractive after-sales business opportunities exist with electrical components and what is their financial contribution?

- What organizational changes (e.g. partnership strategy and EV eco-system; dealer and service network) enable a successful shift?
- How attractive are alternative business opportunities beyond the traditional parts and service area?

THE SECOND LIFE OF THE BATTERY DOES NOT OFFSET LOST REVENUE AND PROFIT

The battery accounts for approx. 60-80% of total (electric) powertrain costs, hence must be in focus of after-sales considerations. FEV Consulting's after-sales battery model however reveals two major challenges when considering related business opportunities. First, increased technical maturity levels of the batteries lead to negligible failure rates and an increased durability performance, shifting the customer relevant "state-of-health undercut" to ever later stages. Second, attractiveness of existing business models (resell, refurbishment, and remanufacturing) seems to be limited, foreshadowing a highly competitive market place with battery pack costs shrinking below 100 €/kWh by 2030.

THERE IS MUCH MORE TO DO: FEV CONSULTING DEVELOPS BUSINESS BEYOND ELECTRIC AFTER-SALES

Together with its customers, FEV Consulting develops individual after-sales strategies to maximize revenue and profit streams based on electrical components and services around the electric vehicle (e.g. smart charging, V2G, maintenance and warranties). A dedicated analysis of additional "revenue and profit boosters" (e.g. within the field of connected or automated vehicle solutions) completes the picture. After strategy definition, FEV Consulting helps its customers to implement the developed ideas and guide them through changes in Corporate Structure, Development, Procurement, Marketing and Sales or HR.

DIFFERENT MARKET SEGMENTS, DIFFERENT IMPACTS, DIFFERENT NEEDS – BUT TIME IS OF THE ESSENCE

FEV Consulting does the above for customers from different industries, for both manufacturers and suppliers. Strategy and implications vary, but the need for action remains, rather today than tomorrow. The passenger car industry faces the after-sales challenge already, driven by electric products in series and on the road. The commercial vehicle industry comes next, learnings should be carried over. Relevant electrification within the off-road industry is not on the horizon yet, but will play a role 2030+. The opportunity to prepare at early stages, leveraging existing know-how and today's learnings, is highly recommended.

