

Scenario analyses for the technological evaluation of the market diffusion of future commercial vehicle concepts

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Methodology

➤ Combined bottom-up, agent-based and discrete choice modelling approach

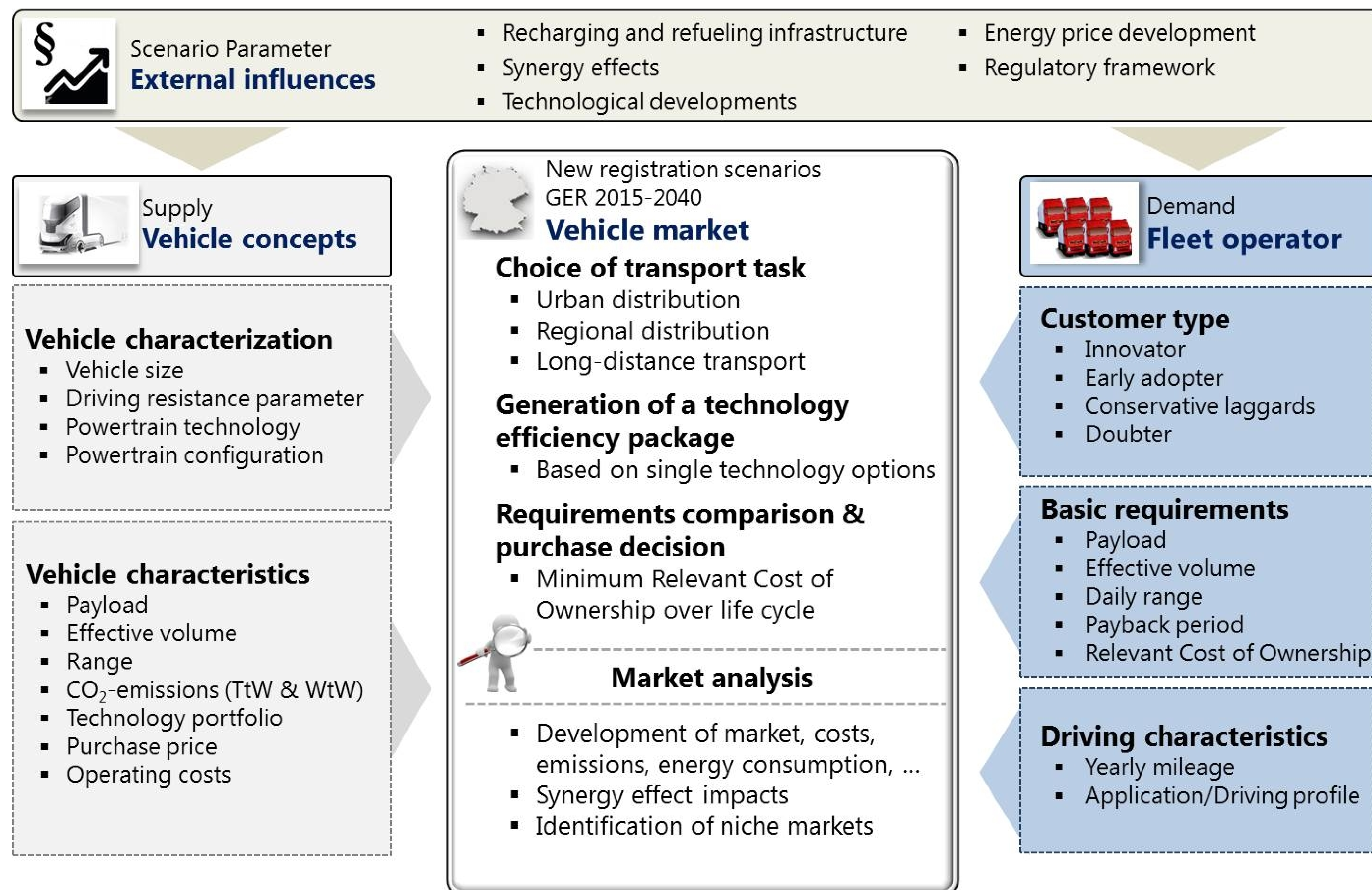


Figure: Approach of the road haulage vehicle technology market model

Results

➤ Market potential identified for HEV in the LCV market and for CNG vehicles in the HCV market
➤ BEV and FCEV vehicle concepts are not competitive under the given framework

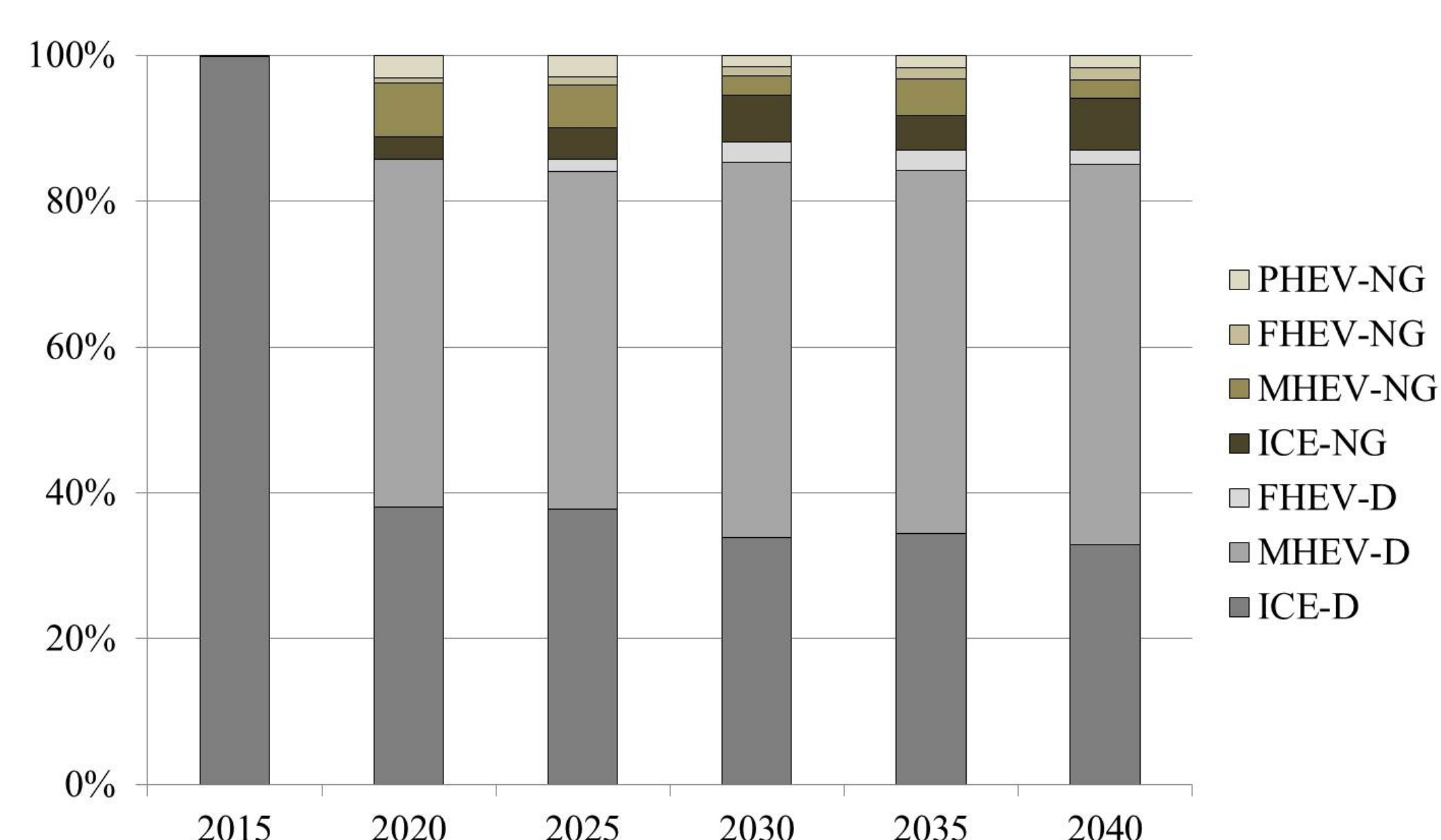


Figure: Results of the reference scenario for the German road haulage market of new light and heavy commercial vehicle registrations

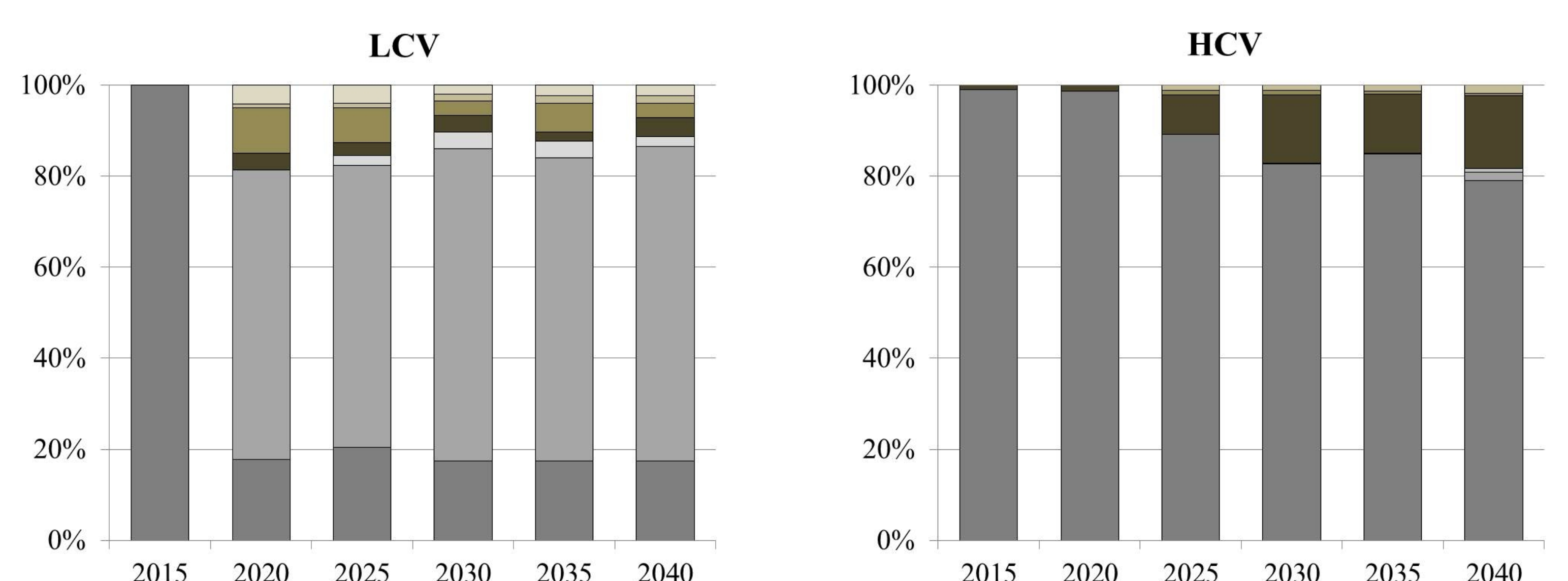


Figure: Results of the reference scenario for the German road haulage market separated into new light commercial vehicle registrations (on the left) and heavy commercial vehicle registrations (on the right)

Conclusion

➤ Significant market shares for electrified powertrains only when CO₂ regulations are in place