



Bachelor-/Master Thesis

Market research on Heavy-Duty Vehicle conversion: Landscape, trends, forecast



Source: Tesla

Initial Situation:

Medium- and Heavy-Duty Vehicles (HDV), despite representing only 9% of the entire vehicle population, amount for almost 39% of greenhouse emissions in the vehicle sector. This fact motivates numerous legislative initiatives towards HDV electrification that propel the efforts from both OEMs and fleet owners around the world for this cause. However, the point in time where the HDV sector reaches full electrification is still in the horizon, with some estimates placing it beyond the year 2050. Because of this, new approaches are needed to accelerate full electrification of this sector.

Your task:

Your task is to apply different tools to analyze the state of the art of HDV electrification, its technological and market trends and derive potential scenarios for electrification strategies of HDV.

The concrete tasks include, for example:

- Displaying the current solutions for electrification including conversion.
- Market analysis of electric conversion of HDVs (e.g. Porter's Five Forces, SWOT, market segmentation).
- Derivation of possible use-cases and implementation strategies for different electric platforms for HDV.

Your profile:

- Studies in industrial engineering, mechanical engineering, or comparable course of studies.
- Interest in production and/or automotive engineering.
- Safe handling of MS Office.
- Independent structured work.
- Core knowledge of business administration and economics are an advantage.

Our offer:

- Comprehensive support.
- Delimited tasks.
- Close cooperation with an industrial company.
- Collaboration in a young, dynamic project team.

Are you interested?

Please send a current transcript of grades, curriculum vitae and certificates to the email address below.

Your contact at PEM:

José Guillermo Dorantes Gómez
Campus Boulevard 30,
D-52074 Aachen
j.dorantes@pem.rwth-aachen.de