

Research Internship

Car manufacturing - energy demand and costs

Background

Currently, traffic sector mostly relies on fossil fuels and cars are in a very small share powered by electricity. Both electric vehicles (EV) and fuel cell vehicles (FCV) are considered as promising green alternative technologies to reduce carbon emissions. However, the following questions remain: What is the optimal technology in terms of utilizes energy for both car manufacturing and its usage? How does the material consumption for these cars manufacturing differ in comparison to the internal combustion engine (ICE) vehicles?



Source: <https://www.automotive-circle.com/events/smart-production-digitalizing-automotive-manufacturing-2024/>

Goals

- Understand and shortly describe the main processes in the car manufacturing industry
- Access the material and energy demands for the car manufacturing
 - What are the differences associated with the different engine types?
 - What are the differences associated with different car sizes?
- Estimate the manufacturing costs for cars with different engine types

Contact

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