



# Project „Flexible Assembly Processes for the Car of the Third Millennium (MyCar)“

## **Problem Description**

Environmental Optimization Tool

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... Why do we need an **environmental optimization tool**  
To evaluate the environmental impact of different  
assembly lines?

## Problem background

- Good image
  - Environmental sustainability is more important now than ever, due to the increasing awareness of the public
  - There are environmental concerns like emissions of greenhouse gas, scarcity of resources and pollution
- Marketing
  - Green operations may be arguments for marketing of goods and services
- Production process(es)
  - Increased energy and material costs due to potential depletion of resources
  - Non-value adding set-up times when changing tools
- Tools
  - Tools for assessment of environmental impact are available on the market, but they are not adapted to production purposes

## Objectives

- Develop a systematic and simplified method for assessment and optimization of environmental performance of a production setup
- The method can be used as a structured guideline and a decision-making tool when designing a new production setup or upgrading of existing production line