

JUNGHEINRICH'S JOURNEY TO CLIMATE NEUTRALITY AND A CIRCULAR ECONOMY



The leading solutions provider of intralogistics Jungheinrich collaborated with Capgemini Invent to consolidate data for Scope 1, 2, and 3 emissions and evaluated the lifecycle of selected products with Capgemini Engineering.

OVERVIEW

Client: Jungheinrich

Industry: Manufacturing

Challenge: Jungheinrich wanted to achieve transparency on its Scope 1, 2, and 3 emissions to strengthen its climate strategy. Additionally Jungheinrich wanted to gain insights on environmental impacts generated in the lifecycle of selected products.

Solution: Jungheinrich worked with Capgemini Invent to determine its Corporate Carbon Footprint (CCF) in a three step-process (screen, collect data, and calculate) and conducted a Life Cycle Assessment (LCA) for selected products with Capgemini Engineering.

Results:

- The detailed corporate carbon footprint analysis is an important milestone for the organization's future climate strategy
- Jungheinrich has access to data on its current CO₂e footprint
- Examination of selected products in LCA enabled evaluations at product level

Within Jungheinrich's sustainability strategy, climate neutrality plays a special role. Jungheinrich wants to reduce CO₂e emissions in intralogistics and support its customers in achieving their climate targets. Therefore, Jungheinrich aims to become climate neutral. In order to achieve this, Jungheinrich wanted to gain comprehensive transparency on emissions drivers within the organization. Transparency and measurability are one of the first steps in determining a granular corporate carbon footprint and identifying emissions hotspots.

Generally, emissions occur all along the value chain. It is therefore necessary to consolidate heterogeneous data from a wide variety of sources and translate it into emissions data. To achieve this, Jungheinrich partnered with Capgemini Invent in order to combine its industry knowledge with sustainability strategy expertise.

A further focus of Jungheinrich's sustainability strategy is its ambition regarding eco-efficiency and the circular economy. Therefore, the leading solutions provider of intralogistics partnered with Capgemini Engineering to assess select product lifecycles.

DETERMINING THE CORPORATE CARBON FOOTPRINT (CCF) IN THREE STEPS

To achieve comprehensive transparency and measurability, Jungheinrich and Capgemini Invent calculated the CCF for the entire value chain from raw materials to the end-of-life disposal of products. The CCF was determined in a three-step process (screening, data collection, and calculation) in accordance with the Greenhouse Gas Protocol.

In the screening phase, a CCF was extrapolated on the basis of rapidly available central data, which provided a rough estimate. Afterwards, the team collected holistic data and linked it with granular, specific emission factors, resulting in a precise CCF.

LIFE CYCLE ASSESMENT (LCA) HIGHLIGHTS PRODUCT-SPECIFIC EMISSIONS

In parallel, Jungheinrich and Capgemini Engineering examined selected products in LCA to enable an evaluation at product level. In the LCA, concrete products were analyzed regarding environmental impact indicators – from raw

material extraction through production and use to the end-of-life. The specific products were modeled in terms of their material and energy flows.

MILESTONES FOR A HIGH-IMPACT SUSTAINABILITY STRATEGY

The in-depth CCF analysis enabled the identification of emission hotspots. These act as a basis for the effectiveness of future reduction measures. Going forward, the Jungheinrich team can continue data collection and evaluation processes for CCF surveys in the future.

By implementing LCA, Jungheinrich has calculated product-specific environmental footprints for products in accordance with DIN EN ISO standard 14040. The LCA modeling of material and energy flows enables concrete detailed analyses and the identification of optimization potential in individual products.



A decorative blue wave line that starts on the left, rises to a peak, and then falls to a trough before rising slightly again.

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