

Defining Product Sustainability Hotspots to Enhance Business Opportunities

OVERVIEW

Whirlpool Corporation (NYSE:WHR) is one of the world's largest manufacturers of home appliances, with approximately \$22 billion in annual sales, 69,000 employees and 54 manufacturing and technology research centers (as of 2021). The Fortune 500 company markets Whirlpool, KitchenAid, Maytag, Consul, Brastemp, Amana, Bauknecht, Jenn-Air, Indesit, Hotpoint and other major brand names in nearly every country throughout the world.

In Europe, Middle East and Africa (EMEA) it has approximately 24,000 employees, a sales presence in more than 30 countries and manufacturing sites in eight countries. Whirlpool EMEA is an operating segment of Whirlpool Corporation. Whirlpool Corporation's European Operations Center is located in Pero, Italy.



Founded in 1911



Manufacturing



Benton Harbor, Michigan , U.S. (HQ)

69,000

Employees (2021)

\$22 billion

Annual Sales (2021)

CHALLENGES



Quantification of the environmental impacts

of products through their entire life cycle to continuously improve their environmental performance



Integration of environmental KPIs

among the main drivers of product development



Identification potential areas of improvement and hotspots

that need to be addressed in a conscious PCR development for refrigerators

“Sphera is a qualified consultancy firm with the technical competence to develop tools. Thanks to the model that we created together, we selected indicators that represent the hotspots and opportunities related to our sector and products.”

— Roberta Bernasconi, Senior Manager Sustainability, Whirlpool EMEA

SOLUTION FAMILY

SPHERA'S SUSTAINABILITY CONSULTING AND PRODUCT SUSTAINABILITY (GABI) SOFTWARE & DATABASES

Whirlpool EMEA worked with Sphera to create an automated eco-design tool that enables the company to perform environmental impact analyses of its products throughout their life cycle, identify hotspots and areas for improvement, and compare alternative product scenarios. As a foundation of the tool, Sphera's sustainability experts developed a parameterized Life Cycle Assessment (LCA) model to represent different refrigerator types using Sphera's Product Sustainability (GaBi) software and databases.

Sphera's Sustainability Consulting and Product Sustainability Software and Databases help organizations improve the environmental performance of their products and services by:

- Enabling data-driven decisions during design and planning
- Advancing product innovation and eco-design
- Providing access to industry-based, high-quality Life Cycle Inventory (LCI) data



RESULTS

By integrating eco-design into product development, Whirlpool EMEA was able to evaluate and monitor the environmental performance of products at every stage of their life cycle and improve production processes by comparing different scenarios.



Identified improvement potential for the company's overall sustainability performance



Gained in-depth knowledge of the relevant aspects for the development of a specific PCR for refrigerators



Identified emissions hotspots and opportunities for product-related communication

Is your organization ready to advance its sustainability journey?

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