

CIRCULAR TRANSITION INDICATORS

Case Studies

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CASE STUDIES



Organization name:
Royal DSM

Number of employees:
23,000

Industry:
Chemicals

Annual turnover:
€10 billion

Website:
www.dsm.com



The world is only 9% circular and the trend is not reversing. Accelerating the transition towards a circular economy is a value-chain effort: it allows our company to track progress and steer towards improvement. By applying the Circular Transition Indicators, we can identify both gaps and opportunities in our value chain.

Roy Vissers

Global Circular Economy Project Lead, DSM.



Why are circular metrics interesting to your company?

DSM is dedicated to securing the future availability of natural resources and unlocking more value from the limited resources available. On circularity, we focus on improving our own impact, enabling customers and partners to deliver more circular solutions, and advocating for the transition to a circular economy. The circular metrics framework is a first step in helping our company to set a baseline and monitor progress on the transition towards a circular economy.

Key challenges

Transitioning to a circular economy model requires companies to understand and control all materials and processes used in production. At DSM, we use the framework to track material flows per business group. One of the challenges we faced is in the collection of data on these flows. While we are familiar with collecting production data and financial figures, we do not currently collect 'circularity' data (product recyclability for example).

Solutions

This framework helped us to engage the organization and have a conversation about circularity with different businesses and functional departments within DSM. Analyzing our CTI 'scores' required new ways of thinking across the organization.

Results

By analyzing material flows per business group, we can provide our businesses with insights into their status as they adopt circular business practices and ultimately seize circular business opportunities. We believe that the circularity gaps and opportunities need to be reviewed in the context of the type of industry, region and product-application and position in the value-chain. Understanding the different challenges within contexts will help businesses to come up with the most relevant circular interventions or business models to apply for their challenges.

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Organization name:
Whirlpool

Number of employees:
92,000

Industry:
Consumer products
and services

Annual turnover:
€21 billion

Website:
www.whirlpoolcorp.com



If you can't measure it, you can't improve it! The Circular Transition Indicators launched by WBCSD allow us to easily self-assess our products towards circularity performance to further define targets, priorities and to monitor progress.

Roberta Bernasconi
Senior Manager EMEA Sustainability, Whirlpool.



Why are circular metrics interesting to your company?

At Whirlpool, we have sustainability goals at company and product level, related to - among others - greenhouse gas (GHG) emission and plastic waste reduction; circular business models such as the use of recycled plastics - would enable reaching such goals. The Circular Transition Indicators are thus internal indicators to support us in continuously monitor and improve our performance to reach our overall sustainability goals.

Key challenges

At Whirlpool, we have focused our first assessment on a single production plant, producing only washing machines. All inputs were referred to one washing machine unit, but easily scalable to the whole production units. For us, one of the main challenges were data availability at the level of detail needed by the tool. Several of our Bill of Material (BOM) items are components / assembly that we buy from suppliers, requiring detailed information from tier 2 and beyond suppliers (for example, for control boards we don't require every single material composition).

Solutions

We had several "product teardown analysis" made to compare our products with similar products from the industry. Such analysis produces a very detailed list of information, including mass and typology / composition of material and chemicals used. Due to the labor intensiveness of this process, we only perform detailed analysis on a limited number of products. To run the tool, we selected a product (washing machine) among the ones used for the teardown analysis that we consider as being representative of what we produce in the manufacturing plant selected for the assessment.

Results

The assessment confirmed our assumptions that we use materials that can be currently recycled (and they are in the so-called open loops), but we don't currently use a high percentage of recycled materials in our products. In other words, our products have the potential to be much more circular than what we see today. Our number one priority will be to focus on the development of recycled plastics to increase the circularity indicator and help us meet our goals to improve the amount of recycled content in our products as we have pledged.

**World Business Council
for Sustainable Development**

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