worldly

Komar Uses Worldly's Product Impact Calculator to Achieve its SBTi Commitments

How a leading global apparel brand saves time and gets more accurate product impact data with Worldly

---

Industry:
Apparel

Location:
US-based with a global presence

Worldly solutions used:
- Worldly Product Impact Calculator
- Higg Facility Environmental Module (Higg FEM)

Komar's sustainability goals

The following are just some select sustainability goals from Komar's publicly announced 2030 sustainability strategy, "SUS-TEX 2030":

Product goals:

Sourcing
100%
sustainably sourced cotton for all its cotton-based products by 2030.

Sourcing
100%
recycled polyester for all its polyester-based products by 2030.

Sourcing
100%
of manmade cellulosic fibers (MMCFs) from Green Shirt (light green or dark green) Certified suppliers by 2030.

Committed to
100%
of packaging being reusable, recyclable, or compostable by 2030.

Energy & emissions goals:

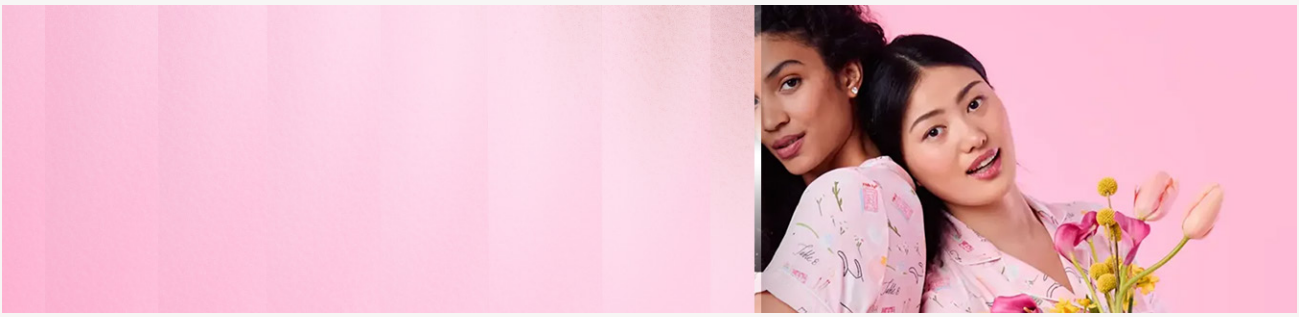
46.2%
absolute reduction in scope 1 & 2 emissions and

27.5%
absolute reduction in scope 3 emissions by 2030, compared to the 2019 baseline (SBTi-validated)

Sourcing
80%
of electricity from renewable sources at its own facilities by 2030.

Net-Zero
emissions across global operations by 2050 (submitted for SBTi validation).

Sourcing
40%
of electricity from renewable sources in its supply chain by 2030.



Key results

01

Time savings of multiple days per month in the ongoing process of calculating and reporting product-level emissions.

02

The ability to calculate real supply chain performance at scale across nearly 100 percent of Tier 1 manufacturing facilities.

03

The ability to align with emerging global frameworks such as Product Environmental Footprint (PEF) and the Digital Product Passport (DPP) using the primary supply chain data Komar already collects.

04

The power to simulate and model the product-level emissions impact of variables such as materials choices and energy sources.

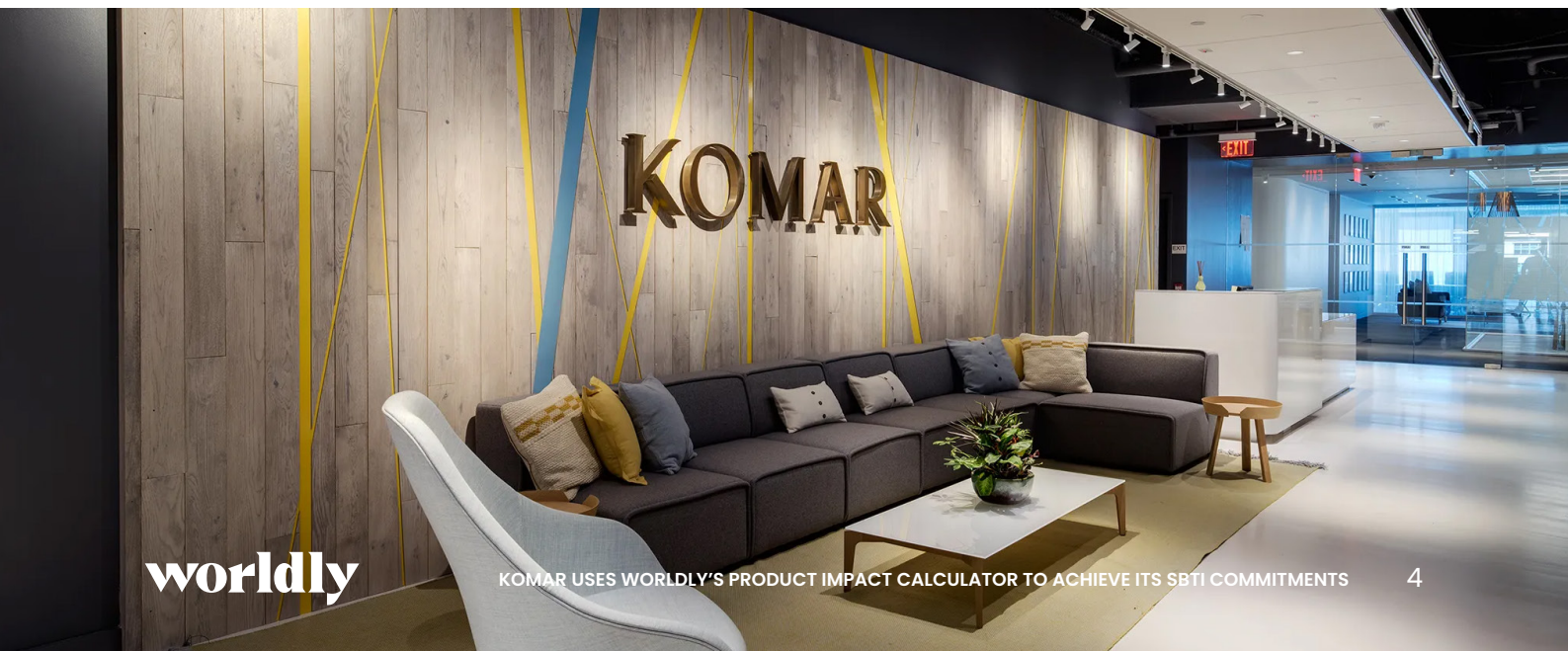
> One of the most valuable parts of using the Product Impact Calculator, and why we chose it, is that we'll benefit from one consistent methodology even as we expand our data collection efforts beyond Tier 2 suppliers. This means our outputs will be consistent and reliable for the future, which isn't the case for a typical LCA.
>
> **Dr. Thiwanka De Fonseka,**
> Chief Sustainability Officer, Komar

The challenge: Meeting science-based targets requires accurate product impact data

In the global apparel and consumer goods industry, Scope 3 emissions—those generated indirectly during production—represent both the biggest challenge and the greatest opportunity for reducing product environmental impact. For most companies, Scope 3 emissions account for 70–90 percent of a brand or retailer's total. Accurate product-level emissions data enables brands, retailers, and manufacturers to understand the true impact of individual products and make informed decisions that support GHG targets, commitments, and regulatory compliance. However, obtaining this level of insight through comprehensive Lifecycle Assessments (LCAs) is often time-consuming and expensive, and also presents challenges with consistency.

"If you look at five different product lifecycle assessment service providers, you'll get five different results because they use different emissions factors. Plus, LCAs are resource intensive, so it's not realistic to conduct them for every product," said Dr. Thiwanka De Fonseka, Chief Sustainability Officer at Komar. This level of resource allocation with inconsistent results doesn't work for a company with science-based climate targets and a commitment to meeting them. Komar needed a solution that could deliver accurate, scalable, and consistent product-level emissions calculations.

As a result, many companies rely on industry averages, default data, or spend-based models to calculate product footprints. Spend-based models offer speed but little precision, estimating emissions solely on the basis of dollars spent. They fail to capture key variables, such as material choices, production location, and a facility's use of renewable energy, rendering them insufficient for meaningful decision-making. For Komar, a U.S.-based, family-owned company with more than a century of history and a broad portfolio of owned and private-label brands, default data and estimates weren't accurate enough for its ambitious climate goals. At the same time, calculating product-level emissions without the right technology was manual, costly, and resource-intensive.



Why Worldly's Product Impact Calculator was Komar's answer to the product impact challenge

Unlike product carbon footprint tools that rely on static averages, Worldly's Product Impact Calculator integrates primary data from a company's own facilities, materials, and suppliers at scale—delivering more precise results. Retail and consumer goods companies managing product-level compliance, decarbonization, and reporting value its ability to quickly unify multiple datasets into a single, defensible product emissions calculation.

Komar chose the Product Impact Calculator because it is purpose-built for the retail and consumer goods industry and enables refinement using their primary data obtained through the Higg Facility Environmental Module (Higg FEM), developed by the global nonprofit Cascale in collaboration with Worldly.

> With Worldly's Product Impact Calculator, we can also use the primary data from our supply chain that's already in Worldly, and we can see the actual reduction. Rather than playing around with numbers, we can do actual decarbonization activities in our supply chain and in our material strategy, because we now have the method to quantify the impact of those changes.
>
> **Dr. Thiwanka De Fonseka,**
> Chief Sustainability Officer, Komar

By using its primary supplier data, Komar can replace industry average assumptions with real energy data reported by its suppliers, enabling more accurate emissions calculations. Komar can compare these results with prior spend-based emissions calculations to understand the differences, identify hotspots, and prioritize decarbonization initiatives throughout their supply chain.

Curious which primary data, and how much, is the most important to collect to drive maximum Scope 3 impact? Download our guide *Measure What Matters: The Primary Data That Drives Scope 3 Accuracy.*

Before the Worldly Product Impact Calculator:

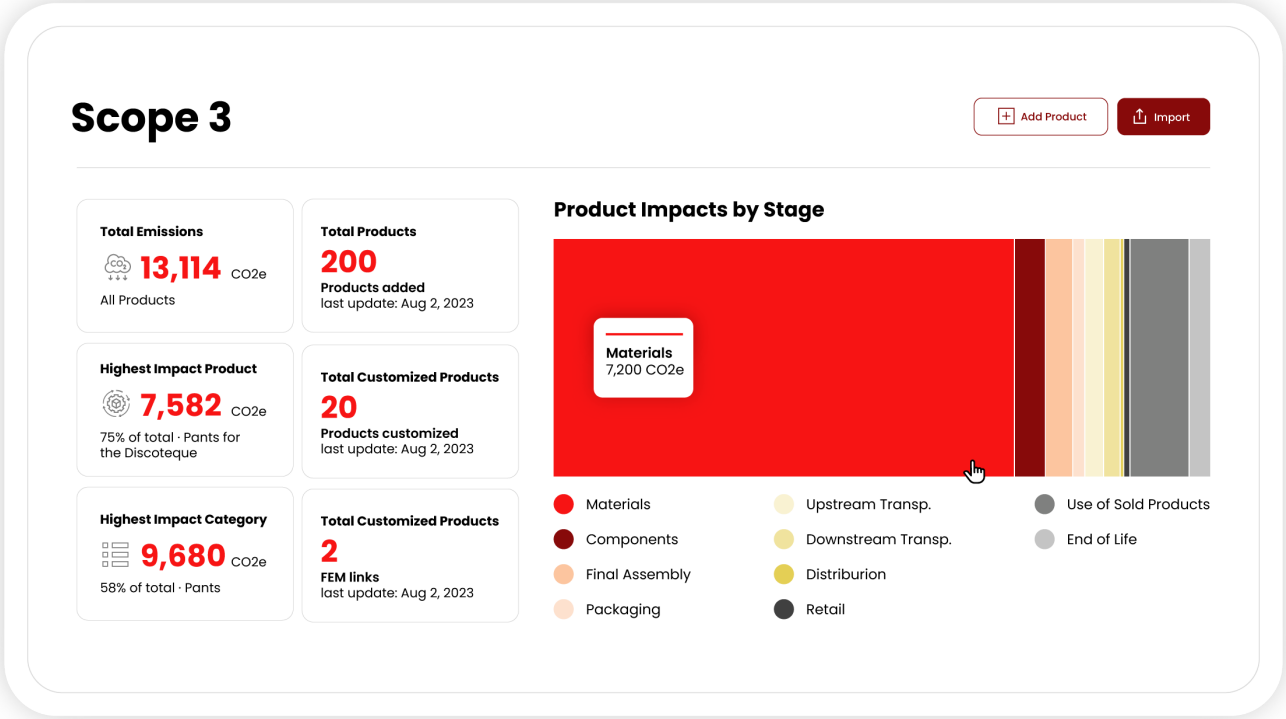
Prior to using the Product Impact Calculator, Komar had the option, and the capabilities, to calculate product-level emissions using industry averages, default data, or spend-based models: all methods that lack the accuracy needed to measure real impact and progress. Alternatively, Komar could manually calculate emissions using available primary data, a process that required significant time and effort. The brand was conducting its product-level calculations using a combination of these methods, primarily through spend-based calculations.

Spend-based calculations are a fast but blunt model that only allow companies to get Scope 3 emissions data based on one variable: Dollars spent on that product. Since spend-based calculations can't account for any other inputs, they can't reflect changes to variables like type of material, country of production, or amount of renewable energy a facility uses. This makes it impossible for spend-based calculations to support the kind of strategic decisionmarking Komar required to meet its science-based targets.

With the Worldly Product Impact Calculator:

Komar reduced days of calculations to hours. By using the primary data it already collects from facilities, the sustainability team gains accurate, defensible insights that reflect real supply chain performance and progress toward decarbonization goals.

Today, nearly 100 percent of Komar's products are linked to their final assembly facilities in the Product Impact Calculator, ensuring product-level emissions are driven by primary data.



4 ways Worldly's Product Impact Calculator helps Komar measure and improve its product impact

1. Komar can move from assumptions to certainty.

Scope 3 modeling has long relied on assumptions and averages, limiting actionable insight. Worldly's Product Impact Calculator enables Komar to replace static factors with verified data from hundreds of Tier 1 and Tier 2 suppliers, reflecting real facility performance.

By comparing Product Impact Calculator results with prior spend-based calculations, Komar can pinpoint where differences emerge—revealing true product and material impacts and enabling targeted decarbonization actions.

2. Komar can simulate scenarios and model potential improvements.

The Product Impact Calculator enables Komar to go beyond measurement and simulate future scenarios before making decisions. The brand can model changes such as material substitutions or supplier shifts and immediately see how those choices affect a product's carbon footprint.

Built-in transparency highlights data sources and remaining gaps, helping Komar prioritize data collection and steadily improve the accuracy of its Scope 3 modeling. This iterative process turns measurement into continuous improvement.

> Rather than doing the calculations manually or using another third-party (especially for the Scope 3: Category 1, Purchased Goods & Services, which is accountable for more than 75% of our Scope 3 emissions), we can use the Product Impact Calculator to save time and money while achieving accurate simulations. We can see what would happen if we changed from Supplier A to Supplier B or changed the boiler from one type to another. These are some of the potentials we're looking at, and using the Product Impact Calculator makes our internal work much easier, and we have great confidence in our results.
>
> **Dr. Thiwanka De Fonseka,**
> Chief Sustainability Officer, Komar

3. Komar is contributing to driving industry-wide progress.

Dr. De Fonseka emphasizes that supply chain decarbonization requires collective action across interconnected brands, retailers, and manufacturers.

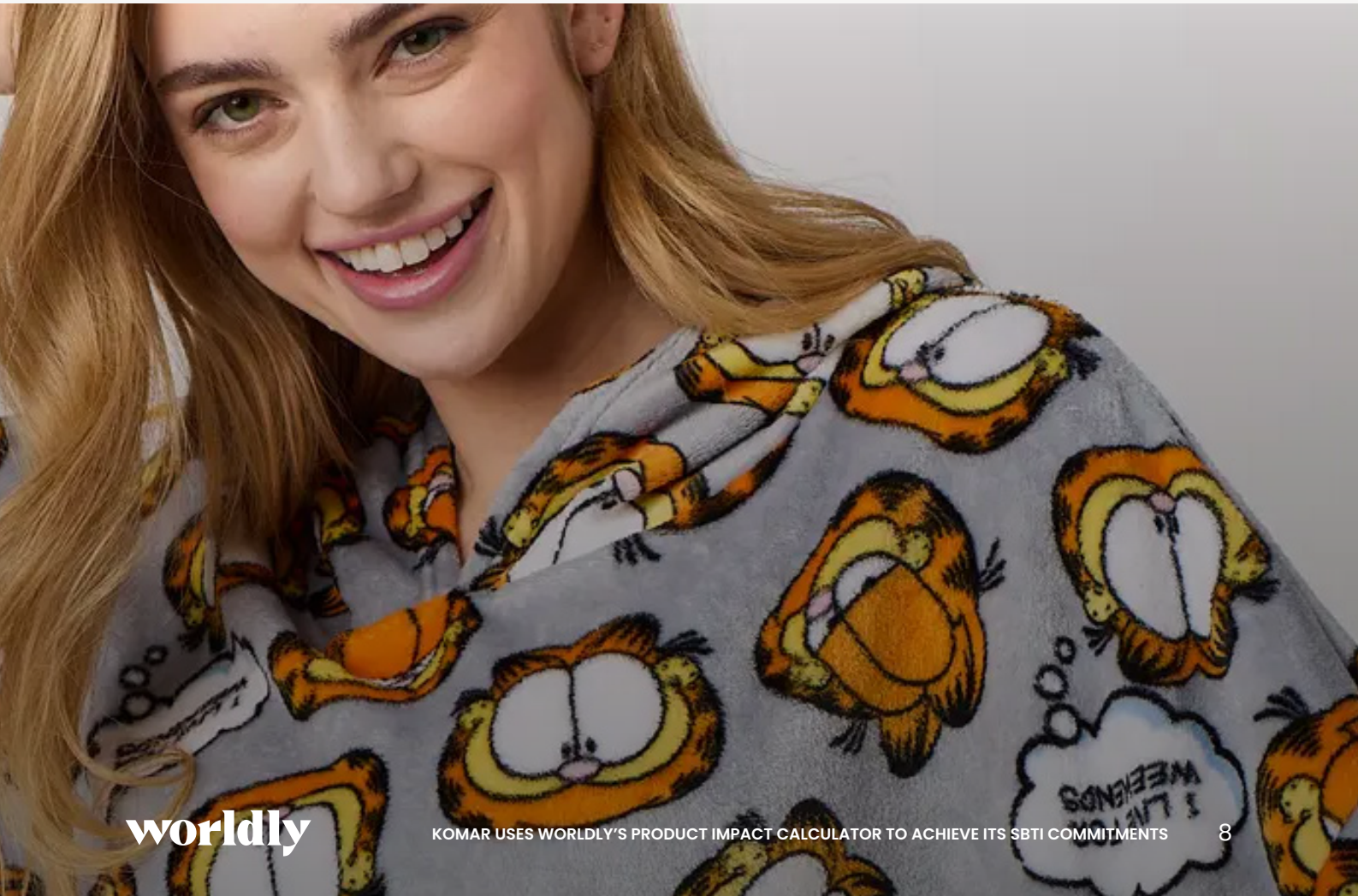
By collecting primary supplier data and using Worldly's Product Impact Calculator to generate product-level Scope 3 emissions, Komar helps advance industry alignment around standardized methodologies.

> The beauty of Worldly's Product Impact Calculator is that it's a methodology the entire industry can rely on, and drive decarbonization together.
>
> **Dr. Thiwanka De Fonseka,**
> Chief Sustainability Officer, Komar

4. Komar achieves all of this in hours, not days.

Komar collects and shares its supply chain data on a monthly basis and used to spend several days each month on the task. With the Product Impact Calculator, several days has turned into several hours: **a time savings of nearly 90 percent.**

This time savings, combined with high accuracy, delivers a clear return on investment compared to manual methods or other technology solutions.



Komar's early results and future vision

Worldly released the Product Impact Calculator in 2024, making Komar one of its earliest adopters. With strong early results, Komar now serves as a role-model brand for others seeking accurate product-level Scope 3 emissions calculations—an increasingly critical capability for evolving regulations, risk management, and sustainability goals.

For brands like Komar that are committed to long-term supply chain decarbonization and risk reduction, investing in the Product Impact Calculator is also a sound business decision because:

Effective supplier engagement supports stronger compliance readiness.

Accurate data enables sustainability reporting with measurable, provable progress.

Industry-wide collaboration reduces effort while improving results.

> We are invested in supply chain decarbonization. Now, we can quantify the ROI for every penny we spend. The cost of Worldly is significantly less than the cost of consultants to do these calculations, and now we can quantify the results we're getting as we work on our Scope 3 reduction strategy.
>
> **Dr. Thiwanka De Fonseka,**
> Chief Sustainability Officer, Komar

Komar's key success metrics

01

Reduced monthly product-level emissions calculations from several days to just a few hours.

02

Achieves high accuracy by incorporating primary facility data from Tier 1 and Tier 2 suppliers.

03

Nearly all products are linked to **Tier 1 manufacturing facilities in the Product Impact Calculator**, ensuring results reflect real supply-chain performance.

04

Uses Product Impact Calculator insights to inform material strategy, supplier engagement, and internal decarbonization investments.

05

Plans to deepen Tier 2 integration, incorporate Tier 3 data, and align with emerging frameworks such as Product Environmental Footprint (PEF) and the Digital Product Passport (DPP).

06

Models Scope 3 Category 1 impacts by evaluating material changes, such as shifting from conventional to recycled polyester or organic and more sustainable cotton.

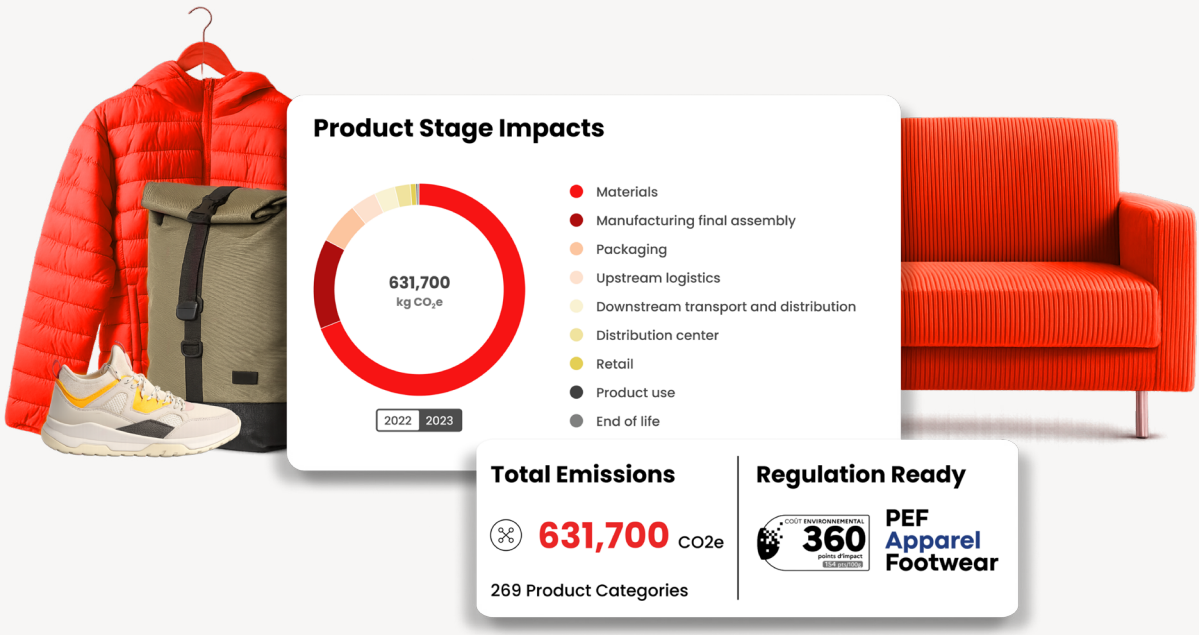
07

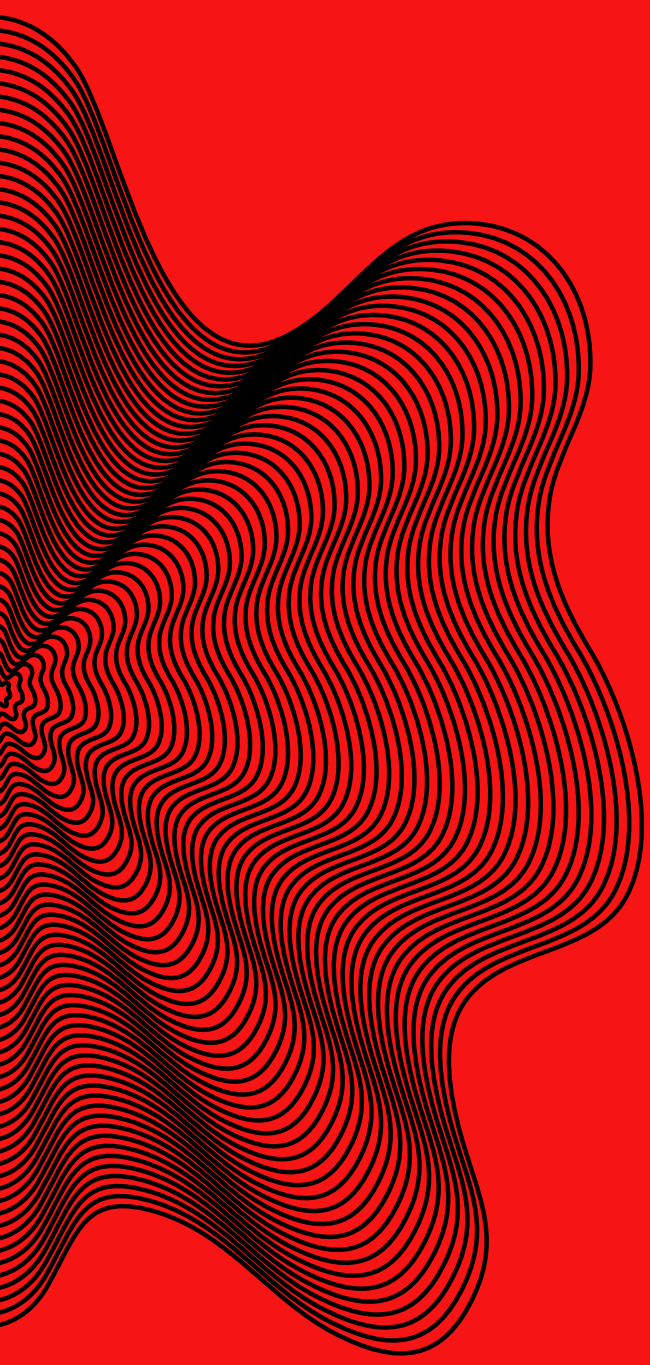
Runs product simulations to assess how emissions change across materials and other variables, with future expansion planned for packaging, trims, and accessories.

Ditch the averages. Drive real decarbonization.

Say goodbye to estimates and product-level LCA calculations that don't drive impactful business decisions. See how the Product Impact Calculator can transform the way you measure Scope 3 emissions, reduce your carbon footprint, and stay ahead of evolving regulations.

Schedule a demo





worldly

Worldly is the leading sustainability and supply chain intelligence platform for the consumer goods industry. The company empowers brands, retailers, and manufacturers to turn **verified primary data** into **insight and action** across complex global supply chains.

Trusted by a network of more than **40,000 companies** across apparel, footwear, home furnishings, and sporting goods, Worldly provides visibility into environmental and social performance, including carbon, water, chemicals, and labor, at the product, facility, and value-chain levels.

Built on industry-recognized standards, including Cascale's Higg Index, Worldly translates raw data into actionable intelligence that helps organizations reduce risk, meet evolving regulatory requirements, and drive measurable progress over time.

www.worldly.io