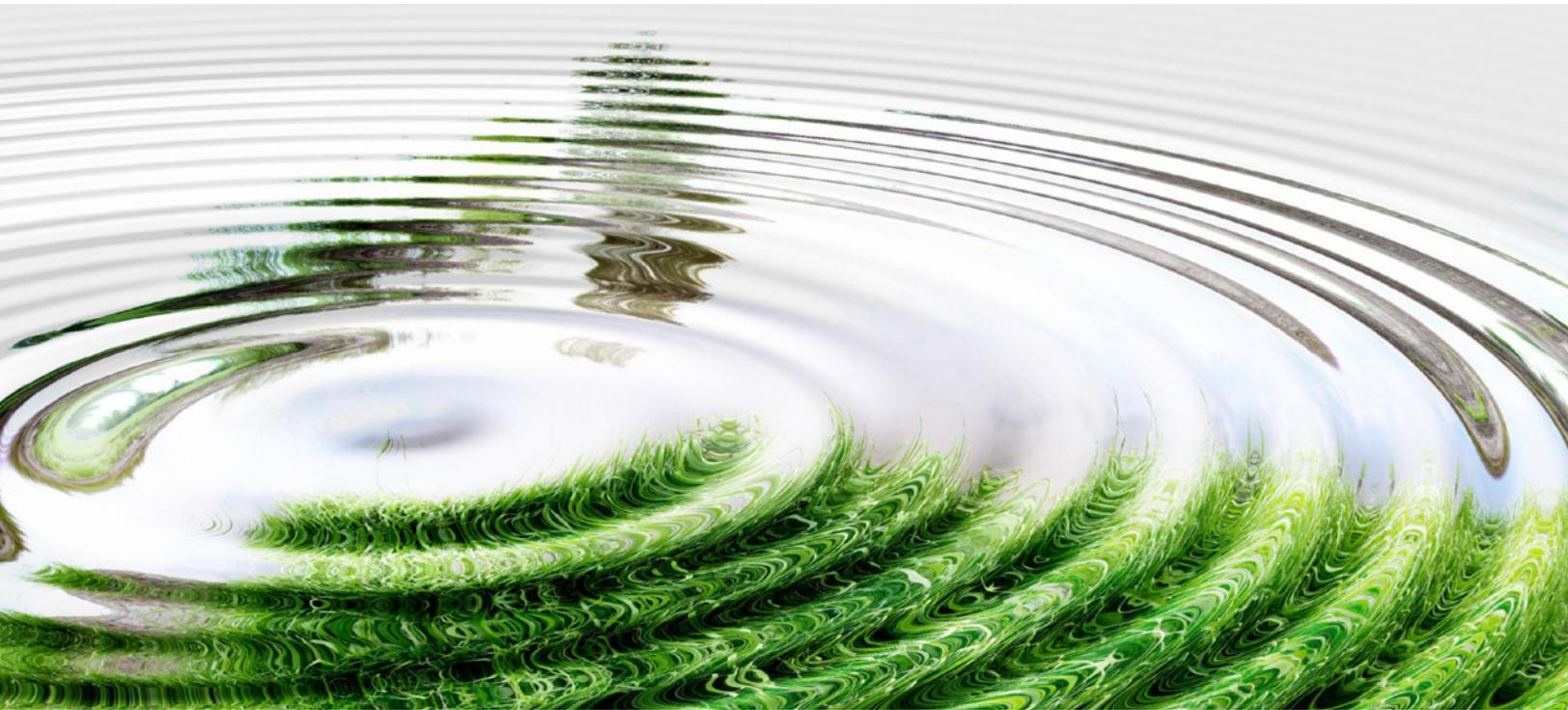


# Sustainable Packaging

The Right Packaging for Your Products, Your Brand and Your Planet



Companies producing consumer packaged goods (CPGs) are at a turning point — find smart ways to make their products and packaging sustainable, or face increasing regulations, taxes, and consumer backlash.

The pressure is on: companies are trying to respond to sustainability mandates, yet assessing what’s needed, sourcing the right materials, and designing products accordingly is extremely complex. Every factor is interdependent, and creating the right solution, end-to-end, requires expertise that’s out of scope for most companies.

**Jabil Packaging Solutions (JPS) has the resources and experience to deliver innovative, sustainable packaging for virtually any consumer product — from food and beverage to home and personal care.**

**We give you packaging choices by applying a threefold approach to the product development process:**

- Design new packaging formats or modify existing products to meet your sustainability goals.
- Assess and validate the carbon footprint, recyclability and sustainability of your new product design to ensure an optimal end-of-life result.
- Determine the best sustainable materials for your package and source them intelligently, while factoring for price, supply, and technical performance.



## Design for Sustainability

**Drive faster time-to-market and eco-friendly validation with our proven design innovation process.**

To achieve practical sustainability, you need to carefully consider all phases of development and production to combine the highest functionality, lowest cost, and least environmental impact. With so much of a product's success directly affected by its design and manufacturability, JPS experience and expertise in every aspect of sustainable packaging is a priceless asset for any company rethinking its green strategies.

Innovative JPS design experts are chemical, industrial, materials, process, human factors, and mechanical engineers. Applying these skills to packaging, they collaborate with your teams to deliver innovative solutions to help customers deliver fully on their brand promises and sustainability goals.



### DISCOVERY

Understand the customer need and explore potential solutions



### CONCEPT CREATION

Apply a process of innovation to provide the best possible solution in the desired material



### DESIGN FOR MANUFACTURING

Engineer faster, cost-effective processes for rapid scale-up



### PROTOTYPE DEVELOPMENT

Produce parts using initial production processes for acceptance testing



### TESTING & VALIDATION

Assess product performance for rapid iteration



### PRODUCTION SCALE-UP

Implement efficient production tooling, equipment, and processes

For additional information, visit [jabil.com/Packaging](https://jabil.com/Packaging)

# Sustainable Packaging Assessment

**Iteratively assess key sustainability factors such as carbon footprint, recyclability and more before moving into full-scale production.**

Accurately calculating a carbon footprint or lifecycle assessment requires a quantitative understanding of the end-to-end supply chain — adding the impacts of source materials, transport, manufacture, as well as end-of-life considerations. JPS can assess your current product's carbon footprint and provide different options to increase sustainability — from using recyclable, bio-based, or biodegradable materials and lightweighting to simply changing source material vendors or locations. JPS first understands your goals and the scope of your packaging challenge. We evaluate current packaging and calculate its quantitative impact on the environment. In close collaboration with your own teams, JPS then interprets all these data points, weighing such things as the costs of change vs. the costs of inaction and remediation. In addition



to enabling sustainable packaging choices, this iterative process can reveal opportunities for enhanced branding, improved manufacturability, as well as a faster, more reliable, and more cost-effective supply chain.

## UNDERSTANDING THE MANY FACTORS THAT INFLUENCE YOUR CARBON FOOTPRINT



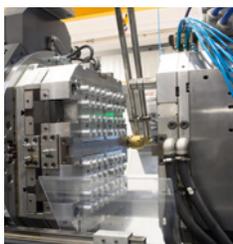
### RESIN PRODUCTION

Leverage supplier declarations and scientifically published data to determine the impact of the resin in your packaging.



### RESIN TRANSPORTATION

Understand the total weight and distance traveled of the Resin as it moves from your supplier to a Jabil factory — all while factoring for fuel efficiency.



### PACKAGE PRODUCTION

Determine the Kwh/kg produced at a specific Jabil site and identify the emission factor from the electricity supplier. Many Jabil sites are completely powered by renewable energy, making emission zero.



### FINISHED PRODUCT TRANSPORTATION

Understand the total weight and distance traveled of the final packaging product as it moves from a Jabil facility to your warehouse or distribution center.



### TRANSPORTATION TO RETAILERS

Uncover the carbon impact of shipping to retailers and customers.



### END-OF-LIFE

Understand what percentage of your packaging gets recycled, landfilled or incinerated based on geography.

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## Materials Sourcing & Development

### **Drive holistic procurement strategies that factor for price, supply chain optimization and performance.**

Determining the right design and packaging materials – from biodegradable fibers to a specialized polymer resin – for a particular product or component is just the first step. Finding dependable, competitive sources is the next. JPS prioritizes strong supplier relationship management to provide reliable access to diverse sources of recyclable, PCR, bio-based, and biodegradable/compostable resins worldwide – ensuring an uninterrupted supply chain while minimizing the environmental impact of long-distance shipping.

Materials science expertise is the key to finding constituents that meet sustainability, regulatory, and performance goals. For example, we develop custom polymer blends to address unique product needs and find innovative materials for barrier packaging techniques. Packaging with the right materials enhances brands – that's why JPS labs and innovation centers consistently find ways to optimize manufacturability, performance, and cost to enable the best options for carbon impact, reduction, reuse, and recyclability.





## Helping Our Customers Achieve Their Sustainability Goals



### PCR RAMP-UP

Incorporating PCR is a marathon, not a sprint. Collaborate with JPS to determine the appropriate PCR content percentages across your portfolio and implement them while considering supply, cost and demand.

### DESIGN FOR RECYCLABILITY

Consolidating materials and altering form factor can make a world of difference when it comes to the end of life scenario for a given package. Work with Jabil's packaging design team to ensure your product can be recycled and reused for maximum value at minimal environmental impact.

### HIGH BARRIER RECYCLABLE FOOD PACKAGING

Barrier packaging drives incredible improvements in shelf life and product quality for food and beverage brands. But until now, it has not been a sustainable option. JPS provides world-leading, high-barrier recyclable packaging solutions that provide the best of both worlds.

### COMPOSTABLE PACKAGING

Not all bio-resins are created equal. JPS leverages materials from leading suppliers to create custom blends that are both functional and sustainable.

### CARBON FOOTPRINT REDUCTION

Sustainability is much larger than just ocean plastics. Jabil Packaging Solutions can assess your package and calculate your carbon emissions. From there, tangible design and manufacturing improvements can be made to decrease your carbon footprint.

### LIGHT WEIGHT, REFILLABLE AND REUSABLE PACKAGING

Many packaging formats still leverage unnecessary amounts of raw material which adds up in terms of cost and carbon emissions. JPS can help augment your packaging designs to eliminate any extra plastic that isn't absolutely essential, including the creation of reusable and refillable product delivery systems.

### VOLUMETRIC EFFICIENCY

From cartons to pallets, the small differences in volumetric efficiency across your packaging portfolio can have big ramifications on your carbon footprint. Work with Jabil to optimize your packaging portfolio for cost savings and carbon emissions reduction.

## Why Jabil

Jabil Packaging Solutions, a division of Jabil, creates brand brilliance for the world's leading brands through technology leadership, manufacturing excellence, and time-to-market advantages. From design to delivery, Jabil's value-added packaging solutions leverage a portfolio of highly engineered and proprietary processes to solve complex packaging requirements. By matching world-class offerings with an array of extended manufacturing capabilities, Jabil builds game-changing smart packaging solutions for customers.

### UNMATCHED TOOLS & EXPERTISE FOR PACKAGING INNOVATION



Engineering  
Excellence



Barrier  
Technology  
Expertise



Auto-Replenishment



High-Volume  
Experience



Materials  
Expertise



Sustainable  
Manufacturing



Manufacturing  
Scalability



Molding  
Expertise



Supply Chain  
Orchestration



Strong Financial  
Backbone



Assembly  
Experience



Electronics  
Pedigree

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#### About Jabil

Jabil (NYSE: JBL) is a manufacturing solutions provider with more than 250,000 employees at over 100 facilities in 28 countries. The world's leading brands rely on Jabil's unmatched breadth and depth of end-market experience, technical and design capabilities, manufacturing knowhow, supply chain insights and global product management expertise. Driven by a common purpose, Jabil and its people are committed to making a positive impact on their local community and the environment.