SUSTAINABLE PACKAGING: WHAT DOES THE FUTURE HOLD?

Overview

The consumer packaged goods (**CPG**) industry is seeing a shift towards **sustainable packaging**, driven by an increasing awareness of environmental issues and rising demand for eco-friendly products.

Use of **sustainable packaging materials** is expected to increase in the CPG sector, creating growth opportunities in the sustainable packaging market. Companies in the CPG industry that can offer sustainable packaging options are therefore likely to have a competitive advantage.

- The spend on packaging typically represents around **9%** of the total product cost

- The average cost of packaging is roughly **$1** for every **$11** spent.

- Manufacturers spend over **$150 billion** every year on product packaging.

Companies in the CPG industry that can offer sustainable packaging options are therefore likely to have a competitive advantage.

Challenges

Traditional packaging methods and materials are no longer sufficient to meet the needs of modern consumers, who expect sustainable, visually appealing, and easily recyclable packaging. Additionally, the growing complexity of packaging regulations can make it difficult for companies to keep up.

As a result, CPG companies must re-evaluate and revamp their entire packaging process to meet these changing requirements, while still maintaining cost-effectiveness and speed to market.
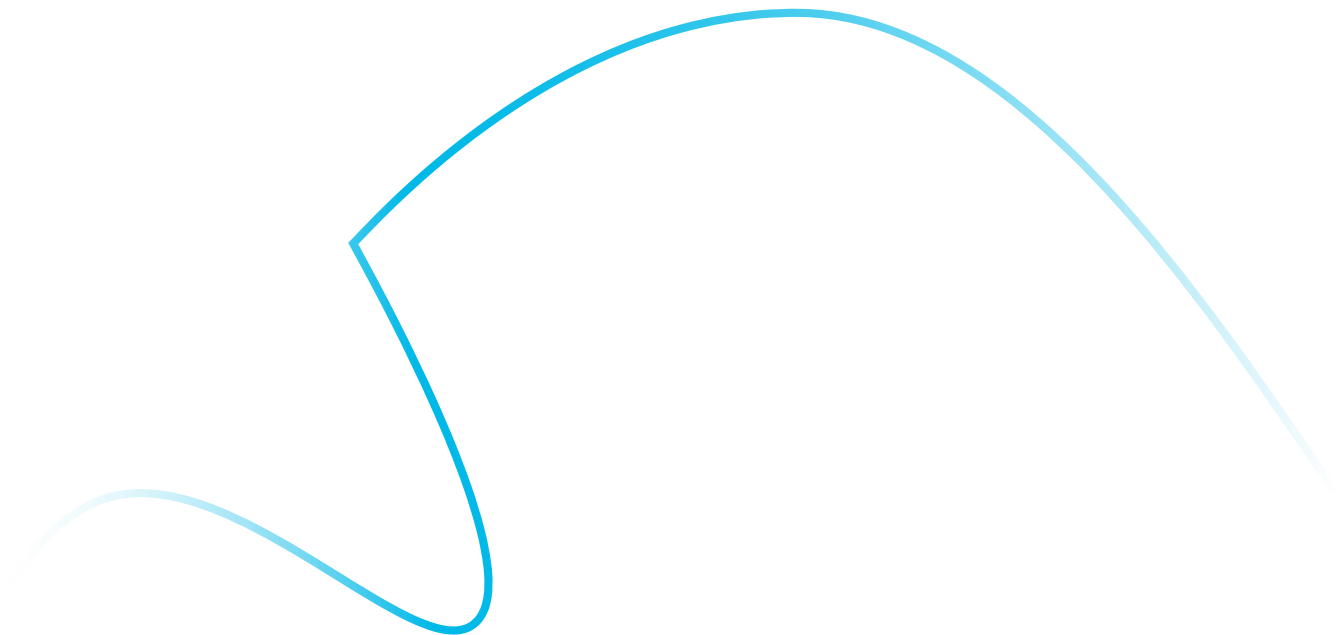
Our Solution

Through an end-to-end 'Packaging as a Service' approach across the entire product lifecycle, Capgemini Engineering integrates engineering and management into one unified workflow, thanks to 3D technologies, sustainable solutions, optimization and efficient management. Starting from a business vision, our teams deploy, at scale, different processes in order to cut costs, reduce environmental impact and improve decision making.

Our list of services include:

Sustainable packaging materials

By leveraging our expertise in synthesis and formulation, material and process selection, process modeling and optimization, and control and laboratory testing, we enable our clients to adopt and deploy sustainable packaging solutions that reduce their environmental footprint.

Packaging design & simulations

Our team helps clients design optimal packaging for their products, taking transportation volume and delivery cost into consideration. We also utilize 2D/3D simulations and labelling design to aid decision-making and improve the overall packaging process.

Packaging cae analysis & physical testing

We provide computer-aided engineering analysis for packaging to meet standards through simulation, analysis, and physical testing. This helps us identify optimization levers for better performance.

Packaging optimization

Our team assists clients in the development of new packaging solutions from specifications to procurement. We optimize filling rates and materials used, leveraging our expertise to reduce packaging costs and waste.

Packaging management

We offer a returnable packaging management system and a real-time container tracking system, both of which help to optimize packaging levels and reduce costs. We also specialize in solving packaging shortages and managing packaging data to support business success.

Why Capgemini Engineering?

Through an end-to-end Packaging-as-a-Service approach across the entire product lifecycle, Capgemini Engineering seamlessly integrates engineering and management into one unified workflow thanks to 3D technologies, sustainable solutions, optimization and efficient management.

Starting from a transformative business vision, our teams deploy various processes at scale, and focus on cutting costs, reducing environmental impacts and supporting clients to make better decisions around sustainable packaging.

E2e packaging approach
Our end-to-end packaging approach is designed to create a cohesive and seamless experience for our clients. We consider all elements of the packaging process, from the materials used to the overall design, to ensure that our packaging protects the product during shipping and handling, and enhances its overall appeal and value.

Multidisciplinary expertise
Our team combines packaging design, sustainable materials development, the optimization of primary, secondary and tertiary packaging levels and different packaging types (eg. steel, plastic, cardboard, wood, foam) with technological and engineering expertise to provide high-value insights and recommendations.

Digital tools as traceability enablers
End-to-end solutions that combine both engineering and digital engineering in the different packaging scopes ensure that all elements of the packaging experience are consistent and aligned with our client's standards - while also improving efficiency and reducing waste in the production process.

Sustainability as a mantra
A global worldwide network of experts available to develop new eco-friendly materials for packaging, optimize the existing client solutions, and consider the entire lifecycle of the packaging to minimize environmental impact of the product.

About Capgemini Engineering

World leader in engineering and R&D services, Capgemini Engineering combines its broad industry knowledge and cutting-edge technologies in digital and software to support the convergence of the physical and digital worlds. Coupled with the capabilities of the rest of the Group, it helps clients to accelerate their journey towards Intelligent Industry. Capgemini Engineering has more than 55,000 engineer and scientist team members in over 30 countries across sectors including Aeronautics, Space, Defense, Naval, Automotive, Rail, Infrastructure & Transportation, Energy, Utilities & Chemicals, Life Sciences, Communications, Semiconductor & Electronics, Industrial & Consumer, Software & Internet.

Capgemini Engineering is an integral part of the Capgemini Group, a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided every day by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 340,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2021 global revenues of €18 billion.

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