The Future of Demand for Chemicals

Capturing Growth and Securing Price Premiums

The chemical industry is seeing a major shift toward sustainability-related chemical products, with demand expected to grow 4.5 times faster than for conventional products. This change is driven by customer preferences and companies across industries aligning offerings, with both consumer and industry buyers willing to pay more for eco-friendly options. To capitalize on this opportunity, chemical companies must revise how they go to market, from business models to value propositions.

Demand for environmentally friendly products is on the rise, with more than half of consumers preferring these options, and a growing number of people willing to pay more for sustainable products.

Indeed, our global research shows 51% of consumers prefer to buy environmentally friendly products, and an analysis of company news releases and reports reveals that business-to-consumer companies (B2C) recognize this change (see Fig.1).

A US survey by PDI Technologies indicates that the share of consumers willing to pay more for sustainable products grew by 2 percentage points, from 66% in 2022 to 68% in 2023, and then by 12 percentage points to 80% in 2024.

Industry Commitments to Sustainability

This consumer shift propels manufacturing and consumer goods companies to develop and promote sustainable offerings and set and publicly share sustainability goals. For example, L'Oréal pledges to use 95% bio-based ingredients, derived from minerals or circular processes, by 2030; H&M Group aims to use recycled or sustainably sourced materials for 100% of its packaging by 2030.

Chemical companies can position themselves as strategic partners, helping customers meet their sustainability commitments. The demand for sustainability-related offerings involves two kinds of chemical products: sustainable chemicals to produce eco-friendly products and conventional chemicals used to manufacture products that reduce environmental impact, such as solar panels or electric vehicles.

As chemical customer industries strive to meet their decarbonization targets, the demand for sustainability-related chemical offerings will continue to grow. Demand for sustainability-related chemical products should increase from \$340 billion in 2023 to \$570 billion by 2028, according to a recent report published by Accenture. With an anticipated 11% compound annual growth rate (CAGR), this market offers a substantial opportunity for growth and innovation, expanding at a rate 4.5 times greater than the 2.4% CAGR projected for conventional products.

Growth in Sustainability-Related Segments

Delving deeper into the chemical sector's customer industries, end-consumer demand is driving higher growth in sustainability-related segments than conventional ones, and we expect this shift to continue shaping future chemical demand.

By analyzing global sales growth for 69 companies across multiple



Fig. 1: Top B2C companies believe sustainability influences consumer purchases.

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industries, we found that sustainability-related segments consistently outperformed overall growth, including conventional segments (see Fig. 2 & 3).

For example, from 2021 to 2023, the auto sector saw electric and hybrid vehicle sales grow by almost 40%, while overall growth was just under 10%, slowed by conventional products. In textiles, sustainability-related segments saw double-digit growth, contrasting with negative growth in conventional segments. Home and personal care products with sustainable ingredients drove growth rates more than double the overall average. These shifts highlight the influence of sustainability on industry growth and future chemical demand.

Strategies for Chemical Companies

While chemical companies can meet some future demand with existing offerings, capturing other aspects will require innovation, advanced technologies and new business models.

We've identified three key actions to

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help chemical companies capitalize on growing sustainability-related demand:1. Accelerate innovation

R&D processes can be completely reinvented with digital, data and AI technologies. To meet future demand for

sustainable products with low greenhouse gas emissions, substantial innovation will be needed, including solutions with cost-effective, eco-friendly chemical processes and recycled or bio-based feedstocks.

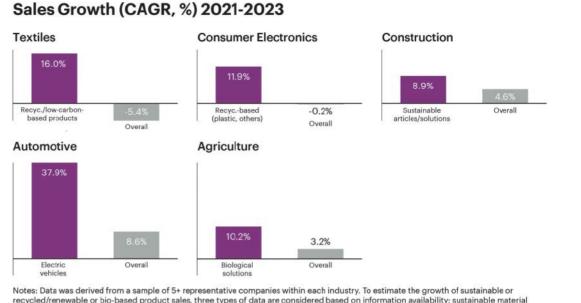
Despite limited innovation budgets, advanced digital technologies such as generative AI can boost R&D success rates by up to 70%, our research shows. These tools can reduce time spent on manual tasks, allowing researchers to focus on value-creating activities such as collaboration and ideation.

For example, lab experiments can shift to quantum-powered virtual experiments, and in-house R&D units can transform into innovation ecosystems that foster collaboration with external partners.

2. Develop a transparent value proposition

Chemical companies can communicate a compelling value proposition that emphasizes the traceability and transparency of sustainability-related features. But sustainable chemical products face a challenge: Despite eco-friendly changes such as using sustainable feedstocks or reducing greenhouse gas emissions, the chemical molecule remains unchanged. Environmentally friendly modifications, which add value, may not be immediately obvious to buyers.

Technologies such as blockchain, digital product passports and business networks can improve traceability and transparency. Blockchain creates a transparent ledger of the chemical production process, while digital pass



recycled/renewable or bio-based product sales, three types of data are considered based on information availability: sustainable material or recycled content penetration, circular or sustainable solution revenue, sustainable product units sold (e.g., EVs) and sustainable sourcing. Overall growth is derived from Oxford Economics Gross output (sales), (Nominal, \$B) for all industries except **Home & Personal Care and **Packaging – revenue growth of representative companies considered.

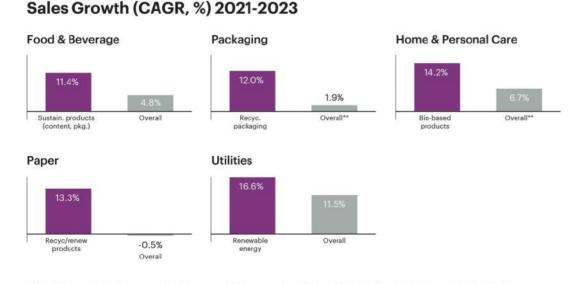
Source: Accenture analysis based on data derived from company annual and sustainability reports, Capital IQ and AlphaSense

Fig. 2: Sustainability-related segments outpace conventional industry growth.

ports give detailed information about a product's value chain. Additionally, business networks connect companies within a supply chain through a digital platform, facilitating traceability.

By offering full transparency and traceability for the sustainability benefits of their products, companies can stand out in the market. This transparency also helps chemical companies justify their share of the premiums paid by consumers. 3. Build value-chain partnerships Forming strategic partnerships with a diverse set of stakeholders—including chemical customers, governments, technology companies and non-governmental organizations (NGOs)—is key. To drive collective success, these partnerships should focus on co-creation, shared innovation, investment commitments and risk- and profit-sharing. Collaborating with technology

companies can provide access to cut-



Notes: Data was derived from a sample of 5+ representative companies within each industry. To estimate the growth of sustainable or recycled/renewable or bio-based product sales, three types of data are considered based on information availability: sustainable material or recycled content penetration, circular or sustainable solution revenue, sustainable product units sold (e.g., EVs) and sustainable sourcing. Overall growth is derived from Oxford Economics Gross output (sales), (Nominal, \$B) for all industries except **Home & Personal Care and **Packaging – revenue growth of representative companies considered.

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Fig. 3: Sustainability-related segments outpace conventional industry growth-cont.

ting-edge solutions, while partnerships with governments and NGOs can help navigate regulatory landscapes and address community concerns.

By fostering a collaborative ecosystem, chemical companies can improve their innovation capabilities and ensure their sustainability efforts are aligned with broader industry, consumer and societal preferences.

Capturing Growth from Future Demand

The shift toward sustainability-related offerings in the chemical industry is more than a trend; it's a fundamental change driven by consumer demand and innovation across a variety of sectors. By taking these three actions, chemical companies can meet the increasing demand for sustainability-related products, secure price premiums and position themselves for growth.

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