

Environmental sustainability

Research is hardly necessary to demonstrate that attitudes are changing towards environmental sustainability at the consumer, business, and governmental levels. Those changes are visible to anyone living in developed regions, where consumer-directed marketing efforts routinely emphasize a company's environmental responsibility.

However, if there were any doubt, hard evidence does corroborate this widespread intuition. Investment decisions are increasingly made with sustainability in mind, and governments in the United States, Europe and elsewhere have committed to various ambitious environmental goals.^{1,2}

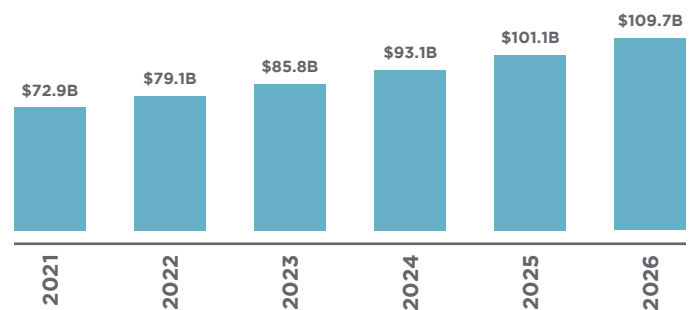
This global trend has already exerted significant effects on the market for cleaning products, which frequently contain toxic chemicals that come with significant environmental costs. New research shows the scale of that impact by pointing to the growth of sustainable cleaning products as a defining feature in the industry in the years to come.

Robust market expansion

A 2021 study from Smithers projected the retail value for “environmentally friendly

laundry, surface care, dishwashing, bath & shower goods will reach \$72.9 billion.”² The study further projects the compound annual growth rate (CAGR) to be 8.5%, pushing the market to a remarkable \$109.7 billion in 2026.²

Compound Annual Growth Rate of the Cleaning Products Market (USD Billion)



This rate of growth more than doubles that of the projected market growth for all cleaning products **(4.1%)** over the same time frame.² Look to Western Europe for the most rapid adoption, but Smithers also projects adoption in the U.S. to grow substantially.

4.1%

Other analyses of overlapping—but not identical—product types show a similar growth trajectory. A 2017 study of household green cleaning products put that market at \$17.9 billion in 2017 and projected a Compound Annual Growth rate of 6.5%, for a value of \$27.8 billion by the end of 2024.³



It's worth noting that this study was undertaken before the pandemic-driven expansion of cleaning and disinfection. There's no reason to believe the habits formed during this time will go away anytime soon.⁴

Barriers to adoption

It's true that the pandemic, especially in its earliest days, likely prompted commercial consumers of cleaning products to prioritize procuring any kind of product, sustainable or otherwise. But industry watchers shouldn't expect this lax attitude to be much more than a bump in the road, as it was largely driven by supply chain issues that made procurement difficult and inconsistent.

As Smithers notes, "[the pandemic] has only restrained temporarily the longer industry trend to reduce their impact on the environment. New products are being developed and marketed on their green credentials, even as homecare sales surge; and leading companies are making solid corporate commitments to cut their carbon footprint."³

The result is that the biggest barriers to the expansion of green cleaners won't be demand, nor the desire of companies to meet it but rather continued R&D-related challenges.

Put simply, there's rarely been a better time to believe in—and invest in—sustainable commercial cleaning solutions.

Drivers

The overriding structural reason environmental concerns will continue to factor so heavily going forward is that various forms of environmental degradation represent an increasingly pressing global challenge. Two limited but important examples illustrate the scale of the problems single use plastics and improper disposal of chemicals.

In the century since its invention, plastic has led to lifesaving medical discoveries and world-altering innovations; it has also given rise to a growing mountain of discarded single-use containers—such as the bottles used to store cleaners and disinfectants.⁵ As Environmental Health News points out, "plastic manufacturing in the first ten years of this century eclipsed the total produced in the entire last century."⁶

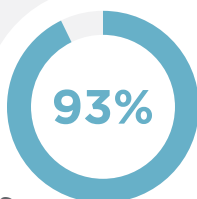


40%

40% of plastic is attributed to **single-use plastics**, which directly impact the habitats of millions of animals each year.⁷



Meanwhile, many of the chemicals found in plastics, such as phthalates, are **damaging to human health**. BPA, another damaging chemical in many single-use containers, has been linked to heart disease and diabetes. BPA is detectable in the urine of **93% of people**, according to the CDC.⁸



The same structural components that make single-use plastic useful in so many day-to-day contexts are the same ones that make them damaging people and the environment alike. According to National Geographic, “millions of animals are killed by plastics every year, from birds to fish to other marine organisms.”⁷

The consequences of improper disposal of hazardous chemicals are not much more encouraging. According to the EPA, even household products “can cause physical injury to sanitation workers, contaminate septic tanks or wastewater treatment systems... They can also present hazards to children and pets if left around the house.”⁷

The improper use of chemicals at an industrial scale presents even more downside risk. The devastating human and ecological costs associated with America’s more than 1,300 Superfund sites—areas devastated by chemical waste—reflect that reality all too vividly.⁹

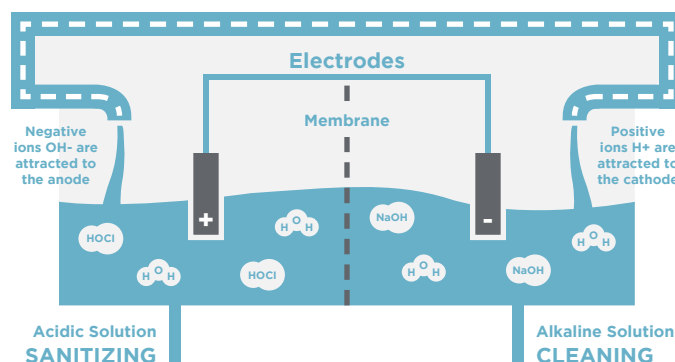
While a regulatory structure has grown up to minimize such events, the best way to eliminate them – as well as less calamitous but still damaging instances of improper disposal—is to find a genuine alternative to toxic chemicals. While that imperative persists, the future will be bright for green cleaning solutions.

The greenest cleaning technology already exists

Still, when Smithers correctly suggests that green cleaners still have a long way to go when it comes to affordable and effective R&D, he has in mind green cleaners that use chemicals. Counterintuitive as it may seem, “green” does not necessarily mean harmless for human beings, as many plant-based ingredients can also be allergenic or otherwise dangerous.¹⁰

For a genuinely green product that fits the intuitive understanding of “sustainable”—i.e. harmless to human beings and the environment alike—businesses and individuals should look to electrolyzed water.

Salt (NaCl) & Softened Tap Water (H₂O)





Thanks to existing patented technology developed by Viking Pure, this established cleaner and disinfectant has dramatically expanded its applications because it can now be used without corroding metal.

By running an electric charge through a combination of salt and water, Viking Pure creates hypochlorous acid—which is the same substance our bodies use to fight infection—to produce a disinfecting

solution of the highest quality. The process also produces a powerful multi-purpose cleaner and degreaser, and both solutions have absolutely no impacts on human or environmental health. And because any company equipped with running water can produce these solutions sustainably in house, it produces very little plastic waste.

In short, this remarkable product has taken “environmentally friendly” to the next level.

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- [1] Eccles, Robert G. Klimenko, Svetlana. (2019, May). The Investor Revolution. Harvard Business Review. <https://hbr.org/2019/05/the-investor-revolution>
 - [2] Author(s) Unknown. (2021, February). Sustainable cleaning products market to surge to \$110 billion in 2025. Smithers. <https://www.smithers.com/resources/2021/feb/sustainable-cleaning-market-surge-110-billion>
 - [3] Author(s) Unknown. (2021, October). Household green cleaning products market estimated to grow. Home and Personal Care Ingredients. <https://www.hpci-events.com/household-green-cleaning-products-market-estimated-to-grow/>
 - [4] Bettenhausen, Craig. (2022, January 24). Cleaning changed during the pandemic, and it may not change back. Chemical & Engineering News. <https://cen.acs.org/business/consumer-products/Cleaning-changed-during-pandemic-change/100/i3>
 - [5] Parker, Laura. (2019, June 7). The World’s Plastic Pollution Crisis Explained. National Geographic. <https://www.nationalgeographic.com/environment/article/plastic-pollution>
 - [6] Knoblauch, Jessica A. (2022, February 01). Environmental toll of plastics. Environmental Health News. <https://www.ehn.org/plastic-environmental-impact-2501923191.html>
 - [7] Parker, Laura. (2019, June 7). The World’s Plastic Pollution Crisis Explained. National Geographic. <https://www.nationalgeographic.com/environment/article/plastic-pollution>
 - [7] Author(s) Unknown. (Date Unknown). Household Hazardous Waste (HHW). United States Environmental Protection Agency. <https://www.epa.gov/hw/household-hazardous-waste-hhw>
 - [8] Author(s) Unknown. (Date Unknown). Bisphenol A (BPA). Virginia Department of Health. <https://www.vdh.virginia.gov/epidemiology/epidemiology-fact-sheets/bisphenol-a-bpa/>
 - [9] Johnson, David. (2017, March 22). Do You Live Near Toxic Waste? See 1,317 of the Most Polluted Spots in the U.S. Time Magazine. <https://time.com/4695109/superfund-sites-toxic-waste-locations/>
 - [10] Author Unknown. (2020, July 13). Cleaning Supplies and Household Chemicals. American Lung Association. <https://www.lung.org/clean-air/at-home/indoor-air-pollutants/cleaning-supplies-household-chem>