

PLANET-FRIENDLY, TEMPERATURE CONTROL PACKAGING THAT'S SHRINKING BIOPHARMA'S ENVIRONMENTAL FOOTPRINT





*The life sciences industry's sharpest minds are re-engineering one of the world's most renewable resources: **paper.***



Often drivers of change, the world's leading pharma, diagnostic, and med-tech companies have set their sights on finding new ways to protect the planet's health while protecting our own. These sustainability initiatives are generating a significant and far-reaching ripple effect, influencing partners, suppliers, and vendors to pursue greener initiatives.

Softbox Systems, an award-winning temperature control packaging innovator, is on a mission. Using its passion for innovation and proven R&D, Softbox aims to create plastic-free temperature control packaging solutions that protect both product and planet.

For biopharma clients, the benefits of a paper-based product like Softbox Systems' newest innovation –Tempcell™ ECO – are impossible to ignore. From the ability to routinely ship prescription products, over-the-counter medicines, and diagnostic kits with complete reliability, to reducing plastic consumption and offering an easy, curbside recyclable option for end-users, Tempcell™ ECO is the sustainable solution the industry has been searching for.

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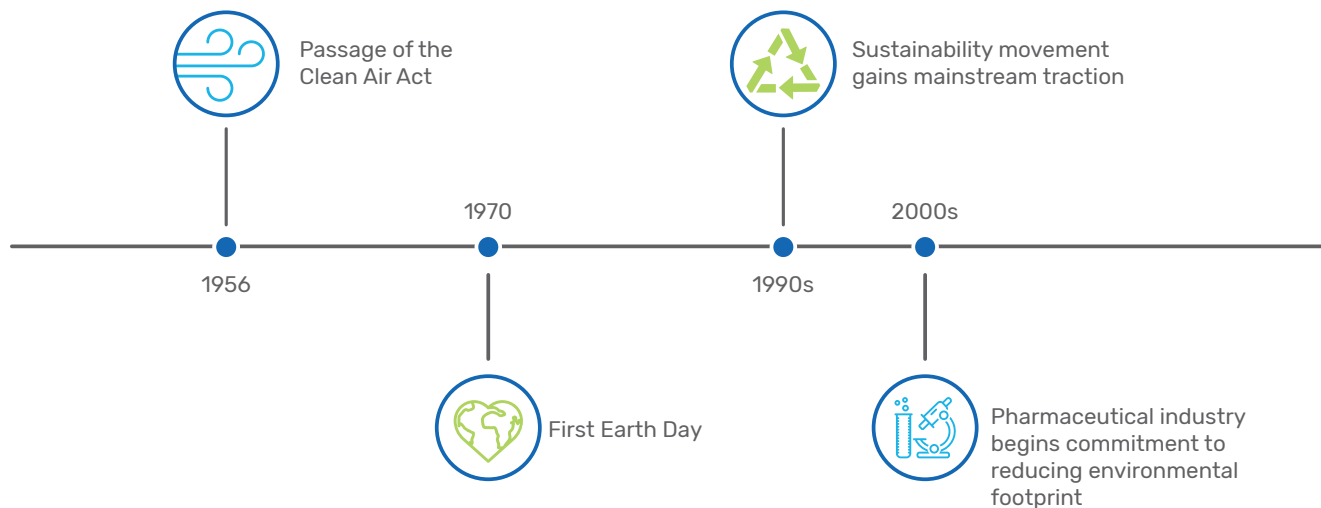
Catalysts for Change

The modern environmental protection movement started in earnest in 1956 with passage of the Clean Air Act. And while the very first Earth Day took place in 1970, it wasn't until the early 1990's that sustainability as a movement secured a real foothold. Brands around the world began to reimagine themselves as planet-friendly, and "green" became a part of our everyday vernacular.

Since the new Millennium, global pharmaceutical companies have made a concerted effort to improve their images in the eyes of consumers by rethinking their corporate ambitions and introducing brand initiatives focused on reducing the industry's environmental footprint. The life sciences industry—known as a catalyst for change—has taken a leadership position in the sustainability movement

by making bold commitments to reduce waste, reuse, recycle, and recover in every phase of their business.

In the area of logistics, leading temperature control packaging (TCP) companies have been in lockstep with their pharma customers, investing heavily in R&D to create innovative packaging solutions that are efficient, effective and eco-friendly. This initiative has inspired intensive exploration of paper-based products and the development of a range of shipping solutions that adhere to both environmental and regulatory mandates. In an industry with a well-earned reputation for continuously evolving and breaking through boundaries, we evaluate how these TCP solutions currently stack up in the areas of performance, customer expectations, and recyclability.



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Sustainability Constraints - Repurposed with a Caveat



Products that have incorporated environmentally friendly insulation materials have often come with limited applications due to lower, less reliable insulation values. These performance shortcomings, coupled with a continual push to keep costs down, represent a formidable challenge for TCP companies.

For decades, plastic-based products have been the standard for temperature-controlled shipping. Traditionally, TCP companies have used insulation materials constructed from expanded polystyrene and polyurethane foams for simple “ship and forget” distribution, primarily because of their “recyclable properties.” However, the term “recycle” can be interpreted in different ways.

Expanded polystyrene foams are easily ground and reprocessed, but the by-product is simply used to create more polystyrene products. Polyurethane products—such as insulation panels—can be repurposed or upcycled into building materials, mattresses, or carpet underlays. While technically recyclable, the task of finding a local recycler capable of processing the material falls to the end user. In many cases, these resources are not readily available, and most of these products end up in landfills or waterways.

In response, life sciences companies with strong sustainability ambitions are seeking truly green alternatives that can be easily recycled by hospitals, doctors’ offices and end users either curbside or through common household recycling bins. Innovative TCP companies have risen to the challenge by thinking “inside the box” to develop new shipping solutions that provide complete reliability, avoid temperature excursions, and offer practical recyclability that protects the planet.

It’s no small task. To date, products that have incorporated environmentally friendly insulation materials have often come with limited applications due to lower, less reliable insulation values. These performance shortcomings, coupled with a continual push to keep costs down, represent a formidable challenge for TCP companies. The “reduce, reuse, recycle, recover” mantra has become a rallying cry that has permeated TCP development processes. It has ensured thorough and thoughtful investigation and testing of material combinations and compositions of packaging systems to achieve the kind of suitability and efficacy that’s now required: a good end-of-life story is a prerequisite for these eco-friendly systems.

Sustainability is firmly on the radar to support change – 2020 Sustainability Report Findings

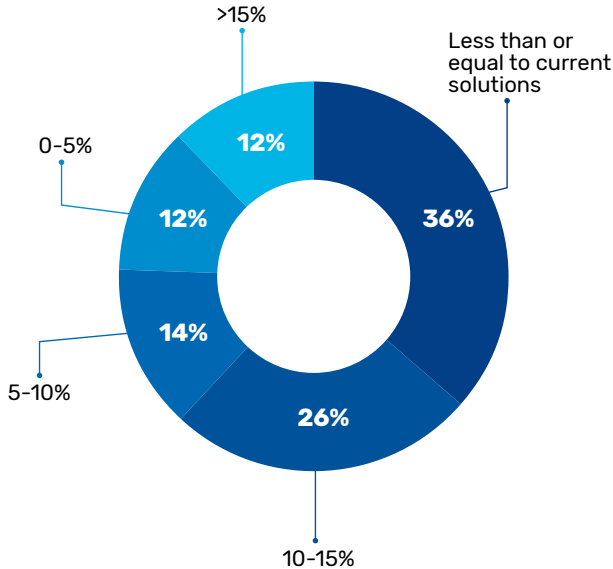
One of the key questions being asked is, “Is everyone on board in pushing the industry toward a more sustainable future?” Softbox Systems recently surveyed senior managers and directors from leading global pharmaceutical companies and published the findings in a 2020 Sustainability Report.

Softbox surveyed management across supply chain, logistics, procurement, and quality controls in 36 key countries worldwide. The study revealed that nearly 90 percent of those surveyed stressed the importance of sustainability, while 72 percent already have it on their radars. The results also defined the implementation of sustainability in temperature control packaging as an important aspect of these company’s future operations as they strive to meet internal goals and customer expectations.

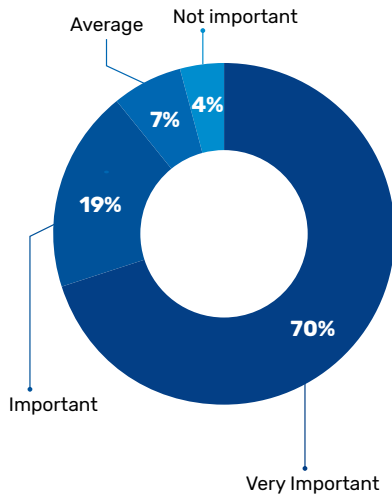
While personal preference and regulatory compliance are two signature reasons behind the push for greener alternatives in shipping, the real driving force is customer demand. Up to 69 percent of senior management reported that they may be required to work with sustainability-minded vendors who have attained a minimum EcoVadis score.

Senior executives aren’t just paying lip service to the idea of sustainable TCP. Almost two-thirds said they are prepared to back up their words with the financial outlay, and more than one-third would add as much as 10 percent to their current budgets in order to make it happen.

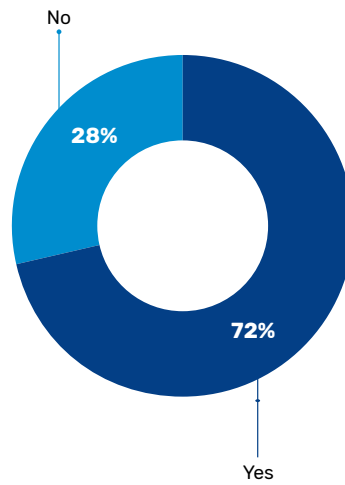
When considering sustainable packaging, what extra % would you be prepared to pay versus a traditional temperature control packaging solution?



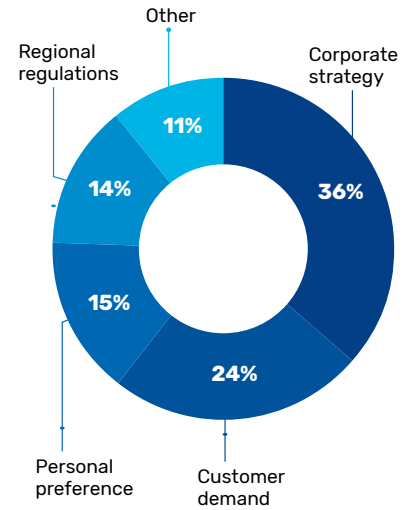
How important is the development of sustainable temperature control packaging solutions to you or your organization?



Is your company considering moving to sustainable temperature control packaging?




What is currently driving pressure to implement sustainable packaging solutions?



ABOUT THE SURVEY

Softbox Systems questioned senior managers and directors working for leading companies in, or associated with, the life sciences sector. Supply chain, logistics, procurement and quality control were all represented in the survey, across 36 key countries worldwide.

Of people who answered

 Supply Chain: **24.32%**

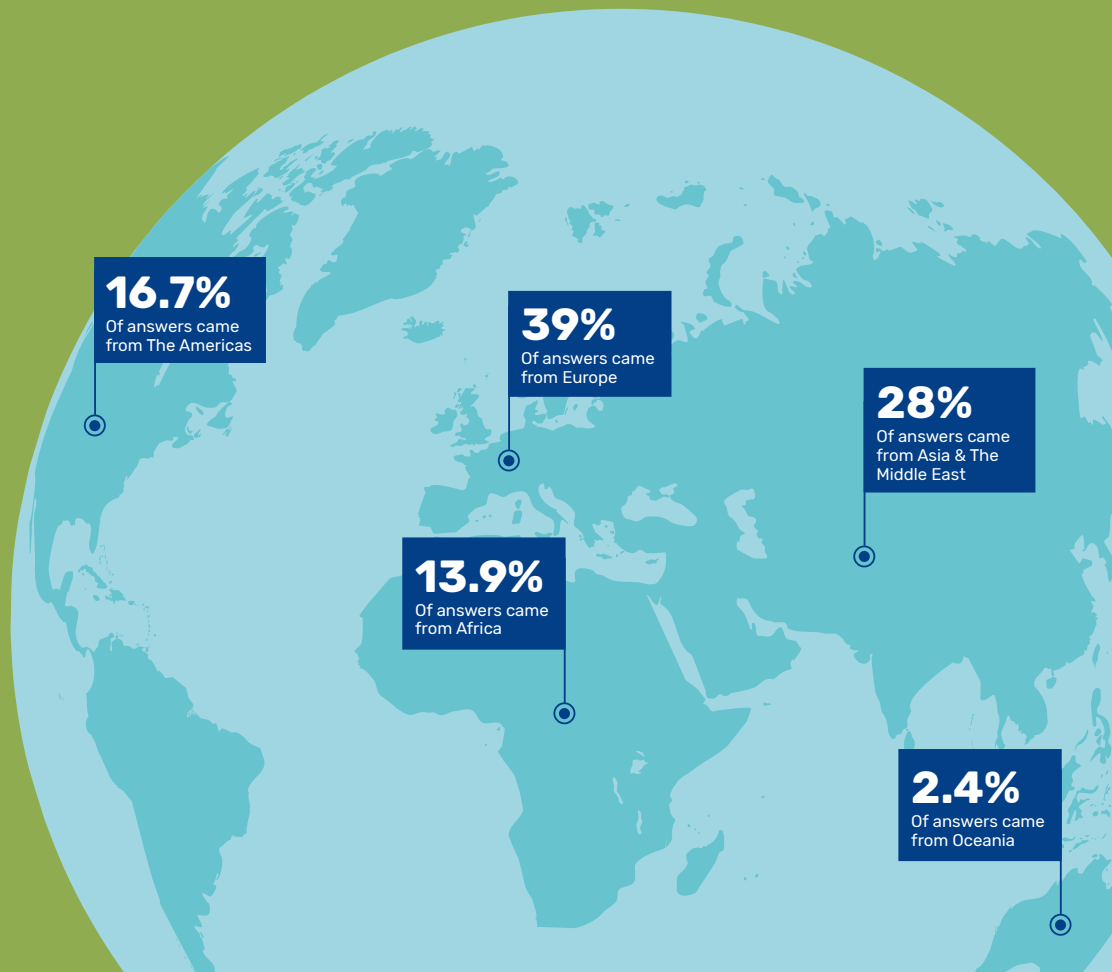
 Logistics: **18.92%**

 Procurement: **8.1%**

 Quality Control: **22.97%**

 Other: **25.68%**

The globe details the areas of the world the survey answers came from

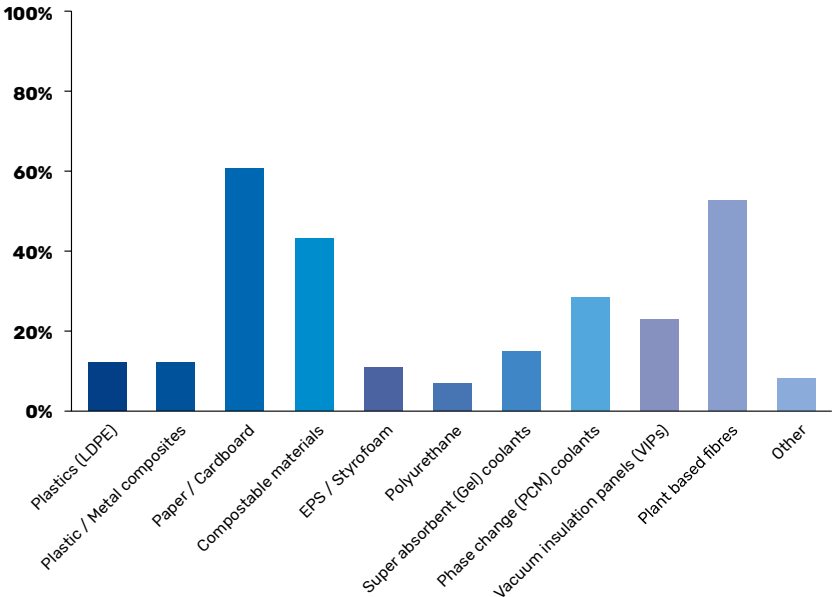


Ticking All the Boxes

More recently, the industry has begun using advanced, high-performance shippers with vacuum insulation panels and phase change materials that help maintain product integrity, freezing and thawing within the product’s required temperature ranges. Reusable and robust, these shipping solutions provide the level of increased thermal protection that pharma companies require. However, even these superstars of the TCP game require multiple uses to achieve acceptable levels of sustainability and cost effectiveness. In their quest for a solution that satisfies regulations and is kind to the environment, the temperature control packaging industry’s sharpest minds have turned to a tried-and-true renewable resource: paper.

According to the Softbox Sustainability Report, biopharma leaders regard cardboard as sustainable material in more than 60 percent of cases, with 52 percent acknowledging the same properties in plant-based fibers. The report clearly indicates that there is room for recyclable solutions to work alongside reusable or renewable high-performance TCP systems in the effort to reduce the industry’s carbon footprint.

What materials do you consider to be sustainable?



In their quest for a solution that satisfies regulations and is kind to the environment, the temperature control packaging industry’s sharpest minds have turned to a tried-and-true renewable resource: paper.

Today, the challenge is two-fold: develop innovative shipping solutions that deliver uncompromising performance while providing easy recyclability that protects the planet.

With a reputation for innovation and a track record of developing intelligent packaging solutions, Softbox Systems recently introduced **Tempcell™ ECO**, a genuinely innovative, paper-based temperature-controlled shipper that is changing the game – for the better.

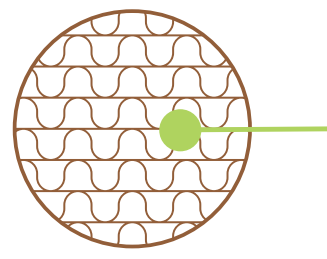
Tempcell™ ECO is made from 100 percent corrugated cardboard and employs Softbox's patent-pending Thermaflute™, a paper-based design that creates an effective insulation barrier, enabling Tempcell™ ECO to provide thermal efficiencies similar to those of traditional expanded polystyrene shippers. This biodegradable packaging solution is designed specifically to transport wide-stability temperature-sensitive pharmaceutical products. It arrives flat-packed to minimize storage space and assembles easily, while its lack of bulk helps to optimize freight efficiencies.

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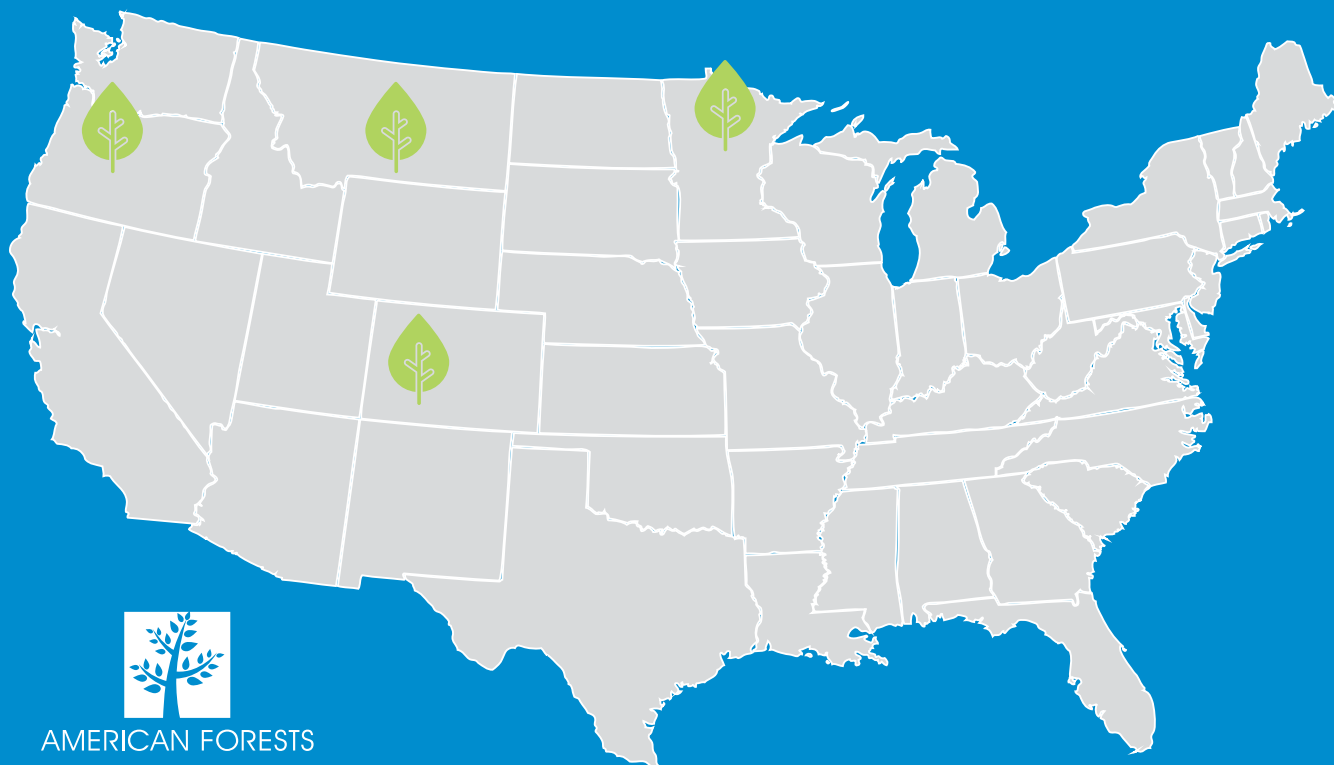


Tempcell™ ECO's fit-for-purpose design is light, strong, and versatile, an ideal solution for all parcel delivery networks. Available in four off-the-shelf sizes (custom sizes are available on request), the box interiors can be custom configured to each customer's needs, ensuring optimal temperature stability and payload protection. Once this innovative parcel shipper has served its purpose, the end-user simply drops it into a commercial or household recycling bin where it can be repurposed as many as seven times and used to create other eco-friendly products.

But the good news doesn't stop there. Softbox Systems has partnered with American Forests and pledged to plant one tree for every 10 Tempcell™ ECOs sold in the United States and Canada. This partnership equates to three trees being planted for each one used in production. Through the sale of Tempcell™ ECO in the first half of 2020, Softbox Systems has already enabled American Forests to plant more than 25,000 trees in reforestation projects stretching from Minnesota to Oregon.



Innovative corrugated layers ensure fit for purpose product protection and temperature control up to 72 hours.



Conclusion

In the temperature-controlled shipping container space, Softbox Systems continues to push the industry toward a more sustainable future. Its innovative eco-friendly, high performance, temperature control packaging solutions protect products and the planet. That's good news for the pharmaceutical industry, but even better news for the planet, and for the people who call it home.

To learn more about Softbox Systems and its newest eco-friendly solution, Tempcell™ ECO, visit TempcellEco.com.



About Softbox Systems

Softbox Systems is an award-winning temperature control packaging innovator, designing and producing high-performance passive temperature control packaging solutions for more than 25 years. We offer consistent quality to our clients from our strategically located global manufacturing sites throughout North America, Latin America, Europe, India, and the Asia Pacific.

Softbox Systems has formed long-standing partnerships with the world's leading pharmaceutical, clinical research, biotech, and logistics companies. By applying innovative thinking, Softbox Systems overcome the challenges our clients face in managing the Cold Chain when shipping temperature-sensitive clinical trials and commercialized products. The company has earned a Silver Sustainability Rating from EcoVadis, the world's most trusted business sustainability rating service measuring and helping advance its impact on the Environment, Labor & Human Rights, Ethics, and Sustainable Procurement.

Learn more about [Softbox Systems online](#), or view the complete the findings from the [2020 Temperature Control Packaging Sustainability report](#) here.