

ADVISORY BRIEF

Unlocking Environmental Sustainability Opportunities in the Life Sciences

What Manufacturers Need to Know

Matt O'Hara • Liz Hamilton





Introduction

The healthcare industry has long been known for its significant environmental impact, including contributing ~5% of total global emissions. As awareness of this impact has increased, life sciences companies are now actively committing to climate resilience and environmental sustainability through various initiatives, including net-zero commitments.

Trinity Life Sciences has identified several recent trends driving this shift including increasing Health Technology Assessment (HTA) requirements, investment reporting, patient and healthcare provider (HCP) demands for greener options, heightened awareness of waste and a focus on environmental cost implications. These trends are leading to greater demand for proactive measures from life sciences manufacturers.

This has spurred a race among the earliest movers to bring sustainability and climate resilience to a product level, embedded in the fiber of their commercial strategy. Today's early movers are expected to gain competitive advantage as the industry landscape evolves.

In this advisory brief, we explore the measures that commercial leaders in the life sciences industry should take today and in the future to prepare their organizations for success in the journey towards climate resilience and sustainability.



Executive Summary

Our CREST (Climate Resilience and Environmental Sustainability at Trinity) team conducted in-depth interviews with 10 key stakeholders across payers, manufacturers and key opinion leaders to better understand ongoing initiatives, prioritiies and implications of sustainability efforts on commercialization.

Through these interviews, we found a demand from stakeholders for more sustainable pharmaceuticals and devices as well as greater transparency regarding climate impact. Innovative manufacturers are beginning to integrate these concepts into their commercial strategies across the product lifecycle.

Currently, some initiatives in the nascent stage include:



Greening manufacturing and distribution



Generating evidence and communicating value through dossiers and tender negotiations

On the horizon, we anticipate:



Climate-based portfolio planning and forecasting at the indication and product levels



Building brand equity and positioning products based on evidence driven sustainability value propositions that enable differentiation

Trinity is at the forefront of groundbreaking research into the critical intersection of climate resilience and life science manufacturing. This advisory brief marks the beginning of a dynamic series that will explore key insights and opportunities in this evolving space. Don't miss the chance to be part of this transformative journey. Contact us to participate in our upcoming publication and help shape the future of sustainable innovation.



Stakeholder Perspectives

Through our interviews with stakeholders, we have uncovered what they see as key priorities for commercial teams when it comes to climate resilience and sustainability. Here is what we learned:



HCPs are looking for prioritization of sustainability in new product development, with an emphasis on preventative care to minimize future resource consumption. They want the ability to offer care that is zero waste and carbon neutral, promoting holistic health.



Patients desire more transparency and the ability to make active choices in the products they use, such as better recycling and disposal options. They want to avoid feeling like they need to make the tradeoff between their health and the environment.



Regulators want the ability to clearly compare product-level health and cost implications, along with consequence mapping. They seek tangible action plans for net-zero commitments to be incorporated into the HTA process.

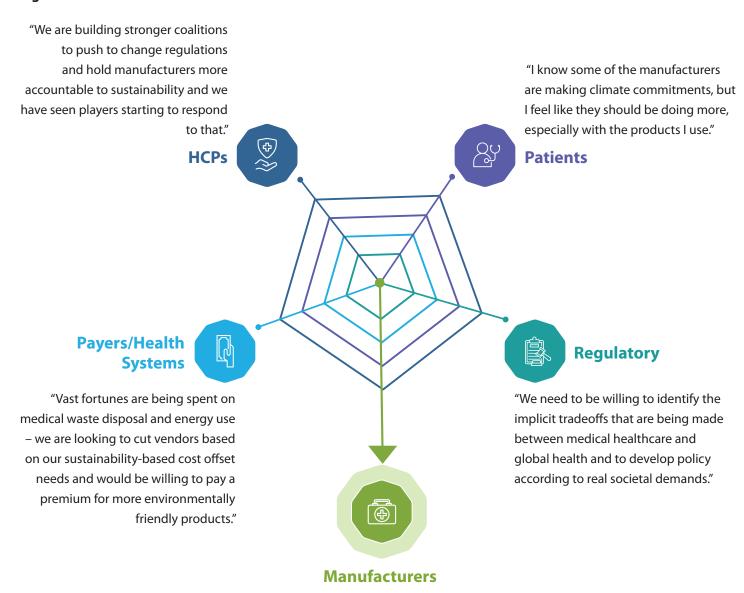


Payers and health systems want the ability to accurately quantify environmental impact and associated costs or savings in product assessments for comparison. They also seek transparency from manufacturers regarding net-zero commitment action plans for patient and investor communications.



Figure 1 below highlights verbatims that we heard during our stakeholder interviews. It shows the interconnectivity between the key players in the "stakeholder influence network" and the demands being placed on manufacturers.

Figure 1. Stakeholder Influence Network



- "I'm being asked to translate corporate's sustainability 'vision' to our day-to-day business decisions."
- "We are starting to look at product-level improvements and at which indications will be the most impactful to improve."
- » "To keep up with new and upcoming reporting requirements, we are starting to collect and analyze new data about waste and emissions across the product lifecycle for value communication."

Manufacturers are starting to address these demands, but it is a challenging task.



Implications for Manufacturers

Stakeholder demands for climate resilience and environmental sustainability are driving innovative manufacturers to take action. Commercial leaders are beginning to respond and incorporate these concepts into their strategies across the commercial journey. Figure 2 below illustrates where companies have seen early successes today, what they are planning for in the next phase and longer-term future aspirations.

Figure 2. Current and future initiatives to incorporate climate resiliency and sustainability across the commercial journey

Happening Now

Coming Soon

What have manufacturers done so far that has been successful?

Where are they going next/ what is the future?



What: Net-zero Commitments and **Green Lab Practices**

Who: Corporate Strategy/Leadership/R&D **How:** Reduction of scope 1, 2 and 3 emissions, primarily across manufacturing and distribution, waste and energy use reduction

(e.g., certifications through MyGreenLab)

What: Prioritization of Products and Indications for Greening

Who: Brand Teams, TA/BU Leadership **How:** Determination of where to focus limited resources on sustainability and resilience improvements



Evidence Generation

What: Lifecycle Assessments and Green Audits Who: Environmental, Social and Governance

(ESG) Leadership

How: Self assessments, addressing regulatory

and compliance data needs

What: Product- and Portfolio-Level

Ouantification Who: HEOR Teams

How: Application of HEOR methodologies

and quantification to demonstrate

environmental impact



Value Proposition & Brand Equity

What: Streamlining of Packaging

Who: R&D and Brand Teams **How:** Elimination of excess

product packaging

What: Product-Level Greening

Who: Brand Teams

How: Incorporation of sustainability into product design and value proposition development for improved differentiation



What: Value Dossier Development

Who: Medical/Access Teams

How: Development of sustainability-focused

analysis of product energy use and

waste generation

What: Health System Partnership

Who: Market Access

How: Incorporation of product sustainability into pricing decisions and negotiations with payers and tenders

Other Future Trends: What stakeholders believe will eventually change the game?

Consistent Reporting Frameworks and Improved Data Availability

Climate Resilience Focused Partnership with Wider Stakeholder Groups



Conclusion

Now is the pivotal moment for life sciences manufacturers to invest in climate resilience and environmental sustainability. These efforts are not just about safeguarding the environment—they are essential to securing the future strength of your business. Trinity is the ideal partner to seamlessly integrate these vital principles into your commercial strategy and drive long-term success.

As a commercial leader, how can you position your organization for future success?

Benchmarking:

Your competition is moving fast. Trinity can provide insights into where your organization stands and guide you forward, offering detailed analysis on organizational structures, best practices and strategic objectives.

Multi-stakeholder Engagement and Communication:

Understanding what truly matters to your customers and key influencers is crucial. Through in-depth interviews and surveys, we can help you focus your efforts on the right priorities—whether it's payers, patients or healthcare professionals.

Portfolio Strategy:

Maximize your impact with limited resources by prioritizing products and indications at a granular level. Let Trinity translate stakeholder needs and your company's vision into clear, actionable steps for growth.

Evidence Strategy:

Build compelling sustainability evidence to differentiate your products in the market. We can support evidence development (e.g., value dossier creation) to highlight the environmental benefits of your offerings.

About CREST

CREST stands for Climate Resilience and Environmental Sustainability at Trinity. We are innovators, strategically applying these considerations across the life sciences commercial model to improve patient access to care, planetary health, and commercial outcomes in our rapidly changing environment



Authors



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Matt is a Partner in Trinity's Evidence Strategy center of excellence with over 20 years of life sciences consulting experience. Matt focuses on driving strategic insights for clients and delivering innovative HEOR solutions within the broader strategic context of product development, market access and market shaping/medical communications. Most recently, Matt has been instrumental in the novel application of Real World Evidence to inform product development, quantifying unmet clinical needs and raising overall market awareness. This work resulted in numerous abstracts, posters, peer-review manuscripts and conference presentations.



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Liz Hamilton is an Associate Principal in Trinity's Strategic Advisory practice and a co-founder of CREST. She advises leaders in the life sciences on commercial strategy, with a focus on portfolio planning, due diligence, lifecycle management and product launch. Her TA expertise includes immunology, oncology and infectious disease/vaccines. Liz earned her Masters of Public Health from the Johns Hopkins Bloomberg school. Her academic research focuses on developing methods for quantifying the net environmental impact of healthcare, with an emphasis on the averted carbon emissions resulting from vaccination and other preventative care initiatives.

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About Trinity

Trinity Life Sciences is a trusted strategic commercialization partner, providing evidence-based solutions for the life sciences industry. With nearly 30 years of experience, Trinity is committed to revolutionizing the commercial model by providing exceptional levels of service, powerful tools and data-driven insights. Trinity's range of products and solutions includes industry-leading benchmarking solutions, powered by TGaS Advisors. To learn more about how Trinity is elevating life sciences and driving evidence to action, visit trinitylifesciences.com.

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