



INTRODUCTION

BEYOND THE GUIDE DEEPDIVE

Welcome to the *Beyond The Guide Deepdive: Pharma & Life Sciences Supply Chain -* a collection of real-world insights and experiences from across the industry, to help procurement teams turn sustainability ambition into action.

This Deepdive began with a simple but powerful idea: that sustainable procurement is a journey no company can take alone.

Inspired by The Guide - an initiative launched by the Sustainable Procurement Pledge (SPP) Champion Program in 2023 - SPP Champions Pfizer and AstraZeneca led a supplier engagement effort within the Pharma & Life Sciences Chapter to explore what sustainability looks like in practice, not just in theory.

In 2024, more than 65 suppliers shared their experiences, highlighting what works (and what doesn't) when integrating sustainability into procurement and supply chain strategies.

From these, 53 case studies were selected - a collection of honest, experience-based stories designed to inform, inspire, and accelerate progress.

At SPP, we love seeing our community take existing initiatives and make them their own. This Deepdive is a perfect example. It's a reflection of what's possible when organizations unite around a shared commitment to sustainability - and a testament to the power of collective action.

We hope this Deepdive becomes a starting point - not just for insight, but for real, lasting impact in your teams, supply chains, and beyond.

REFLECTIONS



From the SPP Pharma & Life Sciences Chapter Co-Chairs

As new Co-Chairs of the SPP Pharma & Life Sciences Chapter, we've seen firsthand how powerful it can be when companies come together with a shared purpose. We brainstormed on how to engage our suppliers and unlock the power of collective sharing to strengthen sustainable procurement in our organizations.



Maria Terracina Co-Chair, Transformation Panel



Robert Williams, Co-Chair, Transformation Panel

This Beyond The Guide Deepdive was the answer to that question, as the outcome of a journey that started with the launch of a best practice sharing initiative in 2024. Through this initiative, we not only engaged our suppliers in meaningful dialogue, we also created a space to surface insights and give back to the whole SPP community. It's been incredibly rewarding to see how many suppliers have responded - with honesty and creativity to move the needle, so we wanted to recognise their efforts by publishing their stories in this 'Beyond the Guide'.

We hope this Deepdive sparks new conversations across the SPP community and beyond. Wherever you are in your journey, our goal is that these stories and insights help you find new ways forward - and inspire you to share your own.

USING THIS RESOURCE

This Deepdive was designed with you - the procurement practitioner - in mind. Whether you are in pharmaceuticals, life sciences, or beyond, this resource provides:

- Real-world supplier experiences showcasing successes, challenges, and lessons learned.
- Actionable insights into Scope 3 decarbonization, human rights, supplier engagement, leadership buy-in, and more.
- A collaborative knowledge base to help procurement teams turn ambition into reality.

You can use this resource to:

- Kick-start internal conversations or team discussions
- Share lessons with your suppliers or partners
- Explore what others are doing and adapt it to your context
- Identify ideas or challenges that resonate and act on them

This isn't a one-size-fits-all solution. It's a toolkit of stories. Use it to reflect, learn, share - and then build your own next step.



CASE STUDIES

BEYOND THE GUIDE DEEPDIVE

- Accenture
- AptarGroup
- Aragen
- BASF
- BD Medical
- CBRE
- Constantia Flexibles
- Controlant
- Croda International
- Curia Global
- Cytiva
- Datwyler
- dsm-Firmenich
- Ecolab

- Epsi
- Eurpack
- Faller Packaging
- Harro Höfliger
- HH Global
- Laurus Labs
- Lonza
- Marken
- Mayr-Melnhof Karton (MM)
- Millipore Sigma
- Nipro
- Nolato
- Pack Druck Uszok & Uszok
- Parexel

- Ralca
- Repligen
- RWS
- Saint-Gobain
- SCHOTT Pharma
- Schreiner MediPharm
- Scientist
- Seqens
- SHL Medical
- Siegfried
- Simon Kucher and Partners
- Smurfit Westrock
- Sodexo

- Solistica
- Steelcase
- Stevanato Group
- Syngene
- Syntegon Technology
- Terumo Medical Care Solutions
- The Judge Group
- Thermo Fisher
- Tucker
- QMC Group
- Walden
- Ypsomed



Investing in Supplier Decarbonization to Drive Emissions Reductions

accenture



Ben Ngobi Global Procurement Plus Global Supplier Impact & Sustainability Program Lead

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our case study can be linked to several key success factors: Internal engagement is crucial to success, Develop supplier relationships, Leverage subject matter experts.

What does the case study help tackle?

The case study addresses the challenge of decarbonizing our supply chain to reduce Scope 3 emissions, which make up the majority Accenture's total footprint. By actively investing in, and upskilling suppliers, we support them in assessing their decarbonization maturity, and depending on the identified maturity, in emissions baselining, target-setting initiative selection and road-mapping. This initiative helps support delivery of as part of our journey to our SBTi-approved fiscal 2040 net-zero targets.

What was the outcome and how did you measure it?

The initiative is ongoing and will continue to evolve as we scale up activities. Our pilot enabled our suppliers to accelerate and scale decarbonization and other sustainability efforts across their value chains. Some suppliers from the pilot program are awaiting validation of their science-based targets (SBTs), while others have already publicly disclosed their targets on their websites. A key outcome of this process was that participating suppliers, who were previously unprepared for a sustainability journey, are now equipped with the knowledge and tools to set and achieve decarbonisation targets.

Progress and program success was measured by tracking suppliers' journey from data collection and emissions calculation, to the formal setting of targets. In June 2024, we hosted a virtual Accenture Supplier Summit, bringing climate thought leaders, sustainability practitioners and suppliers — including some from our pilot program — together to discuss how to accelerate decarbonization and scale other sustainability efforts across value chains.

Who was involved (departments/roles)? How did you justify it to the business?

The initiative was delivered by bringing together the best of our expertise. Additionally, senior stakeholders within the supplier organizations were actively involved, ensuring the project had leadership support on both the Accenture and supplier sides.

What were the key success factors?

The initiative's success relied on supplier commitment and engagement and the supplier's understanding of the business value the program delivered — beyond supporting Accenture's own decarbonization targets; which Accenture communicated from the outset.

The initiative was made successful through a robust business case demonstrating tangible value for Accenture, securing multi-year support from senior leadership.

Businesses engaged in similar activities should regularly review and refine their approach based on new insights and experiences. Gathering feedback from suppliers is key, it is important that the program uses open communication with continuous feedback to ensure no suppliers are left behind. Finally, ensure your business case for investment is strong and clearly articulates the value to secure leadership buy-in and investment.

How would you recommend those with less resources attempt this?

No matter your available resources, focus on understanding the unique support your suppliers need—especially what they can't access elsewhere. Additionally, prioritize high-impact actions that maximize the value of your existing resources.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The initiative is a joint effort across Accenture involving the Supplier Impact and Sustainability team, decarbonization experts from Sustainability Services, and Supplier Relationship Managers.

This effort is led by Ben Ngobi, Global Supplier Impact & Sustainability Lead and is sponsored by Binny Mathews, Chief Procurement Officer.



Collaborating across the Full Value Chain On Decarbonization

Aptar 🚄

factor'? The case study is linked to a key success factor. Aptar's

Is your case study linked to an 'ugly truth' or a 'key success

efforts in reducing climate emissions and collaborating with suppliers and customers on our Climate Transition Plan are highlighted as successful, collaborative initiatives.

What does the case study help tackle?

Aptar believes that caring for the environment means reducing climate emissions. Aptar has validated Science Based Targets for all 3 scopes and recognizes that the key to making progress towards these goals is through collaboration, especially when tackling emissions reductions within our supply chain. Scope 3 emissions make up more than 90% of our total emissions, and of these, the majority are within the category Purchased Goods and Services – raw materials. We must work with the main suppliers who generate a major part of our indirect GHGs impact, like raw materials (plastics and metals) to make progress.

Who was involved (departments/roles)? How did you justify it to the business?

Our sustainability efforts are integrated into the strategies of various functional leaders across the business. This ownership enables measurable, global progress. For example, Aptar's Global Purchasing Team engages with suppliers to create direct opportunities to realize mutual progress.

What was the outcome and how did you measure it?

From baseline 2019, Aptar has reduced Scope 1+2 emissions by more than 75%. We've managed to source additional renewable electricity and have entered into Power Purchasing Agreements (PPAs) in Europe and the U.S. We have also dedicated CapEx envelopes for funding consumption reduction projects within our operations and refined our process of engaging with suppliers to collect primary emissions data. This further enables progress along their emissions targets, actions, and performance while improving our Scope 3 totals. As a result of these efforts, Aptar was named to CDP's 2024 'Climate A List'.

What were the key success factors?

We recently held our 5th Global Supplier Summit. Championed by Aptar's Global Purchasing Team, the Summit drew nearly 200 attendees to focus innovation on decarbonization. Workshops on supply chain resilience, decarbonization and competitiveness took place and suppliers shared ideas to help Aptar achieve its objectives.

As a part of the Supplier Summit, suppliers submitted proposals for reducing emissions in several categories, including raw materials and transportation. From this, more than twenty proposals advanced to the proof of concept (POC) phase for further investigation within Aptar.

In advance of the summit, Aptar published and shared a Supplier Sustainability Engagement Playbook to help our partners better understand our sustainability strategy and targets.

The Playbook also articulated expectations we have of our suppliers, including requirements that they measure, report, and share carbon emissions and other metrics and collaborate with us on Scope 3

How would you recommend those with less resources attempt this?

Collaboration is one of the ways Aptar achieves more sustainable outcomes. Formally integrating social and environmental screenings into our purchasing program allows us to better understand risks and performance areas, increase transparency and operate responsibly. We frequently work with suppliers to set goals, evaluate social & environmental activities, & identify areas for deeper, cross sector partnerships. We also join efforts in the full value chain through organizations like the World Business Council for Sustainable Development. Collaboration enables companies to maximize available resources.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

In Aptar, sustainability is an imperative that drives success and is a responsibility for all. Our Global Purchasing Team works closest with suppliers; raw material commodity leaders champion these efforts.



Beth Holland Chief Sustainability Officer



EnVision - Creating a Sustainable Supply Chain Ecosystem



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Aragen's case study represents a key success factor for the organization. It illustrates how our commitment to sustainability through the EnVision initiative has led to measurable improvements in our supply chain practices and stakeholder engagement.

What does the case study help tackle?

The case study demonstrates Aragen's commitment to a green and sustainable supply chain through our EnVision initiative. This program focuses on creating an enabling ecosystem where we adopt best practices and collaborate with supply chain partners who share our vision for sustainability. Sustainability is integrated into the daily operations of our global procurement and logistics teams. The EnVision program highlights our dedication to driving positive change within our organization and throughout our supply chain ecosystem.

What was the outcome and how did you measure it?

Under Envision, we have implemented comprehensive procedures and policies that govern our supply chain activities, reinforcing our commitment to a green supply chain. This includes the development of a Responsible Supply Chain Policy, Supplier Code of Conduct, Risk Management Framework, Supplier Diversity Policy, and processes for incentivizing supply partners as well onboarding as new suppliers with a focus on ESG commitments. We also developed Supplier Assessment Forms and have established grievance and performance management system.

To measure our outcomes, we employ a Green Supply Chain Scorecard, which serves as a key tool for evaluating and enhancing our sustainability performance. We have developed our own proprietary internal scorecard to measure the greenness of our supply chain at the organization level.

Who was involved How did you justify it to the business?

The implementation of this initiative involved extensive collaboration and collective input from various stakeholders, including Supply Chain Procurement, Logistics, EHSS, Business Units, and our supply partners. We engaged in multiple deliberations to ensure that all perspectives were considered. The Envision program benefits from unwavering commitment and support from Aragen Management, which was crucial in justifying its value to the business.Our Sustainability focus also helped us in meeting key customer expectations.

What were the key success factors?

Aragen has successfully trained 100% of critical supply partners in GSCM, aligning them with sustainability goals and achieving a 91% Green Score in FY24. The sustainable procurement score in the EcoVadis assessment improved from 60 to 70, and the CDP Supplier Engagement rating advanced from Disclosure (D) to Management (B). Notably, we signed a Go-Green Plus agreement with DHL for Sustainable Aviation Fuel, reducing scope 3 emissions as the first SBTi-approved organization in India to do so. Additionally, we have achieved significant local procurement and reduced supply partner grievances by 40%, enhancing partner experiences. Our efforts have been recognized with multiple awards, underscoring our commitment to innovation and sustainability in the supply chain.

What are your watch-outs for others attempting this?

Organizations looking to implement a supply chain program focused on sustainability should ensure that their commitment extends beyond operations to the entire supply chain. It's essential to establish dedicated sustainability initiatives that involve all stakeholders. Continuous engagement and clear communication with supply partners are critical to maintaining these standards and achieving long-term sustainability goals.

How would you recommend those with less resources attempt this?

For organizations with limited resources, starting small is key. Focus on identifying a few critical areas within your supply chain where sustainable practices can be integrated. Engage with existing supply partners to discuss sustainability goals and encourage them to adopt responsible practices. Utilize free or low-cost tools and resources, such as online frameworks and guidelines, to develop a basic sustainability strategy. Key is to measure and have goals

Who were the main drivers and the main leadership sponsor?

The main drivers of our sustainability initiatives are encouragement and guidance from our board & executive committee. Lot of credit to efforts of the Supply Chain team, which includes dedicated sustainability office as well as Procurement, Stores, and Logistics along with our EHSS team. The leadership sponsors are the Aragen Management Committee, which provides support and strategic direction for these efforts.



Chandan Shirbhayye
Vice President & Head –Supply
Chain & Operational Excellence



Enabling Transparency For Sustainability





Michael Royko on behalf of BASF Global Sustainability Manager BASF Pharma Solutions

Is your case study linked to an 'ugly truth' or a 'key success factor'?

At BASF, supporting our customers with sustainability and addressing climate change are key success factors. This journey began with a realization: we could play a significant role in sustainability for our partners. The challenge was clear, and we decided to be part of the solution.

What does the case study help tackle?

As a supplier of raw materials, we understand that the products we produce contribute significantly to the carbon emissions of our customers. By providing transparency on product carbon footprints (PCFs), we empower our customers to make informed decisions that are not only good for their business but also for the planet.

By exploring what contributes to the PCF of our current products, we can collaborate with our customers to produce more sustainable options in the future. We view this as a partnership for a better, more sustainable future.

What was the outcome and how did you measure it?

In 2023 BASF made a big jump by becoming the first company to have our PCF calculation system methodology validated by TüV Rhineland, following the Together for Sustainability methodology. This achievement enables BASF to provide our customers with the PCF of all 45,000

sales products we offer, a level of transparency that sets a new standard for our industry.

Who was involved (departments/roles)? How did you justify it to the business?

A key change for BASF was to shift sustainability from only an EHS concern to being a core aspect of each business unit. This shift required the efforts of various departments, including procurement, digitalization, along with the guidance of a dedicated corporate sustainability team. The business units understood that transparency is vital to support our customers. By enabling visibility over supply chain emissions, we provide our customers with the tools needed to act sustainably.

What were the key success factors?

BASF has a long history of focusing on decarbonization and waste reduction with a 58% reduction in emissions since 1990*. We also pioneered reporting our corporate carbon emissions, BASF is the only industrial enterprise to report a comprehensive corporate carbon footprint since 2008. Building on this strong foundation we turned our attention to determining the individual carbon footprint of our products.

This not only enabled supply chain transparency but also identified decarbonization pathways. For instance, we reduced the PCF of our polyvinylpyrrolidone product (Kollidon® 30), to be

30% lower than global market average, showcasing a tangible outcome from our efforts.

What are your watch-outs for others attempting this?

Not all PCFs are created equal! Utilizing primary data is vital to accurately calculate supply chain emissions, but it is crucial to partner with trusted suppliers that have their calculation methodologies verified by 3rd parties.

How would you recommend those with less resources attempt this?

Partnering with suppliers that already provide high-quality PCFs can be a game changer. This allows access to high-quality primary data without having to invest heavily in calculations or estimations. Instead of reinventing the wheel, leverage existing methodologies that are already in place.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The successful execution of this project relied on the concerted efforts of teams in corporate sustainability, digitalization, and business leadership, all of whom played an integral role in bringing this vision to life. Our main leadership sponsor was our CEO, who saw the value in providing this transparency.



Water Managed as a Precious Resource





Sumit Argawal Senior Director, Integrated Supply Chain Strategy Execution

Is your case study linked to an 'ugly truth' or a 'key success factor'?

BD has set goals to achieve by 2030 (and beyond) in 5 key areas where we see the most opportunity for meaningful and measurable change over the next decade. One of these objectives aims at reducing water consumption by 40% by 2030. This objective is cascaded to all BD plants since 2019.

What does the case study help tackle?

Water is one of the most critical ingredient in the SCF (Sterile Clean & Ready-to-Fill) process of the pre-fillable syringes, using WFI (Water For Injection) during cleaning steps. WFI process requires high volumes of sterile water without contamination. This single step represents most of the plant's water consumption. WFI is also a non negligible contributor to our carbon's emission linked to the high temperatures required during its creation. To reduce these impacts, one component of the action plan is to reduce water consumption at point of use thanks to new Ecowash® nozzles.

What was the outcome and how did you measure it? Since 2023, BD is deploying the Ecowash® nozzles that allow to save up to 20% of water at point of use. This simple change has a concrete impact to water consumption and to CO2 emissions by reducing the amount of WFI required per syringe and the energy required to heat it.

This simple change has a concrete impact to water consumption and to CO2 emissions by reducing the amount of WFI required per syringe and the energy required to heat it. Following successful pilot installation, the retrofit will be implemented on the different plants in the coming months.

Who was involved (departments/roles)? How did you justify it to the business?

As it was embedded in the core business goals, the change was easy to prioritize once the technical solution was cleared by engineering. The plants <u>teams</u> were then involved into the roll out process with relevant engineering and quality experts.

What were the key success factors?

To ensure a smooth change for the plants and reassure quality and customers, we had to demonstrate that the nozzle change didn't affect the product safety and maintains the process effectiveness. The nozzle design was first selected rigorously to that matter.

Once the nozzles were installed and successfully validated functionally, key critical parameters were assessed. Tests were performed either on the lines or on the product itself to validate and record the absence of negative impact of such change. Chemical and material analysis were run as well as particulates and endotoxins for example.

All these process validation data were shared to the internal and external stakeholders enabling a safe and smooth implementation in the different plants

What are your watch-outs for others attempting this?

During the implementation, as you will increase your performance measurement and knowledge, you may discover new areas for improvement. They must not be seen as threat but as opportunities to go further in water consumption reduction either during the implementation or as a next wave

How would you recommend those with less resources attempt this?

Leveraging existing assets rather than technology change is probably the best way to reduce effort.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Given the fact that some of BD Pharmaceutical Systems plants are located in water stress areas, the risk associated to water management & business resilience are paramount to whole organization from local employees up to the senior leadership. Obviously, our operations group (plants, engineering, quality...) are critical to the sponsorship and execution of the program



CBRE



Simon Aldridge PMO and Change Lead

Optimizing Sustainability Goals Tracking Through Integrated Data Management: The SDS Tool Success Story

Is your case study linked to an 'ugly truth' or a 'key success factor'?

An efficient data management provides a comprehensive view of progress toward sustainability goals. As this case study deals with improvement and streamlining of utility data consumption practices across sites, it is linked to a 'key success factor' in enhancing the availability and quality of important data. This transition, led by CBRE's E&S team has resulted in an annual saving by eliminating the costs associated with the discontinued Enel-X platform.

What does the case study help tackle?

This case study addresses the crucial challenge of disjointed data management. By consolidating the submission of sustainability data and invoices into a single system, it eliminates the need for multiple platforms, reducing errors, and enhancing tracking and reporting. Additionally, the mobile app allows facility managers to take photos of meter and BMS readings, simplifying validation and reporting from the field. It also

What was the outcome and how did you measure it?

The outcome is a new system for capturing utility consumption data designed on a platform which is already being widely used across the organization. The previous setup followed different procedures for different sites while the new setup can serve as a single consolidated platform for all sites. Potentials savings are time and cost savings through not having to evaluate/subscribe to other

third-party service (Enel-X) providers & improved auditability and reduced hassle through timely monitoring and justifications of discrepancies or deviations from usual trends.

Who was involved (departments/roles)? How did you justify it to the business?

The SDS tool is realized under the patronage of CBRE's GWS EA FM Client Sustainability Team from London with the support of BSO Business Analytics E&S Team from Warsaw. We justified the transition to SDS by emphasizing the long-term business value: increased operational efficiency, reduced errors, reduced dependency on other third-party service providers, and enhanced sustainability reporting. These improvements directly aligned with our Pharma Company client strategic goals of maintaining regulatory compliance and driving sustainability across the enterprise.

What were the key success factors?

- Streamlined Processes: The unification of data and invoice management into one platform.
- Mobile Accessibility: Facility managers can now capture and upload photos directly from the field, enabling efficient data validation.
- Comprehensive Training: Effective Phase 1 rollout with 1on-1 meetings ensured that every facility manager was trained to use the new system with confidence.
- Seamless Transition: The shift from Enel-X to SDS was executed without significant downtime, maintaining operational continuity.

What are your watch-outs for others attempting this?

- Training: Ensure thorough and continuous training to maximize adoption and minimize resistance.
- Data Consistency: Maintain strict guidelines on data entry and validation to avoid discrepancies across multiple sites.
- Technology Access: Verify that all site teams have reliable mobile devices and internet access for the mobile app to work seamlessly.

What are your watch-outs for others attempting this?

For organizations with fewer resources, we recommend starting small, with a phased implementation at key sites to demonstrate the tool's effectiveness. Leverage existing mobile devices for field reporting and invest in robust training to ensure user adoption. With the right planning and focus on high-impact areas, even resource-constrained teams can maximize the benefits of a unified data management platform like SDS.

Who were the main drivers, and the main leadership sponsor?

The main drivers behind this initiative were CBRE'S E&S team, tasked with finding an efficient solution to replace the Enel-X platform after the service was discontinued. They led the charge in adapting to the SDS tool, which replaced the previously inefficient dual-platform process.



High Barrier - Low Carbon Footprint



Is your case study linked to an 'ugly truth' or a 'key success factor'? The ugly truth is that up until now, total barrier in pharma packaging has come with a trade-off of high environmental impact. Where the use of aluminium results in relatively high carbon footprint and high polymer content in combination with use of PVC hinders the recycling.

What does the case study help tackle?

While technical alternatives to aluminium exists, they are typically based on halogenated polymers and come with their own environmental challenges. Our case study shows that by leveraging system-thinking we were able to develop a total barrier solution that offers (environmental) benefits in all lifecycle stages, contributing to GHG emission reduction along the value chain.

What was the outcome and how did you measure it?

A new generation of PVC-free, low carbon cold-forming blisters with reduced polymer content and increased aluminium share for enhanced sorting and higher material recovery. Combination of less plastic, low carbon aluminium and manufacturing using 100% renewable electricity potentially reduce carbon footprint by ca. 50% *) as compared to the traditional PVC containing alu-alu blisters (cradle-to-grave), without jeopardizing patient convenience.

The new blister structure offers better cavity forming and sealing at lower temperature at higher yield. *) external LCA study pending. The cross-permeation of the blister is min. 55% lower (@40/75). There is no compromising between recyclability, circularity, decarbonization and performance. The new PVC free cold forming blister ticks all the sustainability wish list boxes.

Who was involved (departments/roles)? How did you justify it to the business?

It was a joint development of Pharma Technical Organisation (Product Excellence Centre Blisters), Procurement and Operations. Alignment with Constantia Flexibles sustainability strategy and the potential for significant reduction in ours and our customers scope 3 emissions as well as an attractive business case provided the necessary justification.

What were the key success factors?

Close cooperation with machine manufactures and delivering on multiple environmental KPI's across the entire value chain while enhancing primary packaging function and compling with patient safety. Lower GHG emissions, less plastic, enhanced material recovery at the end of life and in each manufacturing step both at ours and our customers end.

What are your watch-outs for others attempting this?

- Take time to "sharpen your saw". Make sure everybody understands what problem do you want to eliminate and define clear objectives.
- Deploy feedback loops to make sure that you are moving into the right direction
- Don't be afraid of failure and treat setbacks as learning opportunities,.

How would you recommend those with less resources attempt this?

Partner up with your suppliers and engage in a cocreation with your customers to make sure that your investment in innovation will pay off.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

- Leadership sponsor Joerg Adrian, VP Technical Organization & Innovation Pharma
- VP Product Development Pharma Division Wilhelm Zuser
- Technical Key Account Manager

 Thomas Schwartz
- Application Engineer Othmar Weber
- Global Category Manager Aluminum Christoph Voggenberger
- Category Manager Aluminum Georg Breitler



Agnieszka van Batavia VP Sustainability Pharma



COVID-19 Vaccine Waste Reduction Using Controlant's IoT devices



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Real-time monitoring is key success factor: The case study demonstrates how real-time monitoring of vaccine shipments using reusable monitoring devices drastically reduced vaccine wastage during COVID-19 vaccine distribution.

What does the case study help tackle?

Tackling the challenge of reducing vaccine wastage: By eliminating waste in one of the world's most critical supply chains, Controlant is shaping responsible supply chains and a more sustainable future for both the planet and patients. The challenge of reducing vaccine wastage during distribution is addressed by safeguarding cold chain logistics.

What was the outcome and how did you measure it? Reducing vaccine wastage to 0.01%: Calculations* show that Controlant's solution avoided approximately 24,336 tons of CO2eq by reducing the vaccine wastage rate to just 0.01% in 2022 for a top global pharma company. From a patient impact perspective, this meant that 124M more patients could be reached, enough to fully vaccinate the population of the United Kingdom.

*This was measured using real-time data from the Controlant's devices, internal logistic data on vaccine shipments and Lifecycle Assessment of Controlant's device.

Who was involved (departments/roles)? How did you justify it to the business?

Cross-divisional cooperation driven by a solid business case: This was a cross-divisional effort involving Operations and Data Management, supported by the Sustainability team, reflecting increased ambition to become a sustainability leader for pharma. This aligns with Controlant's zero-waste vision and engagement throughout the organization. The business case was easily justified based on the significant reduction in vaccine wastage and corresponding cost savings, along with the environmental benefits, particularly in the context of pandemic preparedness and global health goals.

What were the key success factors?

Real-time visibility and significant waste reduction: Using reusable loggers for real-time temperature monitoring makes early detection of temperature excursions possible and prevents vaccine spoilage. Real-time monitoring reduces waste and the need for extra manufacturing and transportation, lowering emissions, costs, and time to destination. Moreover, monitoring pharma shipments with reusable devices instead of single-use devices can lessen electronic waste, which is one of the world's fastest-growing solid waste streams.

What are your watch-outs for others attempting this? Key recommendations:

Act on temperature excursion alerts quickly or automatically, ensure accurate calibration and servicing of devices, and have an integrated platform with agile monitoring processes. Data management systems should provide actionable real-time insights. Integrating sustainability into daily operations along the value chain.

How would you recommend those with less resources attempt this?

Add value where the impact is greatest: Organizations with fewer resources can focus on real-time monitoring for critical shipments and seek strategic partners for third-party platform integration. Switching to reusable devices can significantly reduce costs and emissions.

Who were the main drivers and the main leadership sponsor?

Logistics, Operations & Sustainability teams:

Gísli Herjólfsson, Controlant's co-founder and co-CEO, founded the company on its zero-waste vision. The Logistics and Operations teams managed efficient device servicing, while the Sustainability team measured and reported the ESG performance to promote zero-waste supply chains.



Vicki Preibisch
VP of Sustainability





Su Pyae Sustainable Sourcing Analyst



Marie Maisonette Sustainable Sourcing Manager



George Grimsey Jones Life Sciences Sustainability Specialist

Supplier Engagement for Greater Scope 3 and PCF Accuracy

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our case study explores the value and 'success' of gathering supplier product-level emissions data, the 'ugly truth' of data availability challenges, and the need for collaboration.

What does the case study help tackle?

Scope 3 emissions form most of our footprint, necessitating we address our purchased emissions if we are to achieve our SBTi targets and work towards Net Zero. With allocated or averaged data, we're not able to effectively identify emission intensity hotspots, collaborate to decarbonise or seek low-carbon alternatives, or accurately quantify and monitor progress. We have initiated a supplier engagement program to gather product-level emissions data alongside other sustainability data.

What was the outcome and how did you measure it?

We want to increase our proportion of purchased raw materials (RMs) covered by supplier Product Carbon Footprints (PCFs). This work depends on supplier readiness, so we initially focused on priority partners and key RMs. Now 29% of our RMs are covered by supplier-specific PCF data. This ongoing work will inform our procurement and decarbonisation strategy while enabling us to provide high-quality PCFs to our customers, sharing the benefits of greater Scope 3 transparency.

Who was involved (departments/roles)? How did you justify it to the business?

Our sustainable sourcing team in collaboration with regional procurement teams are leading this work with support from Group Sustainability. Collaboration between sustainable sourcing and procurement has been invaluable as both teams contribute expertise to engage with suppliers effectively and source quality data. Our suppliers also play a key role, and their ongoing support is highly appreciated, strengthening our relationships. Scope 3 emissions are a huge challenge with fewer levers to pull as they lie outside your direct control. Sustainable sourcing and supplier engagement are therefore key tools for decarbonisation and have received strong backing from all levels within Croda.

What were the key success factors?

Communicating and engaging with suppliers has been key in our successes. Using and aligning with PCF standards like those of TfS is helping to ensure quality and comparability, as well as supplier confidence sharing data. SiGREEN has been particularly valuable for efficient data sharing; however, the number of platforms in use across the industry can create duplication of work for suppliers.

What are your watch-outs for others attempting this?

First, avoid sending lengthy questionnaires to suppliers requesting extensive data without support or engagement.

If data isn't readily available and the request requires significant resource, this can alienate suppliers and result in incomplete or low-quality data. Where possible, partnering with suppliers can produce better results, strengthen relationships, and improve transparency. Second, more accurate PCF data is often higher than industry average or database emission factors as it accounts for more elements and differentiates grade/purity. As more accurate data is shared, baselines and strategies may need updating. Finally, methodologies used to calculate PCFs and account for e.g. biogenic carbon can vary. Using clear standards like the TfS PCF guidelines to align methodologies and ensure more consistent data enables fairer comparison.

How would you recommend those with less resources attempt this?

Procurement teams have valuable expertise and relationships, so upskilling procurement to embed sustainability is key where there are not resources for specialists. Introducing sustainability metrics into KPIs or tender processes can further help to embed sustainable thinking. Digital platforms for PCF data sharing, like SiGREEN, can be extremely valuable. It's free to use and enables efficient gathering and sharing of data once set up.



Decarbonization in Progress – Where Technology Evolution and Respect for the Environment Coexist!





Sonzogno Stefania Manager Operational Excellence Curia Italy, ORI

Ponta Elena Director Manufacturing Operations Curia Italy, ORI

Is your case study linked to an 'ugly truth' or a 'key success factor'?

The increase in CO2 concentration in the atmosphere leads to an increase in average temperature, causing global warming, and creates health damage. We, as a chemical pharmaceutical company, promote health as the main value, not only through the quality of the drugs we produce but also for the way we produce them (measuring the impact of our activities on the environment, health and safety of people).

What does the case study help tackle?

The project is a tangible example of how technical evolution, efficiency and reduced environmental impact represent the key of success.

What was the outcome and how did you measure it?

Installation of Trigeneration Plant Including also one new steam generator (in order to replace an old diathermic oil boiler) and one new chiller (-15°C). The trigeneration plant is an internal combustion engine for producing Electricity, Steam and Cooling, everything built and supplied with EsCo (Energy service Company) Formula. The Trigenerator is a 2,2 MW plant started on Jan 2021 with the outcome of less Energy consumption due to energy efficiency (greater noverall= 80÷85%); in addition, NOx emissions <250 mg / Nmc with SCR

(Selective Catalytic Reduction) system and lower CO2 emissions. All the results let us eligible to obtain the Energy Savings Certificates (ESC). The Steam Generator started 2020, contributes to the less energy consumption due to grater energy efficiency ($\eta \ge 95\%$), and NOx emissions <100 mg / Nmc, heat recovery from exhausted fumes and consequent lower impact, lower CO2 emissions. Last but not least it represent also a safety improvement for people (replacement of diathermic oil system versus less impact technology). The last improvement relevant the new ammonia (NH3) chiller, started on 2020 has decreasing environmental impact (NH3 instead of Freon gas) with consequent greater efficiency than traditional groups, that means lower consumption.

Who was involved (departments/roles)? How did you justify it to the business?

Curia's program zero emission is Sponsored by Curia Executive Leadership across all functions. Dept involved in Curia Italy are all technical teams of Engineering & Maintenance, Health and Safety teams, Cross functional team & specific partners.

What were the key success factors?

- Win-win strategy with partners
- o Clear Tone from the top
- o Clear vision and strong commitment across the organization

What are your watch-outs for others attending this? Have a clear and defined goal, consider it as a priority and integrate it into our core business.

How would you recommend those with less resources attempt this?

The key is represented by a cultural change. We stronghly believe that our actions may have positive impact on environment and sustainability, which must involve the whole organization.

We create a strong vision, shared with the partners we work with, to create a virtuous zero-emission network.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Engineering, Health and Safety teams co-lead the net zero strategy, following Curia Italy vision and ambition and driving, implementing and execution phases. Our executive Leadership sponsor is Leonardo de Paolis, AD Curia Italy Sites, who keeps our leadership teams focus on the program and on the continuous improvement. Our CEO & Curia Global Top Management drives the commitment within the APIs organization.



Nurturing a Healthy Supply Chain



Is your case study linked to an 'ugly truth' or a 'key success factor'?

A recent survey* of over 800 biopharma industry leaders shows 69% state "weak collaboration across the value chain is a barrier to achieving sustainability targets."

Value chain collaboration is essential for the advancement of sustainability. By working together across different stages of the value chain we can achieve greater efficiency, innovation, and value creation.

What does the case study help tackle?

Initiating a sourcing program with a focus on sustainability-minded suppliers is a strategic approach to addressing Scope 3 emissions, which account for roughly 95% of our emissions. This is how we did it: asked suppliers to get EcoVadis assessed, established a green and red spend program with targets, and recently introduced a carbon maturity matrix.

What was the outcome and how did you measure it?

- Goal: 80% spend assessed; Actual: >78% YTD (over 1600 suppliers have been assessed with an average score of over 55).
- Goal: 43% of net green spend; Actual: 57% YTD (over 1 billion in net green spend achieved).

Who was involved (departments/roles)?

Suppliers and our entire sourcing organization (including direct, indirect, transport and logistics, category leaders, strategic, commodity, new product development, operations), and Danaher.

What were the key success factors?

- Commitment from senior leadership.
- Drove awareness internally to increase understanding of why this in important.
- Created KPIs to measure and set targets to track performance (top leadership down through individual team member targets).
- Dedicated resources for this program.
- Consistent communication within the organization and with suppliers both.
- Shared expertise to help suppliers improve their assessment ratings.
- Distributed materials, guides, and courses on our Supplier Sourcing Sharepoint site.

What are your watch-outs for others attempting this?

- Pushback from suppliers due to concerns about time, cost, and resource allocation.
- Recognize that some suppliers may not fully understand the importance of the initiatives or the rationale behind them.
- Realize regions may have varying maturity levels or systems constraints.

How would you recommend those with less resources attempt this?

- Start somewhere. Start small and with due diligence. Even small steps can lead you towards an overall larger goal.
- Assess your list of suppliers and prioritize based on the level of impact.
- Ask questions, ask for help.
- Don't let yourself get overwhelmed.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

We were sponsored by our Direct Sourcing Leader with full executive-level support.

There was also a full team of Sourcing Leaders along with a Program Leader working together to initiate and implement our program.

*2023 Survey of 100 respondents funded by Cytiva, conducted by a third party



Marion Ribes
Sourcing Lead - Sustainability



Collaboration As the Key to Advance Sustainability





Corinne Herger Global Sustainability Manager

Is your case study linked to an 'ugly truth' or a 'key success factor'?

We truly believe that cooperation between different departments, but also along the entire value chain, is key to advance sustainability. Therefore, our case study is linked to a "key success factor" on how collaboration can support in tackling climate change.

What does the case study help tackle?

Our activities - particularly those in the upstream value chain - have an impact on the environment, caused in particular by the production of the raw materials we procure, our own production, transport, and final disposal. This case study provides insights into the possibilities for reducing emissions throughout the value chain.

What was the outcome and how did you measure it?

Datwyler recently joined the Science Based Targets initiative (SBTi) and is working towards binding greenhouse gas reduction targets. All initiatives mentioned support us in achieving our targets and once the target setting process is complete, we can track our progress in reducing emissions. The EcoVadis Platinum Medal (awarded to the top 1% of companies reviewed by EcoVadis) we received already shows that Datwyler is on the right track. Who was involved (departments/roles)? How did you justify it to the business?

Many different departments were involved, such as business unites, sites, and corporate functions like sustainability, procurement, technology and innovation, development and engineering.

What were the key success factors?

Datwyler is working on several initiatives to reduce its environmental footprint. For scope 1 and 2, the main initiatives are purchasing and own production of renewable electricity and increasing energy efficiency. However, Scope 3 is the biggest contributor, and we have not only conducted our first Scope 3 analysis, but also some initial PCFs (Product Carbon Footprints) to assess emission hotspots. Some of the current initiatives to reduce Scope 3 emissions include investigating projects to reduce the need for fossil fuels in the elastomer manufacturing process, increasing the proportion of locally sourced materials and encouraging suppliers to propose more sustainable materials. We strive to optimize the way we supply our customers and thanks to our global footprint, our production capability and product offering. we can propose improved supply configurations to our customers with a sustainable approach. One specific example is our top-quality rubber stoppers which are sold to a pharma company in India. The

production line was relocated from our US plant to our Indian plant to optimize the supply chain with a more sustainable approach by reducing air and sea freight shipments from North America to Asia; the relocation was combined with a transition to a modern best-in-class rubber compound, improving patient safety. Similar changes have been identified and can be implemented in the course of 2025 for other rubber stoppers.

What are your watch-outs for others attempting this?

- Encourage exchanging best practices by joining a sustainability association (e.g. Datwyler is part of the Alliance to Zero)
- Integrate a sustainability indicator into variable compensation to promote employee awareness regarding sustainability
- Collaborate with different internal departments to achieve reduction measures

How would you recommend those with less resources attempt this?

Ensure that sustainability is integrated at all levels of the organization and use synergies between different departments.

Who were the main drivers and the main leadership sponsor? Datwyler stands for a sustainable management approach, linked to our core values of respectful interaction and top performance. Datwyler's climate strategy is supported at management level and all employees contribute to our sustainability journey



Investing in Supplier Decarbonization to Drive Emissions Reductions

dsm-firmenich •••

Is your case study linked to an 'ugly truth' or a 'key success factor'?

We are facing a climate crisis and bold action is needed. Limiting global warming involves a substantial reduction of the GHG emission. The Pharma segment is a key contributor and counts for 4-5% of the GHG emissions.. Therefore companies urgently need to decarbonize. This requires collaboration from all stakeholders along the value chain. dsm-firmenich delivers strong performance in reducing its scope 1-2-3 emission and we want to link our case study to a key success factor, dsm-firmenich being the right partner for addressing customers' scope 3 emission reduction.

What does the case study help tackle?

Part of our climate action is the reduction of our scope 1 emission and the switch to greener energy source.

What was the outcome and how did you measure it?

We were among the first companies to have ambitious scope 1 and 2 targets validated by SBTI. To achieve these commitments, we set-up sustainability improvement roadmaps at our production sites and especially at our Swiss site in Sisseln to drive carbon emission down. The switch to wood-chip fired power plant, one of Switzerland's largest biomass plant, helped us saving 50'000 tons of CO_2 emissions/year.

Who was involved (departments/roles)? How did you justify it to the business?

At dsm-firmenich Sustainability is inherent to our purpose. It is not a standalone initiative but is woven into all our activities including operations. This project was justified to the business as much aligned with our ambitious sustainability commitments validated by SBTI, to reduce our scope 1 emission. It involved technical experts on site, corporate and legal functions and the external partners.

What were the key success factors?

A key success factor was presenting a compelling business case, balancing CAPEX, OPEX, and the required investments against the projected GHG emission reductions. Another critical factor was the collaborative teamwork that united technical experts from Corporate, Legal, and external partners, all working together to drive the project's success.

What are your watch-outs for others attempting this?

Projects with significant CAPEX and multi-year contracts demand strong partnerships among all parties involved and continuous monitoring of the written agreements..

How would you recommend those with less resources attempt this?

Start with your company carbon footprint calculation to analyze what drives your scope 1 and 2 emissions. Identify large projects that would have the highest impact on emission and start with the ones requesting the lowest investment. Set-up site roadmap to steer and monitor progress.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

This project needed full collaboration across several fucntions. It was sponsored by the Senior Vice President Operations, driven by the site manager and supported by Corporate fuctions.



Caroline Ploton
Manager, Sustainability Marketing
Health Nutrition and Care



Embracing Electric Partnership to Move Toward a Net Positive Future



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Investment in renewable electricity and conversion of fleet vehicles to all-electrics are key success factors to help us make progress toward Ecolab's near-term climate targets to reduce Scope 1 and 2 emissions by 50% by 2030, from a 2018 baseline, and sourcing 100% renewable electricity by 2030.

What does the case study help tackle?

Reduced dependency on fossil fuel sources to enable a resilient and sustainable future.

What was the outcome and how did you measure it? Through renewable energy initiatives, Ecolab is now 80% of the way toward our goal of sourcing 100% renewable electricity globally by 2030. We partner with energy service providers and operational supply chain teams to gather monthly electricity use data and validate resulting emissions annually with a third-party. And while we actively work to minimize our total carbon footprint, our biggest impact is through the work we do for our customers. Ecolab's innovative energy-saving solutions and services help customers reduce greenhouse gas emissions in their own operations. In 2023 alone, we helped customers avoid 3.8 million MT of greenhouse gas emissions. This is measured through Ecolab's proprietary eROI – or exponential return on investment – methodology, which estimates the sustainable impact and return on investment of utilizing Ecolab products and services.

Who was involved? How did you justify it to the business?

In 2022, Ecolab and Low Carbon entered into an agreement to develop the Mörknässkogen windfarm, located in Finland. This builds on Ecolab's progress in North America, where Ecolab reached 100% renewable electricity in 2020. Multiple teams across Ecolab help operationalize our virtual power purchasing agreements (VPPAs), including corporate sustainability, finance, treasury, and risk/insurance teams. Ecolab's Power Purchase Agreements and its other initiatives put the company on pace to achieve its renewable electricity targets by 2030. That's well ahead of guidelines outlined by RE100, a global corporate initiative focused on achieving 100% renewable electricity by 2050, of which Ecolab is a member.

What were the key success factors?

"We believe that truly sustainable companies deliver on both their financial and environmental goals," said Christophe Beck, Chairman and CEO, Ecolab. "These efforts support our continued growth and ability to serve customers, all while moving us closer to our 2030 Impact Goals and a 100% positive future."

What are your watch-outs for others attempting this?

Many business leaders find themselves contemplating a choice: pursue growth or sustainability. This is a false choice. The dichotomy between profitability and sustainability is a myth. In fact, Ecolab's customers have demonstrated something we've observed over our own more-than-100 year history. Sustainability is good for business.

The global challenges we face, while real and incredibly urgent, should not be seen as obstacles, but rather opportunities.

How would you recommend those with less resources attempt this?

At Ecolab, we believe what's good for the planet is good for business. Operating sustainably should cost less — not more. Ecolab's North America and Europe renewable energy projects were selected based on upfront capital requirements and financial risk. It is important to work collaboratively across corporate sustainability, finance, treasury, and risk/insurance teams to find the right solution.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor? To promote sustained company success, all leaders work together to achieve related goals. "At a time of increased scrutiny for energy use and net zero commitments, we are proud to be investing in renewable options that are good for both Ecolab's business and our planet," said Ecolab Chief Sustainability Officer Emilio Tenuta. "Many of Ecolab's more than 47,000 associates globally are supporting our customers on their net zero transition, and Ecolab's VPPAs provide tangible examples of how to move from commitment to action."



An SME roller coaster: Day 0 to striving for Net Zero





Dhruv ChaddaWhole Time Director, Espi

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our ugly truth: We started with low sustainability maturity, extremely poor domain knowledge and awareness, and limited financial and technical resources. To overcome this, we have made significant strides through strategic collaboration, leadership, and accountability—factors we consider key to our success. We believe that small actions can meaningfully address climate change, and we aim to set an example by showcasing our commitment to sustainability.

What does the case study help tackle?

Espi's case study shows how an SME can embark on the decarbonization journey by setting clear targets and implementing effective initiatives. These efforts boost sustainability ratings and offer long-term financial gains.

What was the outcome and how did you measure it?

Being the first and only Indian SME in the Pharma, Biotechnology, and Life Sciences space to obtain SBTi approval as of 2023 is our remarkable achievement. We are committed to reducing Scope 1 and 2 emissions by 42% by 2030. Our ambitious targets and ongoing efforts have significantly boosted sustainability performance quickly through initiatives like solar power deployment, forensic energy audits for efficiency, and strategic partnerships —including the use of a software

platform for effective emissions tracking and emission reduction strategies — this has positioned us to achieve our 2030 SBTi goals by 2027.

Who was involved? How did you justify it to the business? I led Espi's sustainability commitment, supported by EHS and Engineering teams as champions of various initiatives. To optimize limited resources, Espi designated senior members from all departments to drive sustainability efforts. Espi also collaborated with external partners like Sprih for carbon accounting and 14 Trees for environmental projects like tree plantation.

What were the key success factors?

Key success factors included unwavering leadership commitment and driving firm-wide sustainability awareness for impact. This cultural shift fueled our adaptability. Notably, 25% of our electricity now comes from in-house rooftop solar, with plans to increase that share, accelerating our progress. Using a digital platform enhanced transparency and data-driven decisions, while strategic partnerships provided essential expertise. Being ahead of SBTi emission reduction targets, poised to achieve 2030 goals by 2027, validated our efforts, boosting morale, further propelling our journey.

What are your watch-outs for others attempting this?

A major watch out for is to ensure that a long-term sustainability commitment is embedded within the

leadership to inspire and drive the entire company. Don't manage everything alone—seek expert advice and use software platforms and forums for effective planning, as sustainability is an ongoing journey. Align with global standards and set realistic targets that fit your company's roadmap. Starting early is key to long-term success.

How would you recommend those with less resources attempt this?

Despite having limited resources, Espi is successfully navigating its sustainability journey by taking incremental steps. Start by measuring Scope 1 and 2 emissions, set small, achievable targets and take concrete actions to reach them, avoiding overly ambitious commitments. Each success will boost team confidence. Seek assistance and guidance from experts and collaborate with partners to amplify your impact.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Espi's sustainability strategy is co-led by the EHS Manager and Engineering Lead, with guidance from myself and support from Sprih. The EHS Manager handles emissions measurement, while the Engineering Lead drives initiatives like energy audits and renewable energy deployment. Together, they keep the leadership team informed and engaged.



Reducing CO2 Emissions through Strategic Collaboration and Innovation

EURPACK°



Marco Braccini Environmental Social & Governance Manager

Is your case study linked to an 'ugly truth' or a 'key success factor'?

We strongly believe that manufacturing companies play a leading role in driving the world towards a sustainable future and that is why we focus on integrating sustainability into our corporate culture.

Every day our commitment to sustainability is reflected in our long term strategy as well as in the engagement with our internal and external stakeholders.

Our case study is based on a 'key success factor' in the research of solutions for reducing CO2 emissions.

What does the case study help tackle?

Our study represents the beginning of a process that we are planning to extend to our external stakeholder engagement program, with the aim of reducing CO2 emissions.

What was the outcome and how did you measure it?

"The Carbon Footprint of our client's packaging" is a study carried out in 2019 in collaboration with the University of Tuscia (Viterbo). The objective was the one to identify the opportunity to improve the LCA of a "complex product" (composed by box, leaflet, booklet, tray and label). The analysis was based on the evaluation of the emissions generated during the production process of each packaging component (considering current specifications), using the Life Cycle Assessment (LCA) method "from cradle to gate", according to ISO 14067:2018 and PCR 2019:13.

In the second scenario we evaluated the impact of a different cardboard on the final LCA result. In detail, we analyzed two types of cardboard: GZ and GD.

Who was involved (departments/roles)? How did you justify it to the business?

For this study we involved the Department of Agricultural and Forestry Sciences (DAFNE) of the University of Tuscia, Via S. Camillo De Lellis snc - Viterbo (ItalY). We have identified in the DAFNE the public body able to fully carry out the analysis needed for the goal.

The DAFNE, carries out research activities in the field of environmental impact assessment of production processes through LCA analysis; it therefore holds the skills, the expertise and the qualifications to effectively ensure the confidence of the project.

What were the key success factors?

The success of this project was possible thanks to the synergy between our suppliers and customers, both of whom are committed to reducing their environmental impact through the adoption of innovative materials and processes. This collaborative approach represents an effective model for future sustainability initiatives. The commitment from all parts involved to embrace and drive sustainable practices has been the boost to new sustainability projects.

What are your watch-outs for others attempting this?

For the success of sustainability projects, it is essential to involve the purchasing department in the selection of sustainable partners. Collaborate with existing suppliers to implement increasingly ambitious sustainability policies. These steps are essential to build a more sustainable future and effectively reduce CO2 emissions.

How would you recommend those with less resources attempt this?

Even with limited resources, significant progress towards sustainability can be made through small steps, strategic collaborations and the intelligent use of available resources. Every small change contributes to a larger positive impact.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

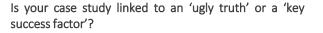
The main sponsor of the project was the Board led by the CEO who provides the necessary support and resources for the success of the project.

The Sustainability Team, crucial to implement sustainability strategies in the daily operations of the company. Purchasing since supplier involvement is essential, Purchasing plays a key role in selecting sustainable partners and negotiating contracts that promote sustainability.



Innovative Paper Pouch for Lower Impact





This innovation is a key success factor that represents our shift towards sustainable materials in product design. The "Paper Pouch" innovation project enabled us to gain important insights into carbon footprint and material reduction. Significant steps towards sustainability can be implemented with innovative packaging.

What does the case study help tackle?

The case study is about the efficient use of materials and the reduction of the carbon footprint by using a lighter, recyclable material for a new type of secondary packaging for pharmaceutical and healthcare products. Successful feasibility studies and available material could significantly accelerate the innovation in the market.

What was the outcome and how did you measure it? The paper pouches have led to a significant reduction in material usage, less storage volume and improved logistical efficiency. The success has been confirmed by an independent life cycle analysis that shows a significant reduction of 70% in carbon emissions.

Who was involved (departments/roles)? How did you justify it to the business?

An interdisciplinary innovation team worked on this project. The team was made up of people from the strategy, product development, operations, sales and product management departments. The project was justified by its alignment with Faller Packaging's sustainability goals and market demand for environmentally friendly, innovative solutions.

What were the key success factors?

Close collaboration with material suppliers and machine manufacturers-- Product design with a focus on functionality and sustainability Extensive product testing and prototype development Market demand for sustainable alternatives

What are your watch-outs for others attempting this? Ensure a clear understanding of the customer's requirements and rigorous testing of new materials and production processes. The safety and protection of pharmaceutical and healthcare products are of the utmost importance and must be evaluated on a case-by-case basis

How would you recommend those with less resources attempt this?

Start a pilot project with us and our machine manufacturer partner to test the requirements for production and further processing. The market reaction and approval issues can be determined much more easily with the first prototypes, without making large investments.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

In our innovation projects, each member plays a crucial role as a driving force. The success of the internal product innovation process is based on the combined efforts of everyone involved! This shared responsibility and commitment are the drivers of our progress. Leadership support comes from our executive team, which prioritizes and supports our sustainability goals and empowers all members of the team to make a difference



Sarina Diebold
Product Owner Paper Pouch



CCF Data Collection: Foundation for Climate Strategy





Stefan MayerDirector QHSE & Compliance

Is your case study linked to an 'ugly truth' or a 'key success factor'?

The "ugly truth" was the very limited data available at the start of the project 3 years ago. Especially for Scope 3, we underestimated the level of detail required by the GHG Protocol and SBTi targets.

A key success factor was that we managed to create a broader understanding of our climate goals through effective communication of our sustainability strategy. Different departments appointed specialists to provide the necessary data and began establishing processes for data collection.

What does the case study help tackle?

Calculating the carbon footprint (CCF) of an entire company requires teamwork. It's essential to secure early support from relevant department leaders and top management. The task can seem overwhelming at first, which is why it's helpful to start pragmatically with estimates. Once the major emission sources are identified, the second step is to refine the calculations.

What was the outcome and how did you measure it?

The outcome was a CCF based on the GHG Protocol, which we used to complete the SBTi Submission Form. It was approved through an external assessment (by our consulting partner).

Who was involved (departments/roles)? How did you justify it to the business?

The project was led by our sustainability management team in collaboration with a consulting partner. Specialists from the sustainability team provided calculations for the supply chain and technology departments. A key factor was the clear commitment from our CEO, Thomas Weller, who prioritized the project.

What were the key success factors?

- 1. A structured GAP analysis to ensure compliance with the GHG Protocol and to cover the entire product life cycle.
- 2. Using a calculation tool with recognized conversion factors (Ecocockpit).
- 3. Persistent data collection from different departments and building knowledge and understanding in those areas.
- 4. A well-structured documentation process, including calculation methods, conversion factors, and levels of accuracy.
- 5. Setting ambitious climate goals based on the federal state's climate strategy and the EU Green Deal (Paris Agreement 1.5 degrees).

What are your watch-outs for others attempting this?

Two years between the commitment and the target submission to SBTi pass quickly. It is important to include all areas from the start.

The collection of all Scope 3 data takes a lot of time.

How would you recommend those with less resources attempt this?

Take advantage of free consulting services from your government and relevant funding opportunities. Consult experts and foster exchanges with other companies, suppliers, and customers. We're all in the same boat, and in the fight against climate change, competitors often become allies.

Start by choosing a good carbon calculation tool. There are affordable and even free tools available for beginners.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The project was driven by the sustainability management team with strong backing from the CEO. The explicitly stated requirements from large customers also played a crucial role.



Building a Path to Responsible Marketing Activation

hh global

is your case study linked to an 'ugly truth' or a 'key success factor'?

HH Global support our clients by activating their brands in market, creating presence at shelf-edge, and bringing increased visibility to the benefits of their products. We are mindful of the unavoidable impact that the associated marketing production has; consumption of valuable resources, creation of waste, and contribution to global warming. Our challenge therefore is: how can responsible marketing activation be achieved at scale? This case study describes a client strategy launched in 2021.

What does the case study help tackle?

Performance specific to the print and Point of Sale categories was targeted. HH Global used our proprietary technology and independently assured carbon calculation methodology to measure and Sandrine Tomaszczyk Senior Sustainability Manager, EMEA report the materials consumed and carbon emissions generated in the process of campaign activation.

What was the outcome and how did you measure it? In its first three years, this initiative has achieved an impressive 25% reduction in carbon emissions, 34% reduction in total material usage, and a 17% increase in the use of recycled material. Such successes deserve celebrating while we remain committed to driving further decarbonisation.

Who was involved (departments/roles)? How did you justify it to the business?

A cross-functional SteerCo comprising leadership from both parties and representation from procurement, commercial, and sustainability mutually defined and agreed a Statement of Work.

What were the key success factors?

2021 acted as the base year with performance measured by our proprietary technology and reported quarterly. This has created more transparency, contributed to better decision making, and guaranteed that time and resources were focused on the opportunities to drive maximum impact.

What are your watch-outs for others attempting this?

A key component of the strategy was to direct activity through a defined, sustainable product catalogue. The marketing environment is fast paced, commercially sensitive and has an ever-increasing imperative for speed to market. In this context, the convenience of maintaining the status quo becomes the challenge. The implementation of the catalogue allowed us to disrupt repetitive buyer behaviour, introducing new sustainable buying patterns

How would you recommend those with less resources attempt this?

Follow the data, Identify hot-spots, large or repetitive contributors, and then focus on material sustainable principles (e.g. increasing recycled content or reducing size / weight / volume). Small, simple changes applied at scale can have a big impact. Start by adding basic KPI's into reporting, such as whether product contains recycled content or come from a certified source and build from there.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The Global Account Director at HH Global worked closely with the client's Global Category Manager, who sponsored the implementation of the sustainable strategy and product catalogue across all markets. Tailored training on the ambition of the strategy, the importance of engagement, and how to use the catalogues was provided to +100 relevant stakeholders across both parties. With guidance from the Global and Regional Directors, the local Client Services Teams drove adoption of sustainable practice at a country-level and provided clean, accurate data for Analytics to run reports on.



Sandrine Tomaszczyk
Senior Sustainability Manager, EMEA



Circular Economy - Energy Conservation



Is your case study linked to an 'ugly truth' or a 'key success factor'?

This 'Circular Economy' case study 'Conversion of waste steam to usable energy' is linked to a 'key success factor'.

What does the case study help tackle?

The aim is to convert **waste to wealth** and creating value to the organization by contributing to the global sustainability challenges. This initiative helped in energy conservation and reduction of Scope 1& 2 GHG emissions.

What was the outcome and how did you measure it?

The implementation of the case study delivered remarkable results to both the parties ecologically and economically.

Process by-product (steam) of neighbouring Industry is being used by us and we monitor the progress by collecting quantitative data and measure the outcome to know our achievements and opportunities for improvements. The results are significant and helped organization to achieve:

- 50% of steam requirement of the Unit, which avoided the coal use and water use for steam generation.
- Reducing the Global Warming by avoiding 42,594 MT of steam release per annum into the atmosphere and utilized which in turn aided to conserve 43,872 KL of water per annum.
- Scope-2 Emission Reduction: Conserved 5,96,320 kWh electricity which requires to operate the boiler.

Who was involved (departments/roles)? How did you justify it to the business?

The ESG initiatives are adopted and executed in a systematic approach at Laurus Labs. The unwavering support and commitment of top management towards sustainability initiatives and goals assisted in execution of this initiative. Decentralized execution at individual sites by the respective Site Leadership Team including Site Operations Head, Heads of Engineering, EHS, & Supply Chain etc. played a indispensable role for the seamless implementation of this initiative. This benefits in Scope-1 Emission Reduction: avoiding the coal consumption up to 11,075 MT per annum deriving a benefit of 15,947 MT GHG emissions reduction.

What were the key success factors?

The key success factors are...

- Organization's proactive approach in adopting and implementing the eco-friendly initiatives from its inception.
- Laurus Labs bagged many prestigious Awards from Government and other prestigious Organizations for its best efforts made in Environment and Sustainability.
- Collaborated with neighbouring industry to achieve "Emissions to Economy" and now made our facility as Boiler free operational Unit.
- Laurus Labs had given the commitment to SBTi in December 2023 and setting-up targets for validation exhibiting strong commitment to sustainable world.

What are your watch-outs for others attempting this?

- Examine the current operations and have a clear vision about sustainability initiatives and goals.
- Conduct a SWOT analysis both internal and external to identify the opportunities.
- Invest in empowering and developing technical skills & all round development of the personnel.
- Leverage industry networks by joining peer groups e.g. SPP, PSCI, TfS etc. and emissions reduction initiatives such as access to 'Energize' programs. Design conversations around driving efficiency and optimizing operations while managing financial implications and sustainability ambitions.

How would you recommend those with less resources attempt this?

Primarily, Create awareness among the team and convince management to recognize the importance of ESG initiatives globally and integrating them into systems. Focus on opportunities which can be adopted easily, Since emissions reduction is not a one time activity but a journey that the organization has to go through.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers includes, the continuous support of the top & senior management and collective efforts of members from EHSS, Engineering, Supply Chain etc. under the leadership of Operations head.



Srinivasa Rao Manikyala Senior General Manager - EHSS



Lonza's Supplier Sustainability Risk & Supplier Decarbonization Maturity Frameworks

Lonza



Sila VogiatzakiDirector, Responsible Sourcing

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our case study is linked to a key success factor in the implementation of our Responsible Sourcing program, namely the development of our Supplier Sustainability Risk and Supplier Decarbonization Maturity Frameworks, that support the need for creating a clear framework to assess and manage supplier ESG performance.

What does the case study help tackle?

Our Responsible Sourcing program focusses on two initiatives – Supplier Sustainability and Supplier Decarbonization. As part of these initiatives, we have two key expectations for suppliers: perform a sustainability evaluation and set science-based targets. The frameworks serve as a guidance for: ...our procurement teams to:

- Easily communicate our Responsible Sourcing requirements to their suppliers
- Assess their suppliers' ESG performance level
- Understand what actions to request from suppliers
- Integrate ESG performance into supplier management and procurement decisions
- ...our suppliers to:
- Understand whether they comply with Lonza's expectations and, if not, what the next steps for compliance are
- Get access to help resources for improvement

Who was involved (departments/roles)? How did you justify it to the business?

The Responsible Sourcing team developed the frameworks, after thorough benchmarking with industry peers, customers, suppliers and internal stakeholders. The goal of developing such frameworks and API integrated Power BI dashboards was to streamline the Responsible Sourcing process and make it easier for buyers to access relevant information per supplier.

What were the key success factors?

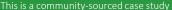
- Easily comprehensible frameworks (e.g., colour coded) that communicate current performance vs. desired performance to suppliers
- Development of a <u>Responsible Supplier Toolkit</u> (incl. the frameworks) which is publicly available
- Communication of the frameworks in a <u>Responsible</u> <u>Supplier digital event</u> with more than 1,100 participants
- Framework criteria are easily trackable via Power BI dashboards to display the Risk and Maturity of each supplier (dashboards are API connected and updated automatically, in real time)
- Development of contract clause and RfP/RfQ guidance, aligned with the frameworks, to enable buyers to include this into purchasing decisions
- Continuous training of procurement on the frameworks (e.g. via internal webinars)
- Ensuring that Lonza leads by example and meets requirements (EV score > 45 and SBTI targets)

How would you recommend those with less resources attempt this?

- Do not re-invent the wheel (e.g., some of our suppliers already replicate the concept)
- Integrate external providers via API and automatize reporting where possible to save time
- Keep it simple: the easier you make it for buyers and suppliers to understand your program, the less explaining you will have to do at a later stage

What are your watch-outs for others attempting this? Frame your program and frameworks positively, so that suppliers do not see it as a threat: the purpose is to help suppliers continuously improve on ESG, rather than punish them for lower performance and offer suppliers capability building (e.g., we use TfS Academy).

What was the outcome and how did you measure it? We significantly progressed towards our 2028 target achievements with 75% of spend coming from suppliers with an assessment (up from 33% in 2022) and more than 200 suppliers already engaged on decarbonization. We noticed an increased autonomy of buyers in leading Responsible Sourcing discussions with their suppliers, a high degree of usage of the Power BI dashboards and a faster understanding of our suppliers when it comes to our Responsible Sourcing expectations.



From Ground to Growth: How Marken's Facilities are Leading the Change in Sustainability



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our case study is linked to a key success factor: Marken's strategy focuses on two clear sustainability goals—reducing environmental impact and enhancing social and community engagement at each facility. By tailoring efforts to local contexts, we've driven meaningful, location-specific adoption of sustainable practices.

What does the case study help tackle?

The case study highlights how Marken used the Greener Facility Scorecard and Pre-Approval Checklist to guide ESG initiatives, track progress, and recognize branch achievements.

What was the outcome and how did you measure it?

Marken's global offices differ in size, budget, and ESG maturity, requiring tailored approaches. Launched in 2023, the Greener Facility Scorecard set goals and tracked progress by awarding points as branches advanced through action tiers. Of 52 sites, 11 exceeded requirements with initiatives like LED lighting, recycled materials, and mental health programs. The "Sustainable Branch of the Year Award" encouraged ESG performance, while annual reviews and feedback drove improvement. New facilities use a Pre-Approval Checklist to embed sustainability from the start.

Who was involved (departments/roles)? How did you justify it to the business?

Marken's Operations, Sustainability, and EHS teams each played a key role in integrating sustainability at the branch level, driven by a clear business case: lower carbon footprint, uphold ethics, and support social responsibility — all benefiting society and the company.

What were the key success factors?

The key success factors were its focus on identifying specific facility strengths and gaps, rather than imposing uniform targets at all locations. This individualization strategy ensures each facility contributes to sustainability goals based on its unique capabilities. Additionally, engagement through drop-in sessions, discussion boards and feedback forms fostered collaboration across departments. The initiative's integration with annual metrics allowed for continuous tracking of progress and informed improvements year-over-year.

What are your watch-outs for others attempting this?

Ensure engagement at all levels by clearly showing how sustainability efforts relate to each role and contribute to broader goals. Targeted communication and involvement foster ownership and commitment.

How would you recommend those with less resources attempt this?

For organizations with fewer resources, we recommend you start by building a local network of supporters to create awareness and generate excitement around sustainability initiatives. This grassroots approach helps drive engagement without requiring significant financial investment. Additionally, leveraging automation tools for surveys and data analysis streamlines processes and makes it easier to track progress without heavy manual effort.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers were people in the sustainability department and branch operations teams/leadership who were involved in executing strategies at locations. The executive sponsors were a steering committee of key leaders, including the Chief Operating Officer, Global Head of Sales, VP of Information Technology, and Head of Strategy & Innovation. This high-level support ensured strategic alignment and strong backing for the initiative.



Sandra VossDirector, Global
Sustainability



Brittany VonFeldt Manager, Global Sustainability



Implementing a 360 Degree Supplier Engagement





Bernhard Heneis Head of Group Sustainability

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Are sustainability and resource-intensive industry contradictory? The MM Group proves the opposite and shows how decarbonization and the circular economy can be successfully implemented in a resource-intensive industry. We pursue a 360-degree approach in which environmental, social and governmental (ESG) issues are tackled along the entire value chain. The study is linked to a "key success factor".

What does the case study help tackle?

Engaging the supply chain holistically according to ESG sustainability issues.

What was the outcome and how did you measure it?

The MM Group has set itself **targets** for responsible procurement and decarbonization (approved Science Based Target). Achievements in relation to our supply chain were to reduce our Scope 3 emissions by 11% in 2023 (compared to 2019) and to assess the sustainability performance of 90% of our key suppliers in 2023 by using an artificial intelligence-based supply chain monitoring tool. We elaborated a supplier code of conduct which is an integral part of our contracts.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The management board and the Group Sustainability and Safety team were the main drivers strategically. The procurement organisation drove the implementation of the measures and the collaboration with our suppliers.

Who was involved (departments/roles)? How did you justify it to the business?

Procurement, Group Sustainability and Group Responsible Sourcing. As a result of the growing strategic interest in value chain engagement and regulatory requirements a Responsible Sourcing department was established in 2024.

What were the key success factors?

As part of this 360 degree approach we defined guiding principles in our Supplier Code of Conduct and underlined the urgency in different policies (e.g. Human Rights Policy; Safety Policy; Environmental Policy; Procurement Policy). These guidelines are communicated within our supply chain. Targets according to deforestation, supplier engagement and decarbonisation (SBT-aligned) were set and tools and measures implemented, in terms of risk mitigation and emission reduction. E.g. we are using an artificial intelligence-based tool to track ESG risks along our whole supply chain to make sure that our high standards are met by our suppliers.

What are your watch-outs for others attempting this?

In a first step it is important to raise awareness for responsible sourcing within your own company. Based on this the **integration into processes** can start by defining clear responsibilities in all involved departments and especially within the procurement organisation. Using shared knowledge is helpful to integrate responsible sourcing requirements and KPI into the existing procurement structure to monitor the success of measures and to track the progress against your targets.

How would you recommend those with less resources attempt this?

Collaboration with the supply chain starts with collaborations within your organisation. Make sure that everyone has the same understanding of the targets and measures and define clear responsibilities while sharing the existing knowledge within your organisation.

Start with key suppliers who have similar targets and enlarge the scope step by step.



Embedding Sustainability in Product R&D



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Key Success Factor

What does the case study help tackle?

By embedding our SHAPE: A Design for Sustainability framework into our Product R&D, we are directly addressing the largest contributor to our carbon footprint, targeting Scope 3.1 (purchased goods and services). This category makes up 60.1% of our overall carbon footprint, by far the largest component of MilliporeSigma's CO₂ inventory.

What was the outcome and how did you measure it?

MilliporeSigma introduced the system in 2022 as a required component of all R&D. In the first full year, approximately 400 products were developed as greener alternatives due to this quantitative system, which consists of 7 categories and 47 induvial criterion that we calculate improvements against. We've measured our success in two ways: (1) new greener products in market – currently 3,200 and growing and (2) quantified improvements to products – including plastic and CO₂ reduction, dematerialization and reduced packaging.

Who was involved (departments/roles)? How did you justify it to the business?

This cross-functional effort was a partnership between Research and Development, our three business sectors (Process Solutions, Science and Lab Solutions and Life Science Services), Quality and Regulatory and Sustainability and Social Business Innovation.

What were the key success factors?

Several key factors led to the success of this initiative, specifically:

- (1) a rigorous framework anchored in quantification and best practices in sustainability
- (2) embedding the SHAPE framework as a required component of our stage gate process
- (3) annual product targets that create accountability throughout the business.

What are your watch-outs for others attempting this?

It's easy to have an example lighthouse product to point to as a success – what is key is making sure you create a mechanism that is repeatable and integrated into the normal operations of your company. When this happens, you create transformation and systems change that is scalable.

How would you recommend those with less resources attempt this?

The great news is you can start this from wherever you currently find yourself. We share our framework and its key categories, making it easily replicable. This initiative is about setting standards and targets for reducing key areas to product development – which creates environmental efficiencies and reinforces our commitment to unapparelled transparency.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

This project was driven by Sustainability and Social Business Innovation, specifically by Fabien Thibault, Director, Product and Packaging Sustainability, Rachael Relph, Senior Manager, Product Sustainability, Joseph Burton, Product Sustainability Specialist and Karen Nass, Senior R&D Program Administrator. Leadership sponsorship was by Jeffrey Whitford, Vice President, Sustainability and Social Business Innovation.

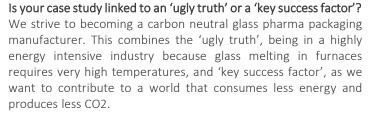


Jeffrey Whitford
Vice President, Sustainability &
Social Business Innovation



Thriving Towards Carbon Neutral Glass Pharma Packaging





What does the case study help tackle?

The production of glass tubing and its transformation into glass primary container presents several challenges and opportunities when it comes to sustainability. To address the environmental impact of such processes, a comprehensive approach must be adopted, starting from raw material sourcing, in-production recycle processes, and extending the end-of-life phase of our glass containers.

What was the outcome and how did you measure it?

This is a long implementation process, but we have seen already great success as we are measuring resource savings from glass tubing and container forming processes: glass otherwise lost can be fed back into the production cycle. Currently, we are feeding about 95% (or more) of our processed tubing back into the glass melting cycle. One additional advantage which comes with this step is that the overall temperature of the furnace melting the glass can be reduced as glass becomes a conductor of electricity, and therefore that saves energy at our glass melting process

Who was involved (departments/roles)? How did you justify it to the business?

This was very much a cross-functional approach. From concept to realization and implementation, we had several our operations and manufacturing colleagues involved right from the beginning to ensure that the goals set were realistic and the timelines for implementation were also realistic.

What were the key success factors?

We have made Sustainability an integral part of our long-term corporate strategy and within the Sustainability workstreams the CO2 emission reduction initiatives are embedded. Making it an integral part of our long-term goals ensures crossfunctional support and full endorsement from Management all along our journey towards carbon neutrality.

What are your watch-outs for others attempting this?

This is a program very specific to our industry and where we Nipro is in the value chain of creating high-quality primary glass containers. As these are quite 'large' processes key is to have the departments that are implementing this at the end involved from the beginning.

How would you recommend those with less resources attempt this?

There is a minimum of investment needed and that can vary by organization, but this is critical for the wellbeing of our environment and the future of our planet. For that reason, any organization should approach Sustainability programs not with the mindset 'let's just get this over with' but rather 'what does it take to make that happen!'.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Nipro's Sustainability program is a central part of its long term strategy, and therefore not only supported by our management but also monitored on a regular basis with the appropriate feedback and reporting structures. In addition, as we have several production sites involved in these initiatives, we have local sustainability representatives that are regularly involved in the planning and reporting.



Alex Jaksch Sr Director Strategy, NPI



Reducing Scope 3 Emissions





Anci Petersson Sales & Marketing Director Nolato Cerbo AB

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our success story is linked to the key success factor.

What does the case study help tackle?

The part that Nolato plays in the value chain means we are a vital link between suppliers of materials and customers' products, and have an opportunity to play a strategically important role in customers' sustainable transition to reduce emission. Our close relationships with our suppliers play a pivotal role in Nolato's sustainability journey and ability to reduce scope 3 for us and for our customers. Our aim was to engage with suppliers' sustainability initiatives linked to Scope 3 emissions and to improve performance in emissions reduction, and thus support us and our customer's journey in reaching Science Based Targets for emission reduction.

What was the outcome and how did you measure it?

Outcome was that we could offer our customers products with lower emission, both through reduced material usage/weight, and through alternative materials, such as massbalance, recycled materials and bio-materials. Several customers have already joined us on this journey. We could measure the impact through reduced usage of material, and also through moving to more sustainable materials, where our suppliers could provide LCA to support.

Who was involved (departments/roles)? How did you justify it to the business?

We have for many years had a consultant employed to collect, support and follow the development of the sustainability initiatives. Four years ago Nolato decided to appoint a sustainability director and a sustainability manager to further strengthen the sustainability work within the group. We yearly set our internal sustainability targets, and currently the focus is on scope 3, which we report into Position Green. Today sustainability is an integral part of our business, and all departments are keen to support the targets. We have had a group of 10 people from different departments, developing the process to ensure a successful outcome.

What were the key success factors?

The key success factors were the sponsorship from the top management in launching our sustainable program, and strongly supporting our targets.

- Clear and achievable targets year on year
- Developed a robust process to ensure the targets were met with a clear time schedule/deadline
- Challenged the process, and made sure the process was easy and reliable.
- Cooperation used the support from our suppliers and customers
- Commitment through involving all relevant departments and employees through seminars, meetings, training, etc.

What are your watch-outs for others attempting this?

Close cooperation with suppliers and customers. Senior/Group management buy in and targets are key at the start. Understand your customers' sustainability expectations, and attend any training, etc. they offer. Share your expectations with your suppliers. Gain insight from the supplier and push them from the start. Have a clear vision what you want/need to achieve and how to do it.

Educate and train – to ensure commitment from internal stakeholders.

How would you recommend those with less resources attempt this?

Start the journey, all steps are counting. Attend customer/supplier training to understand and receive support at no cost.

Ensure you have the management involved and give their commitment.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The owners of the company, and thereafter the sponsorship of the CEO and sustainability director. There have been clear expectations for many years of the company's sustainability targets, and a strong focus on sustainability. At the end — it is the dedication and drive of our employees that continue to move us forward.



From Ambition to Action: Journey to Sustainable Packaging





Darek UszokCommercial manager

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our case study is linked to a key success factor -commitment to sustainable development and our approach to managing social and environmental impacts is a key element of our business strategy, supporting our long-term success. Unpolluted environment benefits everyone.

What does the case study help tackle?

This case study tackles several sustainability issues -by reducing our carbon footprint through GHG emission reductions, we are actively contributing to the global effort to combat climate change. Reducing the consumption of raw materials, energy, and water is central to our sustainability goals, helping to reduce both environmental impact and operational costs. We aim to decrease waste generation and promote recycling, including using FSC-certified materials and phasing out harmful substances.

What was the outcome and how did you measure it?

We have committed to and are on track to reducing our Scope 1 and Scope 2 emissions by 42% by 2030. Our use of FSC-certified materials demonstrates our commitment to sustainable sourcing. We measure our progress through GHG emissions tracking, ISO 14001 Environmental Management System audits, and third-party verifications such as EcoVadis evaluations.

Who was involved (departments/roles)? How did you justify it to the business?

This initiative involved collaboration across multiple departments, Operations to manage waste reduction and energy efficiency efforts. Procurement was responsible for sourcing sustainable materials like FSC-certified cardboard. QA ensured that employee training on sustainability practices was rolled out across the organization. We justified these initiatives by demonstrating how sustainability contributes to long-term financial savings, enhances brand reputation, and opens up new opportunities with environmentally conscious clients in the pharmaceutical and healthcare industries.

What were the key success factors?

SBTi setting measurable targets for GHG emissions reduction has provided a clear pathway for action. Achieving ISO 14001, FSC certification, and being ranked by EcoVadis has validated our efforts and built trust with clients. The engagement of various departments ensured that sustainability was embedded in every aspect of our operations. Use of FSC-certified materials aligns with global sustainability trends and client expectations.

What are your watch-outs for others attempting this?

It is crucial to secure employee engagement across the company. Without this, even the best strategies may fall short in execution.

How would you recommend those with less resources attempt this?

Start with small, achievable steps like ISO 14001 and FSC certification can build credibility and help attract new customers, even if you can't yet implement large-scale sustainability projects. It gives also knowledge and ground for understanding and bigger efforts.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

As a small organization we could quickly implement sustainability initiatives without the delays often seen in larger corporations. With a smaller workforce, it was easier to engage all employees in our sustainability goals, ensuring that every individual plays a role in our success. The main drivers of this initiative were Quality Assurance and Procurement Teams, these departments were responsible for day-to-day sustainability practices such as waste management and sustainable sourcing. The HR together with Operational department ensured that employees were trained and involved in sustainability efforts, from efficient resource use to safe chemical handling.

The main leadership sponsor was the Top management, who ensured that sustainability remained a priority at the highest level of decision-making



From Rail to Road: A Shift to Sustainable Travel Sourcing



Is your case study linked to an 'ugly truth' or a 'key success factor'?

With no direct solution to climate change and its complexities, the same applies to our modal shift in transportation. We recognize that travel constitutes a large portion of our company's emissions and have identified a 'key success factor' in creating achieving sustainable progress through an employeewide mindset shift supported by the selection of our travel suppliers.

What does the case study help tackle?

With approximately 86% of our GHG emissions being Scope 3 Emissions, with 5% specific to business travel, our case study focuses on sustainable travel initiatives implemented and the collaboration it takes between travel managers, suppliers, and employees. Our specific climate related goals include a 20% reduction in air travel emissions and a 50% reduction in fleet emissions from 2019 baseline by 2025. Our initiative defines the purpose, stress levels, and productivity in which travel is conducted and bolsters this to create tangible shifts in both methods of transport and the habits that exert influence in our Scope 3, Category 6 emissions. This case study is still an ongoing effort as part of advancing our climate strategy.

What was the outcome and how did you measure it?

We have achieved a 34% reduction in air travel emissions and a 15% reduction in fleet emissions on a global scale. The success in our air travel is part of a larger company wide initiative to adopt sustainable travel practices which are reflected in not only our Global Travel and Expense policy, but the travel suppliers we partner with.

We have established strong relationships with our large airline and hotel supplier partners. This allows us to align our expectations of their sustainability commitments with our own goals to reduce travel emissions. We do this by tracking different bookings and measuring our total business travel emissions. We have increased the granularity of the data over past couple of years. A specific case study in Germany is piloting an emissions calculation methodology where all available sources (TMC, expense tool, credit card company, and suppliers) are used to calculate travel and expense emissions. This has resulted in a success rate of 96% for domestic rail travel. It is important to note that most of the travel is for clinical trial monitoring visits that cannot be conducted virtually due to the nature of the service and care provided.

Who was involved? How did you justify it to the business? Various stakeholders were involved including our Travel team, our Procurement team, employees, and oversight from our ELT. It was justified to ensure social responsibility and the long-term health of both people and planet. This is a part of our overarching ESG mission and to advance our climate mobility efforts with our CRAs involved with clinical trial monitoring visits. What were the key success factors?

1. We received SBTi validation of our near-term targets in July 2024. Our target to reduce Scope 3 emissions 25% by 2030 from a 2022 base year accelerates the scale to which we must ensure sustainable travel practices to reduce both business travel emissions and purchased services with travel suppliers.

- 2. Promotion of first-class seat selection if rail travel is chosen over air travel.
- 3. Green options as part of booking process. We have also introduced an online booking tool with browsing extensions as the part of the pilot program in Germany to help employees understand CO2 emissions, associated impacts, and our detailed quarterly reports.

What are your watch-outs for others attempting this?

We have had more success with implementation in EU-based countries as both employee mindsets and regulations are more commonly aligned. It is important to engage all teams and create baseline knowledge of the purpose and end goal associated with an initiative. How would you recommend those with less resources attempt this? Begin by recognizing why this should be part of your company's overall climate strategy. If travel constitutes a large portion of your climate impact, it is first important to assess where levers of change exist. For example, we are in the evaluation process for providing employees with a mobility budget. Our recommendation is to start where you are able, and work with your travel suppliers to scale the availability of offerings.

Who were the main and the main leadership sponsor? Procurement, Travel, and Sustainability teams, the Chief Procurement Officer, and employee engagement were the main drivers to the success of this case study.



Benjamin Park
Executive Director of
Travel & Sustainability



Incorporating Efforts for a More Sustainable World





Diego Ramírez de Aguilar Senior Director of Financial Planning and Sustainability

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our case study is centered on a "key success factor" for driving collective change. As an organization, we recognize our ability to contribute to reducing greenhouse gas (GHG) emissions, especially in light of the global environmental challenges and the significant impact on human health. However, we acknowledge that our actions alone are insufficient to combat climate change effectively. Therefore, a coordinated and collaborative effort is essential to achieving meaningful progress.

What does the case study help tackle?

Approximately 60% of our greenhouse gas (GHG) emissions stem from our distribution suppliers, which is why our efforts are primarily focused on reducing Scope 3 emissions to meet the objectives established under the Science Based Target Initiative (SBTi). However, we also remain committed to reducing emissions in Scopes 1 and 2, which account for the remaining 40%.

What was the outcome and how did you measure it?

In 2024, our greenhouse gas reduction targets were validated, approved, and published by the Science Based Targets initiative (SBTi). These targets establish our environmental commitment, aiming to reduce emissions in Scopes 1 and 2 by 2030, and in Scope 3 by 2050.

Who was involved (departments/roles)? How did you justify it to the business?

We established a Sustainability Committee comprised of key leadership roles across various departments within the corporate group. The committee is responsible for driving three core lines of action: Sustainable Business,

which focuses on integrating sustainability into our business operations; World Division, which addresses our environmental impact on a global scale; and Talent Division, which ensures that our workforce is aligned with our sustainability goals.

In addition, we actively involved key leaders from our distribution suppliers, creating a truly multifunctional team. This collaboration between internal and external stakeholders ensures a holistic and coordinated approach to achieving our sustainability objectives. The diverse perspectives and expertise within the team enhance our capacity to implement effective and innovative solutions.

What were the key success factors?

Since 2014, Ralca has demonstrated a strong commitment to environmental sustainability through several impactful initiatives. These include the installation of solar panels, a rainwater collection system, and a water treatment plant at our facilities. Currently, 22% of the energy consumed at our CEDIS in Lerma and 95% at our Naucalpan facilities are supplied by solar energy. In 2022, we further enhanced our sustainability efforts by implementing an Energy Storage System, allowing us to reduce peak energy demand from the grid (CFE). The environmental impact of these initiatives is equivalent to preventing the emission of 2.3 tons of CO2 or planting 620 trees each month.

In addition, our rainwater collection and water treatment systems allow us to be self-sufficient in water resources for 3.5 months each year, reducing our annual water consumption by 18%. In 2024, we joined the Net Zero program, with our targets validated, approved, and published by the Science Based Targets initiative (SBTi).

Our sustainability efforts have also extended to our suppliers. In 2023, our distribution provider integrated two hybrid units into its fleet, fulfilling its commitment to reducing emissions. This effort also earned them Clean Transportation certification, endorsed by the Ministry of the Environment and Natural Resources in Mexico.

What are your watch-outs for others attempting this?

The first steps are often the hardest, but teamwork is key to achieving your goals. Establishing a group of expert decision-makers and forming committees will simplify the process. Training staff on sustainability increases awareness and engagement. Finally, audits like PSCI or Ecovadis help assess your current standing and guide future efforts.

How would you recommend those with less resources attempt this?

The most important step is to begin fostering a culture of environmental care. Once this mindset is established, creative solutions and opportunities will naturally emerge, and over time, these efforts will gain momentum and strength.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers have been the entire management team, company leadership, and the members of the sustainability committee, all of whom have committed to implementing strategies to reduce environmental impact and actively promoting the execution of these initiatives. The CEO has been pivotal in driving the Net Zero commitment across the organization, while the company presidency has provided crucial financial support to ensure the success of these initiatives.



Renewable Electricity Opt-Ins & RECs





Dianne M. HeilerVice President, Sustainability and ESG

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our case study is linked to two key success factors: transition to renewable energy sources and GHG emissions reductions in alignment with our SBTi netzero by 2050 goal. We focused on electricity usage at our largest manufacturing facilities and prioritized them by potential impact and direct purchase availability. Where direct purchases were not available or cost prohibitive, unbundled renewable electricity certificates (RECs) were approved as a suitable secondary option. Investment decisions on how to achieve site-level usage of 100% renewable electricity were driven by our own robust due diligence process.

What does the case study help tackle?

It uses a "low-hanging fruit" example that everyone can relate to and puts it into a business context that helps rally a core team to drive the opportunity across global operations. It makes clear how our Environmental Sustainability 'E' Steering Committee can proactively support high-impact initiatives through investment justification guidance, fast-tracked approval and implementation support. It also provides a base from which to build our company plan to achieve net-zero emissions by 2050, which is due for submission to the Science Based Targets initiative (SBTi) for review in December 2025.

What was the outcome and how did you measure it?

In 2023, 88% of our global electricity kWh usage was powered by 100% renewables. This reduced emissions by 67% in Scope 2 and by 25% in combined Scopes 1 and 2, compared to the previous year. Per kWh cost savings were highest (46%) in U.S. states with deregulated markets for the electricity industry. In 2024, 100% of global usage was powered by renewables. Financial-grade software was used to measure outcomes based on GHG Protocol guidance, utility invoices, reports and market rate quotes.

Who was involved (departments/roles)? How did you justify it to the business?

Corporate Sustainability led our cross-functional core team, which included Facilities, Manufacturing site and network leaders, and Finance. The project was championed by our Chief Operating Officer, who oversees the company sustainability strategy and has individual ESG goals tied to performance. Justification was presented as a ~\$300k net-positive cost savings and a quantifiable success story for strategy advancement.

What were the key success factors?

Disciplined data management and laser focus, combined with investigative and communication skills, were key success factors in managing the project. Quantifiable reductions in emissions and net operating costs were key success outcomes. Recognition that a cumulative cost decrease across a few large sites can more than compensate for cost increases at select smaller sites.

How would you recommend those with less resources attempt this?

Do your homework, organize the data, identify any gaps and create reliable proxies or assumptions, question and verify, build a succinct case that clearly demonstrates related impacts, risks and opportunities. Find your champion; distill your messaging to inspire confidence, trust & approval. Work with external resources where appropriate to better understand opportunities or potential consequences and rely on their mature expertise.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The Sustainability team drove this initiative with direct support from our global network of cross-functional ESG Ambassadors (data collectors), Facilities (utility account managers), site leaders and sponsorship from our Chief Operating Officer.

Watch-outs for others attempting this?

Conduct deep-dive due-diligence before opting into a program or contract to ensure awareness and understanding of all commitment components. Involve internal stakeholders early to educate and create alignment. Recognize the right opportunity when it appears and be ready to 'act on facts' as windows for REC purchases, for example, can be short. Each win helps to develop a long-term plan.



Implementing Carbon Reduction Initiatives Across a Global Workforce



Is your case study linked to an 'ugly truth' or a 'key success factor'?

In 2022 RWS took measures to enhance the accuracy of its carbon footprint by improving data collection and greenhouse gas (GHG) emissions to include both its operations and supply chain and has now committed to setting carbon reduction targets which are aligned with the SBTi. This is a key success factor case study.

What does the case study help tackle?

How to design and implement initiatives across a global workforce with the goal of:

- Reducing energy consumption and emissions
- Reducing waste, increasing re-use and recycling
- Taking actions to improve the environment

What was the outcome and how did you measure it?

We now have 100% renewable energy at eight of our offices. Electricity that comes from clean energy sources is 13.8%. We reduced 12% of our electricity related emissions by purchasing clean energy. We now ensure energy usage is reported promptly and accurately using Watershed which uses more representative emissions factors for district heat and supports with more transparency in reporting.

Who was involved (departments/roles)? How did you justify it to the business?

The Supply Chain and Facilities departments were involved in implementation, while the commercial

teams gathered evidence from our client base to provide the justification as to which direction RWS should take from a business perspective to stay in the top tier of language service and technology providers.

What were the key success factors?

We established colleague-led environment teams to suggest and action local initiatives to improve the environment, like setting timers relative to weather conditions and office opening hours. We increased awareness through engagement with colleagues and cleaning companies to ensure energy was being used only when necessary.

We implemented various energy efficiency actions such as: a 'closed-door' policy to avoid unnecessary energy consumption for heating/cooling; and a 'switch off at night' policy. RWS policies and management systems are based on environmental best practices.

What are your watch-outs for others attempting this?

RWS is an office-based business services operation and has little exposure to harmful and hazardous materials. Nevertheless, we developed and defined strict controls to manage, handle, store and dispose of harmful and hazardous substances to minimise the environmental release-risks. Since RWS is a global company with operations in 33 countries the facilities teams needed to ensure the solutions implemented in each location were compliant with local guidelines and regulations.

How would you recommend those with less resources attempt this?

Leverage the power of community which is a force multiplier in the implementation of critical initiatives. We have a Green Agenda pillar with an associated section on the intranet dedicated to environmental issues. We hold awareness days and include articles of interest in our monthly Groupwide newsletter to increase the understanding of climate change, what we can and are doing to mitigate risks, and reduce the impact on our colleagues and operations.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Our facilities director worked with office management teams worldwide to scope how we could implement our best practices in each global location. They were supported by RWS's leadership team whose role is to ensure the right support in each of the key domains of expertise, from real estate and procurement. The General Counsel and Company Secretary has overall responsibility for the Group's risk management programme. Our main executive sponsor for the Environmental pillar is the Chief Language Officer and supply chain falls under her remit. My role is to keep RWS's ESG Steering Committee up to date on progress on our sustainability ratings.

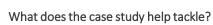


Suzie Towne
Communications – ESG lead



Offering Local Manufacturing with Tangible CO2 Impact Reduction





more local manufacturing.

factor'?

The case study helps tackle the **Scope 3 emissions**, category 9 "Downstream transportation" **quantification**. In addition, it provide an additional argument and proof at the disposal of end-users to activate for **decision making process to switch** for more local supply. As we know, scope 3 is central to the industry's reduction targets, so these changes will help reduce downstream transport.

Is your case study linked to an 'ugly truth' or a 'key success

The biopharmaceutical industry relies on a complex

supply chain. The urgency of drug production often

means shipping from abroad, and in some cases using air

freight. Some products and their associated raw

materials can be shipped around the world! As a supplier

of single-use solutions, we are committed to offering



Saint-Gobain Bioprocess Solutions relies on EcoTransit tool to quantify ${\rm CO_2}$ impact of downstream transportation. 2 scenario with options had been evaluated:

- Scenario 1: From Beaverton US Saint-Gobain Site to Pharma Company based in Ireland, by air, by sea
- Scenario 2: From Dublin Ireland Saint-Gobain site to Pharma Company based in Ireland, by truck

Who was involved (departments/roles)? How did you justify it to the business?

- In order to quantify and link to our overall Life Cycle Assessment, Robert Barrentine, Life Cycle Assessment and Eco-innovation manager have been involved
- In order to foster this approach and formalised the scenario, Caroline Calmels, Sustainability Market Manager, Caroline Calmels was involved to
- And to embed it into our offer and present it as a service to help our customer reduce their scope 3, our sales and supply chain teams are involved too.

What were the key success factors?

Saint-Gobain has adopted Ecotransit since few years already now and manage it with confidence.

Remaining available for developing more scenario or adjusting them are also a success factor.

What are your watch-outs for others attempting this?

The watch-outs are:

Have **clear assumptions** defined from beginning, and being comfortable with having hypothesis.

Ensure that the scenario and scope being assessed are clear, so that the most sustainable decision can be taken without implying a shift in impact.

How would you recommend those with less resources attempt this?

We recommend that this function be automatically available with some input data to generate a quick hypothesis to get started.

It could also be integrated into the transport tool if you manage downstream transport.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

This is a joint effort between sales, sustainability and supply chain teams to take pragmatic action and collaborate with customers to achieve scope 3 reduction targets and contribute to the decarbonization of the biopharmaceutical supply chain.



Caroline Calmels
Sustainability
Market Manager



s Robert Barrentine
Sustainability Project
Manager



Breaking With the Need for Virgin Materials

SCHOTT



Arne Kloke, Head of Sustainability Management



Philipp Ludihuser, Sustainability Manager

Is your case study linked to an 'ugly truth' or a 'key success factor'?

The urgency to address climate change is well-recognized. The challenge now lies in implementing change across the pharmaceutical value chain. We join forces with our partners and focus on specific topics with a clear problem statement to increase resource efficiency and reduce emissions, together.

What does the case study help tackle?

SCHOTT Pharma joined forces with selected customers and Corplex, a leading supplier for transport trays, to question the necessity of using virgin materials in the supply of primary packaging. The case study demonstrates how sustainable practice can be advanced through partnering along the value chain, with a clear focus, and a shared vision.

What was the outcome and how did you measure it?

Today, using virgin materials in corrugated polypropylene trays is the standard and applied as risk mitigation strategy. The partners piloted a pharmacompliant recycling process for trays, enabling the delivery of vials in trays containing recycled content. This will result in an emission reduction of 50% per tray while applying 70% recycled content as compared to using virgin single-use trays.

Who was involved (departments/roles)? How did you justify it to the business?

The joint project involved experts from the departments Procurement, Quality, Environment Health and Safety, Sustainability, and Innovation. Endorsement of senior management was received by translating the programs benefit into the context of the corporates' sustainability strategy and targets. And next to the ecological benefits, financial targets were discussed aswell from the beginning.

What were the key success factors?

The mutual trust between the project partners, the will to question the status quo and pioneer new solutions, as well as the focus on a specific topic made the project a success. And of course, the jointly felt purpose behind the project has been an extra motivation to all of us.

What are your watch-outs for others attempting this?

- Focus on specific, strategy-implementing topics.
- Engage partner along the pharma value chain.
- Build a small, like-minded team to drive change.
- Shape sustainable practice in operations.

How would you recommend those with less resources attempt this?

Identify like-minded partners and tackle the sustainability challenge in a collaborative manner – delivering customer-centric solutions, share your knowledge, and build upon your partners' experience.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Jointly, co-leads from the pharma partners' procurement and EHS organizations, SCHOTT Pharma sustainability team, and Corplex innovation drove the project. For the success it has been vital on the one hand side that one party takes the lead to coordinate the initiative, but all feel the actions as collective endeavor.



Bringing Syringe Packaging to the Next Level





Dr.-Ing. Kurt KuglerSustainability Manager

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Our approach is to design products according the "sustainability by design" principle. Here we see a key success factor for future product development and joint business relations. Our success story is related to our Secure Blister-free Packaging concept using Needle-Trap Secu.

What does the case study help tackle?

The Secure Blister-free packaging concept helps our customers to optimize the packaging density, to save packaging material and storage place, to optimize their packaging processes and finally to create less waste. Both with respect to economic and environmental aspects the concept offers significant saving potentials. The case study is based on using Needle-Trap Secu, the first needlestick prevention device with integrated first opening indication for prefilled syringes, which allows for secure blister-free packaging on unit level.

What was the outcome and how did you measure it?

With the standard version of Needle-Trap, the packaging was done using a standard blister and a sealing lid. 10 blistered syringes were packed in one carton box, resulting in 5 boxes for 50 syringes. With Needle-Trap Secu the blister was skipped and 25 syringes each are bulk packed in a PE bag in an optimized carton box. The number of boxes is reduced

by 60% and the amount of waste is reduced by 46%. In addition to the material and waste savings, the handling was simplified. Opening of single blisters is obsolete and storage in a fridge is space and energy saving now. The waste stream only consists of PE bags and carton boxes, both of which have established recycling methods.

Who was involved? How did you justify it to the business?

The success of Needle-Trap Secu is based on joint efforts of product and process development, product management, sales and of course our customer. The key driver to develop Needle-Trap Secu was the ambition to create a version of Needle-Trap with an integrated reliable first opening indication, which can be used for a secure blister-free packaging concept.

What were the key success factors?

Needle-Trap as a well-established needlestick prevention device on the market was the basis for Needle-Trap Secu. Together with our customer we defined clear targets for the development with a strong focus on having a positive impact on the packaging concept. It finally turned out that not only the packaging could be optimized but that also important sustainability aspects such as reduce, recycle and redesign were covered. Needle-Trap Secu is the basis for a secure blister-free packaging on unit level,

which helps to save resources.

What are your watch-outs for others attempting this?

A clear communication and joint targets are essential to find sustainable solutions for the pharma industry. The product design and the integration of smart features plays a crucial role for transforming the existing linear supply chain to a greener circular one.

How would you recommend those with less resources attempt this?

Look for strong and experienced partners in the field of sustainability and rather focus on promising solutions than trying to change everything at once. Industry collaborations and strong partner networks are important to gain green success in the future.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The success of our Secure Blister-free packaging concept and Needle-Trap Secu is distributed across several shoulders. Our senior management is supporting innovative product solutions whenever possible. Product management coordinates all activities related to a specific solution, in this case Needle-Trap. The close relationship to sales, business development and product development helps to realize customer needs at an early stage and to find the ideal solution for a given problem.



Simplifying Access to Sustainability for All





Matt McLoughlin SVP, Compliance & Categories

Is your case study linked to an 'ugly truth' or a 'key success factor'?

As an online marketplace within the pharmaceutical industry, our company has a responsibility to support our 120+ clients and 5,000 global suppliers in their sustainability journey. The "ugly truth" is that this is not simple, as there is a vast range of knowledge and different levels of progress to consider. However, we have taken significant steps to simplify access to sustainability information for both parties.

What does the case study help tackle?

Every organization is at a different time point within their own individual sustainability journeys. Some clients have fully developed targets and require supplier compliance to maintain relationships, whereas others do not know where to start. Equally, some suppliers have dedicated sustainability teams, whereas other suppliers are SMEs who simply lack the resources. The challenge we wanted to tackle was twofold: inform the bench researcher of a supplier's sustainability status to help them make educated sourcing decisions, utilizing sustainability as a selection criterion, and making it as easy as possible for suppliers to share this information at the point when a decision is being made.

What was the outcome and how did you measure it?

Firstly, we needed to set an example. We report our GHG emissions and began utilizing 100% RE in our offices, while identifying ways to reduce our Scope 3 emissions. Secondly, we educated and informed suppliers of the expectations our pharma clients have regarding their sustainability standards. Finally, suppliers can now share information on their profile

about their achievements and sustainability journey with researchers at the point of a sourcing decision. This promotes sustainability as a key factor to consider when researchers are selecting a supplier for their project.

Who was involved (departments/roles)? How did you justify it to the business?

Our sustainability initiative was driven by our Senior Management team as we believe every individual and organization has a responsibility to support one another to create a more sustainable future. This was supported by our Compliance, Development and Customer departments, who took responsibility for collecting information, designing the reporting solution and delivering the final strategy.

What are your watch-outs for others attempting this?

- Gain Senior Management support unfortunately, in its current form sustainability reporting is not sustainable and needs committed resources.
- Invest sustainability costs money. To major companies
 I would strongly urge you to remove this barrier for
 SMEs whenever possible.
- Prepare there is a ton of information out there, so invest time in learning what you need to do and approach it pragmatically.
- Keep calm the support available to SMEs is not developed enough, and the expectations from reporting platforms unsustainable. Be prepared to get frustrated but keep the long-term goal in mind – we are all trying our best to be more sustainable.

What were the key success factors?

- Create a certification system that enables suppliers to promote their sustainability achievements.
- Deliver an industry supported webinar to communicate expectations and provide support to suppliers.
- Share best practices to promote sustainability as part of client organized events.
- Implement an Environmental Policy supported by Senior Management committing us to our sustainability journey and our organizational goals

How would you recommend those with less resources attempt this?

- Seek help if you need support, seek guidance from others who've gone through this. LinkedIn Groups is a great place to start.
- Be specific if you're a smaller business, start with the simple: Scope 1 and Scope 2. Get used to working on that and understanding how to improve before you even consider Scope 3.

Who were the main drivers and the main leadership sponsor?

Matt McLoughlin, Sr. VP of Compliance & Categories, was the main driver and chief architect of our sustainability journey. He took the lead in discussions with the pharma companies to understand their needs, developed and drove our internal reporting processes, lead internal policy updates and provided guidance on how the platform could help suppliers communicate their achievements.



Increase Energy Efficiency on Couterne's Site

SEQ2NS



Paul-Roch CERNESSON Technical services Manager



Yann Le Morillon Utilities Manager

Is your case study linked to an 'ugly truth' or a 'key success factor'?

The SEQENS Group is fully mobilized to reduce its GHG emissions and set up as target absolute reduction in CO2e emissions from scopes 1+2 of 46.2% between 2021 and 2031 (SBTi). To achieve this, one of the key areas of work at our industrial sites is the optimization of industrial processes and associated equipment performance. Our Couterne site, located in France, has implemented an energy efficiency plan for 2022-2025. This plan was accelerated by the energy crisis resulting from the crisis in Ukraine. Our case study is therefore linked to a "key sucess factor" in decarbonization action.

What does the case study help tackle?

Energy-related CO2 emissions at the Couterne site represent 32% of its Scopes 1 and 2. This energy efficiency plan is helping to reduce the site's natural gas and electricity consumption, and consequently its CO2 emissions.

What was the outcome and how did you measure it?

This efficiency plan has reduced the site's electricity consumption by 3 MWh and its gas consumption by 443 MWh in 2022 and 2023, saving **90 tO2e**. In 2024, the implementation of the "Trap steam preventive maintenance program" action reduced gas consumption by 752 MWh per year, equivalent

to **152 tCO2e** saved. The savings in electricity and gas (used to make steam on site) were measured using meters and flowmeters, then converted using emission factors into CO2e. To date, this plan has saved more than **90,000 euros**.

Who was involved (departments/roles)? How did you justify it to the business?

This project was led by the technical services manager and the utilities manager. These two departments identified areas for improvement to enhance the site's energy efficiency, developed the projects, costed them (expenses and gains) and then implemented them. The return on project investment is essential to justify it to business.

What were the key success factors?

This energy efficiency plan involves different departments and people, with different environmental sensitivities. One of the key success factors was the involvement of all program members: sponsors, partners and stakeholders. This means getting everyone on board, by involving them upstream via workgroups. In addition, the internal sharing of the economic and environmental benefits of these projects has helped to ensure that all staff understand the importance of the program. The 2nd key factor for success is of course to have clearly identified the

areas of work in advance, and to focus efforts on projects with an attractive return on investment and associated environmental gains.

What are your watch-outs for others attempting this?

- Have a good knowledge of the points of overconsumption of energy on the site. This implies having carried out an energy audit of the site or at least having identified the workshops that consume the most energy to focus on them.
- For companies with several sites, it's a good idea to ensure that practices and feedback from this kind of program are shared between sites, so as to cross-cut certain actions or best practices.

How would you recommend those with less resources attempt this?

Start with the quick win projects.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main driving forces behind this project were the "utilities" and "maintenance" teams, working in the field in relation with the production managers. This represents **15 people**. The main sponsor is the site manager. Operational excellence is support.



SHL Medical switching shipments from Air to Low-Emission Sea





Evita LinSenior Director, Supply
Chain

Is your case study linked to an 'ugly truth' or a 'key success factor'?

We recognize that global climate change is a major challenge, requiring joint efforts to reduce its impact on human health and environment. Since our actions alone can't solve the problem, our case study highlights a key success factor in driving collective action.

What does the case study help tackle?

More than 80% of our GHG emissions come from Scope 3 emissions and this case study gives an opportunity to reduce our emission and achieve our approved Science Based Targets 2030.

What was the outcome and how did you measure it?

At SHL Medical, we are prioritizing the switch from air to sea shipments wherever possible. In 2023, we achieved a 54% emissions reduction by moving 55% of products (by weight) from air to sea compared to 2022, despite a 27% increase in overall weight transported

Who was involved (departments/roles)? How did you justify it to the business?

SHL Medical's internal Sustainability program is sponsored at the executive leadership team level and driven by a core team of cross-functional leaders.

There are different technical workstreams addressing decarbonization across our operations and value chain. I lead the logistics and transport impact workstream, collaborating with colleagues from Sales, Sustainability and Finance to ensure a holistic approach.

What were the key success factors?

The key success factor in our achievement is successful shift from air to sea shipments. Despite an increase in the overall weight of products transported, they were able to significantly reduce emissions.

- 1. Efficient Logistics Management: Identifying which shipments can be transitioned from air to sea without affecting delivery timelines.
- 2. Sustainability Focus: Prioritizing environmental goals, such as reducing emissions, as a key performance metric.
- **3. Stakeholder Buy-In:** Gaining support from internal teams and supply chain partners to execute the shift.
- **4. Process Optimization:** Ensuring that logistics processes are streamlined to accommodate sea shipments while maintaining efficiency.

What are your watch-outs for others attempting this?

Some key watch-outs include managing extended lead times,

ensuring product integrity during sea transport, and coordinating closely with suppliers and logistics partners to avoid disruptions and ensure timely deliveries.

How would you recommend those with less resources attempt this?

For companies with fewer resources looking to reduce emissions by switching from air to sea shipments, here are a few practical suggestions they can adopt:

- 1. Start Small and Scale: Begin with a small percentage of shipments and track the benefits. Over time, companies can gradually increase the volume of sea shipments based on initial success.
- 2. Collaborate on Logistics: Partner with other companies to consolidate shipments. This way, smaller businesses can share the cost and space in sea containers, making sea freight more economical.
- 3. Negotiate with Suppliers: Engage with suppliers and logistics partners to explore lower-cost sea shipment options. Long-term contracts can help secure better rates for smaller businesses.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers were the logistics team, along with the sustainability teams managing coordination and compliance.



Driving Green Logistics: SHL Medical's Electric Truck Initiative





Evita LinSenior Director, Supply
Chain

Is your case study linked to an 'ugly truth' or a 'key success factor'?

We recognize that global climate change is a major challenge, requiring joint efforts to reduce its impact on human health and environment. Since our actions alone can't solve the problem, our case study highlights a key success factor in driving collective action.

What does the case study help tackle?

More than 80% of our GHG emissions come from Scope 3 emissions and this case study gives an opportunity to reduce our emission and achieve our approved Science Based Targets 2030.

What was the outcome and how did you measure it?

This newly constructed 26-ton electric vehicle is designed to reduce greenhouse gas emissions by 60% annually compared to diesel trucks of the same class, marking a significant leap forward in implementing green logistics and reinforcing the company's commitment to industry sustainability.

Who was involved (departments/roles)? How did you justify it to the business?

The logistics, sustainability, and procurement teams were involved in introducing the electric truck.

Justification to the business focused on achieving a 60% emissions reduction, aligning with sustainability goals while improving operational efficiency and future-proofing the supply chain.

What were the key success factors?

Key success factors included strong collaboration between logistics, sustainability, and procurement teams, strategic partnerships with Lu Bo Freight Transport and Volvo Trucks, clear alignment with SHL's sustainability goals, and a focus on reducing emissions while maintaining operational efficiency through green logistics initiatives

What are your watch-outs for others attempting this?

Key watch-outs include ensuring infrastructure readiness for electric vehicles, managing higher upfront costs, training teams on new technologies, and planning for extended charging times. Close coordination with suppliers and logistics partners is essential to prevent delays and maintain service quality during the transition to greener operations.

How would you recommend those with less resources attempt this?

For those with fewer resources, start by transitioning a small portion of the fleet to electric vehicles or hybrid options. Prioritize high-impact routes and seek partnerships with local green logistics providers. Additionally, explore government incentives and grants to offset costs and gradually scale sustainable transport efforts.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers were the logistics team, responsible for implementing the electric truck initiative, along with the sustainability and procurement teams managing coordination and compliance. The main leadership sponsor was Sebastian Feng, General Manager at SHL Medical Taiwan, advocating for sustainability and green logistics advancements.



Siegfried



Holger Bühler
Chief Procurement Officer

Siegfried's Collaborative Path to Sustainability: Sharing Emission Reduction Approach in the CDMO Industry

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Siegfried recognizes the significant impact that climate change has on our business and industry. Tackling the current climate crisis requires joint efforts with suppliers and customers to reduce greenhouse gas emissions across the entire value chain. With our current and planned actions, Siegfried is positioning itself for a promising, sustainable future, making this case study a demonstration of a key success factor.

What does the case study help tackle?

This case study illustrates how a pharmaceutical CDMO can effectively engage with both suppliers and customers to reduce its Scope 1, 2, and 3 emissions, as well as customer Scope 3 emissions, fostering collaboration throughout the value chain.

What was the outcome and how did you measure it?

Since 2022, Siegfried has been fully committed to the principles of the Science Based Targets initiative (SBTi). We are just about to submit our targets for validation and expect to have validated targets by the end of 2024. We have been working closely with key raw material suppliers, who provide over 60% of Siegfried's Scope 3.1 emissions. This collaboration has already led to a 15% reduction in our absolute Scope 3 emissions. Additionally, we have launched a PCF project to better understand emissions from individual products and to enhance our response to customer sustainability inquiries.

Who was involved (departments/roles)? How did you justify it to the business?

The initiative was driven by the CEO chaired Sustaina bility Board, supported by a cross-functional team of business and operations leaders. While procurement lead the supplier engagement, the Environmental Sustainability team led Siegfried's PCF projects, working closely with subject matter experts (SMEs) across our global sites. The justification to the business was clear—aligning with the growing demand for sustainable operations from customers and regulators, while positioning Siegfried as a CDMO leader in environmental responsibility.

What were the key success factors?

Siegfried's journey into sustainability, which began in 2020, has been critical to its success. We successfully reduced Scope 1 and 2 emissions by 37.7% through increased use of renewable energy and many energy efficiency projects. Since 2022, Siegfried has conducted detailed analyses of Scope 3 emissions, identifying hotspots and key suppliers responsible for the majority of emissions. By launching a supplier questionnaire, we have collected detailed PCF data covering 60% of our Scope 3.1 emissions, significantly enhancing our data quality and enabling more precise emission reduction planning. In addition to these efforts, Siegfried is continuously working with suppliers to explore switching to greener alternatives for key raw materials, further lowering our Scope 3 emissions.

We are also collaborating with customers to provide detailed PCF for key products. The harmonized PCF methodology, currently under development, will allow Siegfried to quickly respond to customer requests and enhance service quality by providing transparent sustainability data.

What are your watch-outs for others attempting this?

A thorough and detailed analysis is essential to understanding the sources of emissions before setting realistic and achievable reduction targets. It is also important to collaborate with other companies in the industry by participating in workshops and meetings, sharing experiences, and recognizing that joint efforts can achieve far greater results.

How would you recommend those with less resources attempt this?

Start small by focusing on mindset shifts within the organization. Begin with energy efficiency improvements and supplier collaboration, and gradually expand sustainability initiatives as resources become available.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The Legal and SHE teams led Siegfried's sustainability strategy, securing leadership support for ambitious goals. The Chief Procurement Officer integrated sustainability into procurement, aligning supplier relationships and material sourcing with the company's environmental targets.



Reducing Business Travel Emissions with SBTi Targets



Is your case study linked to an 'ugly truth' or a 'key success factor'?

This case study is linked to both an ugly truth and a key success factor. While business travel is vital for our consultancy, it accounts for approximately 60% of our Scope 3 emissions. The key success factor lies in addressing this through science-based targets and leadership in promoting sustainable travel.

What does the case study help tackle?

It tackles the challenge of reducing business travel emissions while maintaining client relationships. Our global travel guidelines, along with our ranking as a leader in rail travel by Travel Smart (a campaign by Transport & Environment, Europe's top NGO for environmentally friendly transport), highlight our commitment to reducing travel emissions.

What was the outcome and how did you measure it?

Simon-Kucher's science-based targets (validated by SBTi) aim to reduce Scope 1 and 2 emissions by 42% and Scope 3 by 51,6% per FTE by 2030. We closely monitor our travel footprint through our Corporate Carbon Footprint (CCF), transparently report progress, and continuously implement internal initiatives, including global travel guidelines designed to encourage rail travel over air travel—efforts recognized by Travel Smart.

Who was involved (departments/roles)? How did you justify it to the business?

The initiative was led by the ESG department in collaboration with Global Travel Management and Office Management, but the real drivers were our consultants. Their commitment to reducing travel emissions while maintaining client relationships was essential. This effort was justified to the business by aligning our travel emissions strategy with regulatory compliance and client expectations, ensuring we remain competitive while contributing to global climate goals.

What were the key success factors?

Success was driven by our SBTi-validated targets, strong internal collaboration, and recognition from Travel Smart. The travel guidelines provided a practical framework for sustainable travel, while the buy-in and dedication of our consultants ensured these guidelines were effectively implemented.

What are your watch-outs for others attempting this?

Challenges include consistent application of travel guidelines and overcoming resistance to changing travel habits. Maintaining transparency and emphasizing long-term benefits are key to success.

How would you recommend those with less resources attempt this?

Focus on the largest sources of emissions, such as air travel, and implement small, scalable solutions. Shifting to rail for shorter trips and leveraging virtual meetings are cost-effective starting points.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers were our consultants, who play a crucial role in managing client relationships while balancing sustainability goals. Their active participation in following the travel guidelines and promoting sustainable travel choices is what made this initiative possible. Leadership sponsors were the CEOs, Dr. Gunnar Clausen and Joerg Kruetten, who ensured the initiative's integration into the business strategy.



Anne Rupp Global Head of ESG Simon-Kucher



Small Changes Add Up – Premium Rigid Box



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Packaging sustainability is a broad subject with a huge amount of complexity due in part to differing regional regulations, waste recycling infrastructures and the complex relationship with CO2. When we discuss packaging sustainability with our customers, the view and priorities of each customer always differs, proving the opportunities to make a packaging component 'more sustainable' are vast.

This example looks at the implementation of several small changes which have maximised the sustainable gains of a single pack.

What does the case study help tackle?

This development has multiple positive impacts:

- Reduction in raw material usage by the height reduction of a carton
- Reduction in CO2e associated with the production and delivery, linked to the 12gr reduction per pack in material
- Total removal of plastic, via the replacement of a plastic insert by a fiber based alternative
- Avoidance of EPR taxation
- Ability to full recyclability within already existing infrastructures due to the pack being a single material

What was the outcome and how did you measure it?

The outcome of this development was positive and shows that even the smallest change can make an impact across several sustainability parameters.

The reductions of plastic and CO2e were part of the corporate sustainability targets so could be calculated and tracked as a reduction.

Who was involved (departments/roles)? How did you justify it to the business?

As with any sustainable development it takes the full team: Design, Procurement, Operations and Sales. We have tried to expand the knowledge of packaging sustainability to all functions to ensure the same sustainable strategy is used for each product team

What were the key success factors?

- Annual packaging weight reduction
- CO2e reduction
- Tonnage of Plastic removal from portfolio

What are your watch-outs for others attempting this?

Make sure the aim of the development is clear from the onset but make sure each development has its clear objectives, standardising sustainability limits progress.

How would you recommend those with less resources attempt this?

Don't over think sustainability, sometimes the small simple changes really do add up. In this case we reduced the height of the carton by 10mm in height which was enough to reduce the total weight of each package by 12g which over the full volume of the order added up to several tonnes of weight saving which in turn impacted carbon reduction positively.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers behind this packaging development were the Smurfit Westrock design team in accordance with the brand teams.

We have been working hard over the last year to fully understand the main tools for change when it comes to Packaging Sustainability, these tools have been trained and trained to our teams which in turn has enabled many positive sustainability stories, our tools include:

- Reduce,
- Recycle &
- Replace



Julie Elder Sustainability Manager Consumer Packaging EMEA, APAC



A Second Chance For Cooling Gels



Is your case study linked to an 'ugly truth' or a 'key success factor'?

At our company, we are constantly looking for new opportunities to make our operations more sustainable, maximizing the value of the waste generated and reducing our carbon footprint. We recognize that these efforts not only benefit our organization, but also generate a positive impact on our customers, our community, and the planet. With this objective, in 2018 we started an innovative project in collaboration with academia and our allies, focused on evaluating the use of gels produced during imports and cold chain transport through a composting process.

What does the case study help tackle?

Each month, our operations generate approximately 12 tons of imported gel waste, which represents 14% of the total waste accounted for. In addition, for example we manage 3.2 tons of gel waste for a pharma company each month, which prevents 38.4 tons from being sent to landfill or incineration per year.

What was the outcome and how did you measure it?



During the period from 2022 to October 2024, a pharma company, through the Solistica service, has sent more than 90 tons of imported gel waste to composting, which has prevented the generation of 52 tons of CO2.

For these calculations, the weight of the gels delivered and the emission factors established by the IPCC in two scenarios are considered. First, it is recognized that the composting process generates a significantly lower carbon footprint compared to other disposal methods. The emissions avoided are calculated as the difference between the emissions generated by composting and those that would have resulted if the gels had been sent to a landfill.

To better visualize this data, the emissions avoided by a pharma company through this good practice are the equivalent of 12 cars not being driven for a year.

Who was involved (departments/roles)? How did you justify it to the business?

With the support of senior management and based on the initiative of the company's Environmental Management Department, alliances were established with the University of La Salle and with the waste manager to carry out all relevant tests and validations.

What were the key success factors?

Leverage with academia and key suppliers to generate innovative and sustainable solutions that provide value to the client and the company.

What are your watch-outs for others attempting this?

Every waste counts. Through a thorough inventory of the waste generated in our organization, we can identify alternatives and develop innovative solutions that allow us to reduce its generation and maximize its potential for use. This process is carried out in close collaboration with academia and the market, ensuring that our strategies are at the forefront and respond to current needs.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Solistica's Environmental Management Department, together with La Salle University and the Industrial Waste Management provider, carried out all research and validation activities.

How would you recommend those with less resources attempt this?

Companies that design packaging are advised to implement reduction or reuse strategies, applying the principle of extended producer responsibility.



Haidee Hernandez Jefe de Gestión Ambiental



Zero Waste to Landfill, 100% Green Energy and Energy Saving and Water Saving Initiatives.





Augustin Joseph Senior Manager – EHS GWE, India and ME



Greg UlmRegional Account Director
Sodexo Asia Pacific

Is your case study linked to an 'ugly truth' or a 'key success factor'?

We recognize global climate change as a critical challenge and have implemented sustainable measures to reduce our carbon footprint. The primary sources of these emissions include food waste, single-use plastics, general waste (such as paper, wood, and metal), e-waste, and excessive energy and water consumption. By addressing these areas, we are committed to driving meaningful environmental impact and supporting a greener future.

What does the case study help tackle?

At the organizational level, the GWE Mumbai team is committed to the following sustainability goals:

- Partnering with waste recycling vendors to achieve Zero Waste to Landfill.
- Reducing total waste generation by 30% by 2025.
- Securing 100% renewable energy contracts for the site.
- Reducing electricity consumption by 20% by 2025.
- Reducing water consumption by 5% by 2025.

What was the outcome and how did you measure it?

Significant reductions in carbon footprint have been achieved at our account's office in Mumbai through various sustainable initiatives led by GWE and Sodexo, using 2019 as the baseline:

- Waste: 87% reduction in GHG emissions (tCO2e).
- Water: 16.99% reduction in GHG emissions (tCO2e).
- Electricity: 18.34% reduction in GHG emissions (tCO2e).

These results demonstrate our joint commitment with GWE to sustainability and our progress in driving measurable environmental impact.

Who was involved? How did you justify it to the business?

The Global Workplace Experience (GWE) team is actively engaged in the Net Zero Project, driving sustainability through various initiatives, including:

- Transitioning from landfill disposal of office waste (such as food, plastic, sanitary, and pantry waste) to recycling solutions, significantly reducing GHG emissions.
- Securing green energy contracts and identifying energy-saving opportunities to reduce our carbon footprint.
- Implementing water-saving initiatives to reduce consumption and promote responsible resource management.

These efforts underscore our commitment to sustainability and advancing toward a net-zero future.

What were the key success factors?

Significant carbon footprint reduction has been achieved at the Mumbai site through key sustainable initiatives:

- Secured a 100% renewable energy contract for the site as of February 2023.
- Achieved a 24% reduction in electricity consumption.
- Reduced GHG emissions by 16.99% (tCO2e) through water consumption efficiency.

These milestones reflect our strong commitment to sustainability and driving meaningful environmental progress.

What are your watch-outs for others attempting this?

Key considerations for others pursuing similar initiatives:

- Achieving Zero Waste to Landfill.
- Reducing Greenhouse Gas (GHG) emissions through targeted actions.
- Collaborating with recycling vendor partners for effective waste management.
- Partnering with vendors to identify energy-saving opportunities for critical assets, including UPS, PAC, HVAC, and electrical systems.

- Implementing strategies to minimize water consumption.
- Investigating renewable sources for energy at the workplace. These are essential for driving sustainable impact & operational efficiency.

How would you recommend those with less resources attempt this?

Recommendations for those with limited resources:

- Partner with recycling vendors to ensure efficient waste collection without additional costs.
- Monitor water consumption trends by installing water flow meters for better management.
- Leverage rainwater harvesting and sewage treatment plants to reduce water usage.
- Conduct regular condition assessments of critical assets, such as UPS, PAC, HVAC, and electrical systems, to identify energy-saving opportunities.

These strategies offer cost-effective ways to drive sustainability while optimizing resources.

Who were the main drivers and the main leadership sponsor?

GWE leadership team were the sponsor, supported by Sodexo on-site team and account management team in India. The main contributors on this initiative from Mumbai site are Abhijit Chabukswar (Facility Manager –left), Akash Magdum (Assistant Facility Manager, Technical –centre), and Sakshi Parab (Assistant Facility Manager, Soft FM –right).









Engaging Suppliers of the Pharmaceutical Supply Chain on ESG Matters





Annacristina MansuttiSenior Director Procurement

Is your case study linked to an 'ugly truth' or a 'key success factor'?

The ugly truth is the challenge for every company to structure up the Procurement Dept. to address ESG issues. Stevanato Group's (SG) key success factor was its decision to adopt EcoVadis, a globally recognized sustainability rating platform and, specifically, an initiative to engage suppliers on ESG topics.

What does the case study help tackle?

The case study provides insights into the approach used to establish and sustain the engagement program with suppliers on ESG topics, with the start of the overseeing of dependencies, impacts, risks and opportunities (IROs) within the value chain, including for instance the climate change challenge. What was the outcome and how did you measure it? The outcome is a screening of suppliers on ESG topics in four key areas: Environment, Labor & Human Rights, Ethics, and Sustainable Procurement with indication of their performance and areas of improvement. Since 2021, SG focused to engage and assess its highest spending suppliers, encouraging them to join the initiative and get evaluated. Each year SG progressed involving more highest-spending suppliers with an increase of more than 50% in 2022 and 20% in 2023.

Who was involved (departments/roles)? How did you justify it to the business?

The ESG Committee, a Board-level committee, oversees all the ESG matters inside the company, including

sustainable procurement practices. In particular, Sustainability and Procurement Depts. are involved in the process. The Procurement Dept. partnered with EcoVadis and involved its buyers at each site in this initiative. Local buyers encouraged their suppliers to join EcoVadis, meeting with them periodically to monitor performance and take corrective actions if needed. Internally, buyers meet regularly to update on the initiative, while the Procurement Dept. informs the Sustainability Dept. on the progressing. To meet evolving stakeholders' expectations, regulations, and business practices, this suppliers' initiative is essential for future Procurement's practices, hence, SG has started to integrate it.

What were the key success factors?

A key success factor for SG was choosing EcoVadis as a partner. This platform, a widely used ESG rating tool for supply chain screening, provides SG with reliable and consistent supplier information, making ESG monitoring more effective and robust. EcoVadis also provides a basis for IROs identification on the supply chain and it enables an engagement on corrective actions with suppliers. In 2023, SG assessed through EcoVadis the most important suppliers representing more than 50% of the Group's spending. Additionally, SG integrated the EcoVadis rating into its supplier evaluation process and discusses it in regular meetings. Since 2021, combined with above, SG has required all suppliers to sign the Code of Conduct.

What are your watch-outs for others attempting this?

Ensure Top Management sponsorship on initiate,

and link it to the annual MBO goals of people involved.

- Often companies could face challenges in monitoring their supply chains due to large number of suppliers. Hence, prioritize and focus on most valuable actions
- Strengthen procurement practices by integrating ESG criteria into decisions, contracts, and regularly engage with suppliers on these ESG topics.
- To be effective, foresee a dedicated approach with suppliers based on factors such as geographic areas and business type, as the level of maturity in addressing ESG challenges may vary.

How would you recommend those with less resources attempt this?

The EcoVadis platform is a widely adopted business practice and a reference point for market players. It is an affordable initiative, with costs voluntarily borne by suppliers. EcoVadis offers well-organized ESG data and information, enabling effective monitoring of ESG topics in a complex and fast evolving context.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The key stakeholders are COO, and senior management of Procurement and Sustainability. At the operational level, the Procurement Dept. and its buyers, after training and onboarding with EcoVadis, are responsible for implementing sustainable procurement practices. They also engage with suppliers to discuss progress and, when needed, corrective actions.



Building Resilience with Strategic Sourcing in Pharmaceutical Supply Chain





Gaurav Sinha Lead Supply Chain Strategy

Is your case study linked to an 'ugly truth' or a 'key success factor'?

The case study — A key success factor on strategic sourcing highlights: Syngene's commitment to sustainable supply chain practices. By reducing environmental impact and promoting social responsibility, Syngene enhances its resilience and reputation. The initiatives undertaken not only improve sustainability ratings but also demonstrate how a proactive approach to sourcing can lead to long-term success.

What does the case study help tackle?

The case study tackles several critical issues: it enhances supply chain resilience by mitigating risks and promoting ethical sourcing. It also addresses environmental concerns and helps prevent regulatory challenges and reputational damage. Furthermore, this approach fosters innovation and drives cost savings through efficient resource utilization and waste reduction.

What was the outcome and how did you measure it?

As a result of our initiatives, EcoVadis Score improved from 40 to 70, reflecting our enhanced sustainability practices and commitment to ethical sourcing. This increase reinforced our reputation as a responsible business. Regular assessments allowed us to track our advancements and identify areas for further improvement. Additionally, we received a statement of verification for the successful implementation of ISO 20400.(Sustainable Procurement Principles).

Who was involved? How did you justify it to the business?

Syngene's Supply chain resilience initiatives are sponsored at Executive Committee level (by CFO)

and led by Strategic sourcing team in collaboration with cross functional teams of corporate communications, legal and finance.

What were the key success factors?

The key success factors comprised:

- Integration of Sustainability practices across our value chain: Revision of the supplier code of conduct and sustainable procurement policy, update of purchase order/service T&C and drafting of sustainable procurement handbook.
- Commitment to Science-Based Targets Initiative (SBTi): The organization has committed to the Science-Based Targets Initiative (SBTi) for managing Scope 3 emissions, using an established baseline for measurement. The goal is to ensure that 81.6% of suppliers, are committed to Syngene's SBT targets by the end of 2028.
- <u>Supplier audits:</u> Conducted ESG assessments for 30% of suppliers (by spend).
- Internal governance: Upskilled the sourcing team on ESG practices through training sessions and improved Key performance indicator measurement and reporting practices.
- <u>External audits:</u> Received a statement of verification for implementing ISO 20400 (sustainable procurement) principles.

What are your watch-outs for others attempting this?

 <u>Roadmap creation:</u> Create a structured roadmap to guide sustainable procurement efforts.

- <u>Internal team buy-in:</u> Invest in training and development to enhance the team's expertise in sustainability practices.
- Engaging with suppliers: Regular engagement with suppliers for knowledge sharing and skill upgradation.
- <u>Define clear targets</u>: Set specific, measurable goals to track progress and drive accountability.
- <u>Implement effective governance</u>: Ensure strong oversight and management practices to support sustainable initiatives.

How would you recommend those with less resources attempt this?

For organizations with limited resources, it is recommended that they develop a structured framework and upskill their procurement team while ensuring regular supplier engagement. Leveraging technology for tracking, collaborating with industry peers, starting with small pilot projects, and seeking external expertise can also enhance their sustainability efforts effectively.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

CFO, Head of Strategic sourcing and leads Supply Chain Strategy and their team.



The Power of Possibility

Steelcase

Is your case study linked to an 'ugly truth' or a 'key success factor'?
Success - Sustainability linked to performance

What does the case study help tackle?

Our path to net zero prioritizes transforming our entire business — our products, operations and transportation — what we make, how we make it, and the ways we deliver it:

- **Products**: Reduce the largest source of carbon emissions, which is embodied in our products, by designing for circularity and choosing and using materials responsibly.
- Operations: Invest in energy efficiency, onsite solar and waste reduction strategies in our own operations to achieve both our 2030 and 2050 carbon emissions reduction goals.
- Transportation: Transform our distribution, delivery, travel and commuting practices to reduce carbon emissions.

We are further amplifying our impact through engagement, collaboration & transparency with employees, suppliers, customers and peers worldwide to achieve net zero. We are the first in our industry to publish a net-zero transition plan. Our role as an industry leader demands that we develop & transparently share our ambitious - and achievable - plan for reaching our net-zero goals.

What was the outcome and how did you measure it?

<u>Our net-zero transition plan</u> outlines our strategy and the actions we are taking to align with a 1.5°C world while supporting the preservation and restoration of nature. It translates our long-term objectives into near-term actions. It is integrated into our corporate strategy, and we commit to reporting progress in our CDP disclosures and in our annual <u>Impact Report</u>.

Who was involved? How did you justify it to the business?

This transition plan demonstrates our commitment to designing a net-zero future throughout our entire value chain. It encompasses what we make, how we make it and the ways we deliver it. The initiatives spelled out in our transition plan & the publication of the plan itself was a cross-collaborative initiative that ranges from the CEO to the personnel on the plant floor, to suppliers. Since most of our emissions are associated with our product supply chain, we are engaging 80% of our suppliers by emissions to set their own science-based targets by 2025, laying a foundation for achieving our net-zero commitment.

What are your watch-outs for others attempting this?

Clear communication and stakeholder engagement are key. Ultimately, a net-zero future needs us all. With a topic of this magnitude, it takes time and intentionality to socialize the need and related activities of action with senior and executive leadership. It's important to start communications early to allow ample time to educate, influence and develop the leadership teams' individual and collective understanding of the problem as well as its proposed, iterative solution. It's also necessary to become comfortable with sharing and committing to a plan or roadmap so far into the future. Vacillating between long term visions and short term, iterative action plans are of utmost importance.

With hindsight, what would you have done differently?

We're proud of our plan and its publication and, at this point, do not feel as though we would have done anything differently. We communicated the needs, expectations and deliverables in clear and actionable ways not just to executive and senior leadership but to the entire body of the organization.

What were the key success factors?

Effectively educating senior leadership on the importance of not only a net-zero commitment (which is a feat in and of itself), but also on being credible in our commitment through transparent communication.

How would you recommend those with few resources attempt this?

To look to how other companies & organizations have made public commitments and to look to best practice public guidance documents as well (e.g. those provided through the Science Based Targets initiative). Smaller companies can also size their plans to their companies, so it doesn't have to be as great an undertaking.

Who were the main drivers (boots on the ground), and the main leadership sponsor?

We have years of executive management involvement on our sustainability project work, so many of our senior executives were instrumental in pushing this project forward. One key individual from our senior leadership team who was more recently involved and essential to our Net-Zero Transition Plan development and ultimate publication was our VP of Brand Communications. Additionally, our Communications team recently reorganized and we now have dedicated resources for ESG & sustainability-related topics, which has been imperative to our success.



Holly Richter Global Account Manager



Green Revolution: Transforming Pharmaceutical Synthesis for a Sustainable Future



Is your case study linked to an 'ugly truth' or a 'key success factor'?

This case study emphasizes the *key success factor* critical need for sustainable practices in pharmaceutical synthesis, addressing the environmental and health hazards associated with traditional processes, such as the use of carcinogenic solvents, excessive waste generation and posing significant ecological risks.

What does the case study help tackle?

The study tackles the environmental impact of chemical synthesis in drug development, aiming to minimize waste, reduce solvent usage, and enhance efficiency while maintaining product quality.

What was the outcome and how did you measure it?

The project achieved significant improvements in several key performance metrics. The **overall yield** increased dramatically from 16% to 45%, showcasing a substantial enhancement in production efficiency. We also attained a **Process Greenness Score** of 148, reflecting our commitment to sustainability and responsible resource management. Furthermore, waste reduction efforts resulted in an impressive approximately 80% decrease in both the **Environmental Factor (E-factor) and Process Mass Intensity (PMI).** These metrics were meticulously calculated to assess the environmental burden and resource consumption associated with our synthesis process. Collectively, these outcomes not only highlight the project's success but also underscore our dedication to minimizing environmental impact while maximizing efficiency.

Who was involved (departments/roles)? How did you justify it to the business?

Syngene key departments played a pivotal role in the success of the project. The R&D team spearheaded the synthesis optimization and the implementation of green chemistry practices, driving innovation in our processes. Sustainability Team assessed the environmental impact of our initiatives and ensured adherence to green chemistry principles. The Finance department conducted a thorough analysis of the cost-effectiveness of reagent substitutions, highlighting potential savings. This collaborative effort provided strong justification for the project, emphasizing cost reductions, decreased regulatory burdens, and alignment with corporate sustainability goals, ultimately demonstrating a clear return on investment.

What were the key success factors?

Interdisciplinary Collaboration: Strong teamwork among R&D, Quality and Sustainability teams facilitated the sharing of expertise and fostered innovative problem-solving. Commitment to Green Chemistry: A dedicated focus on minimizing environmental impact and optimizing resource use guided all project initiatives, ensuring alignment with sustainability principles. Innovative Solutions: The effective substitution of reagents and solvents, coupled with the optimization of synthesis processes, led to significant improvements in efficiency and sustainability. Robust Metrics: The establishment of clear and measurable metrics for yield, waste reduction, and sustainability provided tangible evidence of success and informed ongoing decision-making.

What are your watch-outs for others attempting this?

Regulatory Compliance: Ensure that substitutions do not compromise compliance with industry regulations.

Quality: Maintain product quality throughout optimization processes.

Availability: Assess the commercial availability and costeffectiveness of alternative reagents and solvents before implementation.

Scalability Considerations: Evaluate whether the optimized processes can be scaled effectively for larger production runs without losing efficiency or quality.

How would you recommend those with less resources attempt this?

Focus on one or two synthetic steps to optimize before scaling up. Utilize previous research and case studies for guidance on green chemistry practices. Look for low-cost adjustments that yield significant improvements in sustainability

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Main Drivers: The Syngene R&D team, particularly chemists focused on synthetic methods, and the sustainability team who worked on evaluating the environmental impact.

Leadership Sponsor: The project was championed by the Head of R&D, who advocated for the integration of green chemistry principles into the synthesis process and provided the necessary support for resources and cross-department collaboration.



Sagar Pathare
Senior Principal Investigator
Process R&D



CO2 Footprint Calculation Pharmaceutical Vial Fill & Finish Machine



Is your case study linked to an 'ugly truth' or a 'key success factor'?

For us the case was a lucky situation to test our certified calculation method for a CO2 footprint determination of a pharmaceutical vial fill and finish machine.

What does the case study help tackle?

It tackled the questions on our customer side to identify the contribution of the liquid fill and finish line within the facility. The site itself already source renewable energies but there was always the question about the CO2 impact of the line itself.

What was the outcome and how did you measure it?

The outcome was a CO2 footprint calculation of the machine showing also different scenarios. By using real production data we were able to set up the calculation in a way to allow our customer, who is a CMO within the pharmaceutical market, to convince their customers to go for campaign production instead of running smaller batches.

Who was involved (departments/roles)? How did you justify it to the business?

Within the use case the production team was necessary to measure the activity data in different production states. We then evaluated the results together with the technical team. The data was then put into our Syntegons calculation and finally all the results were put into a presentation for the site management at our customer site.

What were the key success factors?

Key success factors are that the topic sustainability is a crucial part within the technical department and the manager of the technical department plays a vital role. This allows the whole team to get the required resources to get the relevant data.

What are your watch-outs for others attempting this?

It is not so easy to determine the activity / consumption data during the production. By having monitoring systems on the current states of the fill and finish line it was possible to combined the consumption data with the duration within each of the different machine phases / states. Without having this it is really hard to have such an accurate CO2 footprint calculation.

How would you recommend those with less resources attempt this?

Define the goal that the team is aiming for. Perform such CO2 footprint calculation on a simple equipment.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main leadership sponsor was the technical manager at the customer site but also the product manager from Syntegon — both of them wanted to use and test the calculation in order to have a solid base. Within the pharmaceutical industry it is not easy to gain such production insides and therefore it was a full success with the contribution of the whole team within both parties.



Markus Burkert
Product Manager
Sustainability



Installation of Solar Panels (PV) on the Roof of Terumo Europe (Haasrode - Belgium) Plant



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Terumo recognises climate change is a major issue of our times; and is committed to transition out of fossil energy into renewable energy. This is one of the factors for success to reduce our greenhouse gas (GHG) emissions.

What does the case study help tackle? Terumo Corporation (HQ in Japan) committed to reduce greenhouse gas emissions by 50.4% by 2030 from a 2018 base year and to be carbon neutral by 2040 (scope 1& 2). Terumo's targets are validated by SBTi. Looking at EMEA, the strategy is taking significant shape: since 2022, the site in Haasrode has been purchasing 100% of its electricity from renewable sources, reducing greenhouse gas emissions by 70%. The installation of solar panels is a continuation of Terumo's significant progress towards carbon neutrality.

What was the outcome and how did you measure it? Facts & Figures:

- Number of solar panels: 2788 units
- Capacity: 1,347MWh/year (385 households)
- They are now providing part of the energy for the manufacturing site.

Who was involved (departments/roles)? How did you justify it to the business?

The justification to the business was done as the Terumo group has a strong commitment to be carbon neutral by 2040 (scope 1& 2). Furthermore, Terumo Europe has a positive experience with solar panels in its central warehouse in Genk (facility that is rented) where the owner installed a maximum number of solar panels on the roof, all renewable energy directly consumed, providing even on a sunny day 100% of the energy requirement.

What were the key success factors?

Strong commitment from Terumo Europe leadership and drive from the Chief Operations Officer; the company's ambition to reach carbon neutrality and the strong & positive financial business case.

What are your watch-outs for others attempting this?

Secure Finance support by carefully reviewing cost of panels (investments) and payback period

How would you recommend those with less resources attempt this?

Review the priority of your company/group, especially reduction of GHG and whether solar panels would help to reach that goal. Focus on the relatively short payback period and the subsequent cost reductions rather than the initial investment.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers were the Buildings & Facilities team in the plant as well as EHS (Environment Health & Safety) team. The main sponsor was the Chief Operations Officer



Anne-Cecile Dontot
Sustainability Lead



Driving Inclusive Policy Change





Diane RussellSVP, Marketing

Is your case study linked to an 'ugly truth' or a 'key success factor'?

A key success of Judge is our commitment to promoting and advancing human rights and prosperity by implementing policies, standards, and practices that support this effort.

What does the case study help tackle?

It helps us champion human rights by establishing standards, policies, and practices that set a positive example for others. We conduct our business in a manner that respects, protects, and promotes the complete spectrum of human rights outlined in the United Nations Declaration. We take pride in our heightened awareness and sensitivity, enabling us to understand and appreciate diverse cultures.

Together, with help from our Employee Resource Groups, we revised existing and created new policies benefiting women and members of the LGBTQ community.

What was the outcome and how did you measure it? Reviewing and revising our company handbook to incorporate inclusive policies, including:

- Transgender-inclusive policies specific to use of restrooms, pronoun usage, and gender transition
- Paid parental leave newly added benefit that offers paid leave to parents for the birth or adoption of a child
- Bereavement leave policy revised to include paid bereavement in the event of a miscarriage

Judge participates in the Human Rights Campaign Foundation's Corporate Equality Index annually. In 2024, Judge scored 90 out of 100.

Who was involved (departments/roles)? How did you justify it to the business?

Employee Resource Groups, Legal, Proposals team, Marketing, Executive Leadership.

What were the key success factors?

- Understanding gaps in policy
- Empowering Employee Resource Groups to collaborate/drive change at the employee level
- Caring leadership team that is passionate about DEI, employees, and creating the best working environment possible

What are your watch-outs for others attempting this?

Understand what's important to your employees and to the company. Utilize Employee Resource Groups to help craft policy change. Identify which frameworks/ratings the company wants to partake in – don't overcommit.

How would you recommend those with less resources attempt this?

Consider what is feasible with current resources, capacity, budget, and benefits. Create a roadmap and break the changes down into manageable pieces. Increase your efforts as more resources become available.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The dedicated team includes the Chair and Co-chair of our ESG Committee, Chief Diversity Officer, Employee Resource Group leaders, and Executive Leadership team.



Accelerating Renewable Electricity with Customers and Suppliers

Thermo Fisher

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Accelerating renewable electricity adoption across the value chain is a powerful lever for meeting the Paris Agreement. However, the harsh reality is that many organizations still face low accessibility and limited awareness of available options.

What does the case study help tackle?

To meet Thermo Fisher Scientific's near-term and net-zero targets, we successfully dismantled internal barriers to scale adoption while engaging partners to amplify our impact. This case study shares our approach, empowering you to replicate our success.

What was the outcome and how did you measure it?

Thermo Fisher has contributed to adding over 1 terawatt hour of new renewable electricity to the global grid from over a dozen on and off-site projects. This has reduced our scope 2 emissions by over 200,000 tCO2e annually and driven progress towards our 80% renewable electricity by 2030 commitment.

To scale its impact, Thermo Fisher made the intentional decision to utilize its experience, scale and strong financial credit to enable customers and suppliers to engage in the virtual power purchasing market.

Our measure of success is seeing our partners accelerate their use of renewable electricity.

Who was involved (departments/roles)? How did you justify it to the business?

Our Global Sustainability team coordinated with Treasury, Finance, Procurement, Tax, Legal, as well as local operational leaders for on-site projects. Ensuring we meet our climate targets as expected by our customers and stakeholders is our business justification.

What were the key success factors?

SA long-term renewable electricity strategy, supported by leadership, was crucial for gaining stakeholder adoption.

In 2023, Eurofins partnered with Thermo Fisher in a Spanish virtual power purchase agreement, and in 2024, we led a cohort of value chain partners through the Energize initiative. In both efforts, Thermo Fisher provided expert support, accelerating learning and fostering internal buy-in among participants.

Additionally, we have developed a program and a publicly available supplier guide to connect suppliers eager to advance their renewable electricity procurement with seasoned advisors, empowering them to take the next step confidently.

How would you recommend those with less resources attempt this?

Connect with value chain partners who have advanced renewables programs to learn from their experiences. Most customers and suppliers are eager to engage.

- If your company is new to long-term purchasing agreements or has small electricity volumes, consider joining a buying cohort with advisors like Schneider Electric or Sustainability Roundtable for market access.
- As you gain experience, share your successes and recommend advisors within your value chain.

What are your watch-outs for others attempting this?

- Absence of company targets to justify effort, cost and risk. Targets/strategy must come first.
- Not involving internal stakeholders at start.
- Expecting suppliers to increase the use of renewable electricity without guidance.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The executive sponsor for our climate program is our SVP, Global Business Services, who reports to the CFO. The energy and supplier responsibility teams within our Global Sustainability function drove these efforts.



Matthew Yamatin Sustainability Program Director



Supply Chain Decarbonization

Thermo Fisher



Kristen ChambersSenior Manager Supplier
Sustainability

Is your case study linked to an 'ugly truth' or a 'key success factor'?

This case study highlights a critical success factor at Thermo Fisher Scientific. With nearly 90% of our emissions originating from our value chain, addressing this area is paramount. Notably, almost 70% of these value chain emissions fall under Scope 3 categories 1 and 2. By focusing on these key areas, we are strategically positioned to make significant strides in reducing our overall carbon footprint.

What does the case study help tackle?

This case study summarizes key elements of Thermo Fisher's supply chain decarbonization program and can serve as a reference for other companies who are beginning their scope 3 emissions reduction journey.

What was the outcome and how did you measure it? Thermo Fisher has aligned with the Science-Based Targets initiative and established emissions reduction targets in accordance with their Corporate Standard. We have set a near-term goal for Scope 3, aiming for 90% of our suppliers (by spend) to adopt science based targets (SBTs) by the end of 2027. Since beginning our work in this area in 2022, we have been able to demonstrate double-digit growth year over year. Progress towards this engagement target is monitored through direct supplier interactions, data analysis from sources such as SBTi and CDP, and by reviewing supplier sustainability reports

Who was involved (departments/roles)? How did you justify it to the business?

At the top, executive sponsors set the strategic direction and emphasized the program's importance company wide. The operational steering committee ensures that the program is aligned with executive directives and approves necessary funding. Program leadership coordinates initiatives and provides guidance, tracks progress and reports on the program. The delivery team, which included global supply chain sustainability program managers, procurement and data analytics execute the program and ensure consistent delivery.

What were the key success factors?

Our primary KPI is our spend coverage target, which aims for 90% of our suppliers (by spend) to set a science-based target by 2027. Additionally, we have secondary KPIs related to emissions coverage by spend, which we calculate using spend-based emissions factors against our spend data. We also track program indicators such as our supplier SBT conversion funnel and supplier decarbonization maturity.

What are your watch-outs for others attempting this? Ensure processes and tools, such as a Supplier Relationship Management tool, exist to support program objectives. Additionally, without supplier sustainability scoring criteria, contract terms, or sourcing surveys, a supply chain decarbonization program will face delays.

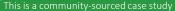
Address both your existing and future supply bases.

How would you recommend those with less resources attempt this?

- Galvanize your procurement, sourcing, and R&D teams around program objectives, embedding them into business goals promptly. This crossfunctional support will help scale your program in the absence of additional full-time resources.
- Explore opportunities to cascade your message to large audiences to alleviate burden on 1:1 supplier engagements— webinars, procurement summits, publications.
- Leverage third-party consultancies and industry consortia for networking and best practice sharing.

Who were the main drivers and the main leadership sponsor?

Thermo Fisher's Supplier Responsibility team drives progress withing the supply chain across ESG topics, with dedicated supplier decarbonization leads managing Scope 3 supplier engagement across our expansive supply chain. This team reports to the VP of Global Sustainability and collaborates closely with Executive Procurement Leadership to enhance program performance by embedding sustainability into the procurement function. Global Sustainability regularly reports Scope 3 performance to our CSR Executive Oversight Committee and Company Leadership Team



Carbon Capital Plan: Net-Zero Investment & Implementation Roadmap

Thermo Fisher SCIENTIFIC



Scott A. Self
Director, Global Sustainability &
Energy

Is your case study linked to an 'ugly truth' or a 'key success factor'?

Organizations face many challenges decarbonizing site operations, specifically reducing Scope 1 emissions. The often complex and costly process requires innovative approaches to balance climate and business goals.

What does the case study help tackle?

With a 2050 net-zero commitment, Thermo Fisher Scientific required a scalable process to identify, fund, and execute Scope 1 & 2 reduction initiatives. This case study details the development of our Carbon Capital Plan (CCP), a program built on organizational alignment, collaboration, transparency, and accountability.

What was the outcome and how did you measure it?

100 site energy assessments, accounting for 90+% of site carbon footprint, identified 1,000 emission reduction and electrical capacity improvement opportunities. 93 projects have been completed since CCP's 2023 kick-off, delivering over 14,000 tCO2e of Scope 1 emissions reduction. In addition to annual CCP implementation and emissions reduction progress, a KPI measuring 5 year CCP budget alignment with respective business plans is tracked and reported. Metrics reviewed quarterly across the organization

Who was involved (departments/roles)? How did you justify it to the business?

Our Global Sustainability team coordinated with Facilities, Engineering, Finance, and Site Leadership. Additionally, an Operational Steering Committee, comprised of leadership-level stakeholders was established to support program governance. Evolving customer expectations and climate regulation shaped our business justification. Whether driven by reputational or legal risk, a cultural shift was necessary to address the changing environmental/business landscape.

What were the key success factors?

CCP success is tied directly to organizational alignment of decarbonization goals with company goals. Specific factors that support this alignment include:

- Collaborative project identification and review process with site teams
- Clear and consistent program messaging across all stakeholder groups
- Constant engagement with business budget owners
- Ring-fenced (i.e., protected) CCP capital budget
- Site-level ownership and accountability of project deliverables
- Regular program communication to leadership

What are the watch-outs for others attempting this?

- Stakeholder education for Scope 1 project evaluation, ROI no longer a key indicator
- Objective project prioritization (e.g., equipment end-of-life) required to manage implementation delay tendencies
- Availability of site and/or utility power to electrify fossil fuel equipment

How would you recommend those with less resources attempt this?

Achieving net-zero is a journey, use extended delivery time to develop sound net-zero strategy, educate stakeholders, and build organizational support. Leverage external partners with strategic, technical, and regulatory experience to support your decarbonization objectives.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The executive sponsor for Thermo Fisher's climate program is our SVP, Global Business Services, reporting to the CFO. Our Global Sustainability energy team manages the program across the organizationan, with site teams driving project execution.



Tucker Using Every Tool to Reduce Freight's Scope 3 CO2





Jeff Tucker CEO

Is your case study linked to an 'ugly truth' or a 'key success factor'?

The key to success is recognizing the ugly truth! The 2024 U.S. freight industry is estimated at \$1.3 trillion and projected to reach \$1.67 trillion by 2030. The trucking industry handles about 80% of the nation's freight bill, around \$1.04 trillion. Globally, the demand for freight transport is expected to double by 2050. The U.S. has approximately 3.5 million tractors & truck drivers in the nation's for-hire trucking fleet. Only a small percentage of trucks are powered by electric or fuel cells. As of July 2024, Tesla has delivered about 100 of these trucks. At the same time, the UN recently reported that without significant changes, the global temperature is set to rise more than 3 degrees C by the end of the century. It is essential to act now.

Zero-emission trucks may take two decades to make a significant impact. By 2030, half of new production is expected to be zero-emission, but it will take well over a decade to phase out combustion engines from the system if all. Then there is air, ocean and rail transport.

Global companies with net-zero goals recognize that transporting goods significantly contributes to emissions. Around half of the top 2,000 global companies have committed to reducing their carbon emissions to net zero, according to the Net Zero Tracker

Tucker's approach provides a practical, science-based, solution for carbon reduction, benefiting the climate, farmers, agriculture, and the environment. It is also supporting sustainable freight transport.

What does the case study tackle?

It outlines every practical approach to sustainable truck transport today, including carbon removal. In the spirit of "and" and not "or" we must use every tool in our arsenal to combat climate change. The recently founded "Carbon Removal Standards Initiative" seeks to "provide technical assistance and capacity building for carbon removal policy, focused on quantification standards." CRSI founders—among the global leaders in ESG, recognize this need.

What was the outcome and how did you measure it?

The outcome is CO2 reduction through a comprehensive approach to freight service procurement. Step one: measure and record CO2 output for every truck shipment. Step two: maximize the usage of US EPA SmartWay Program Partners for up to 40% lower emissions. Step three: remove carbon through reforestation in the Brazilian Amazon for about 10 cents per mile, even before the savings from steps one and two!

What was involved? How did you justify it to the business? We primarily work with progressive companies, such as pharmaceutical firms, who prioritize CO2 reductions. However, many of them are not aware of SmartWay's methods.

We've organized panels and discussions in trade associations to promote these ideas as a practical way to achieve 100% CO2 reduction. To achieve our carbon removal goals, we've also partnered with an NGO in Brazil that focuses on reforestation and teaching farmers more effective farming methods on smaller plots of land, improving their incomes and the environment too.

What were the key success factors?

Educating people on the science and production plans of major trucking providers is crucial. It's also important to recognize that even if trucking is "solved" in 20 years, rail, ocean, and air freight are enormous contributors.

What are your watch-outs for others attempting this? Ensure that your data is based on scientific evidence, can be verified, and has been audited. How would you recommend those with less resources attempt this? Follow Steps 1 and 2. They don't cost anything!

Who were the main drivers and the main leadership sponsor?

Our initiative is led by our CEO, who is a passionate advocate for our customers and their evolving needs. He understands that the future requires tangible steps today and aims to contribute to meaningful change by demonstrating the actions we can take



EVSE me ASAP! The EV Win for our Employees & Customers



Thomas House
CEO at The QMC Group

Is your case study linked to an 'ugly truth' or a 'key success factor'?

This is a win-win for everyone. Key Success (Less co2, cheaper fuel, cleaner air, backup power)

What does the case study help tackle?

Our staff is our most important asset, and many commute over 50 miles per day. The cost is hard on our environment, and employees alike. With the help of incentive programs, we could tackle both. Specifically, we have reduced co2 reporting for our company., reduced fuel spending for our employees. Side benefits are time savings from ICE vehicle filling and maintenance, and power backup.

What was the outcome and how did you measure it?

This program will have increasing benefits over time. Our measurement can be made in 2 ways.

- First: we will be able to remove the co2 that our commuters with EV no longer produce. That will report out on our corporate commitment with SBTi.
- 2. Secondly: we can interpolate how much co2 reduction we have facilitated, based on EVSE use records. Assuming some of our neighbouring companies have employees that now choose to go with an EV, the benefit will extend beyond just our 4 walls.

Who was involved (departments/roles)? How did you justify it to the business?

Property owner, building maintenance and senior management had to collaborate to take advantage of incentives to install EV charging on company lots. The business justification revolved around 3 key aspects.

- 1. Employee retention and happiness.
- 2. Serving our renewable energy initiative (now including carbon neutrality)
- 3. Infrastructure prebuild for future fleet use.

What were the key success factors?

The incentives where critical in making this possible, but we also needed to provide a better solution for our teammates with longer commutes as gas prices rise. Employee retention is a major benefit.

What are your watch-outs for others attempting this?

I would suggest getting a company specializing in the navigation of the documentation. There are many agencies involved. I would also suggest reviewing the payment software well. Since this will need to be a public site (technically), users will interact via a payment screen. Some are harder than they need to be. Finally – we struggle against the incessant desire for cheap gasoline (an obviously bad outcome for EVSE utilization).

How would you recommend those with less resources attempt this?

Outsource as much as you need. Many services will do all the work for you. Your local incentive will illustrate who they can work with. NYSERDA offers a list of prequalified vendors to choose from.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

Our company has always been very sustainability oriented. We have adopted many processes that reduce all types of waste, VOC's, and greenhouse gasses.





MOVIANTO: Warehouse Solar Energy Production



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Movianto part of Walden relies on EHDH Energy, another group entity that specialized in facilitating the expansion of renewable energy capacity in warehouses and depots. This entity is a real "key success factor" to improve our environmental impact.

The company also holds assets related to energy production, finds providers, selects technologies, advises on the energy selling program, organizes interactions with the owner when required, arranges funding, and manages the project until completion.

What does the case study help tackle?

In 2023, with the help of EDHD Energy, 9 Movianto sites were home to solar farms, with over 40,000 square meters of roof space dedicated to energy production. In 2024, 4 more projects are already in the works

What was the outcome and how did you measure it?

We now have a significant and growing proportion of renewable energy produced directly by our sites. Our measurements of KWatt production and our reductions in carbon emissions are objective indicators.

Who was involved (departments/roles)? How did you justify it to the business?

Walden's Real Estate department, EHDH Energy and all the departments at the sites concerned are involved.

These investments not only contribute to our policy of reducing carbon emissions, but also guarantee us at least partial energy independence. They also meet increasingly important customer and regulatory requirements.

What were the key success factors?

The key success factor is our corporate culture and our desire to continually improve our carbon footprint.

Having our own sites makes it easier to implement, and of course the right climatic conditions.

What are your watch-outs for others attempting this?

The technical analysis of building infrastructures is essential, and must be complemented by an overall climatic, financial and operational study. Some sites may not be eligible for this type of technology in their current state

How would you recommend those with less resources attempt this?

Depending on the country, state aid may be allocated to these zero-carbon projects.

Other solutions exist, such as "renting" available surfaces to an external photovoltaic supplier.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The low-carbon strategy is directly defined and driven by the most senior management, the Chairman of the Walden Group.

The QE department ensures that the environmental strategy is rolled out across all Movianto entities. EHDH Energy is more specifically responsible for technical operations relating to photovoltaics.

CSR training for all staff, regular environmental challenges, frequent ecological communications and clearly defined environmental procedures are all tools for deploying and maintaining our employees' environmental culture.



Laure Brenas et Astrid Vellet Walden Chief QE Officer and her deputy



Ypsomed's YpsoMate and UnoPen in NetZero Program



Is your case study linked to an 'ugly truth' or a 'key success factor'?

Ypsomed addresses sustainability as one of its four strategic pillars and aims high in its targets to reduce its greenhouse gas (GHG) emissions along the value chain. The case study is therefore a key success factor and a chance to reduce emissions at product level in a relatively easy way with the possibility to provide the customer with the same quality product and no need of re-submission of the combination product.

What does the case study help tackle?

The case study wants to show that there is a possibility to substantially reduce GHG emissions of a product without change of specification of the product itself.

What was the outcome and how did you measure it?

It was successfully evaluated through life cycle assessment calculations that on device level a GHG emission reduction of 22 - 42%* (cradle-to-gate, depending on specific product) can be achieved through change of raw material feedstock from fossil based to renewable or recycled according to ISCC+ without any change in specification. With a change of packaging to a wooden multi use instead of a plastic single use pallet and recycled PET tray there can be achieved a final reduction of 35-48%*.

Who was involved (departments/roles)? How did you justify it to the business?

The successful implementation of the ISCC+ materials and the passing of the certification process was only possible due to the teamwork of Regulatory Affairs, Innovation, Corporate Sustainability and Production. It has been justified to the business with the selling argument that customers do not have to re-submit existing products due to the chemical identity of products.

What were the key success factors?

The ISCC+ certification of Ypsomed itself and its dedicated granule suppliers and the chemical and physical identity of the material used.

What are your watch-outs for others attempting this?

Ensure that the mass balance principle of ISCC+ is understood and that this is the reason that the chemical identity of the materials is given. Work closely with suppliers to see possibilities for ISCC+ materials. Take into account that the bookkeeping process has to be put in place and understood by the production team.

How would you recommend those with less resources attempt this?

Have an overall project lead that understands the principle of the ISCC+ method and knows the selling arguments of these materials. There is no need to have a chemical background – just the high level understanding on how the production of plastics works.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers were internal sustainability and innovation specialists as well as business development and product management due to the increasing demand and call of action to reduce emissions from our pharma customers.

*calculated values, may differ/change, Ypsomed takes no liability.



Adriana Bitschnau Sustainability Manager Corporate



CLOSING REMARKS

BEYOND THE GUIDE DEEPDIVE

The *Beyond The Guide Deepdive* shows what's possible when organisations come together with a shared commitment to sustainability.

At SPP, we love seeing our community build on existing initiatives and shape them to meet their own goals — for team engagement, supplier collaboration, and meaningful impact.

By building on The Guide, the Pharma & Life Sciences Chapter has created something new: a resource that turns shared knowledge into practical action for procurement professionals across the sector and beyond.

We're deeply grateful to every supplier who contributed, and to the leadership of the SPP Pharma & Life Sciences Chapter for making this happen.

SPP exists to provide a safe space for collaboration — where cross-sector solutions can take root. This Deepdive is a testament to that mission.

Let's keep learning, sharing, and driving real impact.

- Explore the <u>SPP Pharma & Life Sciences Chapter</u>
- Learn more about the <u>SPP Champions Program</u>
- Read <u>The Guide</u>



ABOUT SPP

The Sustainable Procurement Pledge (SPP) is an international grassroots and non-profit organization for procurement professionals, academics, and practitioners, driving awareness and knowledge on responsible sourcing practices and empowering people in procurement. With more than 18,000 ambassadors, SPP fosters the positive impact of procurement. The Pledge is based on the United Nations Global Compact and the Sustainable Development Goals and centers around five key principles of which the pledge comprises. These SPP principles set the frame and values for our collaboration, and how we collectively drive our vision that all individuals acting within global supply chains across the world will apply Sustainable Procurement practices by 2030. Learn more at spp.earth or get in touch via info@spp.earth.

Join us as an SPP Ambassador and sign The Pledge

Click here

Learn more about the SPP Pharma & Life Sciences Chapter

Click here



