



How Fashion Can Decarbonise: Data, Supply Chains, and Partnerships

Paul Lennen and Paul Goff on turning Scope 3 targets into factory roadmaps, monthly data into decisions and profit-plus-carbon into a shared playbook



Introduction

The fashion industry stands at a pivotal point. Anchored by global climate commitments, it faces the immense challenge of decarbonising a vast, complex, and energy-intensive global supply chain. While many brands struggle to align ambitious targets with economic realities, H&M has strategically positioned its sustainability agenda—not as a compliance hurdle—but as a foundational competitive advantage.

In the recent episode of The Sourcing Exchange podcast, host Paul Lennen sits down with H&M's Paul Goff for a candid, on-the-ground look at decarbonising fashion's supply chain. Goff provides an unparalleled view of how one of the world's largest retailers transforms bold climate goals into scalable, factory-level action.

Goff traces his pivot into sustainability and outlines H&M's environmental anchors—net zero by 2040 and a 56% absolute reduction by 2030 including Scope 3—while spotlighting where emissions really sit: energy-intensive Tier-2 dyeing and processing. The result is a clear view of what it takes to grow while bending the emissions curve. The discussion moves beyond aspirational targets to dissect the complex operational realities and strategic shifts required to transform climate commitments into scalable, factory-level action. Goff confirms that success hinges on mastering data, shifting organisational culture, and accepting uncertainty as the default operating condition for the modern supply chain.

The New Standard of Success: Decoupling Growth from Carbon

For any major global retailer, setting aggressive, absolute targets for environmental action is no longer optional; it is non-negotiable. Goff confirms that the strategic priorities are multi-faceted, encompassing firm goals for water reduction and the rapid adoption of recycled and sustainable material content. However, the most critical undertaking is the commitment to decarbonisation—specifically targeting deep, absolute cuts in Scope 3 emissions as part of a journey toward net zero. This requires a level of accountability that transcends traditional reporting metrics and demands a fundamental re-engineering of the sourcing model. Brands must move beyond simply managing their direct footprint (Scope 1 and 2) and embrace the overwhelming challenge of influencing thousands of indirect suppliers globally.

Goff elaborates that achieving these simultaneous goals—increasing output while reducing absolute emissions—demands fundamental, structural transformations across the entire organisation, from design input to final logistics. Historically, business expansion meant a proportional rise in resource consumption and carbon footprint, often leading to a paradoxical situation where business success undermined climate goals. When a company demonstrates that it can increase output while reducing absolute emissions, it signals that its sustainability strategies are driving genuine change, penetrating deep into the core operational model. This successful decoupling is evidence that the transformation is both embedded and structurally sound, demanding innovation beyond simple efficiency. This sustained focus prevents the common problem where cyclical growth simply negates any efficiency gains made the previous year, securing a predictable path toward net zero.

Targeting the High-Impact Nodes: The Tier-2 Imperative

The consensus among experts like Goff is that the greatest opportunities for significant, measurable emission reduction are overwhelmingly concentrated in the heavy industrial processes that define the Tier 2 supply chain. Goff underscores that operations like dyeing are the most energy-intensive nodes in the entire apparel lifecycle, consuming substantial amounts of heat and power generated predominantly from fossil fuels (coal, gas, and heavy oil). Consequently, effective decarbonisation strategies must focus disproportionately on this manufacturing segment where the bulk of the environmental footprint of purchased goods resides. The entire industry's success hinges on solving the inherent energy demands of these factories, moving beyond simple material choices to address process energy consumption and thermal heat generation. This requires technical knowledge about energy mix transitions, heat recovery and innovation.

Achieving success here requires moving beyond simple mandates and into direct, highly technical, and collaborative interventions. This means investing in tangible, factory-level solutions. Energy efficiency is a critical first step, involving the deployment of technologies like heat exchangers to capture and reuse thermal energy that would otherwise be wasted. This technology, while well-known, requires significant coordination, technical expertise for installation, and dedicated financing to implement across thousands of facilities globally. Simply identifying the need is insufficient; sustained brand engagement is required to execute the projects. Simultaneously, promoting the deployment of on-site renewable energy, such as rooftop solar installations, provides a decentralised, resilient source of clean power. This often necessitates bespoke financial structures, such as loan guarantees or supplier co-investment models, to help suppliers manage the substantial initial capital outlay, which can be prohibitive for many small and medium-sized enterprises.

Goff points out that these projects are financially attractive because the environmental benefits are inextricably linked to clear, measurable return on investment (ROI) for the factory owner. The energy savings accrued mean the projects are often characterised by a short payback period, sometimes just three to five years, effectively making them self-financing after the initial term. This financial logic—reducing the supplier's energy costs while cutting the brand's Scope 3 emissions—creates a powerful win-win scenario. Goff asserts that by proactively framing climate action as a way to support the supplier's financial stability and resilience against volatile fuel price markets, retailers build a more transparent, collaborative, and ultimately, cost-effective supply base. This strategic thinking transforms the initial financial hurdle into a shared investment in future operational stability, fostering trust and long-term partnership essential for sustained success across the sourcing network.

Technology and Data: The Engine of Accountability and Foresight

Goff is unambiguous: technology is the foundational engine driving successful climate strategy. It is essential for managing the sheer scale and complexity of a global sourcing network and is, in itself, a crucial competitive advantage. Without robust digital tools, managing thousands of suppliers across multiple tiers, materials, and processes is virtually impossible at the necessary speed and accuracy required by global targets. The level of digital sophistication required goes far beyond traditional Enterprise Resource Planning (ERP) systems, demanding real-time data ingestion and predictive analytics platforms.

The foundation of this technological strategy is mastering data quality and scope. Goff stresses the necessity of moving away from relying on unreliable industry averages and towards the collection of primary data—the verifiable, granular, raw consumption metrics (energy bills, water usage, chemical inputs) sourced directly from every facility. This high-fidelity data provides the necessary transparency and accountability to drive effective, targeted interventions and measure true impact. Brands must insist on this level of detail to ensure their emission reduction claims are robust and auditable against future compliance regimes and investor scrutiny. Relying on averages leads to a 'dilution of responsibility' where individual factory performance is masked, making targeted action impossible. This insistence on primary data is what separates leaders from laggards in the field of verifiable sustainability.

The Shift to Forward-Looking Strategy

Crucially, technology allows organisations to escape the constraints of reactive reporting. Goff explains that by digitally integrating strategic supplier roadmaps—detailed, verified plans for future investments in efficiency or renewables—brands can accurately forecast their carbon trajectory years in advance. This capability transforms data from a mere historical record into a tool for strategic foresight, enabling teams to proactively plan capital allocation and partnership strategies necessary to meet future targets. For instance, if a supplier commits to rooftop solar installation in Q3 of next year, the brand can model the subsequent drop in Scope 3 emissions and adjust their overall sourcing mix accordingly. The ability to tailor in-house tools to specific needs further enhances this advantage, ensuring technology directly serves the highest-impact decarbonisation goals. Lennen observed that this ability to look forwards, not backwards, is what sets leading brands apart in the race to net zero, allowing for dynamic adjustments to strategic sourcing decisions based on climate risk and future cost projections.

The Data Cadence Imperative

Goff also addressed a critical, yet often resisted, operational challenge: increasing the frequency of data collection. He noted that while many suppliers report only annually, this pace is insufficient for modern governance and continuous improvement. Annual data is obsolete before it is verified. Goff argued that a move to a faster cadence (monthly or quarterly) is not merely an administrative burden, but a necessity driven by global compliance (such as the impending validation requirements under future CSRD-like regulations) and operational management. He reframed the challenge from the perspective of the factory manager: energy is a major cost, and no efficient manager would review their costs only once a year. The rapid collection of high-quality data transforms the metric from a reporting liability into a live operational tool, enabling active cost management and real-time identification of process inefficiencies. This rhythm and routine of continuous data flow is essential for embedding climate action into the daily business cycle, identifying anomalies quickly, and building trust through shared, timely information.

Industry Stagnation and the Competitive Edge of Commitment

The urgency of ambitious internal agendas stands in stark contrast to the stagnation of the broader industry. Lennen noted that globally, the fashion sector is, worryingly, moving in the wrong direction from its collective climate targets. Goff attributed this inertia to both external and internal pressures, creating a systemic barrier to progress.

Economic Headwinds and Prioritisation

In economic uncertainty, businesses navigate critical periods where strategic decisions about capital allocation become paramount.

When capital is constrained, priorities fall decisively to top-line growth and bottom-line cost reduction. In this zero-sum game, sustainability, often perceived purely as a cost centre, is unfortunately "pushed off the table." This strategic misstep, Goff suggests, places companies at long-term risk, as they fail to prepare for future regulatory or consumer demands, risking brand devaluation and punitive measures later on.

Sustainability as Strategic Competitive Advantage

The companies that succeed, Goff argues, are those that view deep sustainability investment as a long-term competitive advantage, built on culture and partnership. Their brand longevity is assured by aligning with the growing consumer demand for low-impact product, and their internal culture operates with the clear mandate of "doing the right thing." This ethical foundation becomes a critical component of brand equity and risk mitigation, particularly when engaging with millennial and Gen Z consumers who demand transparency.

The most tangible benefit, as Lennen and Goff discussed, comes from fostering deepened strategic partnerships. These are not simply transactional relationships, but collaborations designed to achieve mutual operational benefits.

Goff noted that sustained commitment leads to genuine operational resilience and financial savings for suppliers, which ultimately benefits the retailer. The resilience gained through shared investment provides a form of competitive advantage that is difficult for competitors to replicate quickly, locking in long-term stable sourcing relationships and predictable quality.

The Power of Public Affairs Work

The strategic view of sustainability extends beyond the factory wall and into public affairs work. Goff detailed how global brands must leverage their influence to tackle systemic, country-level barriers to clean energy access. These efforts are essential for securing the clean energy infrastructure required for the entire industry to decarbonise, addressing market failures that inhibit individual factory action. This involves dedicating internal resources to macro-level policy engagement.

Examples of this influence include:

- **Indonesia:** Collaborating with governmental and energy bodies to establish a certified Renewable Energy Certificate (REC) market where one did not previously exist. This allows brands to purchase verified green power and secure their Scope 3 reductions legally and transparently.
- **Bangladesh:** Actively working to facilitate frameworks for Power Purchase Agreements (PPAs) for solar projects, enabling manufacturers to procure renewable energy directly at a predictable cost, circumventing reliance on a carbon-intensive national grid.

Goff stressed that these initiatives drive macro transformations, ultimately securing the brand's sourcing resilience and operational stability in key production hubs by enabling access to clean, reliable energy for all suppliers in the region. This is a critical investment in collective market success.

The Synergy Framework: Organisational Transformation

The conceptual breakthrough necessary for the industry is the adoption of the Synergy Framework. This model was the core theme of the presentation shared by Lennen at the recent Cascale Annual Meeting and subsequently discussed with Goff during this interview. The framework proposes the movement away from siloed reporting and toward an integrated business narrative where carbon and profit are mutually dependent. This transformation is necessary to secure consistent investment for climate action, preventing it from being cut during economic downturns.

In many organisations, sustainability and sourcing departments often have conflicting objectives. The Sustainability team asks for capital to reduce carbon but cannot guarantee a return, while the Sourcing team asks for investment to reduce cost/lead time but rarely reports on climate impact.

This separation makes executive decision-making fragmented and inefficient, forcing leaders to choose between profit and planet in every budget cycle.

Building Integrated Leadership

Goff explains that achieving synergy starts with people. Companies must ensure their sustainability leaders possess the operational and commercial fluency to bridge the gap between environmental science and supply chain logistics. Goff highlights that this integrated perspective is key to preventing the "talking a different language" barrier that undermines collaboration, establishing a common vocabulary for both financial and climate performance.

This integration is then operationalised through joint scorecards for suppliers. These tools ensure that traditional financial and quality metrics are perfectly balanced with sustainability objectives. Goff argued that this approach fundamentally shifts the supplier's incentive structure: to be a high-performing partner, they must succeed across all dimensions simultaneously. The framework rewards holistic performance, ensuring sustainability is never sacrificed for short-term cost gains and that suppliers are incentivised to invest in their own long-term efficiency.

Goff acknowledged that for the broader industry, this organisational shift is the most difficult challenge. He noted that the barrier is fundamentally cultural, not technical. Decades of adversarial behaviour make the necessary transparency and collaboration difficult. External pressures—such as inevitable environmental and social tipping points—will eventually force this change, but internal mechanisms like linking executive pay to carbon reduction are essential to "anchor and sharpen the focus" now, making climate performance a direct component of executive success and accountability.

Conclusion: The Path Forward for Global Fashion

In conclusion, the path forward for global fashion is clear: it requires accepting uncertainty, embracing a collaborative culture, and ensuring that every investment in climate action is also an investment in operational efficiency and financial resilience. Goff's insights illustrate that the future of sourcing belongs to those who successfully engineer systems where financial and environmental success are permanently and profitably intertwined, ensuring the business model can thrive regardless of external volatility and market pressures.