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Sustainable style: How fashion can afford and accelerate decarbonization

Translating fashion's decarbonization commitments into action has proved difficult. A new McKinsey analysis outlines what the industry can do to reach its targets.

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Fashion brands, big and small, have made ambitious, public commitments to creating more sustainable apparel by 2030. But keeping pace with their decarbonization commitments has been a challenge across the industry.

About two-thirds of brands, according to a new McKinsey analysis, are behind on their own decarbonization schedules, and 40 percent have seen their emissions output increase since making their sustainability commitments.

Today, the global fashion industry accounts for an estimated 3 to 8 percent of total greenhouse gas (GHG) emissions, and the industry's emissions are expected to increase by about 30 percent by 2030 if no further action is taken.[1] There's a particular sense of urgency for fashion to abate emissions as quickly as possible, since several countries that are likely to experience the greatest devastation from climate change are central to fashion's value chain. Intense and frequent weather-related events occur in primary manufacturing countries—such as Bangladesh, China, India, and Vietnam—which export an estimated $65 billion worth of apparel.[2]

Accelerating abatement without affecting the industry is achievable. In fact, it could be more affordable than fashion executives might think. Our research shows that most fashion brands could reduce their GHG emissions by more than 60 percent for less than 1 to 2 percent of their revenues. (This excludes levers related to reselling, renting, and repairing fashion, which would reduce a brand's emissions intensity significantly but also be dependent on consumer behavior shifts.)

In the following article, we have identified six challenges that if overcome would see the fashion industry making more progress in reducing its GHG emissions, as well as six cost-effective actions that can help accelerate decarbonization.

Progressing toward decarbonization commitments is proving difficult

As expectations from regulators, consumers, investors, and employees have shifted, fashion brands have made public sustainability pledges to reduce their GHG emissions. On average, fashion businesses included in our analysis have committed

Most fashion brands could reduce their greenhouse gas emissions by more than 60 percent for less than 1 to 2 percent of their revenues.

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[1] For more, see *Fashion on climate: How the fashion industry can urgently act to reduce its greenhouse gas emissions*, Global Fashion Agenda and McKinsey, 2020; and *The State of Fashion 2024: Finding pockets of growth as uncertainty reigns*, The Business of Fashion and McKinsey, November 29, 2023.
[2] The State of Fashion 2024, November 29, 2023.

to reducing Scope 1 and 2 emissions by about 55 percent and Scope 3 emissions by about 35 percent by 2030. To assess each brand's progress on Scope 3 emissions, we compared brands' historical rates of emissions reduction with the pace of change required to reach their emissions targets (see sidebar "Methodology"). Despite ongoing efforts, we find that brands are struggling to keep pace with their decarbonization targets.

Our analysis has found that two in five brands have seen their emissions intensity increase. Only 37 percent are on track to reach their 2030

decarbonization goals, assuming they continue to reduce their emissions intensity at their current paces (Exhibit 1).

The remaining 63 percent of brands in our analysis will need to accelerate their abatement action if they are to reach their 2030 targets. Twenty-three percent will need to increase their abatement progress by up to ten percentage points a year. The other 40 percent need to increase their abatement progress by more than ten percentage points a year to reach their 2030 targets, which represents a major acceleration in their progress. The need for

Exhibit 1

Only about a third of fashion brands will be able to meet their sustainability targets by maintaining their current emission reductions.

Reduction per year in Scope 3 emission intensity across the fashion industry, by brand

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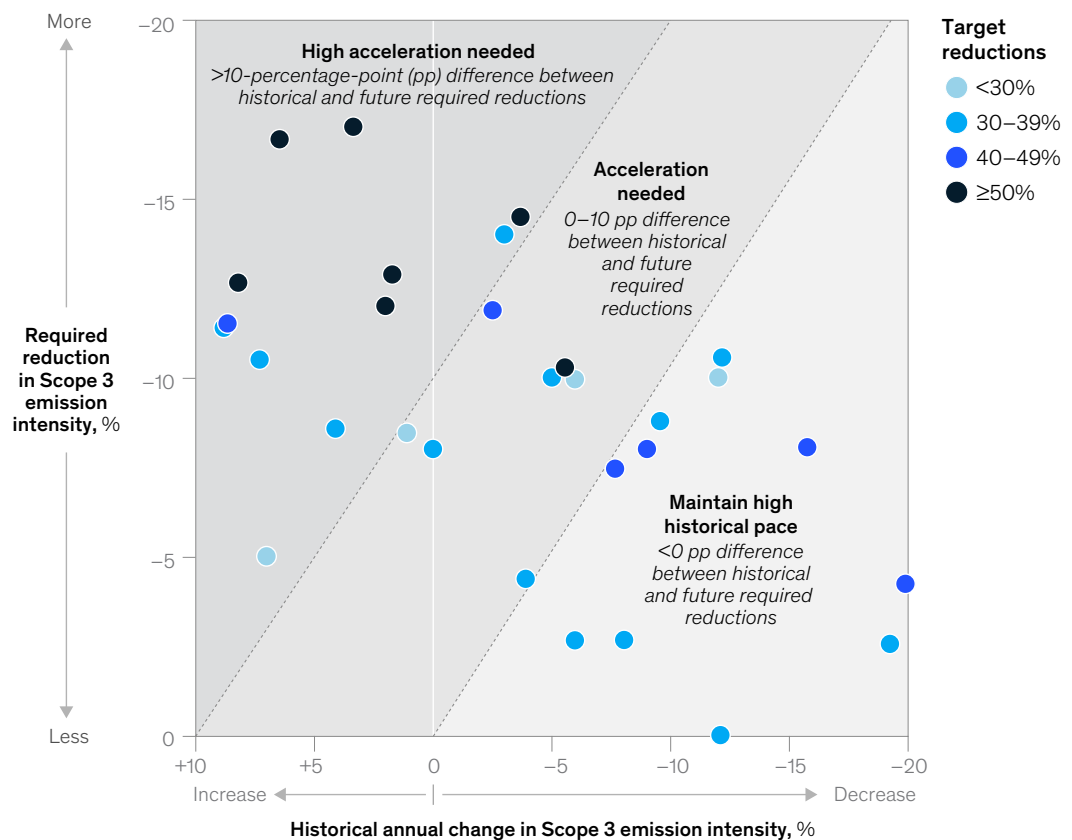
Methodology

We assessed the brands and retailers with revenues above $1 billion that are included in the Carbon Disclosure Project (CDP) and have publicly available decarbonization targets for 2030.[1] The resulting sample represents 30 brands with combined 2022 revenues of more than $300 billion.

We define emissions intensity as greenhouse gas (GHG) emissions divided by revenue, as a proxy for emissions per unit of production. Most brands have set absolute emissions targets, but since many of the brands also have ambitions to expand their businesses, their emissions intensity reductions will need to be higher than their absolute reductions. Emissions intensity is preferable to look at as it takes out volume fluctuation effects.

The historical annual reduction in emissions intensity is calculated from the baseline year to the reported year (2022). The baseline year differs for each company and is the year when the company's emissions target was established.

Future annual reductions in emissions intensity as required to reach targets are estimated from the reporting year (2022) to the target year. Revenues are forecasted until the target year by extrapolating historical growth rates (2017–22). Companies with low historical growth (less than 3 percent) are assumed to achieve the expected industry growth rate of 3 percent, companies with medium growth (less than 7 percent) are assumed to grow at 5 percent, and companies with high growth (greater than 7 percent) are assumed to grow at 7 percent.

We chose to examine progress for Scope 3 GHG emissions to assess fashion businesses' progress across the value chain, since about 70 percent of emissions come from upstream activities.

For more on this, read our *Fashion on climate* report.

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[1] Twenty-five of the companies in our analysis have 2030 targets. Five companies have targets between 2028 and 2032. For simplicity, we refer to all targets as "2030 targets" throughout this piece.

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renewed action is urgent, as 40 percent of brands have increased their emissions intensity since making their sustainability commitments (see sidebar "Pressure to decarbonize is growing"). An increase in emissions intensity can be caused by a mix of factors, such as higher sales of trendy oversize products, overproduction caused by demand management challenges, and an increased reliance on air- and truck-based transportation due to supply chain disruptions.

Six challenges fashion brands can address to become more sustainable

We have identified six persistent challenges that make sustainability transformations[3] inherently complex for fashion brands. Brands will need to overcome them to meet their goals.

1. Keeping sustainability a core priority even when times are tough

While most fashion executives have made public sustainability commitments, translating them into action continues to be a challenge. When finite resources become stretched and executives focus on tightening margins, sustainability initiatives can often take a back seat. This is propelled by the fact that sustainability measures may be seen as having a short-term cost, by consuming either financial resources or time and attention, while the positive impact on sales occurs over the long term and is difficult to directly measure.

2. Putting sustainability at the heart of the business

Achieving meaningful sustainability targets means that initiatives have to penetrate the entire

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[3] While our above analysis focuses on decarbonization and Scope 3 emissions, the findings can be applied broadly to how fashion is tackling other sustainability challenges.

Pressure to decarbonize is growing

Regulatory changes and consumer expectations are compelling fashion businesses to accelerate their decarbonization efforts.

Eighty-seven percent of fashion executives surveyed in our 2024 *The State of Fashion* report said they think sustainability regulations will affect their businesses in the year ahead. The European Union is introducing its Corporate Sustainability Reporting Directive and proposals for a new Ecodesign for Sustainable Products Regulation, a revision to the Waste Framework Directive that includes a mandatory and harmonized Extended Producer Responsibility and a Green Claims Directive. The Green Claims Directive could empower regulators to impose fines of at least 4 percent of a company's annual revenue for specific infringements. Individual member states in the European Union are also implementing new

measures. In France, for example, the Anti-Waste Circular Economy Act requires that all textile products sold in France are labeled with an environmental score.

The United States is also seeing regulatory changes at the state level. New York's proposed Fashion Sustainability and Social Accountability Act, if passed as drafted, would require large fashion companies doing business in New York to map at least 50 percent of their supply chains and disclose their environmental impact. In addition, the US Securities and Exchange Commission has implemented rules that are meant to provide investors with reliable and comparable data on climate risk and obligate companies to disclose climate-related information. Meanwhile, there is similar evidence from grocery retail that consumers increasingly care about sustainability and shift their spending accordingly. In a joint study from

McKinsey and NielsenIQ (examining US grocery sales data from 2017 to 2022), we found that products across food and nonfood categories (such as household and personal care) with two or more sustainability claims grew twice as fast as those with only one.[1]

Because the fashion industry does not require the same certification standards that are seen in grocery retail, it's more difficult to quantify consumer demand for sustainable products in fashion. This lack of common sustainability certifications can make it challenging for consumers to navigate and make educated purchase choices. In addition, a McKinsey analysis of European fashion brands concludes that consumers perceive few fashion brands to be sustainable, meaning it may be difficult for consumers to find sustainable fashion products on the market.

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[1] "Consumers care about sustainability—and back it up with their wallets," McKinsey and NielsenIQ, February 6, 2023.

operating model, from design and sourcing to marketing and retail operations. These are difficult changes to make because they require teams to adopt new ways of working and require more collaboration across business functions.

3. Charting a decarbonization path is complex
Decarbonization in fashion is not straightforward. Charting an optimal path at minimal cost requires deep insights into a brand's supplier footprint across tiers, as well as an understanding of technical topics such as emissions hot spots, production machinery, biofuels, renewable electricity, and energy efficiency.

4. The fashion industry needs more supply chain transparency
Emissions baseline setting and impact measuring are complex tasks and require primary data, such as that from a manufacturing facility, which demands new levels of supply chain transparency. Most brands don't have a direct relationship beyond their tier-one suppliers and rely on industry-average data for tier-two emissions. Relying on secondary data can be problematic, as we have found up to a 20 percent difference in emissions when comparing a brand's life cycle assessments based on primary data with its assessments based on industry-average data.

5. Implementation is consistently underestimated

It's not enough to identify the large-scale changes required to lower emissions. Executing these changes is often where fashion businesses may struggle. To implement decarbonization strategies quickly and at scale, fashion executives can approach them with the same force and rigor as they have with their digital transformations. This includes creating a rigid road map, reporting mechanisms, incentives, capabilities, and true business ownership.

6. The supplier landscape is fragmented

Big fashion brands work with hundreds or sometimes thousands of suppliers, which makes it difficult or even impossible to engage on sustainability initiatives with each one of them. For their part, suppliers have multiple competing brands as customers, and few suppliers have the scale and financial resources to make the capital investments needed to become more sustainable. Instead, they rely on brands to take an active role in facilitating change. Brands are disincentivized to finance production improvements since these improvements would also benefit their competitors.

Even with these six challenges, fashion may actually be well positioned to achieve its decarbonization goals. This is because most costs and value added in fashion come from low-carbon activities, such as design and marketing, while emissions are concentrated over a few activities, such as raw material production, shipping, and wet processing. Therefore, much of what is required for accelerated decarbonization can be delivered at a modest cost relative to retail price.[4] Outside of the environmental benefits of decarbonization, sustainability can significantly strengthen a fashion brand's brand equity, encouraging more consumers to shop with it.

Six actions can help accelerate decarbonization in fashion

Drawing on sustainability successes in other industries, as well as our work in the fashion industry, we have identified six actions that if applied could help fashion businesses propel systematic improvements in their supply chains and reach their decarbonization targets (Exhibit 2).
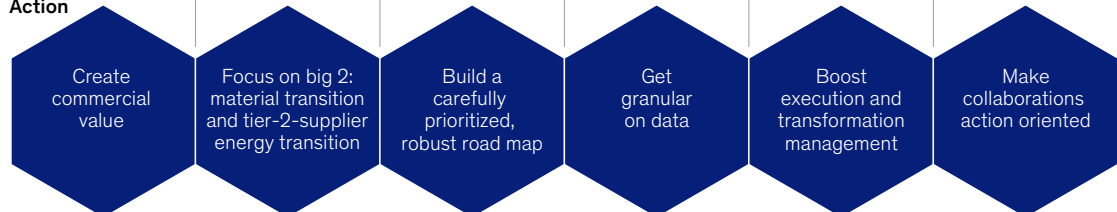
Exhibit 2

Systematic improvements across fashion's value chain can drive progress toward decarbonization.

Mapping 6 sustainability challenges in fashion to 6 actions

Challenge

1. Brands struggle to make sustainability a core priority when times are tough	2. Changes required go to heart of business	3. Charting a decarbonization path is complex	4. Fashion industry lacks sufficient supply chain transparency	5. Implementation is consistently underestimated	6. Supplier landscape is fragmented

Action

Create commercial value	Focus on big 2: material transition and tier-2-supplier energy transition	Build a carefully prioritized, robust road map	Get granular on data	Boost execution and transformation management	Make collaborations action oriented

Source: McKinsey analysis

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[4] *Fashion on climate*, 2020.

1. Create commercial value from your sustainability strides

Understand precisely what your consumers care about with respect to sustainability to determine your distinct brand and value proposition. Work actively at every level—including corporate, brand, and product—to translate achievement of those sustainability goals into powerful, consumer-facing offers that can build brand equity. This could include emphasizing information about a product's materials. Brands could also create compelling offers for net-zero product lines, radical supply chain transparency, industry-leading decarbonization targets, or circular business models. These offers must be rooted in fact.

2. Focus on the big two: Material transition and tier-two-supplier energy transition

Because fashion businesses rely heavily on fossil-fueled energy in primary manufacturing countries, transforming fibers into garments represents about 70 percent of emissions; most of these emissions come from fabric production (mostly dyeing and wet processing) and fiber production.[5] Innovative green materials—including cotton replacements, recycled materials, and bio-based leather alternatives—are becoming more widely available at lower costs. The most promising materials require minimal compro-mise in performance and little, if any, additional cost once supply scales. Using green materials also helps create more commercial value and develop cost efficiencies.

To reduce emissions at material processing facilities, fashion brands could work with their suppliers on energy efficiency improvements, energy production technology shifts (such as switching production technology to solar or industrial heat pumps), and renewable-electricity accessibility. To do so, brands could move toward a more strategic sourcing strategy focused on a higher degree of consolidation and close supplier engagements.

3. Build a carefully prioritized, robust road map

A well-defined road map could answer both the "what" and the "how" to transform a fashion business's decarbonization strategy faster and at a lower cost. Start by creating a detailed view of emissions baselines and decarbonization levers. Then, prioritize and order actions based on abatement potential, cost, speed, and commercial value. Use a marginal abatement cost curve, which compares the abatement potential and cost of each lever.[6] Executives who choose to take an ambitious approach to building their road map can benefit from becoming market leaders. A new and more strategic sourcing approach, for example, could reduce emissions more than a fragmented, piecemeal approach.

4. Get granular on data

Access to reliable data is essential if fashion businesses are going to progress through their decarbonization journeys, comply with sustainability regulations, and provide sustainability information to consumers. Brands must move from industry-average data to primary data. Primary data offer more precise, brand-specific insights about emissions baselines, levers, and progress. This will require partnerships with leading traceability and impact measurement providers and close collaboration with suppliers.

5. Boost execution and transformation management

To overcome the execution challenges in a sustainability transformation, businesses could draw on the transformation playbook used for achieving higher margins or reducing costs. This means going from a softer approach, with top-level sustainability targets and a dedicated team but no solid transformation plan, to an action-based approach. The senior executives leading this team can be made accountable for its progress, assign tasks to various leaders within an organization, and create a rigid transformation plan with systematic progress tracking and clear governance in place.

6. Make collaborations action oriented

The entire fashion ecosystem will need to collaborate if the industry's decarbonization goals are to become a reality. Brands with meaningful supplier overlaps, for example, could jointly define decarbonization pathways and create a critical

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[5] Ibid.
[6] *New at McKinsey*, "A revolutionary tool for cutting emissions, ten years on," April 21, 2017.

mass to invest in supplier decarbonization initiatives. Collaborating on initiatives, such as increasing suppliers' access to renewable energy, could lead to more impactful changes than if a brand were to pursue smaller-scale initiatives on its own. Brands could also collaborate with financial institutions to help suppliers get better access to sustainability-linked financing.

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Not only will taking these actions help fashion executives achieve accelerated GHG abatement at a modest cost, but they can also create substantial business value in sustainable transformations. To capture the opportunity, time is of the essence. Early movers can realize commercial value and

positive effects on brand equity for years to come. We also see an early-mover advantage on the cost side: while the cost of sustainable solutions will likely fall over time, we expect that a widening supply-and-demand gap in the near term will increase the price of scarce sustainable solutions and assets (including materials, machinery needed for decarbonization, renewable energy, and manufacturers with more sustainable processes). Moving early can help a brand secure access at lower prices than its peers can and reach its 2030 decarbonization targets.

For the fashion industry, the hard part of becoming more sustainable isn't deciding to begin the journey; it's maintaining progress. This is where true leaders can reveal themselves.

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