Textile Exchange

Reimagining Growth Landscape Analysis

December 2024

Contents

Cover photo: Madeleine Brunnmeier

About this Report

Goal and scope of this report

The *Reimagining Growth Landscape Analysis* aims to provide a shared reference point on foundational concepts related to the topic of growth in the fashion, apparel, and textile industry, and the role it plays in climate, nature and human rights impacts. Textile Exchange maintains that reimagining growth is crucial for achieving the industry's goals, particularly for Tier 4 production systems.

The United Nations Environment Programme's (UNEP) Emissions Gap Report 2024 emphasizes the urgent need for transformative changes across industries, such as fashion and textiles, to meet global climate targets. It warns that without more ambitious greenhouse gas reductions, the world is on track for a temperature increase of 2.6°C to 3.1°C this century, a rise that would have devastating effects on people and the planet.[1]

Aligned with Textile Exchange's stance, this underscores the need to reduce the extraction and production of new materials in order to achieve greenhouse gas reduction and nature conservation goals necessary to sustain a habitable planet. It also supports the need to redefine value creation to include social foundations and ecological ceilings, moving beyond traditional financial metrics.

In doing so, the latest UN climate report reinforces the imperative for the fashion, apparel, and textile industry to adopt new models of value creation, reduce reliance on virgin fossil-based materials, and integrate broader social and ecological considerations into their measures of success.

Targeted primarily for brands and retailers, the *Reimagining Growth Landscape Analysis* builds on existing scientific and academic literature on the topic of reimagining growth, applying these concepts to the fashion, apparel, and textile industry, and integrates insights from consultations carried out with stakeholders from across the textile value chain in 2022–2024. It aims to contribute to this emerging and urgent field by defining key terms, outlining relevant barriers and challenges for consideration, and suggesting pathways for businesses to take forward. Collectively, it presents a shared direction of travel to accelerate meaningful action in the industry when it comes to addressing the tension between sustainability and growth targets.

The report's focus on the fashion, apparel, and textile industry addresses growth in the context of raw material and fiber production systems and sourcing considerations, aligning with Textile Exchange's focus. While many concepts are broadly applicable, we recognize there are limitations to what is included—for instance, the pathways presented are aimed at what actions businesses within the industry can take, whereas further levers would need to be considered in order to encompass a more holistic view of reimagining growth, such as through consumption and social change.

Additionally, the report seeks to highlight the potential implications of reimagining growth on vulnerable communities, largely in developing countries. It is crucial to recognize that the report, like much of the literature on this topic, is mostly framed through perspectives

Photo: Madeleine Brunnmeier

Goal and scope of this report

from those in more developed parts of the world. This presents another limitation, as the values, assumptions, and solutions proposed may not fully capture the lived realities, cultural contexts, or specific challenges faced by those vulnerable communities. The predominance of developed country voices in the discourse on reimagining growth risks overlooking or marginalizing these perspectives. Readers should take this context into account and consider how to apply the pathways relative to their own markets and situations accordingly, ensuring a just transition so as to leave no one behind.

Reimagining growth for different materials

When considering raw materials and fibers, Textile Exchange believes that reimagining growth has different implications depending on resource type. Materials from sustainably-sourced renewable resources or closed-loop recycling systems are viewed distinctly from those derived from fossil-based sources. The organization strongly advocates for phasing out virgin fossil-based synthetics as rapidly as possible, with the aim of replacing them with materials sourced from textile-to-textile recycling systems or from sustainably-sourced renewable resources.

For materials derived from natural systems—such as cotton, wool, and forest-based materials—Textile Exchange acknowledges that growth must be limited to prevent the conversion of pristine ecosystems that require protection. However, Textile Exchange emphasizes the importance of ensuring that natural materials, grown using regenerative, organic, or other preferred concepts, are available within the textile system. This transition will require significant support from the industry and beyond, to ensure farmers and growers are not left behind. These producers offer a valuable opportunity not only for reducing negative impacts but also for providing a critical pathway toward achieving beneficial outcomes for nature—a goal that remains central to the industry's sustainability ambitions.

Photo: Anass Ouaziz

Acknowledgements

Author

Rachel Arthur

Textile Exchange

- Beth Jensen
- Claire Bergkamp
- Zuzana Mocilenkova
- Zach Kniestedt
- Jennifer Inaba
- Beatrice Murray Nag

Textile Exchange would further like to thank the 27 anonymous individuals who participated in the consultation process held during 2023 on the topic of reimagining growth to help shape and inform this landscape analysis report.

A further thank you goes to the 149 participants of the survey that ran in June-July 2024 exploring terminology the textile sector can use when referring to the topic of production volumes and revenue growth targets relative to sustainability targets.

Expert external interviews and reviewers

- Berkley Rothmeier, *BSR*
- Dr Hakan Karaosman, *Cardiff University, Union of Concerned Researchers in Fashion*
- Zubeida Zwavel, *Centre For African Resource Efficiency And Sustainability Cares*
- Natasha David, *Ellen MacArthur Foundation*
- Juliet Lennon, *Ellen MacArthur Foundation*
- George Williams, *Ethical Trading Initiative*
- Ciara Barry, *Fashion Revolution*
- Ana Maria Uribe, *Human Level*
- Anna Triponel, *Human Level*
- Darshana Gajare, *Lakmé Fashion Week*
- Jalal Moughraby, *Lebanese American University*
- Beatriz Fernandez, *United Nations Environment Programme*
- Claudia Giacovelli, *United Nations Environment Programme*
- Bettina Heller, *United Nations Environment Programme*
- Katia Dayan Vladimirova, *University of Geneva, International Research Network on Sustainable Fashion Consumption*

Photo: Madeleine Brunnmeier

Executive Summary

Executive summary

The fashion, apparel, and textile industry is at a critical juncture. In spite of efforts toward sustainability, the industry's current trajectory is incompatible with achieving key goals, including Textile Exchange's own goal of a 45% reduction in greenhouse gas (GHG) emissions from raw materials sourcing by 2030. Environmental and social impacts are only increasing as growth remains a business imperative for the industry, driven by increasing production of new products relying on virgin resources.

The prevailing linear business model—based on the principles of a take-make-waste economy, as well as on overstimulating demand and overproducing volumes as the norm for maximization of corporate profits—comes with severe consequences, including environmental degradation, resource depletion, and social inequality.

> This norm must be challenged if the industry is to stay within planetary boundaries and achieve its long-term sustainability goals.

Growth as it has been traditionally defined—whether in terms of sales, production, or market share—is deeply ingrained in overarching financial systems and corporate culture. In most cases, pressure to prioritize growth outweighs sustainability goals, particularly when facing investors and shareholders who are accustomed to short-term financial returns.

Discussing limits to growth is seen as radical when success is equated with and enabled by continuous expansion. There is accordingly reluctance to embrace these conversations, reflecting the difficulty of reconciling financial imperatives with the reality of finite planetary resources.

Part of the challenge is around terminology. While a proliferation of literature has emerged over the past few years stating the case for opposing unchecked economic growth[2]—in turn adding to both growing recognition and scientific understanding of the limits it presents—alignment around the word "degrowth" is particularly contentious.

> A study carried out by Textile Exchange in 2024 shows that 65% of participants from the industry believe they could not use the word "degrowth" internally in their organizations.[3]

Instead, The *Reimagining Growth Landscape Analysis* presents a vision of what the industry needs to work toward, in alignment with "regenerative economy" and "post-growth" principles. Central to this is a complete reimagining of value creation. The report calls for business success to be redefined from that based on exponential increases in production and consumption volumes, toward sustainable and ethical practices, prioritizing well-being and prosperity for all stakeholder groups over the long-term.

> This must consider both a social foundation and an ecological ceiling, rather than only financial measures.

Recognition must also be given to the fact that ultimately the shift that needs to occur for transformational change is at the market level rather than just at the individual business level. This transition cannot be achieved by a single brand or the textile industry alone. Businesses should explore the role they can play in helping to drive this shift, sharing best practices and learnings to support others to follow suit. Corporate advocacy for ambitious government action is a key lever, with a critical mass of businesses and business leaders needed to both demand it and support it.

A motivator lies in the financial risks associated with not doing so. Studies show that if business-as-usual continues, global economic output could decrease by nearly 25% by 2040 and as much as 50% by 2070.[4 5]

For textile businesses, impacts to operating profits are expected due to supply chain instability, resource depletion, and the industry's overreliance on finite resources. Costs are also set to increase in the near-term as legislation and regulation comes into force in different regions around the world. Rising consumer demand for sustainability and reputational risks for those businesses reliant on extractive and exploitative processes should also be considered.

> Addressing volumes of production and consumption can be presented as a value creation opportunity over the long-term.

Challenges to the topic of reimagining growth exist beyond the deep-rooted emphasis on short-term profits and shareholder returns. Key examples include: the need for substantial capital investment in circular and regenerative business models; complexity in what reduction looks like across businesses, the industry at large, and differing markets; resistance to change from both businesses and consumers, who are accustomed to mass production and consumption models; and a poor enabling environment at the policy level.

Executive summary

The potential unintended consequences of such action should also be considered from the outset. This report emphasizes that reimagining growth in the textile industry must support social justice and protect the rights, livelihoods, and well-being of people—including producers, workers, and communities across the value chain—so as to leave no one behind. Workers' voices should be integrated from the outset on any efforts to mitigate the potential negative impacts of this systemic shift, to achieve a just transition that ensures not only environmental impact reduction but also decent work for all, social inclusion, and poverty elimination.

Pathways for business change are identified in detail in the following pages, including:

- Capping virgin fossil-based resources, and instead focusing on sustainably-sourced renewable (e.g. regenerative or organic) or closed-loop recycled resources,[6] feeding into products that are designed for longevity and circularity.
- Producing fewer items of higher quality, with their true value reflected in their price.
- Reducing overproduction through the use of advanced technologies and machine learning to eliminate wasteful methods, including deliberate excess.
- Increasing revenue share from circular business models, including services such as repair, remaking, rental, resale, and responsible take-back schemes.
- Promoting equity and respect for human rights, ensuring decent work and living wages throughout the value chain.
- Eliminating messages or sales tactics promoting overconsumption and obsolescence, with marketing budgets redirected to lower impact and circular solutions.
- Shifting to alternative ownership and governance models.
- Demanding and supporting policy that will level the playing field, facilitating sustainability and a market-level transition.

The *Reimagining Growth Landscape Analysis* emphasizes again the role of finance and of policy for many such pathways to become feasible and feed into an industry-wide shift away from the current model.

> Ultimately, the report outlines the need to move beyond incremental sustainability efforts and to fundamentally redefine value creation, prioritizing environmental and social sustainability over the pursuit of perpetual growth.

At the heart of this is reducing virgin resource extraction, instead prioritizing post-growth and regenerative economy principles. It is not only necessary for the future of the planet and its people, but also for the survival of the fashion, apparel, and textile industry itself.

Photo: Madeleine Brunnmeier

Section I

Introduction and Why Reimagining Growth Matters

Background and the big picture

While there is evidence of progress within the fashion, apparel, and textile industry, change is not happening fast enough, nor systemically enough, to achieve key climate and nature goals, such as Textile Exchange's goal of 45% reduction in greenhouse gas (GHG) emissions related to raw material and fiber extraction and initial production by 2030.

On its current trajectory, the industry is estimated to double the maximum required GHG emissions to stay on the 1.5°C pathway outlined by the Paris Agreement by 2030, where it should be looking to halve it, according to McKinsey & Company and Global Fashion Agenda.[7] The Apparel Impact Institute paints only a slightly more optimistic picture, suggesting the data shows industry emissions are on track to grow an estimated 40% by 2030 (from 2022).[8]

Textile Exchange's 2022 Material Change Insights report highlights that the lack of holistic change is both due to the time it takes to adapt existing business models, and the urgent need for external enablers to help drive the transformational change required in the industry.[9]

> In addition to that is the industry's continued focus on growth as a business imperative, driven by the continuous production of new products relying on the ever-increasing use of virgin resources.

Today, the dominant economic model for fashion is linear—based on the notion of take-make-waste, with an accompanying narrative centered around newness, immediacy, and disposability.[10] Businesses are rewarded and incentivized for revenue growth based on producing high volumes, often at low cost and with in-built obsolescence. The power of the marketing machine in stoking overconsumption—creating demand and defining desire through vast advertising spends—should not be underestimated.[11] This model has been facilitated over the past few decades by increased use of cheap virgin synthetic fibers and trade liberalization, which allowed the offshoring of production to countries with weak regulation enforcement and higher human rights risks,[12] resulting in issues including exploitation, systemic underpayment, child and forced labor (including state-imposed), severe health and safety risks, and sexual harassment and violence, particularly toward women. It is further compounded by the ease at which post-consumer textile waste is then shipped across international borders and dumped into communities and

Getting to 45% in Tier 4

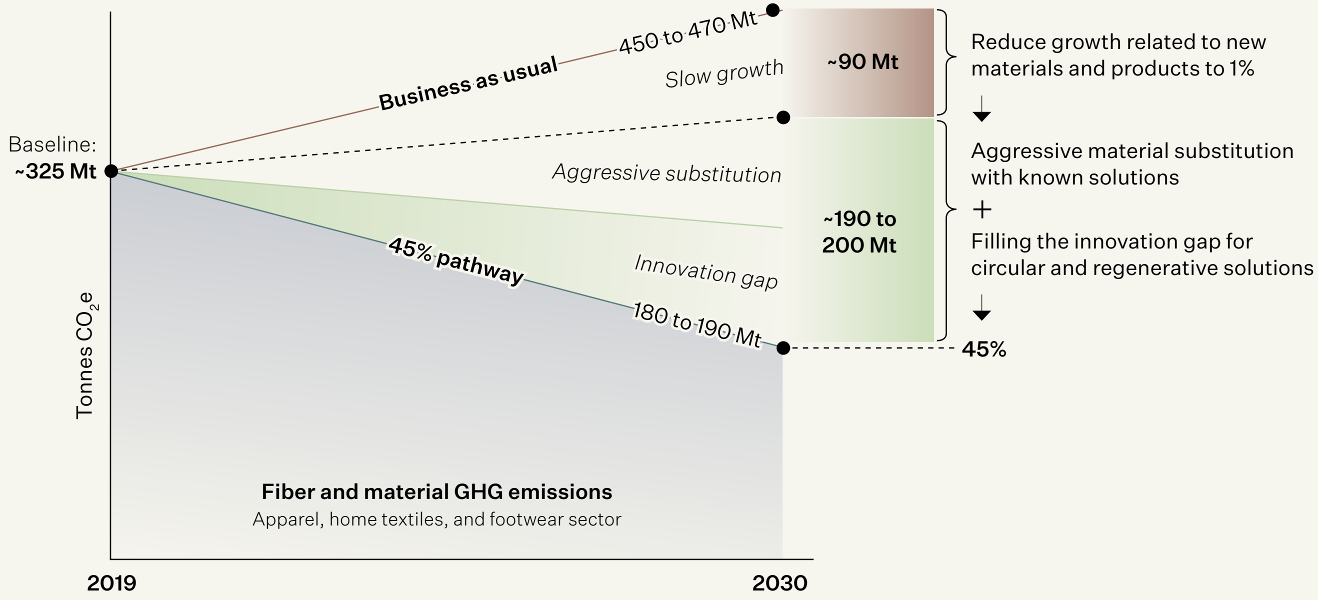


Figure 1: Modeling of interventions needed in the apparel and footwear raw materials extraction phase in order to achieve 45% GHG impact reduction by 2030, as measured against a 2019 baseline. BAU scenario assumes a 3% growth per year from 2019 to 2030. Image credit: Textile Exchange

Background and the big picture

ecosystems, largely in developing countries, that lack the financial capacity or infrastructure to manage it.[13]

There are next to no negative consequences for the businesses responsible for any of this, save for the externalities not currently factored into the price of the resulting products—from their impact on livelihoods to the contribution they make to the triple planetary crisis of climate change, nature and biodiversity loss, and pollution and waste.

Crucially, however, the economic system is designed to enable this. At both ends of the market, it is widely and intentionally about overstimulating demand and overproducing volumes in a bid to maximize returns in the form of corporate profit year over year. The imperative is for economic growth and short-term financial results. This is typically for the benefit of the few (business owners, investors, and shareholders) at the expense of the many. Growth is "culturally, politically, and institutionally ingrained,"[14] and is the mandate and obligation of business today.

> In this industry, that is primarily achieved by increasing volumes of new raw materials to make new products.

Since 2000, when production was 58 million tonnes, global fiber production has more than doubled to 124 million tonnes in 2023. It is expected to grow to 160 million tonnes in 2030 if business as usual continues. Polyester has contributed most significantly to this growth, replacing cotton as the most widely used fiber in the world since the mid to late 2000s. Global fiber production per person has also increased significantly, growing from 8.3 kilograms per person in 1975 to 15.5 kilograms per person in 2023. This figure is expected to rise to 18.8 kilograms per person by 2030 if business continues as usual.[15]

What the exact numbers of new products produced looks like is unknown. Today, only 11% of the largest fashion brands in the world disclose how many units they make annually.[16]

> Rough estimates, however, suggest the industry puts out anywhere between 80–150 billion items of apparel and footwear every year.

The Ellen MacArthur Foundation previously reported that fashion production doubled between 2000 and 2015, while the number of times a garment was worn before being discarded decreased 36% during the same period.[17]

A report led by the Institute for Sustainable Futures at the University of Technology Sydney looking at what a well-being economy for fashion and textiles could entail, refers to the industry as "witnessing a crisis of overproduction (fueled by growth-oriented business models) and overconsumption (caused by a culture of trend-driven fashion)."[18]

In spite of a challenging economic backdrop, in 2024, the fashion industry is expected to grow by up to 4%.[19] Such numbers are fueled at one extreme by the ultra fast fashion companies capable of releasing upwards of 7,000 new styles of garments onto the market every day, with billions of dollars spent on advertising to support them.[20] But the luxury sector is also a significant contributor, having expanded at twice the rate of global Gross Domestic Product (GDP) in the 2010s, largely through growth in China,[21] where shoppers are expected to drive 50% of global luxury consumption by 2025.[22]

In addition, the sports and outdoor sectors are also experiencing rapid growth. The outdoor apparel market is forecasted to increase by 4.5% per year between 2023 and 2028 at the hands of increased outdoor activities as well as the adoption of celebrity brand endorsement deals.[23] Meanwhile, the sports apparel market is due to increase by 4.38% per year between 2023 and 2032, driven by trends such as growing interest in health and well-being, as well as the rise of athleisure clothing seeing sports items filtering into everyday use.[24]

Globally, a new generation of two to three billion citizens entering the middle class in key developing markets is also relevant,[25] collectively aspiring to many of the material ideals embodied by fashion.

In 2019, the Global Fashion Agenda wrote in its *Pulse of the Fashion Industry* report that in spite of increased efforts, "fashion companies are not implementing sustainable solutions fast enough to counterbalance increasing negative environmental and social impacts of the rapidly growing fashion industry."[26] Academics have been similarly calling this out since at least 2015.[27 28]

Researchers at Oslo Metropolitan University refer to this as the elephant in the room that neither industry nor public policymakers are ready to talk about. Based on analysis of existing strategy documents from both stakeholder groups, it notes:

> "[There is a] belief that improvements on a product level will solve the challenges we are facing. This is despite the fact that this strategy has failed, as the growth has eaten up any gains from product improvements." [29]

Background and the big picture

The GHG emissions modeling conducted by Textile Exchange echoes this point. Even in a scenario in which substitution of materials to preferred options is aggressively and rapidly occurring, the fashion, textile, and apparel industry will not meet its 2030 target of a 45% GHG emissions reduction from raw materials production unless overall growth rates of new materials are also reduced.[30]

> Recognizing that growth in new materials at the projected rate is impeding progress demonstrates how important it is to explore change at a systemic level.

While emissions reductions alongside wider sustainability targets are crucial, a complete reimagining of value creation and a move away from growth based on exponential increases in production and consumption volumes are pivotal to being able to do so. The same effort that has gone into creating the existing model, must now be directed toward supporting change.

A reduction in the overall production of new materials is a key lever to enable the beneficial climate and nature impacts we need to see in order to stay within planetary boundaries and address critical issues such as waste and pollution, and deforestation and conversion. Critically, this includes reducing and ultimately eliminating the use of virgin, fossil-based resources for material feedstocks, and ensuring that degraded land is restored, given the finite nature of Earth's resources. What's also crucial with this shift is that it is done in such a way that simultaneously supports social justice and protects the rights, livelihoods, and well-being of producers, workers, and communities across the value chain. Understanding how to ensure a just transition when calling for a reduction is imperative. This is explored in more detail in the *Ensuring a just transition* section of this report.

> Currently, many businesses are caught in a clear tension between two competing priorities: growth and sustainability.

On one hand, growth is seen as essential for attracting investment, satisfying shareholder demands, and maintaining market competitiveness. This focus on continuous expansion—whether in terms of sales, production, or market share—is deeply ingrained in corporate culture and financial systems. On the other hand, the urgent need to address environmental and social sustainability requires businesses to fundamentally rethink their models, often necessitating a reduction in resource use, production volumes, and waste generation.

In most cases, however, the pressure to prioritize growth tends to outweigh sustainability, particularly when facing investors and shareholders who are accustomed to short-term financial returns. Sustainability initiatives, while increasingly part of corporate strategies, often take a backseat when they appear to conflict with immediate revenue targets, or when there are direct examples of competitors who do not act. Yet, without addressing the inherent growth imperative and its environmental impacts, long-term corporate sustainability goals—such as reducing carbon emissions or promoting ethical labor practices—will not be achieved.[31]

This creates a difficult challenge for executives. Discussing limits to growth is not just unpopular but can be seen as radical, especially in a corporate landscape where "more" is equated with success. Terms like

Background and the big picture

"sufficiency," "less," and "reduction" are rarely part of the traditional business lexicon, as they run counter to the dominant economic narrative of profit maximization and continuous expansion. Moreover, the idea of limiting or slowing growth can provoke discomfort because it challenges deeply held assumptions about how success is measured and calls into question the capitalist model itself, which thrives on perpetual economic expansion.

> The reluctance to embrace these conversations reflects the difficulty of reconciling financial imperatives with the reality of finite planetary resources.

And yet, there's also a significant cost of inaction relative to addressing growth. As explored in *The cost of inaction* section of this report, with increasing extreme weather events worldwide at the hands of the climate crisis, there are large-scale financial risks for businesses ahead related to supply chain insecurities and resource depletion, with further considerations and consequences coming down the pipeline from both a market competitiveness and a policy standpoint. Confronting the challenge of production volumes is not only the necessary thing to do for the sake of sustainability targets, but will ultimately become essential for business survival.

As written by the Cambridge Institute for Sustainability Leadership:

> "It is time to revisit the fundamentals of business and sustainability... doing more of the same will not work." [32]

Photo: Matteo Capone

Addicted to growth: The science behind limits

The challenge the textile industry faces is not unique. Human-induced global socio-economic and environmental change has been rapidly accelerating since the 1950s. Now referred as "The Great Acceleration," it sees climate change, biodiversity loss, and pollution tightly coupled to economic growth through global GDP, as shown in *Figure 2*. Population growth was the leading cause of this from 1970 to 2000, but the rising global middle class has been the strongest determinant since.[33]

> A common misconception is that rising GDP will lead to both a reduction in inequality and an improvement in well-being.

In fact, growth-driven economic systems may have increased affluence, but so too have they led to a huge rise in inequality, financial instability, and resource consumption.[34] Since the 1990s, 38% of all new income from global GDP growth has gone to the richest 1%, whereas the bottom 50% captured just 2% of it.[35] Further, in the U.S., CEO pay has increased by 1,460% since the 1970s (taking inflation into account), while typical worker pay has grown by just 18.1% in the same time period.[36] What's more, economic growth in developing countries has failed to lift millions of people out of poverty.[37]

When presenting it in the 1930s, even the creator of the GDP model—an economist named Simon Kuznets—warned it shouldn't be used to determine success alone.[38] In *The Value of Everything*, economist Mariana Mazzucato points out that the biggest challenge with GDP is how it makes no distinction between services that add value to the economy, and those that are dependent on extraction.[39] If you pollute, GDP ultimately goes up, because someone is paid to clean up afterwards. Similarly, terrorism, war, crime, and cancer all contribute to GDP.

Furthermore, by not considering the negative impacts of growth—such as the externalities of resource extraction—what GDP doesn't account for is potential worsening conditions in the future. A landmark review of *The Economics of Biodiversity* commissioned in the UK in 2019,[40] and in turn *The Report of the Brundtland Commission of 1987 on Environment and Development*,[41] focused on exactly this. Both refer to the idea that sustainable development has to mean leaving behind at least as large a stock of assets as that which it inherits—in other words, taking depreciation of natural capital into account, which GDP ignores.

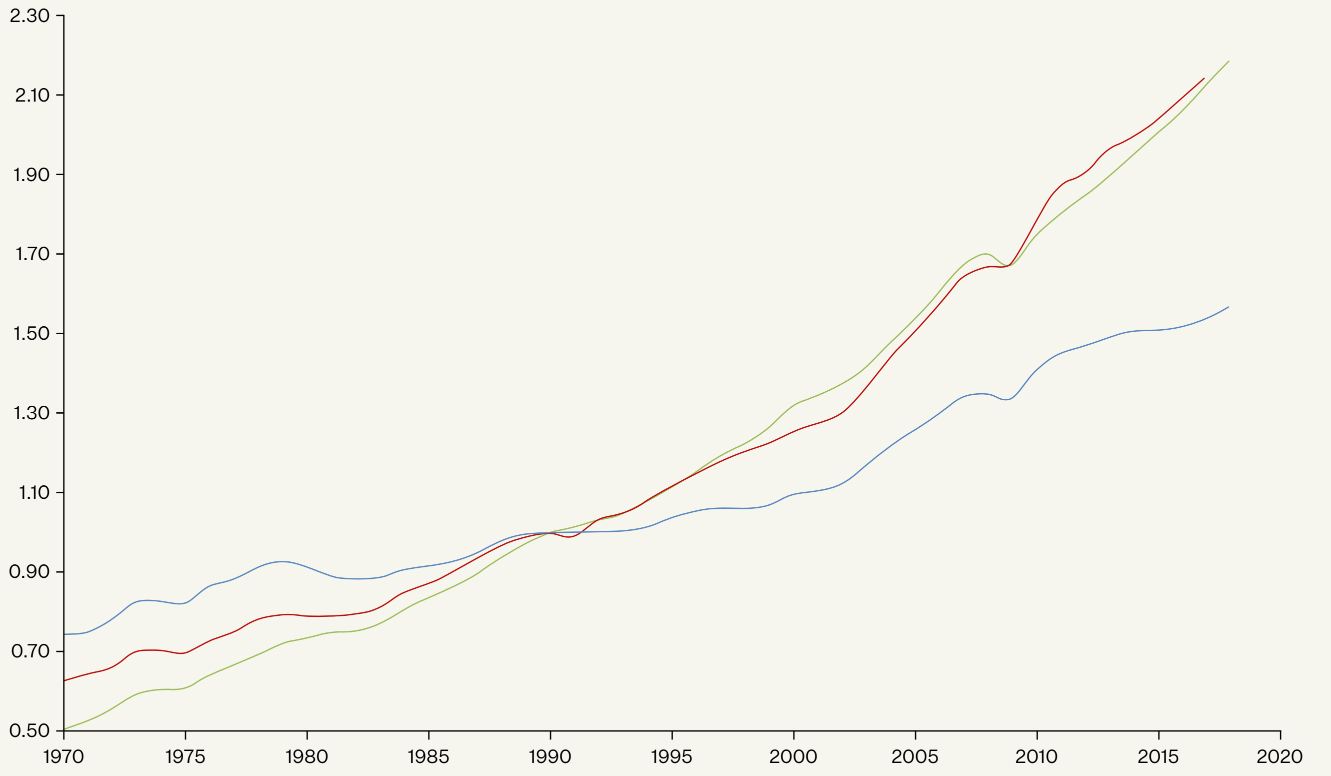


Figure 2. Relative change in main global economic and environmental indicators from 1970 to 2018
Source: [Growth without economic growth](), European Environment Agency (2021).

Addicted to growth: The science behind limits

Professor Sir Partha Dasgupta, economist and author of the report, explains:[42]

> "Arguably, the view of the economy as external to the environment may have been comparatively harmless so long as the biosphere was more than able to supply the demands humanity made of it. That simply is not the case any longer, and has not been for many decades."

Currently, humanity is consuming Earth's natural resources 1.71 times faster than it can regenerate them, according to the Global Footprint Network.[43] Material use has increased more than three times over the last 50 years,[44] and science also shows that six out of nine Planetary Boundaries—a framework developed in 2009 by the Stockholm Resilience Centre quantifying critical components for maintaining the stability and resilience of Earth's life support system—have now been crossed. This includes climate change, biosphere integrity, freshwater availability, land use, nutrient pollution, and novel entities (including microplastics and organic pollutants). It also shows air pollution and ocean acidification are approaching their planetary boundary, calling scientists to say the planet is now well outside of the safe operating space for humanity.[45]

Meanwhile, the Organization for Economic Cooperation and Development (OECD) predicts global GDP will rise by 3% per year through 2060.[46] This would mean a global economy 10 times its current size by the end of the century. As economist Kate Raworth—who developed the Doughnut Economics model, which aims to balance human needs and planetary boundaries (see the *Definitions of growth-related terms in scientific literature* section)—points out, even mediocre growth would mean doubling total GHG emissions by 2060.[47] Raworth explains:

> "[GDP] increase has brought prosperity to billions of people, but the global economy has also become incredibly divisive, with the vast share of returns to wealth now accruing to a fraction of the global one percent. And the economy has become incredibly degenerative, rapidly destabilizing this delicately balanced planet on which all of our lives depend."

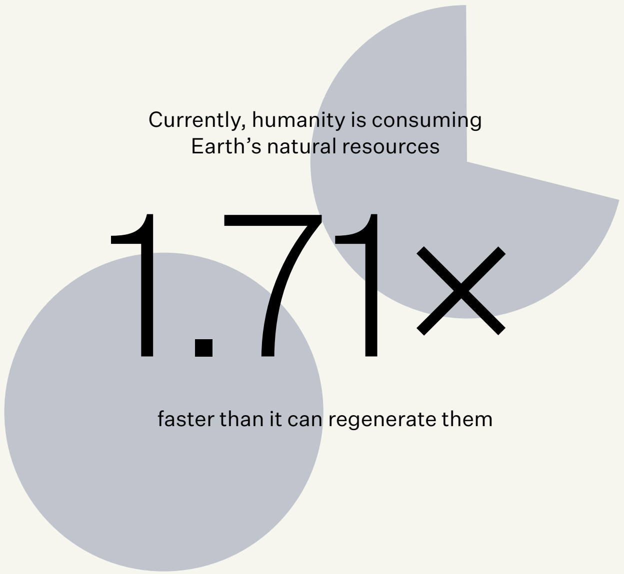
This is not new information. In 1972, a report called *The Limits to Growth* was released by The Club of Rome, an NGO composed of scientists, economists, business leaders, and former politicians.[48] Written by a group of researchers from the Massachusetts Institute of Technology, it examined the implications of continued worldwide growth taking into consideration population increase, agricultural production, non-renewable resource depletion, industrial output, and pollution generation—all of which the fashion industry in some way touches.

Its modeling concluded that the Earth cannot support such growth beyond the end of the 21st century, even with advanced technology. Based on tracking a business-as-usual plot line, it showed "overshoot and collapse" by 2070. To avoid this, it recommended a shift toward sustainable development, emphasizing the need for global efforts to limit economic and population growth to within the planet's finite resources. This was criticized for many decades as a "doomsday fantasy" with its central message that the Earth is finite only recently being accepted. Empirical studies since have shown that the modeling was on target.[49]

In a play on words, the World Resources Institute (WRI) calls this topic the "elephant in the boardroom"—uncomfortable and unmentioned because it challenges the entire business model, as well as the incentives of the current dominant global economic system, as it stands. But the planet's natural systems and finite resources cannot keep up, which means growth predicated on unchecked consumption is no longer an option, it explains.[50]

WRI notes that:

> "A continuation of business-as-usual would mean not just a slight additional strain, but three times our current consumption on the planet's already overused resources."



Source: Global Footprint Network

Understanding degrowth versus green growth

To understand and unpack the specific opportunities for the fashion, apparel, and textile industry in addressing growth, it is important to understand the broader context.

A proliferation of literature has emerged over the past few years stating the case for opposing unchecked economic growth;[51] in turn adding to both growing recognition and scientific understanding of the limits it presents. Central to this is the degrowth movement.

Author and economic anthropologist Jason Hickel defines the term degrowth as:

> "A planned reduction of energy and resource use designed to bring the economy back into balance with the living world in a way that reduces inequality and improves human well-being." [52]

Moreover, Harvard Business Review states it is a concept that challenges the necessity of perpetual economic expansion for human prosperity and points to the inextricable link between economic growth and environmental degradation.[53]

Section III of this report highlights the challenges that exist with the word "degrowth" itself—particularly when it comes to presenting it as a concept to business leaders—and defines other key terms frequently used within this topic.

To be able to better understand degrowth, however, it is important to outline where it sits relative to "green growth." These are two ideas that are frequently pitted against each other, yet are not polar opposite theories.

Green growth is defined by the OECD as:

> "Fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies." [54]

Central to their differences is that green growth supports ever increasing economic growth (or GDP), with the theory that decarbonizing through new technologies and efficiencies will enable global emissions reduction targets on the one hand, while revenues continue to rise in order to satisfy shareholders and investors on the other. This is known as decoupling (see the full definition in the *Definitions of growth-related terms in scientific literature* section) and is rooted in the belief that economic growth is required to reduce poverty and drive prosperity.

Professor Sir Partha Dasgupta writes:

> "This view—that if humanity is sufficiently ingenious it can expect indefinite economic growth—is ingrained in contemporary thinking, and pervasive even in the economics of climate change." [55]

Indeed, the European Green Deal and the United Nations Sustainable Development Goals (SDGs) propose decoupling economic growth from resource use.

While there is no doubt decarbonization and dematerialization efforts are essential, degrowth theory questions whether they're enough alone. Data shows worldwide growth in consumption over the past few decades has increased resource use and pollutant emissions far more rapidly than these have been reduced through better technology. In fact, the digital revolution and the efficiencies it has brought, has thus far only led to more in the way of consumption and inequality, while remaining coupled with energy and materials use, therefore increasing resource intensity and GHG growth.[56]

The Jevons Paradox[57]—whereby greater efficiency means an increase in the total amount of resource used—is at the heart of this. If it takes a garment worker or a machine less time to produce an item of clothing, more items can be made for the same amount of money.[58] In sustainability terms, the same goes for less water or fewer chemicals. Efficiency doesn't necessarily reduce impact, but increases productivity. As it stands, the textile industry tends to prefer efficiency over sufficiency (see the *Definitions of growth-related terms in scientific literature* section for definition) in focusing on how to reduce environmental impact, with technology only advancing growth.

This is determined as relative decoupling—whereby increased efficiency means emissions fall per, for instance, unit of output. But the overall number of outputs or products may increase, meaning overall emissions continue to rise.

> On the other hand, absolute decoupling is about emissions themselves falling even as economic output continues to rise.

Green growth theory supports the idea that (ultimately) absolute decoupling is possible on a global basis at the hands of technological advances as well as other types of economic opportunities not fixed to energy or materials. While a handful of countries have been

Understanding degrowth versus green growth

able to show this, degrowthers challenge that for absolute decoupling to work it needs to happen not only within a short timeframe, at scale and globally, but be maintained and continued over time.[59]

As yet, the likes of economist Timothée Parrique have shown there's no empirical foundation for it.[60] This does, however, remain to be contested by those in the green growth camp.[61]

To provide some broader context: Since 1990, global carbon intensity (meaning the amount of carbon dioxide emitted per unit of economic output, e.g. per dollar of GDP) has fallen on average by 0.6% per year, but overall emissions have risen globally by 2% per year.[62] A study carried out by WRI showed 21 countries had lowered emissions by 1 billion tons from 2000 to 2015, yet global emissions in the same time period grew by 10 billion tons. In some instances this is due to emissions in one country (e.g. the UK) being outsourced to another (e.g. China).[63]

For absolute decoupling, if the intention is to maintain society as it stands—thus ensure income per capita goes up, all the while taking population increase into consideration—yet still hit the Paris Agreement Goals, economist Tim Jackson estimates carbon intensity will need to fall by somewhere in the magnitude of 18% per year, which is 100 times faster than is happening today.[64] Fashion is currently on target to increase emissions by 2.7% every year.[65]

As Raworth notes, carbon emissions are also only part of the story—a wider material footprint also needs to be considered including nitrogen use, land use, water use, and minerals and rare Earth elements. This, she argues, presents an even greater challenge for decoupling.[66]

> "Unending growth cannot be decoupled from resource use on anything like the scale required to bring us safely back within planetary boundaries," she states.[67]

Degrowth theory by comparison suggests downscaling production and consumption will be critical. This is not about cutting volumes overnight, nor is it necessarily about slashing GDP. Rather it is intended as a controlled reduction of material and energy throughput to align with planetary boundaries as well as minimum social standards.

Importantly, it also does not suggest reduction needs to be the case indiscriminately or universally. Degrowth is primarily aimed at high income nations, recognizing that certain developing economies still have space to grow relative to planetary boundaries, and need to do so in order to meet basic human needs.[68] This aligns with the United Nations Framework Convention on Climate Change's (UNFCCC) focus on "common but differentiated responsibilities," recognizing, for instance, that while all countries have a responsibility to take action on climate change, the type and extent of action depends on the country's circumstances, including their respective capabilities and their social and economic conditions.[69]

Similarly, degrowth means a decrease in growth in those sectors where the most ecological damage is seen and highest volumes of unnecessary consumption are witnessed. Degrowth doesn't state that green growth isn't possible in other sectors. In fact, it acknowledges this should and must happen, such as in renewables or regenerative farming. It is a purposeful selection of different activities.[70]

Estimates suggest circular business models could present a

$700 billion

opportunity by 2030, making up

23%

of the global fashion market

Source: Ellen MacArthur Foundation

Understanding degrowth versus green growth

In his book *Less is More: How Degrowth Will Save the World*, Jason Hickel calls out examples of "socially less necessary" industries including single-use products and fast fashion—profitable to capital but ecologically destructive. He also talks about degrowth as:

> "distributing income and resources more fairly, liberating people from needless work, and investing in the public goods that people need to thrive." [71]

Fundamental to degrowth theory then is redesigning businesses based on traditional growth models. As Jennifer Wilkins writes in *The Degrowth Opportunity: Reshaping business for a needs-satisfying, resource-wise economy*:

> "The potential for a degrowth economy is a call of duty to board members and executives to profoundly reconsider business purpose and build strategies that are radically different, to enable society to flourish within social and ecological boundaries." [72]

She shows how degrowth should play out for business through reorienting toward social needs, only making things that are necessary, using resources wisely and regenerating their footprint, and equipping society to operate within social and planetary boundaries.[73] In its fullest sense, this extends to ideas such as cooperative ownership and a focus on localization, but it doesn't mean that businesses couldn't be profitable.

The question is whether that's achievable for all. Another paper looking at sufficiency-driven business models argues that every big transition sees winners and losers, and that while some large incumbent firms may fail, reduced material consumption will not mean the end of business. The paper notes:

> "What seems likely is that economies will continue to be growth-based at least for the foreseeable future, but growth will increasingly be driven by provision of services and premium-priced goods. This will emphasize delivery of higher perceived customer value and creating higher social value with reduced material consumption, hopefully with an increasing focus on delivering well-being and more meaningful value rather than consumerism and overconsumption." [74]

As the fashion, apparel, and textile industry increasingly looks to adopt such concepts, understanding the different concepts around growth—such as degrowth and green grown, as well as the other concepts detailed below—is important to consider, if only to ask whether a green growth strategy is going to achieve enough. Is it possible for absolute decoupling (and thus green growth) to not only be viable for this industry, but be achieved at a global scale, and maintained over time?

The circular economy is a crucial part of this discussion, with circular business models such as rental, repair, and resale pitched as an opportunity for the fashion, apparel, and textile industry to decouple revenue from production or the use of virgin resources.[75][76] Estimates suggest circular business models could present a USD $700 billion opportunity by 2030, making up 23% of the global fashion market.[77]

However, it is important that the reduction in environmental impacts brought by circularity doesn't likewise fuel a growth strategy that just leads to increased production, consumption, GHG emission and negative impacts,[78] as further explored in the *Barriers and challenges for adoption* section of this report, and that the transition is just and equitable, as explored in the *Ensuring a just transition* section.

As yet absolute decoupling within the textile industry, as with economies at large, is unproven. There are no case studies of businesses that have done it, though there are directional examples such as luxury group Kering committing to reducing absolute GHG emissions across its businesses—including scope 1, 2 and 3 emissions—by 40% by 2035.[79] Others including H&M Group[80] and Nike[81] have set similar goals.

Furthermore, to be meaningful, the industry at large would collectively need to move in such a direction. This suggests that while absolute decoupling is one pathway businesses must look to follow, it is unlikely to be enough alone, meaning it must be amid a more holistic approach to reimagining growth and considering the concepts of reduction and/or sufficiency, as explored further in the pathways for business in the *Pathways for business* section.

Section II

Reimagining Growth: Application to Fashion, Apparel, and Textiles

Redefining value: The need for alternative measures of success

Amid the turmoil of the COVID-19 pandemic, as fashion businesses around the world saw stores shuttered, warehouses closed, ships turned around, and factories put on pause, a moment was presented to rethink priorities. In spite of the devastating humanitarian fallout the virus wreaked on the fashion supply chain as canceled orders led to USD $40 billion in lost wages, an opportunity was presented not to return to business-as-usual.[82]

Klaus Schwab, founder and executive chairman of The World Economic Forum, said:

> "The pandemic represents a rare but narrow window of opportunity to reflect, reimagine, and reset our world to create a healthier, more equitable, and more prosperous future." [83]

Others pushed for the idea of "building back better"—with unity seen in the idea that the system as it stands is no longer working.[84] Within the fashion industry, there were multiple calls from different organizations to slow down fashion's "fast and unforgiving pace," as well as its volumes and timings of deliveries, and its discounts.[85] [86] [87]

Though it aligns, this wasn't only about environmental goals. A demand to keep up with the competitive pressure of constant newness meant fashion business boomed over the previous few decades on the one hand, while designers not only burnt out on the other, but continued to exploit workforces throughout the value chain to make any of this work for the market.[88] Luxury houses went from making two collections a year to eight, while ultra fast fashion retailers started turning around looks not within weeks, but days. At one point, reports revealed a fast fashion brand sitting on USD $4.3 billion of unsold inventory.[89] Meanwhile, a 50% sell-through rate is considered reasonable for a luxury business, resulting in one luxury group holding a reported USD $3.5 billion of stock considered no longer suitable for sale, and another group, USD $1.5 billion.[90]

As designer Marc Jacobs told Vogue:

> "We've done everything to such excess that there is no consumer for all of it… When you're just told to produce, to produce, to produce, it's like having a gun to your head and saying, you know, dance, monkey!" [91]

Yet fashion has been feeding its own demise. Conventional wisdom suggests inundating shoppers with a constant stream of product maintains attention and, consequently, share of wallet. As *New York Times* fashion editor, Vanessa Friedman, articulates: "That was, it turned out, a short-term way of thinking that reeked of insecurity, relying on freneticism and white noise. It may have boosted sales, but it also led to not only a glut of stuff but also an erosion of the value proposition. After all, if the company that made a garment didn't think it was worth hanging on to for more than a few weeks, why should the person who buys it?"[92]

Even Patagonia, an organization lauded for its leadership in the sustainability space, frequently acknowledges the same issue. "No matter how many sustainability initiatives we implement, the trends are showing they are insufficient," Rick Ridgeway, former VP of environmental affairs at the company, told *The Atlantic* in 2015.[93] "When you look at these long-term trends, you can't help but conclude that somehow, some way, consumption is going to change—and it's going to have to go down."

In a 2024 interview with *The Business of Fashion*, Patagonia CEO, Ryan Gellert, noted: "There's a tension around growth, and certainly around growth for growth's sake. The biggest magic trick in business [is figuring out how to] be impactful and ascendant while standing still." While he didn't suggest the company would shrink, he did say growth by virtue of selling more new product wasn't top of his agenda.[94]

Volans, a think tank and advisory firm led by author and entrepreneur John Elkington, published a report in 2019 called *Tomorrow's Capitalism Inquiry*, which showed that the challenge is larger than any one business alone. "[With sustainability, we're trying] to create change within businesses and across value chains without challenging contemporary capitalism's operating system. Companies may talk about purpose, shared value or stakeholder value—but they operate within markets that reward them principally for their financial performance," it explains.

> "When the risks are systemic and the failures are at a market level rather than an individual business level, a response that focuses exclusively on improving individual business performance will prove inadequate." [95]

Indeed, the central challenge is the system itself; with the economic core of that system (liberal-democratic society) being growth-oriented capitalist industry[96], and its goals and incentives that are not focused on protecting the planet or people working and living within it.[97] To reimagine growth should not therefore be underestimated—this is about a paradigm shift. Doing so will take addressing the very notion of value creation, and an overhaul of economics at large to make the impact viable.

Redefining value: The need for alternative measures of success

This means asking questions like, how can society develop and grow in quality (e.g., purpose, solidarity, empathy, wellness), rather than in quantity (e.g., reducing material consumption, looking to sufficiency), in a more equitable way?[98] This also means it will need multi-stakeholder engagement, not least from across governments and the investor community as well as with business leadership.

As sustainable business network and consultancy BSR explains in its report, *The Elephant in the Sustainability Room*:

> "No single group of actors, company, or government will have the capacity to navigate this complex transition. Policymakers, the financial sector, businesses, and citizens all are integral components in this collective pursuit, shaping both the regulatory web and the patterns of production and consumption that can reduce the social and environmental impacts related to today's economy." [99]

While businesses cannot achieve this transformation alone, they have an important role in contributing to the change. Advocating for global government action that will help design out the conflict mentioned between long-term sustainability and short-term commerciality[100] (or growth) is a critical element and one of the most important roles business leaders can play, as explored further in the *Pathways for business* section of this report.

Such conversations as to the role of policy to address this topic are beginning. In 2019, 11,000 scientists from 150 countries called on governments "to shift from pursuing GDP growth and affluence toward sustaining ecosystems and improving well-being."[101] In 2022, The Intergovernmental Panel on Climate Change (IPCC) acknowledged the need to "prioritize human well-being and the environment over economic growth."[102] Then in 2023, the European Parliament hosted a conference called Beyond Growth, inviting leading thinkers to share their views on what needs to be done.

"The first glimmer of hope is the very fact that we are here today at the European Parliament talking about the root cause of the polycrisis: the obsession with growth," said Sandrine Dixson-Declève, co-president of The Club of Rome, in a keynote address.

> "We need leadership from the EU to shift the economic system from one that is grounded in power, profit, and patriarchy to one that is anchored in people, planet, and prosperity." [103]

Meanwhile, a letter signed by 400 academics and civil society organizations released to accompany the conference, called on the European Parliament to disengage from the "socially and ecologically harmful growth competition and instead embrace a well-being cooperation."[104]

"In order to ensure the highest quality of life with the lowest footprint, we must completely change the goals and rules of the economic game," it read.

> "The current focus on quantitative growth [should] be replaced by the aim of thriving in a regenerative and distributive economy, one that delivers qualitative well-being by meeting the needs of all people within the means of the living planet."

Included within its asks are limits to raw material extraction with a binding material footprint reduction target, and nature protection and restoration measures for healthy and resilient soils, forests, marine, and other ecosystems. Further principles cover equality, well-being for all, and active democracy.

In 2024, UNEP and the International Science Council stated that a new global emphasis is needed on well-being metrics rather than pure economic growth in order to achieve the Sustainable Development Goals. But, and as explored further in the *Ensuring a just transition* section of this report, that this future must be "consultative, multilateral, cooperative, and integrate the voices of traditionally marginalized groups, including women, youth, local communities, and Indigenous Peoples."[105]

The burgeoning topic of reimagining growth in fashion, apparel, and textiles

The topic of reimagining growth has gained in momentum and coverage within the fashion, apparel, and textile industry over the past five years, ranging from academic papers to conference topics, policy positions, and more.

The *Earth Logic Fashion Action Research Plan*, a framework focused on putting the Earth before profit from Professors Kate Fletcher and Mathilda Tham, for instance, suggests the need for a 75-95% reduction in material consumption (the equivalent of a British citizen putting everything they own into a small rowing boat).[106] The University of Technology Sydney's report on a well-being wardrobe supports this, making the case for moving fashion beyond growth toward a system where human and ecological health come first,[107] while a paper in the *International Journal of Sustainable Fashion & Textiles* in 2023, called for "scaling down the production and consumption of products that are produced purely for profit such as clothing for planned obsolescence."[108]

The Or Foundation, a non-profit organization addressing fashion waste and its impacts on communities particularly in Ghana, calls for the industry to introduce reduction targets for new clothing of at least 40% over five years, balanced by the increase of reuse and remanufacture of existing materials.[109]

The Global Fashion Agenda's 2024 *Fashion CEO Agenda* featured "redefining growth" as one of five unlocks for net positive; promoting circular businesses as an alternative so that companies can "mitigate oversupply and excess inventory and reduce the environmental impacts associated with extracting new materials to make new products." It calls for a cap on finite resource use by establishing performance indicators that drive the reduction of resource consumption and promote alternative routes for revenue creation.[110]

The British Fashion Council's Institute of Positive Fashion has also acknowledged this topic, placing reducing the volume of new physical clothing as a key target outcome in its circular economy framework.[111] While it didn't set a specific target for production, it outlined that this should include consumers halving the number of items they buy annually. An update to its strategy in 2023 included a focus on helping to fuel "responsible growth."[112]

From the consumption angle, analysis by the Hot or Cool Institute shows, on average, high-income G20 countries need to reduce their per capita fashion consumption footprint by 60%.[113] This varies by market, and by income groups, however. For instance, the top 20% of earners in the United Kingdom would need to reduce by 83% to be compatible with the 1.5-degree target, Germany and Italy sit at 75%, while India on average is below the 2030 budget and would be able to increase its fashion consumption. The IPCC encourages the top 10% of income earners worldwide to limit consumption and explore the good life consistent with sustainable consumption.[114] A report from the Sustainable Fashion Consumption Network considered four possible scenarios for clothing consumption practice in 2040, exploring efficiency and sufficiency measures and what they might look like to align with sustainability goals.[115]

Speaking at the Textile Exchange conference in 2021, degrowth economist Jason Hickel referred to fashion, apparel, and textiles as a "textbook example of what is wrong with the economy," noting that to actively achieve its climate targets, the industry will need to scale down aggregate textile production. He called for producing garments that last longer, cutting advertising, and promoting reuse and exchange. He also suggested a binding sectoral agreement with a hard cap on physical outputs and resource use: a "Paris Agreement but for textiles."

But he caveated what that would look like:

> "If we were to scale down the throughput of fashion by say 80%, it doesn't mean we don't have access to fashion. We can still be creative and innovative, but just within the confines of limits, and to me that is actually more interesting."

Policymakers are also looking this way. In June 2023, the European Parliament adopted a report on the EU Textiles Strategy for Sustainable and Circular Textiles, increasing its ambition and adding tougher measures to reduce textile production and consumption. Its motion called on the European Commission to introduce measures that will enable a "paradigm shift in the fashion industry to end overproduction and unsustainable consumption, driving fast fashion to go out of fashion." Among other focuses on design, waste, social issues, and beyond, it requests the Commission proposes binding EU targets for 2030 to significantly reduce the EU's material and consumption footprints and bring them within planetary boundaries by 2050.[116]

The cost of inaction

What will happen if the fashion, apparel, and textile industry doesn't address the challenges of unchecked growth dependent on an ever increasing amount of new materials and products as part of its overarching sustainability strategy? Outside of the increasing detrimental impacts continued overproduction and overconsumption will have on people and the planet, there is significant risk attached to inaction, from large scale costs for businesses to threats over the long-term viability of companies at all stages of the value chain. Those who act earlier will be in the best position.

Investment firm BlackRock estimates that if business-as-usual continues, global economic output will decrease by nearly 25% by 2040, which is the equivalent of more than USD $21 trillion of the 2019 GDP.[117] Another study shows this could be as high as 50% by 2070 and suggests many climate-scenario models in financial services today are severely under-estimating the economic impact of climate change, in doing so creating a false sense of security.[118]

> "The laws of nature will demonstrate the economic limits of unsustainable business practices and these limits will translate into economic loss... The question must no longer be 'how much sustainability related activity can we afford?' and must instead be 'how do we accelerate, navigate and benefit from the transition, and secure our long-term business success?'." [119]

Source: Global Fashion Agenda and UNEP

The cost of inaction

Considerations for business include supply chain risks at the hands of increasing environmental disasters, growing policy interventions, and rising consumer demands:

Supply chain instability and resource depletion

Rising temperatures and intensified flooding could see export earnings from Bangladesh, Cambodia, Pakistan, and Vietnam alone slashed by USD $65 billion by 2030, according to a report from Cornell University's Global Labour Institute and investment firm Schroders.[122] These markets represent 18% of global apparel exports and employ 10.6 million workers. For those brands operating on competitive margins, with limited cushion for absorbing productivity burden or excess costs, such climate-related impacts could significantly affect operating profits. "In financial terms, the impact is significant enough for all parts of the industry to have a vested interest to address the issue," the report finds. Risk and higher costs similarly follow from resource depletion and the industry's overreliance on finite resources. Businesses should be mapping their vulnerabilities to such ecosystem degradation and instability across their supply chains, and acting to adapt to as well as mitigate such impacts. A proactive approach to reinventing business models will both minimize environmental footprints and risk exposure.[123]

Incoming policy

Costs for business are expected to increase in the near-term as legislation and regulation is stepped up for the industry for failure to adapt, including from meaningful penalties, taxes, extended producer responsibility fees, and beyond. Quotas and caps imposed on resource consumption are predicted to follow out of necessity over the longer-term, with textiles a first industry to be impacted.[124] Further to this is the need to disclose the financial risk that business operations are exposed to at the hands of climate change (as outlined above), which will impact which investors are willing to back.[125] Acting on reducing the industry's impacts at the hands of addressing its reliance on volumes of production and consumption should thus be presented as a value creation opportunity over the long-term.

Competitive and reputational risk

Increasing consumer demand for lower-impact solutions and service-based offerings presents a competitive risk for those not operating in the space of reimagining their business model relative to reducing traditional growth. Brands should be looking to capture the opportunities that lie in new markets and customer segments, such as those offered by the circular economy, setting themselves apart from competitors.[126] Further, those business models reliant on oversupply, rapid fashion cycles, and obsolescence should consider the reputational risks attached to growing awareness of their environmental and social impacts.

To effectively address the topic of excess production volumes and the challenge of revenue growth targets being at odds with sustainability goals, businesses should look to carry out individual cost of inaction studies so as to better understand their own exposure to such strategic and operational risks and impacts over both the short- and long-term, and scenario plan to explore possible outcomes accordingly. This can also help support the business case and secure buy-in to accelerate action.

Photo: Madeleine Brunnmeier

Section III

How to Define the Concept of “Reimagining Growth”

Challenges with the terminology

Keywords used in this report on reimagining growth have so far included: degrowth, green growth, responsible growth, circularity, overproduction, overconsumption, decoupling, sufficiency, excess, and more.

The variety included here is because there is not currently a single term that succinctly captures the vision needed for our industry. As explained in the *Harvard Business Review*: "By prioritizing social and ecological well-being over profits, degrowth does pose an intrinsic challenge to the current capitalist model, because it implies a societal move from excessive consumption and overproduction to reduction, redistribution, and the values of care. These ideas run in contrast to traditional market-first ideologies, so business leaders bristle at the concept."[127]

Vogue Business writes:

> "One of the key challenges is finding a way to talk about growth that doesn't alienate executives or demotivate individuals who see conversations that spiral into systems change as too far beyond their control." [128]

Alternative, more positive terms are often put forward as a result, such as "well-being economy," "regenerative economy," or "post-growth." Others including "sustainable growth" or "good growth" are also referred to, yet they are arguably variants of "green growth" and what its aims are. As already outlined in the *Understanding degrowth versus green growth* section of this report, degrowth and green growth have very different meanings. One cannot be used interchangeably for the other, nor should they be seen to mean the opposite to one another. Furthermore, green growth should not be considered strong enough alone to encapsulate what the industry should be aiming for.

In a survey run by Textile Exchange in June 2024, 65% of participants from the industry said they could not use the word "degrowth" internally in their organizations.[129] Reasons given included the fact it is simply seen as too negative, or too controversial, because it is believed to go against business interests and thus a board's statutory duties. "This concept is counter to all financial underpinnings of our business. We would not maintain nor attract investors with a degrowth strategy," one participant shared. Another added:

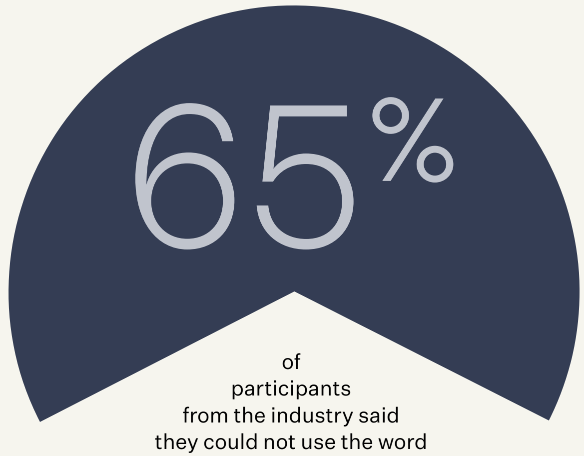
> "I would feel uncomfortable using it at a time when protecting the growth of the business is so important due to economic challenges. The word degrowth could be misconstrued and distract from the positive messages we would want associated with sustainability."

Others referred to the impact it would have on their personal reputation and credibility internally, with phrases used including: impractical dreamers, fools, non-commercial, ignorant, ideological, and in cuckoo-land. "One would not be taken seriously, nor invited for comment, let alone to attend key meetings," one respondent noted. Another: "Unfortunately [degrowth] has the ability to stop conversations before they even start."

It is this resistance piece that is key. It is not that stakeholders surveyed don't want to talk about the topic, it is more to do with how they go about it. "I would rather use terms that are solutions-focused. [It's about plans that] move us in the direction we want (using less resources in our business) and people [understanding] why they're important."

Other problematic terms highlighted in the survey included "slow growth," "rethinking capitalism," and "limits."

In a survey run in June 2024,



"degrowth"

internally in their organizations.

Source: Textile Exchange

Definitions of growth-related terms in scientific literature

To date, Textile Exchange has used "reimagining growth" to collectively refer to addressing the topic of excess production volumes and the challenge of revenue growth targets being at odds with sustainability targets. As outlined, there are many other words and phrases often used interchangeably within the industry when acknowledging this subject. At best this causes confusion, but at worst, it stalls progress on action. The next three pages define each of these terms and connected concepts as they relate to the topic.

Circular economy

A systems-oriented framework focused on decoupling economic activity from the consumption of finite resources, while designing waste out of the system. In a circular economy, products and materials are kept in circulation through processes like regeneration, maintenance, reuse, refurbishment, remanufacture, recycling, and composting.[130 131]

Decoupling

The process of increasing economic output while reducing negative environmental impacts. Decoupling can appear in two distinct forms:

- **Relative decoupling:** where the growth rate of the environmentally relevant parameter (e.g. resource use) is lower per unit of economic output (e.g. revenue), meaning environmental impact grows more slowly than revenue. However, because revenue continues to grow overall, the total environmental impact still increases, even if the impact per unit of output decreases.
- **Absolute decoupling:** where the growth rate of the environmentally relevant parameter (e.g. resource use) decreases, even while the growth rate of the economic parameter (e.g. revenue) increases. This means that economic growth continues without a corresponding increase in environmental impact, and overall environmental impact is reduced.[132 133]

Degrowth

A planned reduction of (e.g.) energy and resource use designed to bring the economy back into balance with the living world in a way that reduces inequality and improves human well-being.[134] Degrowth is not accidental and general, but chosen and selective.[135] Moreover, it is a concept that challenges the necessity of perpetual economic expansion for human prosperity[136] and, instead, puts forward a societal project centered on social health and ecological resilience.[137]

Doughnut economics

An economic model consisting of two concentric rings that form a shape that resembles a doughnut. The inner ring represents a social foundation, ensuring that no one lacks life's essentials; the outer ring represents an ecological ceiling to ensure that humanity doesn't collectively overshoot planetary boundaries protecting Earth's life-supporting systems. The space between those rings is the sweet spot: an ecologically safe and socially just society, led by a regenerative and distributive economy.[138]

Definitions of growth-related terms in scientific literature

Green growth

Fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies.[139] Within the broader framework of a green economy,[140 141 142] green growth supports the idea that economic expansion can coexist with reduced emissions and material demand (see: decoupling).[143]

Also referred to as: sustainable growth, good growth, responsible growth, slow growth.

Material efficiency

The optimized use of resources to reduce waste and environmental impact, while maximizing productivity and profitability.[144 145]

Overconsumption

Consumption that is a) beyond the physical and core social needs of an individual, b) primarily driven by peripheral social needs (e.g. personal image and identity), and c) inconsistent with all people on Earth having the same level of consumption while ensuring planetary sustainability.[146]

Overproduction

Excessive production; production in excess of demand.[147] In the context of the fashion, textile, and apparel industry, this term is expanded to denote the unbridled production of clothing and textiles that surpasses actual consumer need. This results in a surplus of goods, which may manifest as deadstock/unused fabric, unsold inventory, returned items, discarded items, or unused clothing stored in consumers' wardrobes.[148 149 150]

Oversupply

The industry's overstimulation of the market to increase levels of consumption (e.g. through marketing), and inability to accurately predict consumer demand. The result is supplying much more than what is needed or can be consumed,[151] which leads to economic inefficiencies and environmental concerns such as a surplus of products (e.g. unsold inventory, unused materials, and discarded items).[152]

Post-growth

A concept grounded in the assumption that extractive economies cannot grow infinitely on a planet with finite resources. Instead, post-growth advocates for a transformation in the composition and structure of economic activity by prioritizing social and environmental goals. In doing so, it aims for a holistic vision of progress that prioritizes human and planetary well-being. Post-growth does not prescribe a single method for achieving this; rather, it promotes synthesizing multiple approaches, including what is encapsulated by terms such as "degrowth," a "steady-state economy," and the "well-being economy."[153 154 155 156 157 158]

Regenerative economy

An economy that avoids harm by operating within planetary boundaries as well as actively working to restore and enhance natural systems. It is net positive in all aspects—climate, nature, society, and the economy. In a regenerative economy, nature's laws and patterns of systemic health, self-organization, and self-renewal are applied to socioeconomic systems. Some of the principles that govern the regenerative economy include empowered participation, local economies and communities, circularity and sufficiency, and cooperation.[159]

Definitions of growth-related terms in scientific literature

Slow fashion

An awareness and approach to fashion that carefully considers the processes and resources required to make clothing, and focuses on timeless, high-quality designs over trend-driven pieces destined for landfill after a few wears.[160 161 162] A counter suggestion to fast fashion.

Steady-state economy

An economy with a constant flow of throughput at a sustainable (low) level, with population and capital stock free to adjust to whatever size can be maintained by the constant throughput.[163] It is defined in biophysical terms by three quantities: constant flows, constant stocks, and sustainable scale. Steady-state economics also highlights that areas such as technological advancement and knowledge sharing can grow indefinitely.[164]

Sufficiency

A set of measures and daily practices that reduce consumption of energy, materials, land, and water—rather than merely improving efficiency—while delivering human well-being for all within planetary boundaries.[165]

Value creation

The process of increasing the economic worth and/or performance of a product or service through unique strategies and practices. Typically aimed at enticing investors, value creation can take many forms and traditionally targets enhancing customer experience, improving operational efficiency, and driving growth and profitability.[166 167 168]

Waste

Undesirable material that is disposed of after essential use or is damaged, of minor economic value, or otherwise cannot be utilized.[169] Waste is typically generated as a result of overproduction, oversupply, and overconsumption, and generates negative environmental and social impacts both upstream and downstream in a value chain.[170 171 172]

Waste that is reclaimed as secondary raw materials can be divided into two main categories:

- **Pre-consumer material:** material diverted from the waste stream during the manufacturing process. Excluded is the reutilization of materials such as rework, regrind, or scrap generated in a process and capable of being reclaimed within the same process that generated it.[173]
- **Post-consumer material:** generated by households or by commercial, industrial, and institutional facilities in their role as end-users of the product that can no longer be used for its intended purpose. This includes returns of materials from the distribution chain.[174]

Well-being economy

Measuring and promoting well-being rather than focusing solely on economic indicators like GDP. It relies on three principles:

1. restoring a harmonious relationship between society and nature,
2. ensuring a fair distribution of resources to address economic inequality, and
3. supporting healthy and resilient individuals and communities.[175 176]

Beyond the more subjective aspects of emotional well-being or happiness, however, well-being as an outcome should consider respect for all human rights being met as a baseline.[177]

The well-being economy can also act as an umbrella concept for several growth-alternative economic models, including degrowth, post-growth, and steady-state economics, which all follow the intention of a well-being economy.[178]

Textile Exchange's recommendations on terminology

Over three-quarters (77%) of participants in Textile Exchange's survey on terminology said having a shared language that the industry is aligned on to address the topic of production volumes and revenue growth targets relative to sustainability targets would be useful.[179] While Textile Exchange agrees on the importance of this, our review of the current terminology reveals that no single term clearly articulates the vision our industry needs.

Survey participants identified that this is relevant to get right for a wide range of stakeholder groups. Senior leadership teams including board members and C-suite executives—namely the CEO and CFO—were identified as the most crucial audiences, but other roles highlighted included operations, marketing, design, production, sourcing, buying, and beyond.

One participant noted:

> "Every cross-functional team across the business involved in making changes to reach these targets [needs] to hear the business case."

External stakeholders spanning policymakers, investors, and shareholders were also referenced, as well as suppliers, farmers, NGOs, and consumers.

The survey didn't however result in unity around one word or phrase that could be used. In fact, "degrowth" itself was still referenced by many as an option. But so were over 80 alternatives, proving how vast and varied the thinking is within this subject, as well as how limited the depth of understanding is regarding key differences between the meanings of each term. For instance, while green growth wasn't one suggested, "sustainable growth" or "responsible growth" received the most votes overall for use, demonstrating the caution participants have on the topic, and the desire to remain aligned with current business or growth-based thinking as a result. "Circular business models" and "rethinking value creation" were similarly highlighted as terms that would be deemed appropriate for internal use to encapsulate this topic.

To elevate the importance of reimagining growth as an essential strategy for the fashion, apparel, and textile industry to achieve its climate and nature targets, Textile Exchange proposes that the most critical step at this stage is aligning on the principles associated with this area of work, rather than on the terminology.

> No single term is perfect, and focusing too much on finding the right one risks becoming a distraction from the essential work that needs to start now.

That being said, the key principles we propose aligning around are primarily drawn from the "regenerative economy" and "post-growth" concepts, as explained in the definitions section. This is a vision of what the industry needs to work toward; centered around well-being, prosperity, and ensuring that businesses operate within planetary boundaries. We want to encourage the industry to explore new pathways and seize business opportunities that enable transformation, survival, and, ultimately, thriving.

What is clear is the urgent need for a shift in how business operates. While this may feel uncomfortable, Textile Exchange believes now is the time to have a serious discussion about how our industry must evolve if we are to have any chance of meeting the climate, nature, and human rights goals that must be met.

> We recognize that reducing resource extraction and dependence on new materials is a critical step in this process, alongside efforts to decouple through solutions such as circular business models.

To do so, new thinking about what success and value creation looks like will be crucial. Potential pathways for this are explored in the *Pathways for business* section of this report, as well as the challenges that will need to be addressed to do so. Finally, the *Conclusion and recommendations for next steps* section identifies recommendations and next steps for this work.

Section IV

A Fashion, Apparel, and Textile Industry That Has Reimagined Growth in Practice

Introduction

In the context of a regenerative economy and post-growth global future, moving beyond incrementalism and sustainability-as-usual in the industry will be essential to reduce our reliance on growth fueled by the ever increasing sale of new materials and products each year. As BSR outlines in *Figure 3*, credible and ambitious action to reconcile business with the boundaries of the planet is needed to move to a place of high transformation.

This section explores what this looks like in practice for the industry. It lays out the barriers, challenges, and gaps in knowledge or research that exist to be able to do so, as well as the potential pathways that would need to be considered.

In both instances, the ideas explored are not exhaustive lists, rather a starting place based on both existing literature and consultations carried out by Textile Exchange in 2023 and 2024.

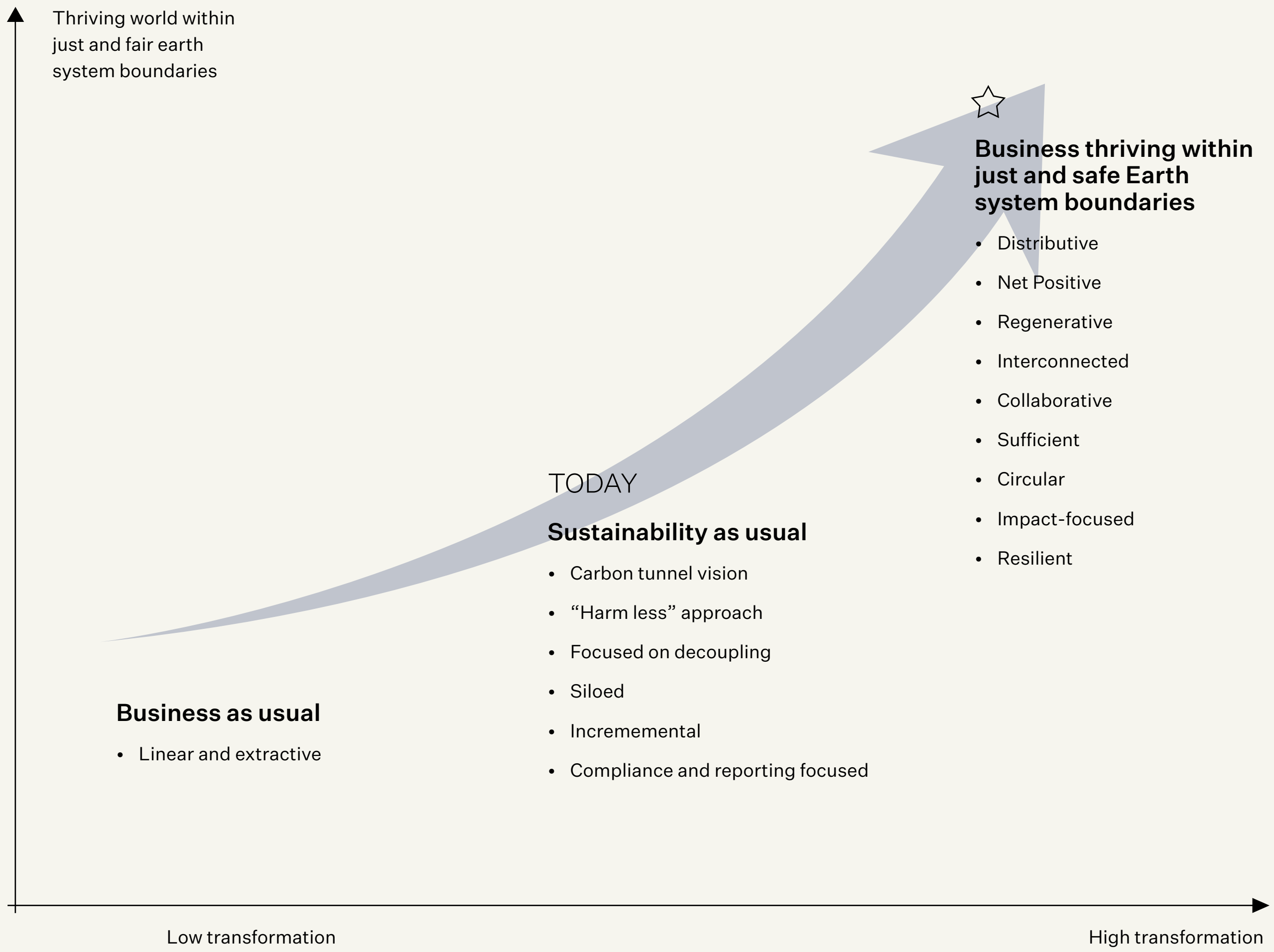


Figure 3: Moving toward alternative business models with greater potential for transformative change than today's incremental approaches.[180]

Source: BSR

Barriers and challenges for adoption

Implementing a future that moves beyond traditional growth models for the fashion, apparel, and textile industry will mean confronting significant barriers and challenges, from gaining top down buy-in, to the lack of enabling environment and the risk of significant trade-offs or unintended consequences.

The systems challenge

As outlined, the scale of change required to move away from a system rooted in mass production and resource extraction represents a paradigm shift. This transition cannot be achieved by a single brand or the industry alone. It will be particularly challenging for publicly listed companies, which often prioritize short-term shareholder returns and fear loss of competitiveness, creating immediate barriers to the long-term thinking required.[181 182] However, businesses should explore the roles they can play in driving and advocating for this shift—for example, by reducing dependency on new materials, decoupling growth from resource extraction, or lobbying policymakers accordingly—and then share best practices and learnings to help others follow suit.

Poor enabling environment at the policy level

The shifts required are significantly inhibited by a lack of supportive regulatory frameworks and insufficient infrastructure to implement new business models.[183 184] Current policy frameworks and regulations lag behind innovations in circular business models, which require incentives and public infrastructure that are not yet widely available. Additionally, there is little global policy alignment and few trade agreements supporting sustainable supply chains, creating a competitive disadvantage for leading companies while others continue to benefit from cheaper, faster, higher-volume, and higher-impact models. Addressing these gaps will be critical to ensuring that companies are not penalized for pursuing sustainability goals (see *The need for policy support* section for a deeper dive on this topic).

Unintended negative consequences

Reimagining growth in the industry will inevitably impact people throughout the value chain, particularly marginalized communities and vulnerable populations, and there is insufficient experience and evidence on how to mitigate these concerns effectively. Efforts must account for potential negative impacts and unintended consequences in order to ensure a just transition, with workers' voices integrated from the outset. See the *Ensuring a just transition* section for a deeper exploration of this topic.

Resistance to change

Even if senior executives recognize the need for change, they are often operating within a system that doesn't support it. Current business models, internal structures, and competitive practices are built around short-termism and maintaining the status quo, making it difficult to implement new approaches that challenge traditional growth paradigms. Fundamentally, the market punishes those who take on the cost of transformation while competitors profit from unsustainable practices.[185] Executives accordingly face barriers such as shareholder pressure, short-term financial targets, and established processes that resist disruption, creating a situation in which sustainability managers understand the need for transformation but struggle to drive progress without the systemic changes that enable and support executive leadership in making long-term decisions.

Barriers and challenges for adoption

Incentive structures

Measures of success for stakeholders throughout the value chain—not just senior leadership—are tightly aligned with the current business-as-usual model, which prioritizes the continual production and sale of new items as quickly as possible over time. Competition and business success at every level of the market is based on who can sell the most, reinforcing this approach. Within this paradigm, expecting individual job roles to shift, such as asking a marketer to stop promoting overconsumption, directly conflicts with how they are evaluated and, in many cases, how they are remunerated.[186] This misalignment between sustainability goals and performance incentives creates a significant barrier to change.

Knowledge and skills gap

This type of systems shift requires new skills, knowledge, and ways of thinking that are not currently embedded in many organizations. For example, workers, managers, and designers in the fashion industry may lack the training or experience required to advocate for and execute new approaches to materials sourcing or production volumes. As detailed in the *Ensuring a just transition* section of this report which looks at a just transition, there is also a significant knowledge and skills gap with workers and communities throughout the value chain. The concept of reimagining growth in the textile industry is still fairly nascent, and education and training opportunities are minimal.

Financing models

Transformative business models will require significant capital (USD $20 billion to $30 billion of financing is needed per year to develop and commercialize disruptive solutions and circular business models for textiles),[187] yet companies may be unwilling to commit long-term investment that impacts immediate financial performance.[188] To support this transition, there needs to be a shift toward impact-based financial metrics that integrate environmental and social impacts into company valuations. Policy support is necessary so that impact investors and financial institutions adopt triple bottom line considerations (profit, people, planet) to drive wider stakeholder buy-in and enable long-term value creation over short-term returns.

Complexity of reduction

Companies must recognize that the current growth model—estimated at 4% for the industry collectively in 2024,[189] though markedly higher for some individual companies—driven by extracting increasing amounts of new materials to sell more new products, is unsustainable and undermines the ability to meet global climate and nature goals. However, determining how businesses should adjust their production and consumption patterns is complex and requires a collective, industry-wide approach. To ensure fairness, strategies must account for the diverse markets in which companies operate, i.e. sustainable development in developing countries versus reductions in developed countries, all the while ensuring clothing also remains accessible for all parts of society in any given market. Establishing a clear framework around reduction, with targets and standards determined specifically for the textile industry aligned to existing methodologies and grounded in scientific and ethical processes, will be crucial to guide this transition.

Non-disclosure

Currently, there is no comprehensive evidence base for the volume of units produced across the fashion and textile industry, despite growing calls for mandatory disclosure.[190] Textile Exchange's Materials Benchmark is one of the few existing platforms where companies voluntarily report material volumes, providing valuable insight into resource use; however, this reporting focuses on material volume rather than on the number of product units produced. To create a more accurate picture of the industry's environmental impact, it is critical that companies not only continue reporting material volumes, but also start tracking and disclosing unit production volumes. This dual approach will be essential for setting baselines and developing effective strategies to manage overproduction and its related environmental impact. Further transparency around how much in the way of used textiles end up in landfill versus being recycled or repurposed would also be of benefit.

Supply chain visibility

The complexity of globalized supply chains presents a significant barrier to a regenerative economy. Many fashion, apparel, and textile brands do not have full visibility of their supply chains, particularly at the lower tiers where raw materials are sourced. Reimagining growth will require transparent, collaborative supply chains, but existing logistical, technical, and financial challenges make this transition difficult.

Barriers and challenges for adoption

The rebound effect

With circular business models believed to be a significant part of the solution, how do such offerings ensure they don't otherwise just feed further consumption growth (see the Jevons Paradox in the *Understanding degrowth versus green growth* section)? Further, given the additional resources required for quality and longevity, it is crucial to ensure that broader efforts toward circularity don't inadvertently lead to higher environmental impacts if the model continues to focus on overproduction.[191]

Narrow focus on recycling

While mainstreaming fiber-to-fiber recycling and phasing out waste plastic bottles as inputs to recycled synthetics[192] is a pivotal part of what is required, it should not be viewed as the only solution.[193] Significant investment will be needed in collection, sorting, and technology to facilitate recycling, but equally important is the need to support the transformation required for the sourcing of new natural materials, helping producers transition to regenerative farming, ranching, and forestry systems. Both approaches must work in tandem, alongside a focus on addressing the overall challenges of overproduction and overconsumption, to drive meaningful, systemic change.

Lack of case studies

Having examples of businesses doing this successfully was one of the biggest requests in the consultation for this landscape analysis report, yet there are very few case studies available to date. We have found that businesses are generally wary of allocating resources toward this sort of transformation without clear evidence of success, and those who are experimenting with it are hesitant to share their approaches and learnings in a public forum.[194]

Consumer behavior

Just as there is resistance to change within senior leadership, consumers also resist shifting away from mass consumption and throwaway culture. While the responsibility shouldn't fall solely on individuals, large-scale consumer awareness, education, and adoption are necessary. Promotional activities must be adjusted to champion positive alternatives alongside the implementation of meaningful business model innovation,[195] with price sensitivity considered as another layer of complexity. Global and regional insights into consumer attitudes toward sustainability, along with behavior change research, are essential.

Photo: Madeleine Brunnmeier

Pathways for business

Within the context of a regenerative economy and post-growth global future, different pathways will need to be explored and adopted by businesses to rethink growth within the fashion, apparel, and textile industry. It should be noted that there is no one solution for doing so; no single example of the suggestions that follow will individually or independently achieve the change required, though many of them are interdependent to move toward reimagining growth. Some of them will need to happen to subsequently enable others to then take place; some will never be possible for certain types of organizations; and others will need to happen simultaneously and in different ways depending on context.

To this end, this section offers a set of considerations for businesses as part of a route forward for the industry to address the topic of production volumes and revenue growth targets relative to sustainability targets. Case studies exploring some of these pathways in practice can be seen in the *Case studies* section.

Photo: Anass Ouaziz

Pathways for business

Capping use of finite resources

Limits on resource consumption in line with planetary boundaries will help support reduction in the number of new items produced in the industry. Instead of new virgin fossil-based resources, the focus should be on sustainably-sourced renewable (e.g. regenerative or organic) or closed-loop recycled resources,[196] feeding into products that are designed for longevity and circularity. Transparency should be embedded across the entire life cycle of products, with traceability from farm to end of life, to ensure the sustainable sourcing of raw materials.

Producing better

A focus on quality over quantity of new raw materials and products produced should be the priority, with their true value reflected in what is both paid (e.g. through a living wage to actors throughout the value chain) and charged (e.g. in the price of the products to consumers) for them. In doing so, products will be more suited to increased utilization and being kept in circulation for longer, with consumers more emotionally attuned to the idea of their longevity (slow fashion or emotional durability). Durability or how long a product will last in a literal sense should not be the primary aim, but rather how often an item is used and for what length of time (increased utility) with the aim of displacing the need or desire for more otherwise and thus reducing disposal and waste.[197 198]

Reducing overproduction

Advanced technologies and machine learning should be employed to eliminate wasteful production methods, better model and forecast demand to limit additional volumes and markdowns, move to on-demand and localized sourcing and production models, and reduce return rates.[199] This is about efficiencies to reduce waste embedded throughout the system, which comes with a clear business case to do so. But it is also about addressing and mitigating the model of deliberate excess, produced to both help with economies of scale and because it is deemed cheaper than missing a sale. Brands should also move to a place of reporting on their total unit volumes of production, unsold items, and returns.

Scaling circular business models

Revenue opportunities should be explored through circular business models over new product creation reliant on finite resources, maximizing the value created from every item and reducing total material throughput (an example of absolute decoupling). This will mean redesigning business structures to provide access to services such as repair, remaking, rental, resale, and responsible take-back schemes rather than those incentivizing increased purchases. Doing so will also require investment in, for instance, infrastructure and reverse logistics, while caution is taken to avoid unintended negative consequences (both environmental and social), as well as the rebound effect that may follow if services simultaneously encourage further consumption, as outlined in the *Barriers and challenges for adoption* section. Greater profitability can be achieved when circular models are combined with pathways like producing fewer, higher-quality items and aligning marketing practices.[200]

Promoting equity and respect for human rights

The industry is far from meeting its responsibility to respect human rights as outlined by the UN Guiding Principles on Business and Human Rights,[201] or adhering to fundamental principles and rights at work as set-out by the International Labour Organization's core conventions.[202] Decent work, paying a living wage, and respecting land rights throughout the value chain are all crucial, but this should extend to ensuring equitable wealth distribution systems are in place to improve livelihoods and ensure global and intergenerational equality.[203] Aligned with Kate Raworth's Doughnut Economics, a social foundation should be embedded in all efforts to drive such transformative change.[204] Workers' and community rights are human rights and need to be at the center of any effort to reimagine growth in this industry. This also involves integrating rightsholder voices into decision-making processes at all levels to ensure fairness. A just transition where reduction, localization, and circular business models are concerned is paramount, as outlined in the *Barriers and challenges for adoption* section and explored further in the *Ensuring a just transition* section. A holistic approach to justice should also extend to incorporate animal welfare.

Aligning marketing

Messages or sales tactics promoting overconsumption and obsolescence should be eliminated, and budgets redirected to lower impact and circular solutions. This is about recognizing the power of fashion's marketing engine[205] and the issue of oversupply and overselling in the industry,[206] whereby consumers are being encouraged to buy (and then dispose of) significantly higher quantities than they need, even within models that adopt the aforementioned production efficiencies and create little

Pathways for business

pre-consumer waste. Incentives could be developed for brands that engage in responsible marketing practices, helping redefine what "successful" marketing looks like. It should be noted that this pathway particularly applies to developed countries, recognizing that some regions and demographics still need to meet basic needs. At large, aligning marketing and communication efforts will support consumer awareness, education and engagement with alternative choices, normalize and social proof sustainable behavior, inspire new value sets, and shift aspirations.[207] The UNEP and UN Climate Change Sustainable Fashion Communication Playbook should be used as a reference for best practice.[208]

Introducing new measures of success and value creation

A future-oriented fashion, apparel, and textile industry will recalibrate success metrics to prioritize well-being and prosperity for all stakeholder groups over the long-term, considering both a social foundation and an ecological ceiling,[209] rather than only financial measures or obligation to shareholders. Businesses should set targets to signal this shift, with performance indicators and incentives for employees and senior leadership aligning toward both sustainability and the circular economy.[210] Incorporating these new metrics into a company's strategy will ensure alignment from top to bottom. For instance, bonuses for executives could be linked directly to environmental impact reduction targets, or more broadly the Sustainable Development Goals. Clear metrics to measure and report progress in both qualitative and quantitative terms will be critical.[211]

Integrating finance

Financial actors will need to play a pivotal role in moving to a future industry that appropriately balances environmental, social, and financial outcomes. Internally, this is about a less siloed approach to profit and loss—taking an expanded accounting approach to consider the wider costs and benefits from an environmental and social perspective of such change. This should also take into account the cost of inaction, as outlined in *The cost of inaction* section of this report. Further, it's about investment into shared infrastructure for the circular economy. Meanwhile, from an external perspective, it's also about the need for the finance sector to de-risk investments and support promoting and scaling new business models as well as those innovating in reducing overproduction and establishing responsible purchasing practices, ensuring they're not burdening suppliers with debt in order to hit targets.[212] [213] [214] Blended finance models, combining public and private capital, could help de-risk investments and encourage systemic change. This should include phasing out financing for unsustainable practices, such as extensive use of virgin fossil-based resources, business models based on rapid production cycles, oversupply, low-quality garments, and planned obsolescence.[215] It is also about the investment community similarly moving away from short-term thinking toward longer-term and broader measures of success, which will need to be supported by an enabling policy environment. As Triodos Bank, the first bank to publicly support the call for a post-growth transition, explains, it is about "making money work for positive change."[216]

Shifting to alternative ownership and governance models

Different forms of ownership structure and governance should be adopted. This would mean considering setups such as co-operatives, social enterprises, and non-profit status, as well as reinvesting profits into the value chain on things like reducing environmental impacts. Governance structures should be in service of purpose and innovative in design—such as to be democratic, inclusive, collaborative, decentralized, networked, and adaptive.[217] Examples of successful alternative ownership models from other industries could serve as useful inspiration for fashion, apparel, and textile brands to follow.

Corporate advocacy

The need for policy support section of this report explains the crucial role that ambitious government action must play in order to support, and in many cases, facilitate the aforementioned pathways. This will not be achieved, however, without a critical mass of businesses and business leaders both demanding and supporting policy that will facilitate sustainability and a market-level transition. This is critical to ensuring the level playing field necessary to achieve the paradigm shift required, ultimately enabling the resiliency of businesses and the industry at large. Importantly, this engagement includes educating policymakers about the realities of the industry and its supply chains, ensuring that legislation strikes the right balance between aspirational and realistic so as to drive real change. Corporate advocacy needs to happen just as strongly as those fighting to resist it or protect their short-term interests, ensuring those organizations doing so are scrutinized and challenged.[218]

Ensuring a just transition

As outlined in the *Background and the big picture* and *Barriers and challenges for adoption* sections of this report, reimagining growth in the textile industry must include supporting social justice and protecting the rights, livelihoods, and well-being of people—including farmers, producers, workers, and communities across the value chain and throughout the life cycle of products (including end of life with waste collectors, sorters, market traders, and beyond)—so as to leave no one behind. This means mitigating any potential or actual negative impacts or unintended consequences on people to achieve a just transition that ensures not only environmental impact reduction but also decent work for all, social inclusion, and poverty elimination.[219 220] This approach should underpin any work on the pathways outlined in the *Pathways for business* section as well as the recommendations set out in *Conclusion and recommendations for next steps*.

There is a clear contradiction at play between environmental movements calling for reduction, and the social justice or human rights movements that highlight the consequences of the millions of job losses this could lead to, particularly for those in developing countries.

> Care must be taken to ensure that any actions taken or measures implemented to reduce environmental impacts do not further harm the rights and livelihoods of producers, workers, and communities in the value chain.[221]

The future of the industry must therefore address these issues by preemptively addressing the potential negative impacts, inequities, or losses from its interventions.[222] Included in this are support measures such as reskilling or upskilling workers (and wider stakeholders such as farmers and producers) displaced by reduction or localization, financial support for unavoidable unintended consequences, implementation of redistributive wealth measures, and enabling freedom of association and collective bargaining.[223 224 225 226] Responsible disengagement guidelines should also be followed for those adapting their value chain partners so that impacts to people are prevented and mitigated.[227 228] For instance, providing sufficient notice when terminating supplier or producer relationships.

Today, 96% of the world's largest fashion brands haven't made a public commitment to a just transition strategy, and only 4% disclose their efforts to retain and re- and/or upskill workers whose jobs are at risk, according to Fashion Revolution.[229]

Research by BSR on the impacts of a circular fashion economy on value chain workers shows there is a strong risk of repeating the same pattern of poor working conditions in circular roles; there is a skills and training gap, and skilling efforts are presently insufficient; and that the transition will take place amid a backdrop of growing precarity and economic inequality throughout the global fashion system.[230] This will unevenly affect women and other already marginalized and vulnerable groups, including Indigenous Peoples. It suggests this is a critical opportunity to deliberately design a better future.

Indeed, a just transition shouldn't be seen as just avoiding negative consequences. Beyond the risks, there are components of a just transition that could provide significant opportunities for impacted communities if it is done in a way that enables benefits, while also mitigating climate risks and increasing climate resilience (as outlined in *The cost of inaction* section of this report).

Ensuring a just transition

Further, reducing the growth that comes from certain types of business models in the industry, such as those built on exploitation and significant human rights abuses, should also be seen as a positive. While globalization promised to lift many out of poverty through job creation, the reality is that the industry is systematically built on poverty wages.

> Opening up opportunities for new roles in higher value green sectors (not necessarily still within the fashion, apparel, and textile industry), or indeed within sustainable and circular fashion, will be highly preferable.

In her 2024 *Regenerative Fashion Futures: Post-growth Textile & Fashion Report*, Safia Minney points to regenerative approaches as the positive underpinning practices that drive a just transition toward a society that is aligned with planetary boundaries and agnostic to economic growth. She spotlights opportunities in using low-impact materials; a commitment to looking after water, soil, and waste; a commitment to using renewable energy wherever possible; and prioritizing communities, living incomes, welfare, and gender equality. She calls for a post-growth system, where everyone benefits.[231]

Recognition should also be given to the fact that the need to reduce volumes, or cap resource extraction, is largely the result of the "cumulative historical consumption of high-income countries," as BSR refers to it.[232] Whereas, low-income countries may need to continue seeing growth in order to meet basic human needs, as explored in the *Understanding degrowth versus green growth* section of this report.[233]

If applying it to fashion consumption as an example, across the G20, India is the country with the lowest per capita fashion consumption footprint. More than 175 million people (around 14% of the total population) live below the international poverty line.[234] Yet it is also an economy where fashion consumption levels and lifestyles built around consumption are growing due to both population size and rapid economic development. India is expected to become the fourth largest economy in 2025, growing at 7% per year, outpacing all other economies, and putting it on track to become the world's third-largest consumer market by 2027.[235] Further, India's Ministry of Textiles has ambitious targets to scale its textile industry, aiming for USD $600 billion in exports and a domestic market worth USD $1.8 trillion by 2047, up from USD $44 billion and USD $110 billion, respectively, in 2022. It is expecting this to be fueled by the acceleration of fast fashion and a booming e-commerce sector.[236]

There is deep complexity to unpack here when considering and shaping strategies to reimagine growth in the textile industry. When developed countries have typically benefitted for so long from the cheap, fast labor of sourcing and manufacturing countries, how can it impose limits on such nations just as they are arriving at the same perceived luxuries—both in terms of economic growth and the literal consumption of more fashion and textiles? What will be important is that developing nations can still enjoy the benefits of growth, but in a way that is more sustainable and equitable.

Critical within this on all fronts, is that actors in developing countries, and particularly the voices of traditionally marginalized groups and communities, are not only present in the work to move toward a more equitable future, but helping to direct it. It should be consultative, multilateral and cooperative,[237] acknowledging those who are most likely to be affected by it, and ensuring solutions are culturally and regionally appropriate.

Karaosman et al. writes:

> "Giving agency back to people at various supply chain levels is vital while, simultaneously, improving the well-being of the planet and society... Supply chains [are] dynamic systems in which the role of people and tacit knowledge, embedded in their context, are vital for transformation." [238]

Where they are active and effective, trade unions should play a key role in this process to represent the needs and interests of workers in unionized contexts. Where they aren't, the industry should ensure the rightsholders' voices are represented by other legitimate means or other key actors they are working closely with on the ground.

As Kalpona Akter, founder and executive director of the Bangladesh Centre for Workers Solidarity (BCWS), said:

> "It should not be a top down approach. It should be bottom-up, you need to hear us. You need to know how we will be impacted." [239]

The need for policy support

Many of the suggested pathways will not be possible, nor succeed, without long-term government commitments and an enabling policy environment in place to support them, especially when it comes to directing financial resources, incentivizing and supporting new business models, and supporting consumers to make better choices. It will be crucial for consensus from countries to support a move toward this, and for countries to come together to ensure the enabling conditions are in place globally.

> Some of this is already underway in certain jurisdictions, but more is required so as to reward action and penalize those who resist change, driving all businesses to act. [240]

While there remains an opportunity for a dedicated paper exploring what specific instruments would need to be employed for a post-growth future, the relevant existing literature puts forward a range of recommendations, many of which have already been referenced throughout this landscape analysis.

A non-exhaustive list of suggestions includes:

- A moratorium on extraction or levies on finite resource consumption, as well as removal of fossil fuel subsidies
- Pricing externalities, including but not limited to pollution, carbon emissions, and biodiversity loss
- Extended Producer Responsibility schemes with eco-modulated fees and incentive structures
- Targeted Producer Responsibility schemes that mandate product labels showing date of manufacture and apply fees once items enter the waste stream dependent on lifespan
- Incentives on environmental stewardship, sustainable practices, and circular business models and services
- Recycling quotas
- Eliminating trade policy (or trade-related) barriers to the circular economy
- Mandated disclosure on volumes of units produced as well as numbers of unsold and returned goods
- Bans on planned obsolescence
- Bans on the destruction of unsold and returned goods
- Alignment on definitions, e.g. what is eligible for recycled content
- Measures to integrate textiles as part of municipal waste management regulations
- Regulating exports of waste
- Subsidies for repairs
- Bans on aggressive and false advertising and restrictions on certain sales tactics
- Anti-greenwashing and consumer protection laws related to environmental claims
- Influencer and sponsorship regulations
- Frameworks for consumer product claims
- Funding programs for circular business model startups and innovators
- Green financing options and subsidies for sustainable businesses
- Circular infrastructure investment
- Mandated living wages for workers as well as social and labor protections
- Mandated disclosures of how sustainability performance influences executive pay
- Bans on unfair trading practices
- Support the work of trade unions and workers' rights to form and join trade unions and to freely associate and collectively bargain
- Scaling human rights due diligence regulation
- Well-being indicators introduced as determinants of national performance over GDP

As BSR outlines, policymakers can play a:

> "critical role in creating a conducive environment for businesses to operate within planetary boundaries by implementing legal frameworks that incentivize virtuous practices while penalizing harmful ones, thereby creating the best conditions for alternative business models to thrive." [241]

However, the urgency of the crises means we cannot wait for these to be in place, meaning voluntary action is crucial in the meantime. Simultaneously, the industry must also play an important role in helping to push for ambitious policy that can help level the playing field for business and shift the market at large. As mentioned in the *Pathways for business* section, corporate advocacy is a crucial element for progress.

As with business, governments and multilateral organizations must also ensure a just transition, as outlined in the *Ensuring a just transition* section, for instance, by carefully considering potential social and economic impacts of reduced production and consumption within or beyond their own borders, so as not to leave anyone behind.[242] A coordinated global policy approach will be required to ensure there are no disproportionate burdens or further unintended consequences.

Section V

Conclusion and Recommendations for Next Steps

Conclusion and recommendations for next steps

This landscape analysis report presents the need for urgent, systemic changes backed by ambitious government action in how the fashion, apparel, and textile industry operates. Moving beyond incremental sustainability efforts and fundamentally redefining value creation—prioritizing environmental and social sustainability over the pursuit of perpetual growth—is crucial to the climate, nature, and human rights goals before us. At the heart of this must be a focus on reducing virgin resource extraction and overall dependence on an ever-increasing amount of new materials, instead prioritizing regenerative economy and post-growth principles.

> Addressing the growth imperative should be seen as not only necessary for the future of the planet and its people, but also for the survival of the fashion, apparel, and textile industry itself.

Where the pathways of this report are designed as considerations for businesses to take forward to achieve this, this section outlines some collective recommendations and next steps for the industry at large. These should be seen as actions that will help facilitate a post-growth industry and that would ensure a just transition in doing so.

RECOMMENDATION 1

Multi stakeholder dialogue and action

Further discourse and consultation is needed on this topic with stakeholders from across the value chain and wider related actors (e.g. investors) to explore and action the barriers, challenges, and pathways. Cross-sectoral collaboration so as to learn from other industries may also be considered. During the consultations held by Textile Exchange on the topic of reimagining growth in 2023, stakeholders suggested that while Textile Exchange should play a key role in this work, the breadth and scope of what it encompasses means it should not do so alone. Collaboration across NGOs, intergovernmental organizations, and other relevant stakeholders will be critical, as achieving a post-growth textile industry isn't something any brand or organization can do individually. Further, having decision-makers and senior executives involved in such convenings or dialogues is critical, as is ensuring representation and inclusivity in the conversations, as highlighted in the *Ensuring a just transition* section of this report on a just transition, centering the voices of workers, especially from developing countries and from marginalized communities.

Photo: Madeleine Brunnmeier

Conclusion and recommendations for next steps

RECOMMENDATION 2

Reduction targets

In order to set resource limits or define how much less businesses should produce, there is a need to work toward setting shared, measurable growth or volume reduction targets across the industry specifically, recognizing the differences in what may be needed for different material types, as well as to create a roadmap as to what such a transition can look like. These should be aligned to existing methodologies and grounded in scientific and ethical processes. Again, they will be most robust when developed through multi-stakeholder input and dialogue. This should happen in parallel to immediate reduction efforts from the industry and not at the expense of forward motion while such targets are established. Mechanisms for monitoring and evaluating progress, as well as ensuring accountability, will also be important.

RECOMMENDATION 3

Research

There are some clear data gaps to be filled to help support the transition to a regenerative economy and post-growth industry. For instance, deeper knowledge on the economic implications and repercussions of this shift, as well as actions to be taken, especially around reduction, so as to mitigate and avoid negative unintended consequences, would help ensure a just transition, and enable equality and respect for the human rights of producers, workers, and communities. A global study on consumer attitudes to map consumption patterns and behaviors by countries/ regions, digging into cultural differences and readiness states for adoption of sustainable and circular practices, as well as how to incentivize/nudge them, could also support increased understanding for new business models.

RECOMMENDATION 4

Policy paper

There is a fundamental need for policy to support the transition to post-growth, addressing particularly the challenges of overproduction and overconsumption in the textile industry. This is outlined in more detail in *The need for policy support* section of this report with ideas of some of the instruments this could include. A dedicated paper based on consultation, including with policymakers, exploring these in more detail would be of further value. This should outline what could be employed at a domestic, regional, and international level, and how it will impact the industry, as well as some of the policies already being introduced for textiles (their values and their limitations), in order to inform, guide, and build capacity for policymakers. To ensure focus is at a systems change level, further research should also be undertaken to explore policies that have been employed for other sectors through periods of transition, especially those that resulted in job losses and reskilling needs.

Photo: Madeleine Brunnmeier

Section VI

Case Studies

Case studies

Eileen Fisher

Eileen Fisher CEO Lisa Williams has publicly talked about reducing the brand's production volumes. "We're being thoughtful and methodical about how we're designing future collections to reduce the number of pieces we manufacture. We're reducing the number of fabrics we're using. And every time one of our designers comes up with a new style, we have a conversation about whether we really need it," she told *Fast Company*.[243] The company is now focused on how circularity can contribute to the bottom line so as to allow it to further reduce its number of new garments.

Ellen MacArthur Foundation

In May 2024, the Ellen MacArthur Foundation announced it is working with eight brands on The Fashion ReModel project to scale up circular business models while curbing the production and consumption of new materials.[244] The aim is to identify solutions and unlock barriers in order to decouple revenue from production. Arc'teryx, Primark, Reformation, Zalando, and H&M Group's ARKET, COS, and Weekday have each set (undisclosed) revenue percentage targets in order to work toward making circular business models the norm.

Photo: Agnese Morganti

Case studies

Houdini Sportswear

Swedish outdoor brand Houdini Sportswear is committed to both addressing volumes and making circular business models accessible to more people. Its long-standing Live Large With Less initiative sees it encouraging its customers to live their best lives with only a 10-piece wardrobe. It is also looking at value creation in new ways: It was the first company to execute a Planetary Boundary Assessment at a company scale,[245] with specific findings focused on having a long-term perspective, having a holistic view on impact (including volumes produced), transitioning to circular products and material flows, and designing a relational business model.[246]

House of Hackney

In a bid to hold itself to a higher account, luxury interiors brand House of Hackney restructured its corporate governance in 2023, appointing Mother Nature and Future Generations to its board of directors. "We are living beyond our planetary boundaries; infinite growth on a finite planet is not possible, and in order to try to stabilize our precious ecosystems, on which we are dependent for our own existence, we need to listen to Nature, and we have a duty to do so," the company explains.[247]

Hiut Denim

In March 2024, Hiut Denim announced it was looking for 30 "believers" to invest in its new "no-growth business model." It will limit its production of jeans to 10,011 pairs per year, paying back the loan it takes over a 10-year period, the 11th year for interest. The cash generated would enable the brand to continue to innovate on the product—and license successful results—while the concept would help generate demand, create waitlists, and shape the influence the business has in the space to drive change.[248]

Patagonia

In 2023, Patagonia founder Yvon Chouinard and his family donated all of their shares (worth circa USD $3 billion) to a newly-created non-profit and charitable trust. Central to this move is that every dollar not reinvested back into Patagonia is distributed as dividends to protect the environment and fight climate change (circa USD $50 million in 2022), making Earth its only shareholder. This focus on philanthropy isn't new to the business; it had previously donated more than USD $200 million over the years through its One Percent for the Planet program. In 2024, it also launched a documentary called *The Shitthropocene*, referred to as an anthropological exploration of our obsession with buying stuff, or indeed of the history of consumption. In its own words it is a "journey from the cellular-level origins of our lack of impulse control to the ways our central nervous systems have been hacked in the name of capitalism. It is also about how we might begin to save ourselves from ourselves."

SMEs producing less

There are a growing number of brands exploring the idea of "less" across the fashion industry, albeit most of them small to medium enterprises and privately owned. Emerging designers such as Di Petsa and Collina Strada are pursuing small-scale, custom operations, for instance, while Vivienne Westwood is reported to have reduced the size of its ready-to-wear business by 3%, bags by 55%, and shoes by 58%.[249] As its global brand director, Christopher Di Pietro, explained: "We had to walk the talk of our 'Buy less, choose well, make it last' mantra. We can sell less, but sell better, and still be profitable." Accessories brand, Wildish, focuses on limits to production, stating: "We only make 25 bags a week. That's our capacity. We have no intention of exponential growth."[250] Meanwhile, in a bid to curb overconsumption, US retailer Toward lets customers limit themselves to 12 orders per year.[251]

Section VII

Further Reading

Further reading

Some further reading exploring ideas for what reimagining growth in the fashion, apparel, and textile industry could look like in practice:

- Circular business models: Redefining growth for a thriving fashion industry, Ellen MacArthur Foundation (2021)
- Circular transition indicators: Sector guidance - fashion and textile, WBCSD (2023)
- Consumed: The need for collective change; colonialism, climate change & consumerism, Aja Barber (2021)
- Earth Logic: Fashion action research plan, Kate Fletcher & Mathilda Tham (2021)
- Elephant in the boardroom: why unchecked consumption is not an option in tomorrow's markets, World Resources Institute (2017)
- Fashion as sustainability in action: A guide for fostering sustainable prosperity in micro and small fashion businesses, Centre for Sustainable Fashion (2021)
- Fashion futures 2040, Sustainable Fashion Consumption Network (2023)
- Fashioning the future, War on Want (2023)
- Guidelines for a just transition towards environmentally sustainable economies and societies for all, ILO (2015)
- Keeping workers in the loop: Preparing for a just, fair, and inclusive transition to circular fashion, BSR (2021)
- Overselling sustainability reporting, Harvard Business Review (2021)
- Pushing the boundaries of EPR policy for textiles, Ellen MacArthur Foundation (2024)
- Regenerative fashion futures: Post-growth textile & fashion report, Safia Minney (2024)
- Stop waste colonialism: Leveraging extended producer responsibility to catalyze a justice-led circular textiles economy, The Or Foundation (2023)
- Survival of the fittest: From ESG to competitive sustainability, University of Cambridge Institute for Sustainability Leadership (2024)
- The elephant in the sustainability room, BSR (2024)
- The sustainable fashion communication playbook, UN Environment Programme and UN Climate Change (2023)
- The world is on fire but we're still buying shoes, Alec Leach (2022)
- Unfit, unfair, unfashionable: Resizing fashion for a fair consumption space, Hot or Cool Institute (2022)
- Wellbeing wardrobe: A wellbeing economy for the fashion and textile sector, European Environmental Bureau (2022)

Photo: Kin Coedel

Endnotes

Endnotes

1 UNEP. (2024)

2 Szalai, J. (2024, June 8). Shrink the Economy, Save the World? The New York Times. nytimes.com/2024/06/08/books/review/shrink-the-economy-save-the-world.html

3 Survey conducted by Textile Exchange with 149 participants in June-July 2024 on exploring terminology the textile sector can use when referring to the topic of production volumes and revenue growth targets relative to sustainability targets.

4 BlackRock Investment Institute. (2021). The big emerging question: How to finance the net-zero transition in emerging markets. blackrock.com/corporate/literature/whitepaper/bii-the-big-emerging-question-2021.pdf

5 Institute and Faculty of Actuaries. (2023). The Emperor's New Climate Scenarios: Limitations and assumptions of commonly used climate-change scenarios in financial services. actuaries.org.uk/media/qeydewmk/the-emperor-s-new-climate-scenarios_ifoa_23.pdf

6 Textile Exchange Glossary. Sustainably-sourced renewable and closed-loop recycled resources. textileexchange.org/glossary. Emissions Gap Report 2024. unep.org/resources/emissions-gap-report-2024

7 McKinsey & Company and Global Fashion Agenda. (2020). Fashion on Climate: How the Fashion Industry Can Urgently Act to Reduce Its Greenhouse Gas Emissions. mckinsey.com/~/media/mckinsey/industries/retail/our insights/fashion on climate/fashion-on-climate-full-report.pdf

8 apparel impact institute. (2024). Taking Stock of Progress Against the Roadmap to Net Zero. apparelimpact.org/wp-content/uploads/2024/05/Taking-Stock-of-Progress-Against-the-Roadmap-to-Net-Zero-2024-5.15.pdf

9 Textile Exchange. (2023). Material Change Insights 2022. textileexchange.org/app/uploads/2024/01/Textile-Exchange_MCI-Insights_2022.pdf

10 UNEP and UNFCCC (2023). The Sustainable Fashion Communication Playbook. unep.org/resources/publication/sustainable-fashion-communication-playbook

11 Ibid.

12 UNECE. (2024). Reversing direction in the used clothing crisis: Global, European and Chilean perspectives. unece.org/sites/default/files/2024-06/ECE_TRADE_484E_0.pdf

13 The Or Foundation. (2023). Stop Waste Colonialism: Leveraging Extended Producer Responsibility to Catalyze a Justice-led Circular Textiles Economy. stopwastecolonialism.org/stopwastecolonialism.pdf

14 European Environment Agency. (2021). Growth without economic growth. Sustainability transitions. eea.europa.eu/publications/growth-without-economic-growth

15 Textile Exchange (2024). Materials Market Report 2024. textileexchange.org/app/uploads/2024/09/Materials-Market-Report-2024.pdf

16 Fashion Revolution. (2024). What Fuels Fashion? issuu.com/fashionrevolution/docs/full_report_31_july

17 Ellen MacArthur Foundation. (2017). A new textiles economy: Redesigning fashion's future. emf.thirdlight.com/file/24/uiwtaHvud8YIG_uiSTauTlJH74/A New Textiles Economy: Redesigning fashion's future.pdf

18 UTS Institute for Sustainable Futures. (2022). Wellbeing Wardrobe: A wellbeing economy for the fashion and textile sector. eeb.org/wp-content/uploads/2022/03/Wellbeing-Wardrobe-A-wellbeing-economy-for-the-fashion-and-textile-sector-March-2022.pdf

19 The Business of Fashion and McKinsey & Company. (2023). The State of Fashion 2024. mckinsey.com/industries/retail/our-insights/state-of-fashion

20 De Clercq., G. and Spencer, M.. (2024, March 04). France Mulls Penalties to Rein In Ultra-Fast Fashion Brands. Business of Fashion. businessoffashion.com/news/sustainability/fast-fashion-regulation-france

21 Solca, L. (2019, December 10). Luxury's Decade of Change. Business of Fashion. businessoffashion.com/opinions/luxury/luxurys-decade-of-change

22 Zheng, R. (2020, May 12). Bain & Company: Chinese Consumers Will Make Up Half of Global Luxury Purchases by 2025. Jing Daily. jingdaily.com/posts/bain-company-chinese-consumers-will-make-up-half-of-global-luxury-purchases-by-2025

23 Technavio. (2024). Outdoor Sports Apparel Market Analysis North America, APAC, Europe, South America, Middle East and Africa - US, China, Germany, UK, Japan - Size and Forecast 2024-2028. technavio.com/report/outdoor-sports-apparel-market-industry-analysis#:~:text=The outdoor sports apparel market,increasing popularity of outdoor activities

24 Fortune Business Insights. (2024). Sports Apparel Market Size, Share & Industry Analysis, By Product (Tops & T-shirts, Trousers & Tights, Shorts and Others), By Demography (Men, Women, and Kids), By Distribution Channel (Online and Offline), and by Regional Forecast, 2024-2032. fortunebusinessinsights.com/sports-apparel-market-107401

25 Wilson, D. and Dragusanu, R. (2008). The Expanding MiddleClass: The Exploding World Middle Class and Falling Global Inequality. Goldman Sachs Economic Research Global Economics Papers. Issue 170, New York: Goldman Sachs.

26 Global Fashion Agenda, Boston Consulting Group & Sustainable Apparel Coalition. (2019). The Pulse of the Fashion Industry 2019. globalfashionagenda.org/resource/pulse-of-the-fashion-industry-2019

27 Parsons The New School For Design. (2014). The Journal of Design Strategies: Alternative Fashion Systems. issuu.com/journalofdesignstrategies/docs/the_journal_of_design_strategies_vo_088cf55a6bc566

28 Maldini, I. and Balkenende, R. (2017). Reducing clothing production volumes by design: a critical review of sustainable fashion strategies. Conference paper: PLATE. Product lifetimes and the environment. researchgate.net/publication/320958304_Reducing_clothing_production_volumes_by_design_a_critical_review_of_sustainable_fashion_strategies

29 Klepp, I.G., et al. (2023). The plastic elephant. Overproduction and synthetic fibres in sustainable textile strategies. Consumption Research Norway - SIFO. oda.oslomet.no/oda-xmlui/handle/11250/3086387

30 Textile Exchange. (2024). Climate+ guides the fashion, textile, and apparel industry towards a shared goal. textileexchange.org/climate-vision

31 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

32 Cambridge Institute for Sustainability Leadership. (2024). Survival of the Fittest: From ESG to Competitive Sustainability. cisl.cam.ac.uk/files/from_esg_to_competitive_sustainability.pdf

33 European Environment Agency. (2021). Growth without economic growth. Sustainability transitions. eea.europa.eu/publications/growth-without-economic-growth

34 Wiedmann, T., et al. (2020). Scientists' warning on affluence. Nature Communications. nature.com/articles/s41467-020-16941-y

35 World Inequality Lab. (2021). World Inequality Report 2022. wir2022.wid.world

36 Bivens, J. and Kandra, J. (2022, October 04). CEO pay has skyrocketed 1,460% since 1978. Economic Policy Institute. epi.org/publication/ceo-pay-in-2021

Endnotes

37 OHCHR. (2024, July 02). End dangerous fixation with GDP as way to eradicate global poverty: UN expert. Press release. ohchr.org/en/press-releases/2024/07/end-dangerous-fixation-gdp-way-eradicate-global-poverty-un-expert

38 U.S. Bureau of Foreign and Domestic Commerce. (nd.). National Income, 1929-1932. fraser.stlouisfed.org/title/national-income-1929-1932-971

39 Mazzucato, M. (2019). The Value of Everything. Penguin.

40 Dasgupta, P. (2021). Final Report - The Economics of Biodiversity: The Dasgupta Review. gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review

41 Brundtland, G.H. (1987). Report of the World Commission on Environment and Development: Our Common Future. sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf

42 Gov.UK. (2020). The Dasgupta Review - Independent Review on the Economics of Biodiversity Interim Report. assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882222/The_Economics_of_Biodiversity_The_Dasgupta_Review_Interim_Report.pdf

43 Global Footprint Network. footprintnetwork.org

44 UN Environment Programme. (2024). Global Resources Outlook 2024: Bend the Trend - Pathways to a liveable planet as resource use spikes. International Resource Panel. resourcepanel.org/reports/global-resources-outlook-2024

45 Richardson, K., et al. (2023). Earth beyond six of nine planetary boundaries. Science Advances. science.org/doi/10.1126/sciadv.adh2458

46 Johansson, A., et al. (2012). Looking to 2060: Long-term global growth prospects - A going for growth report. OECD Economic Policy Papers. oecd-ilibrary.org/docserver/5k8zxpjsggf0-en.pdf

47 Raworth, K. (2018). Doughnut Economics: Seven Ways to think like a 21st-Century Economist. Cornerstone.

48 Meadows, D., et al. (1972). Limits to Growth. A Potomac Associates.

49 Herrington, G. (2020). Update to limits to growth: Comparing the World3 model with empirical data. Journal of Industrial Ecology. onlinelibrary.wiley.com/doi/abs/10.1111/jiec.13084

50 Putt del Pino, S., et al. (2017). Elephant in the Boardroom: Why Unchecked Consumption is Not an Option in Tomorrow's Markets. World Resources Institute. wri.org/research/elephant-boardroom-why-unchecked-consumption-not-option-tomorrows-markets

51 Szalai, J. (2024, June 8). Shrink the Economy, Save the World? The New York Times. nytimes.com/2024/06/08/books/review/shrink-the-economy-save-the-world.html

52 Hickel, J. (2021). Less is More: How Degrowth Will Save The World. Windmill Books.

53 Marquis, C. (2024, June 11). In Defense of Degrowth. Harvard Business Review. https://hbr.org/2024/06/in-defense-of-degrowth

54 OECD. (2011). Towards Green Growth. OECD Publishing. oecd-ilibrary.org/environment/towards-green-growth_9789264111318-en

55 Dasgupta, P. (2021). Final Report - The Economics of Biodiversity: The Dasgupta Review. gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review

56 Wiedmann, T., et al. (2020). Scientists' warning on affluence. Nature Communications. nature.com/articles/s41467-020-16941-y

57 Jevons, W.S. (1865). The Coal Question: An Inquiry Concerning the Progress of the Nation, and the Probably Exhaustion of Our Coal Mines. Macmillan and Co.

58 Moorhouse, D. (2023). Sustainable fashion and textiles: A case for degrowth. International Journal of Sustainable Fashion & Textiles. intellectdiscover.com/content/journals/10.1386/sft_00017_2?crawler=true

59 Hubacek, K., et al. (2021). Evidence of decoupling consumption-based CO2 emissions from economic growth. Advances in Applied Energy. sciencedirect.com/science/article/pii/S2666792421000664?via%3Dihub

60 Parrique, T. (2019). The political economy of degrowth. PhD Thesis. researchgate.net/publication/339844751_The_Political_Economy_of_Degrowth

61 Szalai, J. (2024, June 8). Shrink the Economy, Save the World? The New York Times. nytimes.com/2024/06/08/books/review/shrink-the-economy-save-the-world.html

62 Jackson, T. (2009). Prosperity without Growth. Routledge.

63 Davenport, C. (2016, April 05). Can Economies Rise as Emissions Fall? The Evidence Says Yes. The New York Times. nytimes.com/2016/04/06/upshot/promising-signs-that-economies-can-rise-as-carbon-emissions-decline.html

64 Jackson, T. (2009). Prosperity without Growth. Routledge.

65 McKinsey & Company and Global Fashion Agenda. (2020). Fashion on Climate: How the Fashion Industry Can Urgently Act to Reduce Its Greenhouse Gas Emissions. mckinsey.com/~/media/mckinsey/industries/retail/our%20insights/fashion%20on%20climate/fashion-on-climate-full-report.pdf

66 Brave New Europe. (2023, May 10). "Not growing but thriving": The Beginning of a Paradigm Shift - interview w/ Kate Raworth. braveneweurope.com/not-growing-but-thriving-the-beginning-of-a-paradigm-shift-interview-w-kate-raworth

67 Raworth, K. (2018). Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist. Cornerstone.

68 Hickel, J. (2021). Less is More: How Degrowth Will Save The World. Windmill Books.

69 UN. (1992). United Nations Framework Convention on Climate Change. unfccc.int/resource/docs/convkp/conveng.pdf

70 Hickel, J. (2021). Less is More: How Degrowth Will Save The World. Windmill Books.

71 Ibid.

72 Wilkins, J. (2022, April 13). The Degrowth Opportunity: Reshaping business for a needs-satisfying, resource-wise economy. Heliocene. heliocene.org/2022/04/13/the-degrowth-opportunity/

73 Ibid.

74 Bocken, N.M.P. and Short, S.W. (2016). Towards a sufficiency-driven business model: Experiences and opportunities. Environmental Innovation and Societal Transitions. sciencedirect.com/science/article/pii/S2210422415300137

75 Ellen MacArthur Foundation. (2021). Circular business models: redefining growth for a thriving fashion industry. emf.thirdlight.com/file/24/Om5sTEKOmm-fEeVOm7xNOmq6S2k/Circular business models.pdf

76 WRAP. (2023). Textiles 2030 Annual Progress Report 2022/23. wrap.org.uk/sites/default/files/2023-11/textiles-2030-annual-progress-report-2022-23.pdf

77 Ellen MacArthur Foundation. (2022), Rethinking business models for a thriving fashion industry. ellenmacarthurfoundation.org/fashion-business-models/overview

78 Prendeville, S., et al. (2014) Circular economy: Is it enough? Ecodesign Centre Wales. researchgate.net/publication/301779162_Circular_Economy_Is_it_Enough

Endnotes

79 Kering. (2023, March 17). Kering commits to next horizon in sustainability with group-wide target for reducing absolute emissions by 40%. Press release. kering.com/en/news/kering-commits-to-next-horizon-in-sustainability-with-group-wide-target-for-reducing-absolute-emissions-by-40/

80 H&M Group. (2024). Goals and ambition. hmgroup.com/sustainability/leading-the-change/goals-and-ambitions

81 Nike. (2024). Reducing Our Carbon Footprint. about.nike.com/en/impact/initiatives/reducing-our-carbon-footprint

82 Doyle, M. (2020, October 21). How Can Fashion Brands Keep Workers Safe? Remake. remake.world/stories/news/how-can-fashion-brands-keep-workers-safe

83 Schwab, K. (2020, June 03). Now is the time for a 'great reset'. World Economic Forum. weforum.org/agenda/2020/06/now-is-the-time-for-a-great-reset

84 OECD. (2020). Building back better: A sustainable, resilient recovery after COVID-19. Policy paper. oecd.org/en/publications/building-back-better-a-sustainable-resilient-recovery-after-covid-19_52b869f5-en.html

85 Rewiring Fashion. rewiringfashion.org/

86 Kansara, V.A. (2020, May 12). Dries Van Noten Proposes Reset to Fashion's Deliveries and Discounting Calendar. Business of Fashion. businessoffashion.com/articles/luxury/dries-van-noten-proposes-reset-to-fashions-deliveries-and-discounting-calendar

87 British Fashion Council. (n.d.). The Fashion Industry's Reset: An Important Message from the BFC & CFDA. Press release. britishfashioncouncil.co.uk/pressreleases/The-Fashion-Industrys-Reset-An-Important-Message-from-the-BFC--CFDA

88 Aleksander, I. (2020, August 06). Sweatpants Forever: How the fashion industry collapsed. The New York Times Magazine. nytimes.com/interactive/2020/08/06/magazine/fashion-sweatpants.html

89 Paton, E (2018, March 27). H&M, a Fashion Giant, Has a Problem: $4.3 billion in Unsold Clothes. The New York Times. nytimes.com/2018/03/27/business/hm-clothes-stock-sales.html

90 Kent, S. (2024, March 04). AI, Outlets, Recycling: Can Luxury Solve Its Billion-Dollar Excess Inventory Problem? Business of Fashion. businessoffashion.com/articles/sustainability/lvmh-kering-waste-overstock-leftover-billion-dollar-problem

91 British Vogue. (2020, April 15). Edward Enninful, Marc Jacobs & Stella McCartney Discuss The Future of Creativity | British Vogue.Youtube. youtube.com/watch?v=gqXOvWvO9hc

92 Friedman, V. (2020, October 22). The Newest Thing in Fashion? Old Clothes. The New York Times. nytimes.com/2020/10/22/style/upcycling-fashion.html

93 Knafo, S. (2015, May 29). One Retailer's Unusual Message: 'Don't Buy So Much Stuff'. The Atlantic. theatlantic.com/business/archive/2015/05/one-retailers-counterintuitive-message-dont-buy-so-much-stuff/394343

94 Kent, S. (2024, June 28). 'In Business to Save the Planet': The Patagonia Paradox. Business of Fashion. businessoffashion.com/articles/sustainability/patagonia-sustainable-fashion-ryan-gellert-ceo

95 Elkington, J. and Roberts, R. (2019). Tomorrow's Capitalism: The 2020s Leadership Agenda. Volans. volans.com/wp-content/uploads/2019/11/TC-2020s-Leadership-Agenda.pdf

96 Boyer, D. (2022, March 03). Why We Have To Give Up On Endless Economic Growth. Noēma Magazine. noemamag.com/why-we-have-to-give-up-on-endless-economic-growth

97 Manufactured Podcast. (2024, January 09). 98. Crossover Moments: Ken Pucker. manufacturedpodcast.com/podcast/98-crossover-moments-ken-pucker

98 European Environment Agency. (2021). Growth without economic growth. Sustainability transitions. eea.europa.eu/publications/growth-without-economic-growth

99 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

100 Cambridge Institute for Sustainability Leadership. (2024). Survival of the Fittest: From ESG to Competitive Sustainability. cisl.cam.ac.uk/files/from_esg_to_competitive_sustainability.pdf

101 Ripple, W.J., et al. (2020).World Scientists' Warning of a Climate Emergency. BioScience. researchgate.net/publication/337084926_World_Scientists'_Warning_of_a_Climate_Emergency

102 Creutzig, F., et al. (2022). Demand, Services and Social Aspects of Mitigation. Book chapter. IPCC. https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Chapter05.pdf

103 The Club of Rome. (2023, May 17). Beyond Growth: Opening plenary speech by Sandrine Dixson-Declève. clubofrome.org/blog-post/decleve-beyond-growth

104 Parrique, T., Raworth, K. and Liegey, V. (2023). A post-growth Europe critical to survive and thrive, urge over 400 civil society groups and experts. Open letter. friendsoftheearth.eu/wp-content/uploads/2023/05/EN-BG-Open-Letter.pdf

105 UNEP and ISC. (2024). Navigating New Horizons: A global foresight report on planetary health and human wellbeing. wedocs.unep.org/handle/20.500.11822/45890

106 Fletcher, K. and Tham, M. (2019). Earth Logic Fashion Action Research Plan. The JJ Charitable Trust. katefletcher.com/wp-content/uploads/2019/10/Earth-Logic-plan-FINAL.pdf

107 UTS Institute for Sustainable Futures. (2022). Wellbeing Wardrobe: A wellbeing economy for the fashion and textile sector. eeb.org/wp-content/uploads/2022/03/Wellbeing-Wardrobe-A-wellbeing-economy-for-the-fashion-and-textile-sector-March-2022.pdf

108 Moorhouse, D. (2023). Sustainable fashion and textiles: A case for degrowth. International Journal of Sustainable Fashion & Textiles. intellectdiscover.com/content/journals/10.1386/sft_00017_2

109 The Or Foundation. (2023). Stop Waste Colonialism: Leveraging Extended Producer Responsibility to Catalyze a Justice-led Circular Textiles Economy. stopwastecolonialism.org/stopwastecolonialism.pdf

110 Global Fashion Agenda. (2024). The Fashion CEO Agenda 2024: Special Edition. globalfashionagenda.org/resource/the-fashion-ceo-agenda-2024-special-edition

111 British Fashion Council. (2021). The Circular Fashion Ecosystem: A Blueprint for the Future. instituteofpositivefashion.com/uploads/files/1/CFE/Circular_Fashion_Ecosytem_Report.pdf

112 British Fashion Council. (2023). Dear BFC community - a letter from David Pemsel, BFC Chairman. Announcement. britishfashioncouncil.co.uk/bfcnews/4734/Dear-BFC-Community-%7C-A-Letter-From-David-Pemsel-BFC-Chairman

113 Coscieme, L., et al. (2022). Unfit, Unfair, Unfashionable: Resizing Fashion for a Fair Consumption Space. Hot or Cool Institute, Berlin. hotorcool.org/wp-content/uploads/2022/12/Hot_or_Cool_1_5_fashion_report_.pdf

114 IPCC. (2022). Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf

115 Martinez, C.M.J. and Vladimirova, K.D. (2023). Fashion Futures 2040. Sustainable Fashion Consumption Network. sustainablefashionconsumption.org/projects-2/fashion-futures-2040

116 Committee on the Environment, Public Health and Food Safety. (2023). Report on an EU Strategy for Sustainable and Circular Textiles. europarl.europa.eu/doceo/document/A-9-2023-0176_EN.html

Endnotes

117 BlackRock Investment Institute. (2021). The big emerging question: How to finance the net-zero transition in emerging markets. blackrock.com/corporate/literature/whitepaper/bii-the-big-emerging-question-2021.pdf

118 Institute and Faculty of Actuaries. (2023). The Emperor's New Climate Scenarios: Limitations and assumptions of commonly used climate-change scenarios in financial services. actuaries.org.uk/media/qeydewmk/the-emperor-s-new-climate-scenarios_ifoa_23.pdf

119 Cambridge Institute for Sustainability Leadership. (2024). Survival of the Fittest: From ESG to Competitive Sustainability. cisl.cam.ac.uk/files/from_esg_to_competitive_sustainability.pdf

120 Global Fashion Agenda. (2017). The Pulse of the Fashion Industry. globalfashionagenda.org/resource/pulse-of-the-fashion-industry-2017

121 UNEP. (2019). Global Environment Outlook – GEO-6: Healthy Planet, Healthy People. unep.org/resources/global-environment-outlook-6

122 Cornell University. (2023). Higher Ground? Fashion's Climate Breakdown. ILR Global Labor Institute and Schroders. ilr.cornell.edu/global-labor-institute/higher-ground-fashions-climate-breakdown

123 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

124 Bocken, N.M.P. and Short, S.W. (2016). Towards a sufficiency-driven business model: Experiences and opportunities. Environmental Innovation and Societal Transitions. sciencedirect.com/science/article/pii/S2210422415300137

125 Bauck, W. (2022, April 19). Why Climate Risk Is Moving Up the Agenda for Fashion Investors. Business of Fashion. businessoffashion.com/articles/sustainability/why-climate-risk-is-moving-up-the-agenda-for-fashion-investors

126 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

127 Marquis, C. (2024, June 11). In Defense of Degrowth. Harvard Business Review. hbr.org/2024/06/in-defense-of-degrowth

128 Webb, B. (2023, August 24). As emissions rise, fashion grapples with growth. Vogue Business. voguebusiness.com/sustainability/as-emissions-rise-fashion-grapples-with-growth-degrowth

129 Survey conducted by Textile Exchange with 149 participants in June-July 2024 on exploring terminology the textile sector can use when referring to the topic of production volumes and revenue growth targets relative to sustainability targets.

130 Ellen MacArthur Foundation. (n.d.). Circular economy introduction. https://www.ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview

131 UNEP. (2022).UN Environment Assembly 5 (UNEA 5.2) Resolutions. unep.org/resources/resolutions-treaties-and-decisions/UN-Environment-Assembly-5-2

132 UNEP. (2011). Decoupling Natural Resource Use and Environmental Impacts from Economic Growth. wedocs.unep.org/handle/20.500.11822/9816

133 ScienceDirect. (2019). Decoupling. sciencedirect.com/topics/earth-and-planetary-sciences/decoupling#:~:text=Relative%20decoupling%20means%20using%20less,inexorable%20feature%20of%20economic%20growth

134 Hickel, J. (2021). Less is More: How Degrowth Will Save The World. Windmill Books.

135 Parrique, T. (2022). "Degrowth goes far beyond reduction of GDP." Polytechnique insights. polytechnique-insights.com/en/braincamps/economy/ideas-around-degrowth-is-gdp-on-its-way-out/degrowth-goes-far-beyond-reduction-of-gdp/

136 Marquis, C. (2024, June 11). In Defense of Degrowth. Harvard Business Review. hbr.org/2024/06/in-defense-of-degrowth

137 Parrique, T. (2022). "Degrowth goes far beyond reduction of GDP." Polytechnique insights. polytechnique-insights.com/en/braincamps/economy/ideas-around-degrowth-is-gdp-on-its-way-out/degrowth-goes-far-beyond-reduction-of-gdp

138 Baskin, K. (2024). 'Doughnut economics': 4 questions for industry leaders. MIT Management Sloan School. mitsloan.mit.edu/ideas-made-to-matter/doughnut-economics-4-questions-industry-leaders

139 OECD. (2011). Towards Green Growth, OECD Publishing. oecd-ilibrary.org/environment/towards-green-growth_9789264111318-en

140 UN Department of Economic and Social Affairs. (n.d.). Green economy. Sustainable Development Goals. sdgs.un.org/topics/green-economy

141 UN Department of Economic and Social Affairs. (2012). United Nations Conference on Sustainable Development, Rio+20. sustainabledevelopment.un.org/rio20.html

142 UNEP. (2024). Green economy. unep.org/regions/latin-america-and-caribbean/regional-initiatives/promoting-resource-efficiency/green

143 Savini, F. (2022). Post-growth, degrowth, the doughnut and circular economy: a short guide. Ontgroei. ontgroei.degrowth.net/post-growth-degrowth-the-doughnut-and-circular-economy-a-short-guide

144 apparel impact institute. (2021). Roadmap to Net Zero: Delivering Science-based Targets in the Apparel Sector. Working Paper. apparelimpact.org/wp-content/uploads/2021/11/21_WorkingPaper_RoadmapNetZero_.pdf

145 Abbate, S., et al. (2023). Sustainability trends and gaps in the textile, apparel and fashion industries. Environment, Development and Sustainability. link.springer.com/article/10.1007/s10668-022-02887-2

146 UNEP. (2023). Sustainability and Circularity in the Textile Value Chain – A Global Roadmap. unep.org/resources/publication/sustainability-and-circularity-textile-value-chain-global-roadmap

147 Oxford Dictionary. (2024). Overproduction. oed.com/dictionary/overproduction_n?tl=true

148 Kim, A. (2024, June 27). How the Apparel Industry Could Refashion Itself with Sustainability in Mind. Stanford Business. gsb.stanford.edu/insights/how-apparel-industry-could-refashion-itself-sustainability-mind

149 Klepp, I.G., et al. (2023). The plastic elephant. Overproduction and synthetic fibres in sustainable textile strategies. Consumption Research Norway - SIFO. oda.oslomet.no/oda-xmlui/handle/11250/3086387

150 Wulff, G. (2024). The Challenge of Overproduction and Overconsumption. Book chapter. link.springer.com/chapter/10.1007/978-3-031-33246-3_13

151 Jin, B.E. and Shin, D.C. (2021). The power of 4th industrial revolution in the fashion industry: what, why, and how has the industry changed? Fashion and Textiles. fashionandtextiles.springeropen.com/articles/10.1186/s40691-021-00259-4

152 Fashinza. (2024). A Report On Overproduction In The Apparel Industry. fashinza.com/fashion-designs/design-trends/a-report-on-overproduction-in-the-apparel-industry/

153 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

154 European Parliament. (2023). From growth to 'beyond growth': Concepts and challenges. europarl.europa.eu/RegData/etudes/BRIE/2023/747107/EPRS_BRI(2023)747107_EN.pdf

Endnotes

155 OECD. (2020). Beyond Growth: Towards a New Economic Approach. oecd.org/en/publications/beyond-growth_33a25ba3-en.html

156 Fioramonti, L. (2024). Post-growth theories in a global world: A comparative analysis. Review of International Studies. cambridge.org/core/journals/review-of-international-studies/article/postgrowth-theories-in-a-global-world-a-comparative-analysis/71CCA8B6ABB96B0F68722FFB4B4A9B3C

157 Savini, F. (2022). Post-growth, degrowth, the doughnut and circular economy: a short guide. Ontgroei. ontgroei.degrowth.net/post-growth-degrowth-the-doughnut-and-circular-economy-a-short-guide/

158 Slameršak, A. (2024). Post-growth: A viable path to limiting global warming to 1.5oC. One Earth. cell.com/one-earth/fulltext/S2590-3322(23)00507-9

159 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

160 Hill, M. (2023). What Is Slow Fashion? Good On You. goodonyou.eco/what-is-slow-fashion

161 Symons, F. (2023, August 24). What is Slow Fashion? Oxfam. oxfam.org.uk/oxfam-in-action/oxfam-blog/what-is-slow-fashion

162 Yang, S., Song, Y., and Tong, S. (2017). Sustainable Retailing in the Fashion Industry: A Systematic Literature Review. Sustainability. mdpi.com/2071-1050/9/7/1266

163 Daly, H.E. (2008). A Steady-State Economy. London: Sustainable Development Commission.

164 Fioramonti, L. (2024). Post-growth theories in a global world: A comparative analysis. Review of International Studies. cambridge.org/core/journals/review-of-international-studies/article/postgrowth-theories-in-a-global-world-a-comparative-analysis/71CCA8B6ABB96B0F68722FFB4B4A9B3C

165 IPCC. (2022). Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf

166 Bereman, M., et al. (2020, March 25). Patterns for value creation in apparel, fashion, and luxury. McKinsey & Company. mckinsey.com/industries/retail/our-insights/patterns-for-value-creation-in-apparel-fashion-and-luxury

167 African Development Bank Group. (2018, August 22). Textile and Clothing industries can drive Africa's industrialization, benefit women. https://www.afdb.org/en/news-and-events/textile-and-clothing-industries-can-drive-africas-industrialization-benefit-women-18427

168 Devillard, S., et al. (2021, October 14). Jumpstarting value creation with data and analytics in fashion and luxury. McKinsey & Company. mckinsey.com/industries/retail/our-insights/jumpstarting-value-creation-with-data-and-analytics-in-fashion-and-luxury

169 Tang, K.H.D. (2023). State of the Art in Textile Waste Management: A Review. Textiles. mdpi.com/2673-7248/3/4/27#B5-textiles-03-00027

170 Jin, B.E. and Shin, D.C. (2021). The power of 4th industrial revolution in the fashion industry: what, why, and how has the industry changed? Fashion and Textiles. fashionandtextiles.springeropen.com/articles/10.1186/s40691-021-00259-4

171 UNEP. (2023). Sustainability and Circularity in the Textile Value Chain – A Global Roadmap. unep.org/resources/publication/sustainability-and-circularity-textile-value-chain-global-roadmap

172 Wulff, G. (2024). The Challenge of Overproduction and Overconsumption. Book chapter. link.springer.com/chapter/10.1007/978-3-031-33246-3_13

173 Textile Exchange Glossary. Pre-consumer material. textileexchange.org/glossary

174 Textile Exchange Glossary. Post-consumer material. textileexchange.org/glossary

175 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

176 Chrysopoulou, A. (2020, December 16). The Vision of a Well-Being Economy. Stanford Social Innovation Review. ssir.org/articles/entry/the_vision_of_a_well_being_economy

177 Adams, M. and Williams, G. (2021). Delivering on the promises of wellbeing? Traidcraft Exchange's experiment with measuring wellbeing. Development in Practice. tandfonline.com/doi/full/10.1080/09614524.2021.2002267#d1e125

178 UTS Institute for Sustainable Futures. (2022). Wellbeing Wardrobe: A wellbeing economy for the fashion and textile sector. eeb.org/wp-content/uploads/2022/03/Wellbeing-Wardrobe-A-wellbeing-economy-for-the-fashion-and-textile-sector-March-2022.pdf

179 Survey conducted by Textile Exchange with 149 participants in June-July 2024 on exploring terminology the textile sector can use when referring to the topic of production volumes and revenue growth targets relative to sustainability targets.

180 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

181 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

182 Bocken, N.M.P. and Short, S.W. (2016). Towards a sufficiency-driven business model: Experiences and opportunities. Environmental Innovation and Societal Transitions. sciencedirect.com/science/article/pii/S2210422415300137

183 UNEP. (2023). Sustainability and Circularity in the Textile Value Chain – A Global Roadmap. unep.org/resources/publication/sustainability-and-circularity-textile-value-chain-global-roadmap

184 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

185 Cambridge Institute for Sustainability Leadership. (2024). Survival of the Fittest: From ESG to Competitive Sustainability. cisl.cam.ac.uk/files/from_esg_to_competitive_sustainability.pdf

186 UNEP and UNFCCC (2023). The Sustainable Fashion Communication Playbook. unep.org/resources/publication/sustainable-fashion-communication-playbook

187 Fashion for Good and the Boston Consulting Group. (2020). Financing the Transformation in the Fashion Industry: Unlocking Investment to Scale Innovation. fashionforgood.com/wp-content/uploads/2020/01/FinancingTheTransformation_Report_FINAL_Digital-1.pdf

188 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

189 The Business of Fashion and McKinsey & Company. (2023). The State of Fashion 2024. mckinsey.com/industries/retail/our-insights/state-of-fashion

190 Speak Volumes campaign. (2024). Stop Waste Colonialism. The Or Foundation. stopwastecolonialism.org/speak-volumes

191 Zero Waste Europe. (2023). Beyond circular fashion: A new business model for the fashion industry. zerowasteeurope.eu/library/beyond-circular-fashion-a-new-business-model-for-the-fashion-industry

Endnotes

192 Textile Exchange. (2024). The Future of Synthetics. textileexchange.org/knowledge-center/reports/the-future-of-synthetics

193 Klepp, I.G., et al. (2023). The plastic elephant. Overproduction and synthetic fibres in sustainable textile strategies. Consumption Research Norway - SIFO. oda.oslomet.no/oda-xmlui/handle/11250/3086387

194 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

195 Bocken, N.M.P. and Short, S.W. (2016). Towards a sufficiency-driven business model: Experiences and opportunities. Environmental Innovation and Societal Transitions. sciencedirect.com/science/article/pii/S2210422415300137

196 Textile Exchange Glossary. Sustainably-sourced renewable and closed-loop recycled resources. textileexchange.org/glossary

197 UNEP. (2023). Sustainability and Circularity in the Textile Value Chain – A Global Roadmap. unep.org/resources/publication/sustainability-and-circularity-textile-value-chain-global-roadmap

198 Klepp, I.G., et al. (2023). The plastic elephant. Overproduction and synthetic fibres in sustainable textile strategies. Consumption Research Norway - SIFO. oda.oslomet.no/oda-xmlui/handle/11250/3086387

199 UNEP. (2023). Sustainability and Circularity in the Textile Value Chain: A Global Roadmap. oneplanetnetwork.org/sites/default/files/2023-10/Brands and Retailers - UNEP Sustainability and Circularity in the Textile Value Chain A Global Roadmap_0.pdf

200 Klepp, I.G., et al. (2023). The plastic elephant. Overproduction and synthetic fibres in sustainable textile strategies. Consumption Research Norway - SIFO. oda.oslomet.no/oda-xmlui/handle/11250/3086387

201 UN Human Rights Office of the High Commission. (2011). Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework. https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf

202 International Labour Organization. (2011, July 13). ILO Conventions. ilo.org/resource/ilo-conventions

203 UTS Institute for Sustainable Futures. (2022). Wellbeing Wardrobe: A wellbeing economy for the fashion and textile sector. eeb.org/wp-content/uploads/2022/03/Wellbeing-Wardrobe-A-wellbeing-economy-for-the-fashion-and-textile-sector-March-2022.pdf

204 Raworth, K. (2018). Doughnut Economics: Seven Ways to think like a 21st-Century Economist. Cornerstone.

205 UNEP and UNFCCC (2023). The Sustainable Fashion Communication Playbook. unep.org/resources/publication/sustainable-fashion-communication-playbook

206 Bocken, N.M.P. and Short, S.W. (2016). Towards a sufficiency-driven business model: Experiences and opportunities. Environmental Innovation and Societal Transitions. sciencedirect.com/science/article/pii/S2210422415300137

207 UNEP and UNFCCC (2023). The Sustainable Fashion Communication Playbook. unep.org/resources/publication/sustainable-fashion-communication-playbook

208 Ibid.

209 Raworth, K. (2018). Doughnut Economics: Seven Ways to think like a 21st-Century Economist. Cornerstone.

210 Global Fashion Agenda. (2024). The Fashion CEO Agenda 2024: Special Edition. globalfashionagenda.org/resource/the-fashion-ceo-agenda-2024-special-edition

211 UTS Institute for Sustainable Futures. (2022). Wellbeing Wardrobe: A wellbeing economy for the fashion and textile sector. eeb.org/wp-content/uploads/2022/03/Wellbeing-Wardrobe-A-wellbeing-economy-for-the-fashion-and-textile-sector-March-2022.pdf

212 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

213 UNEP. (2023). Sustainability and Circularity in the Textile Value Chain: A Global Roadmap. oneplanetnetwork.org/sites/default/files/2023-10/Brands and Retailers - UNEP Sustainability and Circularity in the%20Textile Value Chain A Global Roadmap_0.pdf

214 Fashion Revolution. (2024). What Fuels Fashion? issuu.com/fashionrevolution/docs/full_report_31_july

215 UNEP Finance Initiative. (2024). Circular Economy as an Enabler for Responsible Banking: Circular Solutions to Achieve Climate Targets in the Textile Sector. unepfi.org/industries/banking/circular-solutions-textiles

216 Triodos Bank. (2024, July 02). Triodos Bank is the first bank to publicly support the call for a post-growth transition. News. triodos.com/en/articles/2024/triodos-bank-is-the-first-bank-to-publicly-support-the-call-for-a-post-growth-transition

217 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

218 Cambridge Institute for Sustainability Leadership. (2024). Survival of the Fittest: From ESG to Competitive Sustainability. cisl.cam.ac.uk/files/from_esg_to_competitive_sustainability.pdf

219 Karaosman, H., Marshall, D. and Ward, I. (2024). For the many not the few: introducing just transition for supply chain management. International Journal of Operations & Production Management. doi.org/10.1108/IJOPM-07-2023-0587

220 International Labour Organization. (2016, February 02). Guidelines for a just transition towards environmentally sustainable economies and societies for all. ilo.org/publications/guidelines-just-transition-towards-environmentally-sustainable-economies

221 War on Want. (2023). Fashioning the Future: Fixing the fashion industry for workers and climate. waronwant.org/sites/default/files/2023-08/WOW_Fashioning the Future_report.pdf

222 UNEP. (2023). Sustainability and Circularity in the Textile Value Chain – A Global Roadmap. unep.org/resources/publication/sustainability-and-circularity-textile-value-chain-global-roadmap

223 Ibid.

224 UTS Institute for Sustainable Futures. (2022). Wellbeing Wardrobe: A wellbeing economy for the fashion and textile sector. eeb.org/wp-content/uploads/2022/03/Wellbeing-Wardrobe-A-wellbeing-economy-for-the-fashion-and-textile-sector-March-2022.pdf

225 Martinez, C.M.J. and Vladimirova, K.D. (2023). Fashion Futures 2040. Sustainable Fashion Consumption Network. sustainablefashionconsumption.org/projects-2/fashion-futures-2040

226 Fashion Revolution. (2024). What Fuels Fashion? issuu.com/fashionrevolution/docs/full_report_31_july

227 OECD. (2018). OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector. mneguidelines.oecd.org/responsible-supply-chains-textile-garment-sector.htm

228 UN Human Rights Office of the High Commission. (2011). Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework. ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf

229 Fashion Revolution. (2024). What Fuels Fashion? issuu.com/fashionrevolution/docs/full_report_31_july

230 BSR and Laudes Foundation. (2021). Keeping Workers in the Loop: Preparing for a Just, Fair, and Inclusive Transition to Circular Fashion. bsr.org/reports/BSR-Keeping-Workers-in-the-Loop.pdf

Endnotes

231 Minney, S. (2024). Regenerative Fashion Futures: Post-growth Textile & Fashion Report. Middlesex University and ACCESS. safia-minney.com/wp-content/uploads/2024/09/Regenerative-Fashion-and-Just-Transition-Report.pdf

232 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

233 Hickel, J. (2021). Less is More: How Degrowth Will Save The World. Windmill Books.

234 Coscieme, L., et al. (2022). Unfit, Unfair, Unfashionable: Resizing Fashion for a Fair Consumption Space. Hot or Cool Institute, Berlin. hotorcool.org/wp-content/uploads/2022/12/Hot_or_Cool_1_5_fashion_report_.pdf

235 The Business of Fashion and McKinsey & Company. (2024). The State of Fashion 2025. businessoffashion.com/reports/news-analysis/the-state-of-fashion-2025-bof-mckinsey-report

236 Government of India Ministry of External Affairs. (2024, April 08). India targets US$ 600 bn in textile exports. Economic News. indbiz.gov.in/india-targets-us-600-bn-in-textile-exports

237 UNEP and ISC. (2024). Navigating New Horizons: A global foresight report on planetary health and human wellbeing. wedocs.unep.org/handle/20.500.11822/45890

238 Karaosman, H., Marshall, D. and Ward, I. (2024). For the many not the few: introducing just transition for supply chain management. International Journal of Operations & Production Management. doi.org/10.1108/IJOPM-07-2023-0587

239 War on Want. (2023). Fashioning the Future: Fixing the fashion industry for workers and climate. waronwant.org/sites/default/files/2023-08/WOW_Fashioning the Future_report.pdf

240 Cambridge Institute for Sustainability Leadership. (2024). Survival of the Fittest: From ESG to Competitive Sustainability. cisl.cam.ac.uk/files/from_esg_to_competitive_sustainability.pdf

241 BSR. (2024). The Elephant in the Sustainability Room: Addressing the Tension between Growth and Environmental Goals in Corporate Business Strategies. bsr.org/reports/BSR-Elephant-in-the-Sustainabilty-Room-Report.pdf

242 UNEP. (2023). Sustainability and Circularity in the Textile Value Chain – A Global Roadmap. unep.org/resources/publication/sustainability-and-circularity-textile-value-chain-global-roadmap

243 Segran, E. (2023, September 07). Eileen Fisher's new CEO wants you to buy fewer clothes. Fast Company. fastcompany.com/90948608/eileen-fishers-new-ceo-wants-you-to-buy-fewer-clothes

244 Ellen MacArthur Foundation. (n.d.). The Fashion ReModel. ellenmacarthurfoundation.org/the-fashion-remodel/overview

245 Erlandsson, J., Bergmark, P. and Höjer, M. (2023). Establishing the planetary boundaries framework in the sustainability reporting of ICT companies - A proposal for proxy indicators. Journal of Environmental Management. sciencedirect.com/science/article/pii/S0301479722026056

246 Goddard, C. (2024, June 04). Houdini Sportswear Unveils 2024 Planetary Boundaries Assessment, Complete Analysis of Brand's Environmental Impact and Future Initiatives. Press release. outdoorindustry.org/press-release/houdini-sportswear-unveils-2024-planetary-boundaries-assessment-complete-analysis-of-brands-environmental-impact-and-future-initiatives/

247 House of Hackney. (2024). Mother Nature & Future Generations: Taking their Seat at the Table. houseofhackney.com/uk/mother-nature-future-generations-on-board

248 Hiut Denim Co. (n.d.). The 'No-Growth' Business Model. How It Will Raise Funding. dropbox.com/scl/fi/dlho4wm6wyzhd7bc2msu5/HiutDenimCo_TheNoGrowthBusinessModel-1.pdf?rlkey=jg7iyl00koj2a9h60td8h3ycm&e=1&dl=0

249 Arthur, R. (2020, June 15). Fashion's post-growth future. Vogue Business. voguebusiness.com/sustainability/fashions-post-growth-future-covid-19

250 Wildish. (2024). wildishstore.com

251 Webb, B. (2022, January 27). Degrowth: The future that fashion has been looking for? Vogue Business. voguebusiness.com/sustainability/degrowth-the-future-that-fashion-has-been-looking-for