THE GFA MONITOR

2024 Update

Publisher: Global Fashion Agenda
Authors: Holly Syrett, Felicity Lammas, Léa Mocheff
Editor: Sergio Laguna
Designer: Florinda Pamungkas

Acknowledgements
The authors thank all of those who contributed their time and expertise to this report.

Impact Partners
Apparel Impact Institute, Ellen MacArthur Foundation, Fair Labor Association, Social & Labor Convergence Program, Textile Exchange.

Principal Industry and International Stakeholders
ACT, Alliance for Water Stewardship, Anker Research Institute, Better Buying Institute, Cascale, Circle Economy, PEFC, The Fashion Pact, The Microfibre Consortium, ZDHC.

Global Fashion Agenda Team
Federica Marchionni, Alice Roberta Taylor, Constance Beswick, Alexandra Gora, Imogen Lee-Savage.

Global Fashion Agenda also thanks its partners who make it possible to conduct research and present findings to the broader industry.

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About Global Fashion Agenda
Global Fashion Agenda (GFA) is a non-profit organisation that fosters industry collaboration on sustainability in fashion to accelerate impact. With the vision of a net positive fashion industry, it drives action by mobilising, inspiring, influencing and educating all stakeholders. The organisation has been leading the movement since 2009 and presents the renowned international forum on sustainability in fashion, Global Fashion Summit. GFA influences policy through its advocacy efforts, publishes thought leadership, implements impact programmes, presents educational guidance, and connects companies with solutions. To learn more, visit our website or contact us directly via impact@globalfashionagenda.org.

About this report
This GFA Monitor edition serves as a concise update gauging industry progress towards a net-positive fashion industry. Building on the Fashion CEO Agenda's holistic framework, it highlights the critical need for social and environmental sustainability. This edition is co-created with Global Fashion Agenda's Impact Partners and stakeholders who are acknowledged as principal industry experts in their respective fields. For detailed actions, tools, definitions and best practice examples, readers are encouraged to download the full GFA Monitor 2023 for more comprehensive guidance.

About the Fashion Industry Target Consultation
Launched in 2022, the Fashion Industry Target Consultation is a multi-stakeholder project led by GFA and the UN Environment Programme (UNEP) to annually assess the industry-wide sentiment against key milestones that the industry must strive to meet to achieve a net-positive fashion industry. This year, 100 stakeholders from across 6 continents participated, focusing on 27 action areas. The results are presented in this GFA Monitor update. It is important to note that there are limitations to data gleaned from a survey and comparing performance from one year to the next should be interpreted with care, due to variations in respondents. For the consultation methodology, please see the Annex. Learn more at globalfashionagenda.org/fashion-industry-target-consultation.

Disclaimer
While mentioned parties are supportive of the content of the GFA Monitor publication relevant to their fields of work, this does not mean that their organisations nor members holistically endorse this report. The report does not constitute the explicit views of GFA's partners and is not intended to bind partners or member brands to any commitment or course of action.

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Opening Address

“To navigate immediate disruptions and ensure long-term resilience, the fashion industry must embed sustainability at its core, aligning environmental and social objectives with the business case to safeguard both its future and the communities it impacts.”

Ahead of COP29, I am proud to present this special edition of the GFA Monitor, the annual gauge of the fashion industry’s progress on the five priorities of the Fashion CEO Agenda: Respectful and Secure Work Environments, Better Wage Systems, Resource Stewardship, Smart Material Choices, and Circular Systems. This edition of the GFA Monitor serves as a concise update to the 2023 edition, delivering valuable insights and identifying critical actions to stay aligned with the industry’s collective path forward.

GFA incorporated expert insights from leading industry organisations with diverse areas of expertise, to consolidate existing knowledge, reduce complexity, and present industry guidance, while substantiating a clear business case to act. The report also presents insights from GFA and the UN Environment Programme’s Fashion Industry Target Consultation, a survey providing an industry snapshot of current target setting and measurement reporting across pivotal areas for action. These insights are strategically placed within their respective priority chapter, highlighting data from brands, producers/manufacturers, and the overall respondent aggregate, which represents a wide array of stakeholders.

Since COP28, nations are enhancing their Nationally Determined Contributions to set more ambitious greenhouse gas reduction targets, the Loss and Damage Fund is being operationalised and contributions to the Green Climate Fund have increased. The fashion industry is also progressing, with exciting developments such as the expansion of sustainable cotton market share, the growing commitment from global brands to binding agreements supporting collective bargaining and improving wages, and an increase in awareness and target-setting across the five priorities of the Fashion CEO Agenda. However, companies are encountering difficulties in deciding where to take action, often under pressure to prioritise economic drivers, as we have also noted a decrease in the implementation, measurement and reporting of these targets. Wage increases remain minimal, gender pay disparities persist, and efforts to advance DEI initiatives are still lagging at the supply chain level despite growing evidence of their importance for business success.

Extreme climate events have increased again this year, including record heat waves in South Asia, catastrophic floods in Brazil, Kenya, and the UAE, as well as an intense wildfire season in Canada, driven by prolonged drought and rising temperatures. The wars in the Middle East, Ukraine and Sudan, have led to severe humanitarian crises, often impacting the most vulnerable.

As industries confront ongoing climate threats, geopolitical tensions and increased scepticism or de-prioritisation of sustainability initiatives, they must reconfigure their strategies to tackle immediate disruptions, while fostering long-term sustainability and resilience within the industry and the communities they serve. Operationalising environmental and social objectives, including mitigation and adaptation approaches, and building the risk of inaction into the business case, are pillars to futureproof organisations without sacrificing sustainability.

The GFA Monitor Update 2024 aims to support this endeavour while reinforcing the COP29’s core themes: enhance ambition and enable action. These principles guide global efforts to combat climate change and protect communities, emphasising the necessity for heightened commitments from all stakeholders. As such, policymakers are called upon to incentivise an environment conducive to sustainability and innovation. In addition, the fashion industry, along with both public and private sector actors, is urged to utilise the actionable steps, credible tools, programs, solutions, and proven best practices present in this report and the more expansive 2023 GFA Monitor resource.

At GFA we are acutely aware of the ongoing challenges and are unwavering in our commitment to help the fashion industry navigate the complexities of today’s social and environmental landscape. By actively participating in this collective global effort, we can pave the way towards a net positive fashion industry—one that contributes more to people, communities, the natural world, and the global economy than it takes.

Federica Marchionni
CEO, Global Fashion Agenda

Executive Summary

The GFA Monitor outlines tools and proven practices the fashion industry can draw on as it transitions its practices to becoming net positive. It highlights the current state of progress in key areas for action across the five sustainability priorities of the Fashion CEO Agenda.

Synopsis

The fashion industry faces well-identified challenges and opportunities in its pursuit of a more sustainable, equitable, and transparent ecosystem. This report seeks to assist industry stakeholders in this journey by offering proven solutions that can be embraced and applied by all actors.

Respectful and Secure Work Environments

Despite some significant advancements, continued efforts are needed to align industry standards and strengthen buyer-supplier partnerships. Although companies are increasingly recognising the business benefits of inclusive practices, DEI efforts must address persisting structural inequalities, often affecting women and marginalised groups disproportionately. While providing flexible employment to many, informal employment arrangements, such as homeworking and subcontracting, frequently expose workers to exploitation and substandard occupational protection.

Action Areas
- Responsible purchasing practices
- Diversity, equity and inclusion
- Terms of employment
- Social protection

Better Wage Systems

Notable pockets of progress have been made in addressing wage issues, with initiatives supporting wage transparency, responsible purchasing practices and collective bargaining. However, system solutions are insufficient and wage gaps persist, especially in key manufacturing regions where inflation outpaces wage growth and gender pay disparities remain a concern. Legislative efforts, such as the EU's Corporate Sustainability Directive, aim to improve wage transparency and equity.

Action Areas
- Wage transparency
- Responsible purchasing practices
- Freedom of association and collective bargaining agreements
- Pay equity

Resource Stewardship

While nature protection gains prominence in addition to climate change mitigation, greenhouse gas (GHG) emissions continue to rise besides increasing resource use and industry growth. Biodiversity conservation, water stewardship and pollution control require holistic strategies as the repercussions of climate change increasingly disrupt manufacturing regions. Regulations such as the EU Renewable Energy Directive and policies on chemical use are set to address decarbonisation and environmental impacts. Indigenous communities need to be included more closely in decision-making around biodiversity conservation.

Action Areas
- Energy use
- Land use and biodiversity protection
- Water stewardship
- Chemical use
- Fibre Fragmentation

Smart Material Choices

Companies are increasingly setting goals with respect to sustainable materials, with brands aligning with the United Nations' 2030 targets. However, virgin synthetic fibre production has increased and the share of recycled fibres has decreased. Regulatory initiatives such as the EU's Green Deal push for more sustainable textile materials, but significant innovation is required to reduce raw material consumption and recapture value from existing resources.

Action Areas
- Synthetics
- Plant fibres
- Man-made cellulosic fibres
- Animal-derived fibres

Circular Systems

Companies are increasingly setting targets, investing in solutions and implementing programmes around circularity, particularly textile recycling and circular business models, although scale has often not yet been reached. Despite regulatory initiatives promoting circular design and waste reduction, the gap in circularity has widened since 2018. To advance circularity in the fashion industry it is essential to address overproduction, improve recycling infrastructure and ensure an equitable transition for workers.

Action Areas
- Circular design
- Circular business models
- Textile-to-textile recycling
- Just transition

The above fields of action in the respective priority areas present the industry's key challenges and opportunities for building a more sustainable, equitable and transparent fashion ecosystem.

Respectful and Secure Work Environments

Upholding standards for the respect of universal human rights for everyone employed along the value chain

Impact Partner

The Social and Labor Convergence Program

Website

The Social & Labor Convergence Program (SLCP) is a multi-stakeholder initiative with the mission to implement a Converged Assessment Framework that will eliminate audit fatigue, collect credible and actionable social and labour data, increase transparency and support stakeholders' efforts to redeploy resources into improving working conditions in global value chains.

"2023 SLCP assessments showed a 5% increase in social & labor legal non-compliances demonstrating the importance of keeping Respectful and Secure Work Environments high on the agenda."

Janet Mensink,
Executive Director,
Social & Labor Convergence Program

Other contributors to this chapter

ACT | Anker Research Institute | Better Buying Institute | Cascale

Why does it matter?

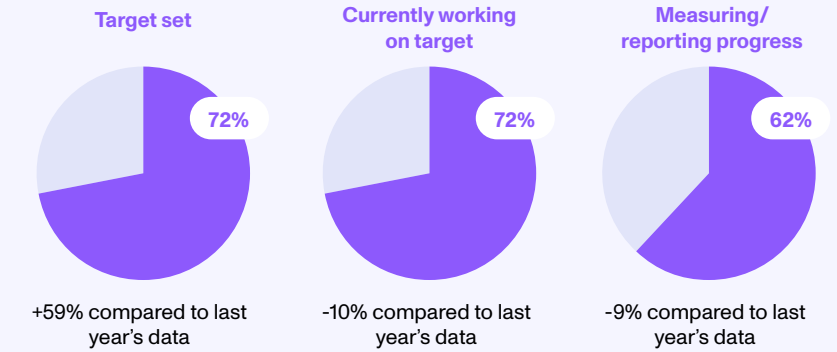
An estimated 300 million workers[1] sustain the USD 1.7 trillion fashion industry.[2] Ensuring safe conditions, fair wages and well-being promotes positive social and economic development for workers and their communities. Such improvements also benefit the industry by increasing resilience, productivity and talent retention, while providing workers the protection and representation they need.

Where are we today?

The findings of this year's Fashion Industry Target Consultation indicate a rise in the number of targets set by brands and manufacturers across all six indicators in the Respectful and Secure Work Environments category. Most targets concern the topic of responsible purchasing practices (RPPs) and grievance mechanisms. However, the number of companies actively working on these targets and measuring progress has declined slightly.[3]

Recent progress on RPPs is reflected in this year's TIWW[4] purchasing practices metric, which draws on data gathered through the Better Buying Partnership Index™. The score rose 8 points to 48 in comparison to the previous year.[5] However, this figure should be viewed with caution. As the vast majority of suppliers are rating brands they consider preferred partners, the results reflect industry best practice, rather than an industry-wide norm. Broader participation from suppliers is needed to obtain a more representative picture. Brands' commitments to RPPs were put to the test in August this year when political unrest and protests in Bangladesh turned violent, resulting in the loss of more than 1,000 lives,[6] and leading to curfews and communication blackouts that brought operations to a standstill. Encouragingly, despite the challenges, local stakeholders reported that the industry for the most part continued to uphold practices and in some cases supported local suppliers with extended delivery times.

Fig. 1 – Responsible purchasing practices are adopted across the textile chain by 2030



Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

Improvements in diversity, equity and inclusion efforts have been observed in marketing campaigns and public-facing roles, but internal diversity is still lacking at both corporate and supply chain level with women and marginalised groups most at risk.

While most industrialised nations today have workers' compensation programmes in place, the level of benefits offered in each case varies widely. Often performed under informal arrangements, homeworking and subcontracting continue to offer flexibility, but often at the expense of essential protection and with heightened risks, including of forced labour. As impacts of climate change, most notably extreme temperatures, increasingly affect the health of workers, social protection measures are becoming crucial across the value chain.[7]

In 2023, a total of 9,230 facilities conducted an assessment using Social & Labor Convergence Program's (SLCP) Converged Assessment Framework, up 27% from the year before. The assessments covered 6.6 million workers and unlocked as much as USD 26 million in savings from streamlined audits.[8] SLCP assessments identified the highest number of non-compliances in the topics of health and safety, working hours and worker involvement, findings that are consistent with last year's data and that highlight the pressing need for improvement in these areas.[9]

At the same time, governments are increasingly pushing for greater social corporate accountability through progressive legislation. As of this year, the European Sustainability Reporting Standards (ESRS) require companies to report their impacts on workforce conditions and rights. The EU's new Corporate Sustainability Due Diligence Directive (CSDDD) further mandates due diligence to prevent human rights abuses and environmental harm. Additionally, an EU ban on products made with forced labour is nearing adoption. In the United States, bills like the Massachusetts Fashion Sustainability and Social Accountability Act and Washington's Transparency in Supply Chains Act are also enhancing social impact accountability and brand disclosure around efforts to combat human trafficking and forced labour in their supply chains. This legislation will likely require brands to dedicate more resources to risk management and to ensuring ethical practices throughout their supply chains.

To achieve respectful and secure work environments for all workers, action is required across four key areas:

❶ Responsible Purchasing Practices | ❷ Diversity, Equity and Inclusion | ❸ Terms of Employment | ❹ Social Protection

1 Responsible Purchasing Practices

Purchasing practices, such as contractual agreements and payment terms, shape brand- manufacturer interactions and influence the ability to produce garments in safe working environments. Combined with value chain transparency, they enable effective planning, improved working conditions and fair compensation for workers.

Recent data reveals notable progress in responsible purchasing practices (RPPs) with all brand and manufacturer respondents setting and actioning targets to demonstrate measurable improvements towards RPPs by 2030.[10] Strong industry support, with 97% of all respondents backing alignment on this target, reflects a unified commitment to progress. ACT's 2023 Accountability and Monitoring Report shows positive developments among signatories on purchase prices, fair payment terms and training on the topic of responsible sourcing. Despite gains, challenges remain with respect to price quotations, transparency, labour costing and delayed payments, impacting planning and investment in workplace improvements.[11]

The Better Buying Partnership Index™ shows an eight-point increase in buyer-supplier partnership scores, with the largest increases reported in buyer's efforts to improve environmental performance in products and supply chains, followed by the efficiency of operational processes and buyers' efforts to improve working conditions.

This year, 66% of all respondents indicated to have set targets to improve value chain transparency, a 39% increase from 2023. Of those, 62% report having made progress.[12] Rising adoption of blockchain and digital product passports is set to improve data accuracy and traceability. Amid rising regulatory pressure, including under the EU's CSRD and CSDDD, brands are facing requirements that prescribe more detailed supplier disclosures as a means of identifying and addressing socio-environmental impacts.

2 Diversity, Equity and Inclusion

Addressing power imbalances presents an opportunity to empower marginalised groups, including women and racial minorities, by promoting equal opportunities, improving health, advancing careers and increasing control over their futures.

Encouragingly, 62% of this year's respondents have set targets for implementing diversity, equity and inclusion (DEI) policies by 2040, up 49% from 2023. Additionally, 55% are reporting on these targets, with 90% supporting industry-wide alignment to drive collective progress.[13] NGO-led initiatives such as RISE aim to advance gender equality through upskilling, policy changes and business practice transformations. Better Work Jordan launched new guidelines focused on improving inclusion of workers with disabilities by improving physical accessibility and equitable recruitment practices. GFA together with PwC also published the Unpacking Pay Equity - Italy report to raise awareness and provide direction for improving pay equity in Italian value chains.

Sustainable development goals

Read the full GFA Monitor 2023 for concrete actions, open-access tools, definitions and best practice examples.

Read GFA's Policy Matrix: EU and Americas regularly updated overviews of the main policy initiatives impacting this priority.

DEI is increasingly being recognised as crucial, not only for social impact but also for business success. Companies embracing DEI have been seen to outperform their peers financially by 39% and make 87% better and faster business decisions.[14] Furthermore, inclusive companies benefit from higher employee advocacy and lower turnover, while diverse workforces increase consumer engagement.[15] Despite visible diversity in marketing and on catwalks, progress in workplace diversity still lags behind.

In garment-producing countries such as Bangladesh and Cambodia, women make up more than 50% of the workforce, but rarely hold higher paying and management roles.[16] Furthermore gender discrimination is often tied to age discrimination, with younger workers predominantly female.[17] Employers also lack effective tools for preventing violence and harassment, which one in five workers report facing. While laws and policies exist, gender issues must be integrated into core agendas as employers bear the main responsibility for preventing workplace violence and harassment. Practical tools are needed, along with information campaigns and training, to effectively implement policies and drive change.

3 Terms of Employment

Formalising work arrangements is key to preventing human rights abuses, ensuring equal treatment across fashion's value chain particularly for vulnerable groups, among them women, migrant workers and those in informal employment.

Homeworking and subcontracting continue to provide vital income and flexibility for millions of workers. However, they are often subject to informal employment arrangements. As a result, they can lack essential protection such as healthcare, paid leave and social security. Marginalised groups are disproportionately affected. In 2021, some 2 billion workers worldwide were informally employed, a significant share of whom in Asia's garment sector.[18] In Bangladesh, Pakistan and India, between 65% and 92% of workers are still employed without written contracts, leaving them vulnerable to exploitation.[19] In Pakistan, over two-thirds of surveyed workers were paid less than the minimum wage, and many were not compensated for forced overtime. There is also evidence that the shift to piece-rate contracts is lowering earnings and increasing work hours in some cases.[20] Although 90% of respondents support industry alignment to address informal work challenges by 2030, and 100% of producers and manufacturers indicate that they have set corresponding targets, no brand has yet done so following this years' survey.[21] Continued efforts to formalise employment and integrate these issues into industry agendas are essential for meaningful progress.

Having said that, progress is evident in some areas. Efforts in Turkmenistan's cotton sector have for instance reduced the prevalence of forced labour, driven by increased pressure for supply chain transparency and the implementation of labour rights reforms. The adoption of technology and verification tools to identify forced labour risks has also risen, with over 95% of US companies adopting these, driven by the UFLPA.[22] Additionally, a new EU and United Nations PROTECT project aims to strengthen the rights of women migrant workers and children across Southeast Asia, focusing on labour rights, violence prevention, combating human trafficking, and legal protections.

4 Social Protection

Social protection is a fundamental human right and includes measures such as sick pay and unemployment insurance. Freedom of association, collective bargaining and grievance mechanisms empower workers to improve conditions and safely address complaints.

Most industrialised nations now have workers' compensation programmes to compensate for lost income and provide medical care and rehabilitation services, however each with unique regulations governing benefits and procedures. This year, Bangladesh introduced the Employment Injury Scheme Pilot to compensate workers affected by workplace injuries or fatalities at 150 factories and with the support of several initiatives and global brands. As climate change sees temperatures soar in regions like Bangladesh that experienced their worst heatwave in 70 years, more workers are falling sick, impacting productivity and costing roughly USD 6 billion annually in labour losses.[23] Some manufacturers have started implementing cooling solutions, hydration stations and other protective measures. Of the evolving climate-related risks, heat stress has become a major concern, especially in Africa, Asia and Arab states, where heatwaves claimed 4,200 lives in 2020.[24] It is vital that social protection schemes reflect these increasing risks.

Recent reports indicate many fashion brands are failing to uphold their commitments to freedom of association (FoA) and access to collective bargaining agreements in South and Southeast Asia, instead relying on often ineffective worker committees rather than trade unions, weakening workers' representation. Business & Human Rights Resource Centre's report highlights how FoA is being undermined in six key garment-producing countries.[25] As legislation like the EU's CSDDD emerges, brands face increasing pressure to tighten their policies on FoA. Effective grievance mechanisms are essential for addressing worker complaints, complementing the critical role of FoA and trade unions. The ILO, together with three trade union federations and through its Strengthening Industrial Relations in Indonesia (SIRI) project, has developed a grievance application process for garment workers. This initiative supports both union and non-union members in confidentially raising complaints related to their labour rights. Training has been provided to union leaders to handle these cases effectively and advocate for workers.

Fig. 2 – Worker access effective grievance mechanisms across the textile value chain by 2030

Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

Better Wage Systems

Ensuring the necessary systems to enable manufacturing partners to pay all workers fair compensation and living wages

Impact Partner

Fair Labor Association

Website

The Fair Labor Association (FLA) promotes human rights at work. FLA is an international network of companies, universities and civil society organisations collaborating to ensure the people working at the world's factories and farms are paid fairly, and that their health, safety and well-being are protected. FLA's mission is to create better workplaces through innovative solutions to the most complex labour rights issues.

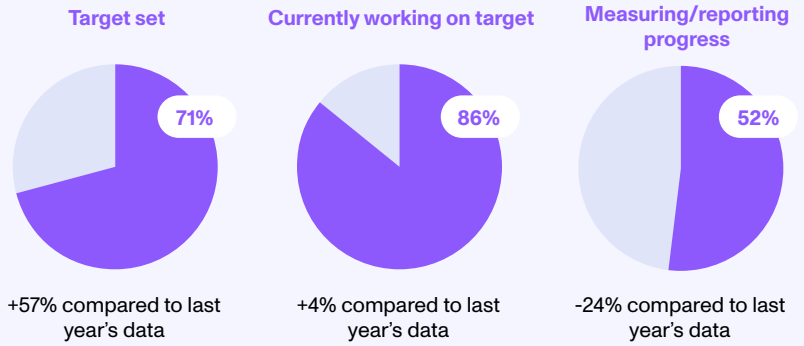
"Working together, we can and will end poverty-level wages for garment workers. Establishing industry targets for 2035 is a step forward; now we must prioritize measuring progress toward living wages."

Tiffany Rogers,
Director of Innovation and Development, Manufacturing,
Fair Labor Association

Other contributors to this chapter

ACT | Anker Research Institute | Cascale

Fig. 3 – Fair compensation and living wage is achieved across the textile value chain by 2035



Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

Why does it matter?

Promoting implementation of better wage systems can create a fair and inclusive fashion system, improving garment workers' livelihoods globally. Manufacturers benefit from reduced risk, motivated workers and increased loyalty. While most brands don't pay workers directly, they can promote fair compensation and living wages through responsible purchasing practices that include commitments to absorb higher wages, ensuring systems are in place to cover the cost of higher wages, including accountability mechanisms and supporting collective bargaining agreements.

Where are we today?

This year's survey results indicate an increase in targets set across the three indicators in the Better Wage Systems priority, with the largest rise in promoting fair compensation and living wages by 2035 (up 57%). Multi-stakeholder initiatives and NGOs continue to play a key role in supporting industry efforts to enable fair compensation and living wages through data collection, frameworks and collaboration with brands, confirming the industry's commitment to wage issues. The growing momentum toward wage digitalization, for instance in Cambodia, is accompanied by notable progress in purchasing practices with regards to wages, including itemised costing and fair payment terms.[26] Recent studies have also increased transparency on minimum wage growth against living wage benchmarks. Aside from revealing significant gaps (particularly disparities between genders), they provide important data for prioritising actions.

The recent ILO conclusions frame living wages as a core labour right.[27] However, key manufacturing regions are still seeing inflation outpacing wage increases, as most recently reported in Bangladesh, Cambodia, Pakistan and Turkey. TIWW[28] has also reported a 1% increase in the gap between minimum and living wages since 2023, with Colombia, Honduras and Turkey seeing the largest increases. Countries with the widest gaps include China, Egypt, India and Indonesia.[29] Although Bangladesh has raised its minimum wage by 56%, it remains insufficient to cover living costs, and fears persist among governments and factory owners that higher wages could drive fashion companies to lower-wage countries.[30] Pakistan is additionally facing political upheaval, economic instability and mass inflation, which this year has led to factory closures and a rise in informal employment practices. As a result workers, with and without contracts, are having to contend with low wages and unpaid overtime.

Promisingly, new legislative initiatives such as the EU Corporate Sustainability Due Diligence Directive, the EU Corporate Sustainability Reporting Directive and the Massachusetts Fashion Sustainability and Social Accountability Act are set to drive forward wage transparency and fair compensation. These laws require companies to address fair wages, freedom of association and collective bargaining, paving the way for more equitable conditions in the fashion industry.

To achieve better wage systems for all workers, action is required across four key areas:

❶ Wage Transparency | ❷ Responsible Purchasing Practices | ❸ Freedom of Association and Collective Bargaining Agreements | ❹ Pay Equity

1 Wage Transparency

Wage transparency is crucial for ensuring fair compensation and living wages across the value chain, holding brands accountable and empowering workers to advocate for their rights.

Just 4% of companies currently disclose the proportion of garment workers earning living wages, Remake's latest Accountability Report reveals.[31] While 25% share the benchmarks or methodologies used for determining living wages, just 2% report paying a living wage to all direct employees globally.[32] Legislative initiatives such as the FABRIC Act, the New York Fashion Act, and the EU's Pay Transparency Directive are set to accelerate wage transparency by mandating openness about pay levels, career progression and workers' rights to pay information. The rising adoption of digital product passports as well as digital wage payment schemes offers further potential to increase transparency and accountability, yet as it stands the fashion industry's progress on wage transparency is inadequate.

Fashion leaders are continuing to collaborate with non-profit organisations like FLA, Global Living Wage Coalition (GLWC), and WageIndicator to collect real wage data across the industry. FLA is utilising data collected by its members through the Fair Compensation Dashboard to analyse and produce aggregated reports on wage trends across different manufacturing regions. The latest report on Bangladesh shows that, from 2019 to 2022, the average net monthly wage increased by only 0.95% despite high inflation.[33] In fact, workers' average monthly wage actually declined by 4.6% from 2021 to 2022.[34] In 2022, average worker wages were 51.78% below the GLWC estimate for Dhaka.[35] While an increase in wages can be expected following the minimum wage update in December 2023, the negotiated level still falls 46% short of demands by unions, civil society organisations and multi-stakeholder initiatives.[36] Adjusting purchasing practices to cover increased labour costs, enhancing supplier feedback mechanisms and supporting workers' rights to freedom of association are recommendations put forward by FLA to improve wage progress. FLA's Vietnam report shows that workers' average net wages have consistently increased since 2020, but they still fall short of the pre-pandemic period. As a result, the living wage gap has widened from 5.4% in 2019 to 22.4% in 2022.[37] Identifying complexities in buyer-supplier relationships in multi-buyer apparel and footwear factories, FLA's living wage pilot in Vietnam aims to improve purchasing and costing practices, wage transparency and worker engagement.

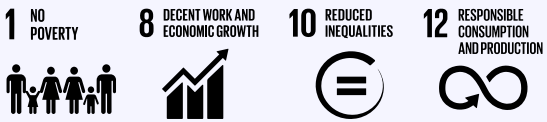
2 Responsible Purchasing Practices

Responsible purchasing practices are crucial for improving wages, ensuring timely payment, stable employment and fair compensation. They affect pricing, deadlines and brand disengagement, impacting workers' wages across the value chain.

According to this year's ACT Accountability and Monitoring Report, signatories have made notable strides with an 8-point improvement in brands including wages as itemised costs in purchasing prices, a 2.6-point increase in fair payment terms, an 11-point rise in brands committing to responsible sourcing training and an 18-point increase in practicing responsible exit strategies.[38] Additionally, 37% of signatory suppliers received guidance on labour costing aligned with ACT's protocol, 96% of orders adhered to agreed payment terms and 64% of factory exits complied with ACT's responsible exit checklist.[39] Moreover, a 57% increase was observed in this year's respondents, including 100% of producers and manufacturers claiming to have set targets to promote fair compensation and living wages by 2035. However, only 25% of brands claim to have set this target, although all respondents support industry alignment and active engagement to drive progress.[40]

Until brands adjust their purchasing practices and pay higher prices, the onus to absorb wage increases will continue to put suppliers under pressure. Despite support – including letters issued by organisations such as ACT and FLA and signed by global brands that are members, encouraging increased minimum wage negotiations and underscoring the importance of collective bargaining, FoA and responsible purchasing practices – few brands have publicly committed to absorbing the increased wage costs. A notable exception is the ACT programme in Cambodia, which has facilitated a number of legally binding agreements in which individual brands make commitments to support collective bargaining agreements that increase wages. That said, more systemic solutions are generally needed. With this in mind, Remake is advocating for a multi-year living wage strategy for South Asia. Advocacy is also growing for more frequent minimum wage reviews, ideally annually such as is current practice in Vietnam. In Bangladesh, for instance, minimum wages are updated every five years.

Sustainable development goals



Read the full GFA Monitor 2023 for concrete actions, open-access tools, definitions and best practice examples.

Read GFA's Policy Matrix: EU and Americas regularly updated overviews of the main policy initiatives impacting this priority.

3 Freedom of Association and Collective Bargaining Agreements

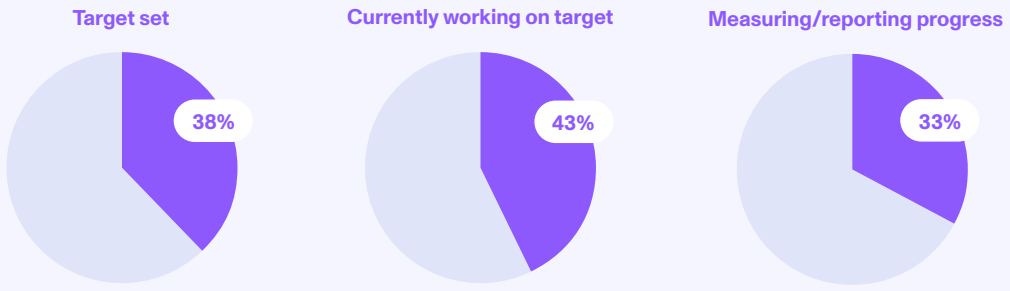
Freedom of association enables collective bargaining to establish binding standards for fair wages and compensation, help address regional living costs and support wage scales to retain and attract skilled employees.

Data from this year's survey indicates progress in setting targets for collective bargaining agreements (CBAs) to achieve fair compensation and living wages by 2035, with a 14% increase in respondents claiming to have set this target, accounting for a total share of 38%.[41] However, only 25% of brands say they are actively working towards these targets, in contrast to 100% of suppliers, with both segments indicating only 50% were measuring or reporting progress. Despite these results, 100% of brands and producers support industry alignment on this goal and are actively working to advance it.[43]

Bucking the trend, individual brands have signed ground-breaking agreements with IndustriALL Global Union to support CBAs and higher wages in Cambodia. Facilitated through the ACT programme, these agreements include legally binding commitments that are monitored and legally enforceable through an international arbitration process. In a parallel process, trade unions and manufacturers are likewise in the process of establishing CBAs in Cambodia. As a result, Cambodia could soon see the first brand-supported CBAs in the industry. These would offer brands the means to provide direct and targeted support and incentives to factories paying higher wages on the basis of collective bargaining. A new supply-chain-level model for industrial relations, the ACT programme in Cambodia is jointly coordinated through a working group in which brands, employers and trade unions are represented.

Despite all advances, FoA and collective bargaining are still plagued by problems in many garment production countries. In some regions, forming trade unions is unsafe, exposing workers to many risks, including union-busting and wage theft. Although FoA and collective bargaining are fundamental rights under ILO standards and national laws, only 39% of major brands report on their implementation.[44] Furthermore, only 15% disclose the presence of democratically elected trade union representatives in their facilities, and just 1% show how collective bargaining has resulted in wages that exceed local legal requirements.[45] In the case of Pakistan, despite legal rights to form unions, actual unionisation is very low, with only 2% of workers being union members and nearly 80% of workplaces lacking unions. These poor unionisation statistics underscore the significant barriers to effective collective bargaining.[46]

Fig. 4 – Worker access to collective bargaining agreements that provide fair compensation and living wage by 2035



Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

4 Pay Equity

Pay equity is essential to ensure fair compensation for all workers, regardless of personal characteristics and background. It addresses disparities faced by vulnerable groups and minorities and ensures equal pay for work of equal value.

Wage gaps in the fashion industry often stem from differences in gender, race and nationality, although most of the currently available data focuses on gender pay gaps. The current edition of the survey shows a 35% increase in respondents claiming to have set targets to achieve pay equity by 2035, including 100% of producers and manufacturers, yet only 25% of brands have reported setting such targets.[47] Only 38% of respondents are actively measuring or reporting progress. However, 90% support industry-wide alignment on achieving pay equity.[48]

The Anker Research Institute (ARI) has developed a common methodology for measuring gender pay gaps across the value chain and has produced insights reports in Bangladesh, Colombia, Morocco, Thailand and Turkey. These reveal significant gender pay gaps ranging between -5.5% and 25.9%.[49] In Bangladesh's garment factories, men earn up to 30% more than women measured by base wages, while Turkish garment factories show smaller but variable gaps between 4% and 17%.[50] The studies recommend continuous wage monitoring and commitment to closing gender pay gaps, urging industry associations, trade unions, governments and brands to collaborate to address the root causes of these gaps.
A recent ILO report highlights similar trends in Sri Lanka, where women's hourly wages are about 27% lower than men's, with disparities more pronounced among informal economy workers.[51] New ratification of international agreements in Sri Lanka should help reduce these gaps if effectively implemented. Earlier this year, GFA and PwC published the initial results of their joint pay equity research in Italian fashion value chains, which indicated a notable divergence in the perception of gender equality between CEOs and those responsible for DEI and HR. Furthermore, the joint report noted that monitoring was challenging due to the large share of SMEs involved.

Governments are also seeking to increase transparency, with legal requirements for gender pay gap disclosure becoming more common in developed countries. One example is the EU Pay Transparency Directive that requires EU companies to disclose gender pay data by 2027.

Resource Stewardship

Decoupling value creation from virgin resource extraction and emission growth through coordinated and multi-stakeholder action

Impact Partner

Apparel Impact Institute

Website

Apparel Impact Institute's (Aii) mission is to identify, fund and scale quality solutions that accelerate positive impact in the apparel, footwear and textile industry. This is achieved by implementing programmes, identifying industry needs and opportunities, catalysing funding and accelerating change. Aii is committed to enable the reduction of 100 million tonnes of CO_2e from the supply chain by 2030.[52]

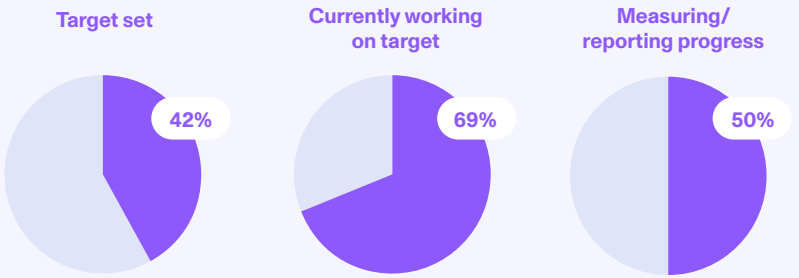
"With 2030 approaching, the industry must swiftly deploy decarbonization programs, tools, and equipment, ensuring measurable, verified year-over-year carbon reductions across the value chain to meet targets."

Lewis Perkins,
President,
Apparel Impact Institute

Other contributors to this chapter

Cascale | Circle Economy | PEFC | The Fashion Pact | The Microfibre Consortium

Fig. 5 –The textile industry limits GHG emissions across scope 1, 2 and 3 by 2030, and achieves net zero GHG emissions by 2050, in line with UNFCCC requirements



Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

Why does it matter?

Fashion is a significant consumer of finite resources and contributes to global GHG emissions, driving deforestation, pollution, climate change and ecosystem depletion that threaten soil health, biodiversity, water resources and vulnerable communities. To safeguard the planet, the industry must decouple value creation from finite resource extraction and emissions through coordinated, multi-stakeholder efforts across the value chain. Resources used must be stewarded responsibly to ensure their regeneration and availability for future generations.

Where are we today?

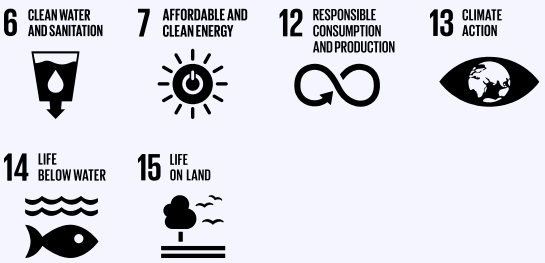
This year's survey results suggest that target setting across all five resource stewardship indicators has increased, with the greatest rise (59%) focused on water stewardship by 2040. However, fewer respondents are actively working on these targets or measuring progress.[53] Notable progress has been made in terms of increased compliance with basic GHG reporting and target setting aligned with science. Driven by NGOs, collective decarbonisation efforts are also growing. That said, the sector's emissions, estimated at between 1.8%[54] and 4%[55] of global emissions, continue to rise. Despite some efficiency improvements in the value chain, these are offset by growth in production as well as in demand for materials. More companies are adopting nature protection strategies and regenerative land practices. However, greater inclusion of indigenous communities in decision-making is needed given their important role in biodiversity conservation. In the chemicals space, brands, supported by initiatives such as ZDHC, are increasingly enforcing wastewater guidelines and supplier compliance with Manufacturing Restricted Substances Lists (MRSLs). Lastly, commitments to reduce microfibre release are also growing, with new studies providing a better understanding of fibre fragmentation impacts.

At policy level, regulations are evolving, particularly around decarbonising the fashion value chain, chemical use and waste disposal. Key policies include the EU Renewable Energy Directive and EU Industrial Emissions Directive, which promote the use of renewable energy and introduce requirements for pollution control. Under the EU's REACH Regulation, an upcoming restriction will phase out PFAS (chemicals frequently used to make textiles water and stain resistant) due to their environmental persistence and associated health risks. Regulations such as the EU's Corporate Sustainability Due Diligence Directive and Nature Restoration Regulation are also set to mitigate biodiversity impacts and restore ecosystems. The imperative for accelerated industry decarbonisation and improving resource stewardship has never been greater in view of the repercussions of climate change. In Bangladesh, Cambodia, Pakistan and Vietnam alone, extreme heat and flooding is projected to severely affect the garment industry by 2030, putting at risk 1 million potential jobs and USD 65 billion worth of apparel exports, which would equate to a decline of 22% in export earnings compared to a climate-adaptative scenario.[56]

To improve resource stewardship, action is required across five key areas:

❶ Energy Use | ❷ Land Use and Biodiversity Protection | ❸ Water stewardship | ❹ Chemical use | ❺ Fibre Fragmentation

Sustainable development goals



Read the full GFA Monitor 2023 for concrete actions, open-access tools, definitions and best practice examples.

Read GFA's Policy Matrix: EU and Americas regularly updated overviews of the main policy initiatives impacting this priority.

1 Energy Use

Transitioning to renewable energy and phasing out coal are essential levers for limiting global temperature increase and averting the most damaging impacts of climate change.

Brands and producers are increasingly setting GHG reduction goals. Indeed, the number of respondents claiming to have set targets to limit GHG emissions by 2030 is up by 12% to 42% of all respondents, including commitments to net zero by 2050.[57] Some 45% of Fashion Charter signatories have set climate targets to keep warming below 1.5°C. In addition, those aiming to obtain 100% of their energy from renewable sources by 2030 has increased by 24%.[58]

A look at the current state of progress towards these targets reveals a mixed picture, with 89% of Fashion Charter signatories now complying with basic reporting. Practically all respondents (99%) report operational emissions.[59] However, many signatories source from coal-reliant countries such as China, making suppliers that are not dependent on coal for energy hard to find.[60] Additionally, one in four companies fail to disclose GHG emissions, and 75% lack key supplier performance data for integrating climate change performance indicators in contracts.[61] Fashion leaders are redoubling their efforts to engage in collective action on renewable energy, efficiency, infrastructure and financing solutions. Notable initiatives include Fashion Climate Fund, Climate Solutions Portfolio, Renewable Energy Initiative, The Fashion Pact's Collective Virtual Power Purchase Agreement project, Supplier Leadership on Climate Transition and Future Supplier Initiative.

Despite increased investment and collective action, based on data from Cascale (formerly the Sustainable Apparel Coalition), Wordly and Textile Exchange, sector emissions totalled 0.879 gigatonnes in 2022, accounting for approximately 1.85% of global GHG emissions.[62] If current trends persist, emissions could reach 1.243 gigatonnes by 2030. Still heavily reliant on coal and other fossil fuels, the apparel industry has to cut emissions from 0.879 gigatonnes in 2022 to 0.489 gigatonnes by 2030 to stay on the 1.5°C trajectory.[63] Fashion Revolution's latest report indicates that 24% of brands do not make any disclosures on decarbonisation efforts, while 86% lack a public, time-bound and measurable coal phase-out target.[64] Moreover, 94% of companies lack renewable energy targets for their supply chains and 42 out of 105 brands assessed have increased their scope 3 emissions since their baseline year.[65] Often presented as a means of offsetting emissions, carbon credits are increasingly criticised as being ineffective in delivering true climate benefits and mitigation outcomes. Indeed, some 32% of voluntary carbon market credits are linked to renewable energy of insufficient quality to meet requirements of labelling initiatives such as ICVCM.[66] Fashion Revolution urges fashion brands to invest at least 2% of their revenue towards a fair transition from fossil fuels, or the industry risks overshooting the 1.5°C limit by 50% by 2030.[67]

2 Land Use and Biodiversity Protection

Adopting regenerative sourcing models to lower impact on land and protect biodiversity is essential for ecosystem function, human well-being, food security and the global economy.

Today, more companies are implementing nature protection strategies across their supply chains, driven by regulations such as the German Supply Chain Act and the EU's CSDDD. Following the 2023 release of SBTN's Science-Based Targets for Land, 42% of this year's survey respondents have set targets to implement science-based land conservation steps by 2030, up 31% from last year. However the share actively working on and measuring progress has decreased slightly.[68] This year, GRI also updated its transparency standards, establishing a new global benchmark for biodiversity impact reporting that supports detailed, location-specific disclosures to ensure

investors, regulatory authorities, NGOs and consumers can assess how impacts on biodiversity are mitigated and reduced. New programmes this year include the WWF's Regenerative Landscape Collaborative. Building on successful models in India, Brazil and Tanzania, it aims to promote regenerative agricultural practices in cotton production.

Over one-third of materials used by the fashion industry stem from land-based ecosystems. Currently, 67% of companies have identified a person or team that is accountable for biodiversity activities. Spread across 90 countries, there are an estimated 476 million indigenous people worldwide.[69] Although they play a critical role in preserving 80% of the world's biodiversity,[70] only 5% of companies consult their leaders and communities.[71] Textile Exchange and Conservation International's new guide provides 12 partnership principles to help fashion and textile companies collaborate effectively with indigenous communities, outlining a key step towards integrating indigenous perspectives into the industry's decision-making processes.

Recent reports linking major fashion companies to cotton sourced from deforestation-prone farms underscore the need for stricter audits. Despite projected growth of the market for man-made cellulosic fibres (MMCFs), only 12% of brands have committed to measurable deforestation targets.[72] Encouragingly, the new EU Deforestation Regulation, effective as of early 2025, will increase traceability and transparency and will require all companies selling into the EU provide evidence that their products are deforestation-free. Moreover, a recent PEFC study confirms related consumer demand, with 74% of consumers expecting brands to ensure their products come from sustainably managed forests.[73]

3 Water Stewardship

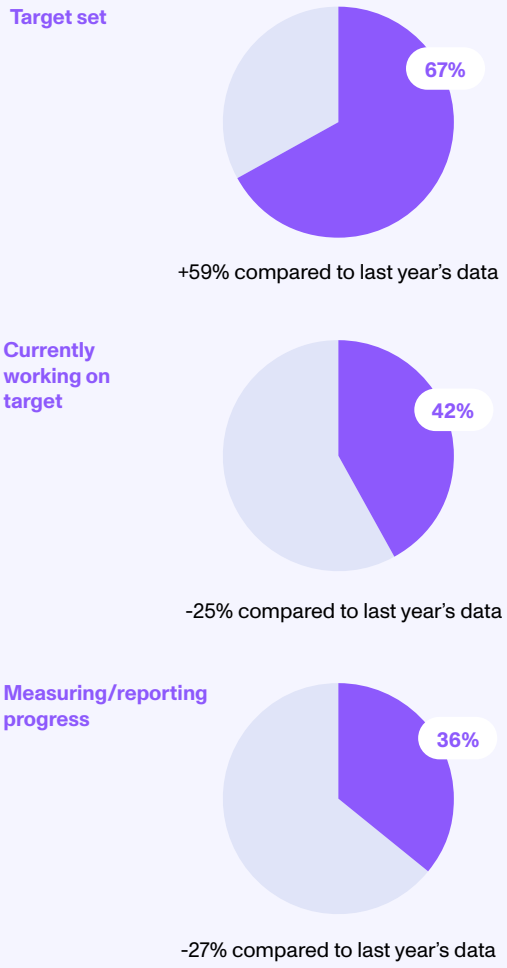
Water stewardship is vital for ecosystems, human health and the economy, yet rising consumption, pollution and poor governance threaten global water security.

The apparel sector is increasingly setting water-related value chain targets, with 26% of companies establishing goals and about 70% on track to meet them.[74] This year's survey shows a 59% increase in respondents setting water stewardship targets by 2040, with 100% of producers and manufacturers actively working on and reporting progress.[75] In contrast, only 33% of brands are actively working on achieving targets in this area, and a mere 17% are measuring progress.[76] As rising temperatures accelerate the global water cycle, resulting in more frequent droughts and extreme rainfall, key manufacturing regions and global trade are being impacted.

Freshwater and marine eutrophication is a significant impact of the textile industry, though currently mostly overlooked in impact assessments. Eutrophication, which results from the buildup of nutrients like nitrogen and phosphorus in water, disrupts ecological cycles, endangers aquatic life, and compromises water quality, often caused through discharges caused by cotton and wool production, textile manufacturing and waste disposal practices. The impact of the textile value chain on marine eutrophication is described in more detail in the upcoming Textiles Circularity Gap Report by Circle Economy.

Launched at the UN 2023 Water Conference, the Water Action Agenda aims to achieve water security for all. It predicts that the cost of mitigating supply chain water risk will be five times less than the cost of impact.[77] Given that most of the apparel supply chain operates in regions of moderate to high water stress,[78] water use and risk disclosure against standardised frameworks is essential for informing robust mitigation strategies.

Fig. 6 – Water Stewardship is implemented across the textile value chain by 2040



Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

4 Chemical Use

Embracing sustainable chemical management and eliminating hazardous chemicals can enhance water, land and human health while optimising costs and reducing risks for workers, consumers and the environment.

Growing awareness of chemical pollution, alongside regulation, continues to drive a growing number of industry players to adopt more sustainable chemical management practices. 36% of this year's respondents claim to have set targets to align all chemical formulations with a recognised Manufacturing Restricted Substance List (MRSL) by 2040, with 47% indicating that they actively track progress.[79] ZDHC continues to lead efforts to support the industry in this space, with all signatory brands committed to the ZDHC MRSL and 86% enforcing wastewater guidelines for their suppliers. Over 2,500 suppliers publish wastewater test reports, of which 75% comply with MRSL parameters. Additionally, leading manufacturers are adopting more advanced effluent treatment plants to achieve wastewater recycling and zero discharge of hazardous chemicals. Companies are also coming up with innovations in the chemical space, particularly in denim production. For instance, Archroma has developed a new denim production solution featuring resource-saving pre-treatment and dyeing processes.

Regulatory challenges remain, with calls for improved and simplified REACH regulations in the EU to better safeguard people and the environment. Debate continues around the use of PFAS. Used for decades in clothing and other textiles to repel water, oil and dirt, these chemicals have been linked to serious health issues. PFAS-treated textiles often end up in landfills or are incinerated, releasing chemicals into the environment.[80] Although some leading companies are committing to PFAS-free products, the textile industry remains a significant PFAS emitter, impacting manufacturing areas as well as posing risk for end-users. The most recent reports from Bangladesh show PFAS levels exceeding proposed EU limits, involving risks to water, soil and food. Further concerns are also being raised that the use of such chemicals in textiles may impair recyclability and hinder circular economy goals, emphasising the need for stronger regulations to ensure safer products.

5 Fibre Fragmentation

Fibre fragmentation impacts water, air and soil, and is increasingly recognised as a significant issue, with a 26% rise in survey respondents setting targets to mitigate microfibre pollution by 2050.[81] While the proportion is low in comparison to other material topics, 36% are working on these targets at present, and 28% are measuring progress.[82] Integrating fibre fragmentation into broader sustainability strategies is crucial due to its links to biodiversity loss, environmental pollution and climate change.[83]

The Microfibre Consortium (TMC) leads global efforts in this area by hosting the largest data collection globally on fibre fragmentation, with over 100 signatories to the Microfibre 2030 Commitment. This year, TMC launched an e-learning course and snapshot guidance to aid manufacturers in reducing microfibre release during production. Studies highlight that manufacturing decisions, especially yarn spinning methods, significantly affect microfibre release[84] and also show that textile effluent treatment plants are insufficient in removing microfibres, capturing as little as 24%.[85]

There is growing evidence that natural, man-made cellulosic and synthetic fibres should be considered environmental pollutants with some studies indicating that more than 60% of fibres in our oceans are of natural origin.[86] Domestic laundering of textiles contributes to this pollution, and could be reduced through mandatory filters in washing machines and consumer education.

Smart Material Choices

Decoupling value creation from virgin resource extraction and emission growth through coordinated and multi-stakeholder action

Impact Partner

Textile Exchange

Website

Textile Exchange is a global non-profit driving positive impact on climate change across the global fashion and textile industry through smart material choices. It guides a growing community of brands, manufacturers and farmers towards more purposeful production from the very start of the supply chain. Textile Exchange's goal is to help the industry to achieve a 45% reduction in the emissions that come from producing fibres and raw materials by 2030, and to accelerate the adoption of practices that improve the state of our water, soil health and biodiversity.

"At Textile Exchange, we're committed to driving materials transformation at tier 4. Scaling of preferred production systems such as textile-to-textile recycling, regenerative agriculture and investing in equitable partnerships are essential to achieving climate and nature targets and building resilient systems that respect resources and people."

Sarah Needham,
Senior Director of Engagement and Partnerships,
Textile Exchange

Other contributors to this chapter

Cascale | PEFC | The Fashion Pact | The Microfibre Consortium

Fig. 7 – All priority materials are both preferred and low climate impact by 2030, in line with UNFCCC

Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

Why does it matter?

Fibre production and consumption has substantial implications for ecosystems, farmers and workers' well-being. Fashion brands, along with stakeholders such as policymakers must support tier 4 producers who cultivate and extract raw materials from the earth, plants or animals to drive a collective transition towards preferred raw materials, scaled innovation and slow growth in annual production and consumption of finite materials to mitigate environmental and social risks.

Where are we today?

This year's results suggest an increase in targets set across all smart material categories, including synthetics, plant fibres, man-made cellulosic fibres (MMCFs) and animal-derived fibres, with 91% of brands and 63% of producers setting goals aligned with those of the United Nations Fashion Industry Charter for Climate Action to use preferred, low-climate-impact materials by 2030.[87] However, there has been a decline in the percentage of respondents actively working on these targets and measuring progress, with only 50% of brands tracking their performance.[88] Sustainable cotton[89] is gaining market share, on the back of several initiatives supporting farmers' transition to organic and regenerative practices.[90] However, the combined share of recycled fibres across fibre groups dropped from 7.9% in 2022 to 7.0% in 2023, with less than 1% of global fibres stemming from post-industrial and post-use recycled textiles in 2023.[91] Despite industry commitments to combat climate change, the production of virgin fossil-based synthetic fibres rose from 67 million metric tonnes in 2022 to 75 million metric tonnes in 2023.[92] MMCFs are seeing increased adoption. Over 500 brands are committed to the Canopystyle initiative, which advances responsible use of forest resources in rayon and viscose supply chains.

On the regulatory front, the EU Green Deal is advancing sustainability in apparel and textile through key initiatives such as the EU Strategy for Sustainable and Circular Textiles and the Regulation on Deforestation-Free Products (EUDR). Additionally, the Ecodesign for Sustainable Products Regulation (ESPR) promotes durability, recyclability and the use of recycled fibres while improving transparency and traceability through a number of tools, among them the Digital Product Passport. Non-EU regulations, such as the New York Fashion Act, could reinforce social-environmental due diligence, while the US Farm Bill could impact efforts to scale regenerative, organic and climate-smart agriculture.

Despite industry efforts, global fibre production rose from 116 million metric tonnes in 2022 to 124 million in 2023, almost doubling over the last 20 years.[93] Current modelling suggests that even if proven solutions available in the market are implemented in 50% of total fibre and raw materials production, GHG emissions savings will only account for one-third of the total reduction targets set. This means that not only would materials need to be substituted to have any hope of hitting the targets set, but also that innovation scaling and a deceleration in the annual production and consumption of new raw materials are needed.[94]

Making smart material choices requires action across four key areas:

1 Synthetics | 2 Plant Fibres | 3 Man-made Cellulosic Fibres | 4 Animal-derived Fibres

1 Synthetics

A shift from virgin fossil-fuel-based materials to recycled synthetics with a focus on textile-to-textile recycling reduces energy use, waste and hazardous conditions and promotes a circular economy in the textile industry.

In 2023, synthetic fibres including polyester, polyamide, polypropylene, acrylics and elastane dominated the global fibre market, accounting for around 67% of total production.[95] Polyester tops the list with a 57% market share. It also had the highest proportion of recycled fibres at around 12,5%, of which 98% was obtained from mechanically recycled PET bottles.[96] To capture the vast quantities of textiles currently wasted and dumped in landfills, and considering the growing competition from the bottle and packaging industries for post-use bottle feedstock, it is imperative to capture textiles as a feedstock for rPET and to scale textile-to-textile recycling technologies.[97]

Efforts to expand textile-to-textile recycling of synthetics are gaining momentum, with many players aiming to meet ambitious targets for recycled material use. Among survey respondents, 44% have set goals to source polyester from preferred raw materials, prioritising textile-to-textile recycling by 2030, up 28% from last year. However, respondent groups diverge notably, with 36% more brands working towards this target than producers and manufacturers.[98] Furthermore, reported progress on these goals has dropped by 35%.[99] Innovators such as Syre are establishing recycling plants with an initial focus on polyester, reducing carbon emissions by 85% compared to virgin counterparts. Fashion leaders are increasingly coupling such initiatives to long-term off-take agreements to ensure they deliver on their targets. A notable increase is also evident in service providers offering traceability solutions, among them Haelixa, Fibretrace and Aware.

Chemically and biologically recycled polyester still only makes up less than 1% to total polyester owing to an array of factors including cost, technological hurdles and high energy consumption.[100] The market share is however expected to grow as new operations for chemically recycled polyester go into commercial production, alongside the efforts of companies such as BlockTexx and Worn Again. Biobased polyester is also emerging, but currently accounts for just 0.1% of total polyester production.[101] The Material Innovation Initiative's latest report entitled 'Beyond Polyester' emphasises the need to explore biosynthetic and natural fibres alongside recycling of polyester. It warns that current feedstock qualities and availability will be insufficient to meet demand.[102]

2 Plant Fibres

Adopting regenerative, agro-ecological and organic practices for plant fibres can improve soil health, biodiversity, water availability and quality as well as livelihoods while mitigating harmful chemicals use and resource-intensive conventional farming methods.

In 2023, plant fibres such as cotton, jute, hemp and flax made up roughly 25% of the global fibre market, with cotton holding a 20% share.[103] Encouragingly, the market share of cotton produced under programmes recognised by the 2025 Sustainable Cotton Challenge increased from 25% in 2020/21 to 27% in 2021/22, with Better Cotton accounting for 21%.[104] An increasing number of cotton-focused initiatives such as CottonConnect, Organic Cotton Accelerator, Unlock Cotton and US Cotton Trust Protocol are further aiding farmers in transitioning to organic and regenerative practices. These are reporting impressive reductions in water, chemical and energy use as well as emission cuts. Global efforts such as UNIDO and WTO's plan to raise USD 12 billion are set to advance cotton textile industries in West Africa, while supporting decent jobs for women and youth. The Aid by Trade Foundation also announced its intention to roll out its Regenerative Cotton Standard (RCS) in Africa to India, helping small-scale farmers adopt climate-resilient practices and improve soil health.

The market share for recycled cotton stalled at 1% in 2023,[105] but is anticipated to grow as a number initiatives pick up the pace, among them Accelerating Circularity in the United States and Europe and the Circular Fashion Partnership in Asia, which aim to accelerate the scale-up of textile-to-textile recycling for both post-use and post-industrial textile waste, including cotton. Lab-grown cotton is also emerging as an alternative, with companies such as Galy securing USD 33 million to scale up cellular agriculture that reduces reliance on virgin cotton and cuts water, land use and carbon emissions. Aside from cotton, hemp is gaining in popularity, with production on the rise globally. That said, concerns about its environmental impact persist, with reference to its GHG emissions as well as pesticide and fertiliser contamination.[106]

Challenges however remain, such as climate change, land grabbing and human rights issues. For instance, the typhoon which struck northern Vietnam in September 2024 caused severe flooding and affected approximately

Sustainable development goals

Read the full GFA Monitor 2023 for concrete actions, open-access tools, definitions and best practice examples.

Read GFA's Policy Matrix: EU and Americas regularly updated overviews of the main policy initiatives impacting this priority.

200,000 hectares of farmland. This event is expected to disrupt cotton production and agricultural outputs in the region, reflecting the challenges faced by cotton farmers in Pakistan during the catastrophic floods of 2022, which led to record low cultivation in 2022/2023. While climate change is redesigning the productive geography of cotton cultivation, causing traditional growing regions to confront increased temperatures and altered precipitation patterns, there is significant potential for scaled cotton production to return to Italy.[107] With material sourcing also comes continued forced labour concerns, particularly in regions of Xinjiang and Turkmenistan, highlighting the need for stricter regulations. Criticisms related to human rights abuses as well as deforestation in Brazil are also raising ethical concerns.

3 Man-made Cellulosic Fibres

Man-made cellulosic fibres hold great potential for a bio-based economy when sustainably sourced, helping to prevent deforestation, habitat loss, land conversion, chemical misuse and risks to forest communities.

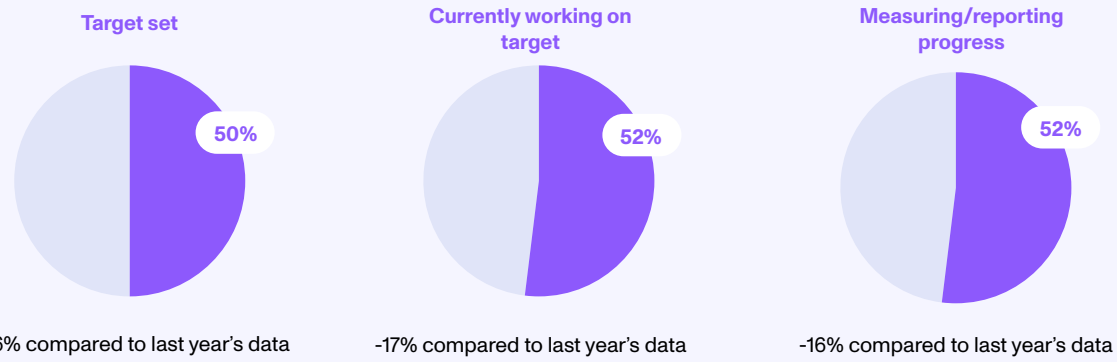
Man-made cellulosic fibres (MMCFs), including viscose, lyocell, modal, acetate and cupro, held a market share of around 6% in 2023.[108] Since 1990, global MMCF production has more than doubled, with continued growth expected.[109] Viscose is the most important MMCF, accounting for approximately 80% of the total MMCF market. However, recycled MMCFs remain underdeveloped, with their market share increasing only slightly from 0.5% in 2022 to 0.7% in 2023.[110]

Encouragingly, there has been a 36% increase in survey respondents setting targets to source and produce all MMCFs from preferred materials, with a total of 50% aiming to prioritise next-generation and recycled raw materials by 2040.[111] Currently, 52% of respondents are working on and reporting progress towards these targets.[112]

While many recycled MMCFs are still in development, commercially available options primarily rely on cotton linter or post-industrial cotton textile residues as feedstock. Certification for MMCFs, such as PEFC and FSC, is crucial for transparency. The market share of certified MMCFs increased from 55-60% in 2020 to 60-65% in 2021.[113] However, the market share has stagnated since 2022, with an estimated 60-65% of all MMCFs covered by FSC and/or PEFC certification in 2023.[114] Although progress has been made, brands' could further promote the growth in sustainable MMCF adoption and the continued elimination of materials linked to deforestation and biodiversity loss by proactively engaging with their supply chains to ensure alignment with their commitments and by clearly communicating their sustainability goals. Compounding this challenge, overall global forest area covered by FSC or PEFC declined from 11,2% in 2022 to 8,7% in 2023 due to bans on timber from Russia, Belarus and occupied Ukrainian territory.[115]

The CanopyStyle initiative now has over 547 brand partners driving momentum towards lower-impact alternatives. As of 2022, 53% of global MMCF production was assessed as low-risk for sourcing from ancient forests, a significant step forward in sustainable sourcing. Nonetheless, for just over half of all MMCFs used, risks like deforestation, water security and indigenous rights remain critical issues in this material category.

Fig. 8 – All man-made cellulosic fibres are sourced and produced from preferred raw materials by 2040



Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

4 Animal-derived Fibres

Adopting robust standards for animal farming practices can help improve soil health, biodiversity and animal welfare, regenerate land and reduce associated greenhouse gas emissions and chemical use.

In 2023, animal-derived fibres held a market share of 1%, with wool comprising the majority at 0,9%.[116] Growing concerns over animal treatment have led to the creation of multiple welfare standards. While crucial, these standards vary in their requirements, assurance methods and chain of custody requirements. To streamline certification, Textile Exchange offers Responsible Animal Fiber certification covering the existing Responsible Wool Standard, Responsible Mohair Standard and Responsible Alpaca Standard to support farmers in achieving high welfare standards.

Up 5%, a total of 34% of this year's survey respondents claimed to have set targets to source wool from preferred materials, focusing on regenerative farming by 2040.[117] No producers or manufacturers reported setting or measuring this target, a fact that is likely due to the survey sample.[118] Wool has the second-highest recycled fibre share globally at about 7%, with Italy, China and India leading recycled wool production. The market share of wool covered by the Responsible Wool Standard (RWS), Climate Beneficial™, Sustainable Cape Wool Standard, SustainaWOOL GREEN, SustainaWOOL GOLD, ZQ and ZQRX increased from around 4,2% to 4.8% between 2022 and 2023, with RWS-certified wool accounting for 85% of the sustainable wool market.[119] In some key wool-producing countries, RWS-certified wool reached a considerable market share – in South Africa, for example, it accounted for 43% of all wool produced. However, mulesing, still practised in Australia, poses a persisting issue.[120] To address this, certifications such as RWS, ZQ and SustainaWOOL GREEN and GOLD are available to ensure wool is sourced from non-mulesed sheep. Woolmark Company, this year introduced a sustainability roadmap to promote low-impact wool production, circularity and improved animal welfare, and new platforms, such as Authentico Verification System and FibreTrace are arising with services to offer traceability from farm to garment.

As for leather, over 20 brands have now committed to the Deforestation-Free Call to Action for Leather, co-led by Textile Exchange, Leather Working Group and World Wildlife Fund, aiming to create transparent, deforestation/conversion-free supply chains. 36% of this year's survey respondents have set targets for sourcing bovine leather from deforestation-free sources by 2030. Recycled leather rates remain low, but leading brands are partnering with innovators to develop recycled leathers from post-industrial offcuts as well as developing plant-based and lab-grown leather alternatives. While first-mile tracing of cattle from farms to slaughter houses has formed part of the EUDR requirements adopted in 2023 , the fashion industry, including most notably TextileGenesis, ZDHC and Leather Working Group, is starting to more widely explore increased traceability and chemical management solutions for leather.

Circular Systems

A just, fair and inclusive circular economy that decouples economic development from the consumption of finite resources and in which waste and pollution are eliminated, products and materials are circulated and nature is regenerated.

Impact Partner

Ellen MacArthur Foundation

Website

The Ellen MacArthur Foundation is committed to the creation of a circular economy that tackles global challenges, such as climate change, biodiversity loss, waste and pollution. The Foundation's Fashion Initiative brings together global leaders from across the industry to create a circular economy for fashion – where products are used more, are made to be made again and are made from safe and recycled or renewable inputs.

> *"In order to truly challenge conventional linear models at scale – and for a circular economy for fashion to become the norm – we must accelerate efforts that not only redesign the products of the future, but also the services and business models that deliver them and keep them in use."*
>
> Jules Lennon,
> Fashion Lead,
> Ellen MacArthur Foundation

Other contributors to this chapter

Cascale

Textile Exchange

Why does it matter?

Current linear models in fashion lead to overproduction, underutilisation and poor disposal. Transitioning to a circular economy – eliminating waste, circulating products and materials as well as regenerating nature – can decouple economic growth from finite resource consumption, offering dignified employment and better products and services.

Where are we today?

This year's survey results show increases in targets set across all indicators of circular systems, with the largest rise of 59% to 71% of all respondents in textile-to-textile recycling of post-industrial and post-use waste by 2030.[121] Efforts to increase circular consumer marketing also saw notable growth, with over 50% of respondents setting new targets.[122] However, fewer respondents reported measuring progress, especially on finite resource use (-42%), overproduction (-10%) and circular design (-16%). 52% of respondents set targets to reduce their use of finite resource by 30% by 2035, a 42% increase over 2023. However, only 43% of those are measuring progress.[123] Additionally, 58% of respondents have targets to reduce overproduction by 30% by 2040, and 91% of brands support collective industry action on this issue.[124]

Brands are increasingly adopting circular design principles and expanding business models for resale, rental and repair services. In this way, they are reducing reliance on new garment production. Investments in research and development as well as capacity building for textile-to-textile recycling are also growing. However, the transition to a circular economy must ensure equity and inclusion for workers, avoiding the perpetuation of existing issues from the linear model.

Although circularity is becoming a major global trend, impacts of initial actions remain limited. The circularity gap has widened from 9.1% in 2018 to 7.2% in 2023.[125] Textile production has almost doubled over the past 20 years, straining dwindling virgin resources.[126] In the United Kingdom alone, 23 million garments end up in landfills or incinerated each year, contributing 750,000 tonnes of carbon emissions. Extended producer responsibility systems for textile waste have seen little progress around the globe.[127] New GFA research highlights the critical role of logistics partners in managing reverse material flows for circular systems. It emphasises the need for effective network design, clear financial ownership as well as infrastructure and collaboration arrangements to achieve increased collection volumes and, in turn, economies of scale.

Over 520 global regulations[128] now emphasise circularity and regionalisation in sourcing and design strategies. EU regulations, including the Waste Framework Directive (WFD) and the Ecodesign for Sustainable Products Regulation (ESPR), aim to reduce reliance on virgin resources, lower greenhouse gas emissions and improve job quality. Under the WFD, by January 2025, the EU will mandate that all Member States implement separate collection for textile waste. Similarly, the California Responsible Textile Recovery Act of 2024 requires producers—including manufacturers, brand owners, and importers through a tiered approach—to develop and implement plans for the collection and recycling of textile waste, ultimately aiming to divert textiles from landfills and increase recovery rates.

To achieve circular systems, action is required across four key areas:

1 Circular Design | 2 Circular Business Models | 3 Textile-to-textile Recycling | 4 Just Transition

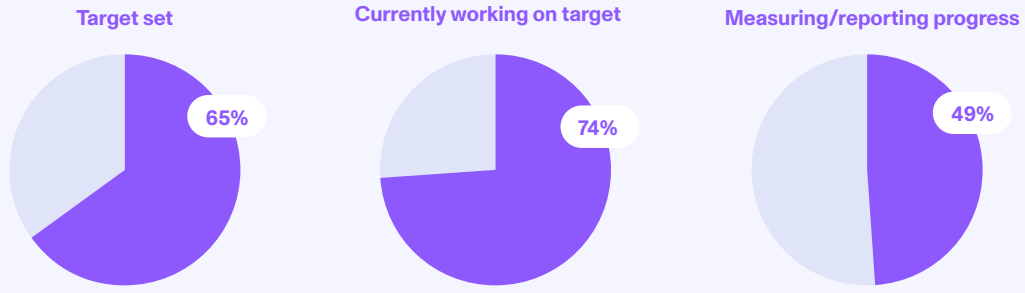
1 Circular Design

Designing products for longevity and remaking as well as using safe, recycled and renewable materials, paired with fitting business models, is crucial for maximising product reuse, reducing environmental impact and influencing purchasing habits.

Designing products for the circular economy is increasingly a major priority in fashion, offering potential to reduce carbon and water footprints by over 50% by 2030.[129] This shift in mindset is partly driven by regulations such as the EU's Ecodesign for Sustainable Products, which sets clear criteria for more sustainable products. This year, 65% of our survey respondents claimed to have set targets to design products for the circular economy by 2040, a 52% increase from 2023. Of those, 49% are already reporting progress.[130] Supporting these goals, fashion brands are increasingly offering in-house circular design training in partnership with knowledge experts and are launching collections focused on longevity, recyclability and the use of recycled materials. Fashion leaders are also moving beyond capsule collections and incorporating circular principles into their core product lines.

Various multi-stakeholder initiatives are further supporting efforts, notably Ellen MacArthur Foundation's Jeans Redesign, which unites brands, manufacturers and mills to implement clean chemistry in denim production, ensuring that products can be safely produced and cycled. Over 100 industry stakeholders are aligning with the Jeans Redesign guidelines. As a result of these efforts, 1.5 million pairs of redesigned jeans entered the market in the period between 2021 and 2023.[131] Sourcing stitch threads and zippers that can be easily disassembled without fabric waste is still challenging and requires further investment in research and development. Beyond product redesign, 71% of brands reported having an ongoing service or business model in place to keep jeans in use at their highest value, highlighting the need of systems redesign to complement product redesign in organisations' circular economy actions.

Fig. 9 – Design all products across the textile value chain for the circular economy by 2040



Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

Sustainable development goals

8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Read the full GFA Monitor 2023 for concrete actions, open-access tools, definitions and best practice examples.

Read GFA's Policy Matrix: EU and Americas regularly updated overviews of the main policy initiatives impacting this priority.

2 Circular Business Models

Circular business models hold the potential to reduce environmental impacts by generating revenue without new production, reducing waste, alleviating pressure on finite resources and enhancing resilience to disruptions.

Circular business models – including rental, resale, repair and remaking – are gaining momentum as brands and consumers increasingly recognise their potential. Diversifying how the industry generates revenue can accelerate a new business model for fashion in which companies develop multiple income streams and foster new touchpoints with customers. This year, there was a notable 50% increase in survey respondents claiming to have set targets to derive at least 10% of their revenue from circular business models by 2040, with 51% already measuring progress towards this goal. The survey findings also indicate strong support for alignment on this target, with 100% of brands in favour of reaching industry alignment and actively engaging in collective efforts to drive progress.[132] Ellen MacArthur Foundation's new Fashion ReModel project, involving eight fashion brands, aims to identify solutions and unlock barriers in order to scale circular business models and begin to decouple revenue from production.

Today, the second-hand apparel market is rapidly expanding and is projected to reach USD 350 billion by 2028, outpacing the overall global apparel market threefold.[133] Resale grew 15 times faster than the broader retail clothing sector in 2023, with online resale up 23% and expected to account for half of all spending on second-hand apparel by 2025.[134] Poised to more than double in size in the next five years, the sector is expected to reach USD 40 billion by 2028.[135] As consumer demand for second-hand apparel increases, brands must confront challenges such as intricate logistics and the costs of resale—encompassing the collection, categorization, repair, and cleaning of items—while also tackling resource limitations in staffing and technology necessary for navigating the complexities of the second-hand market. Expansion in rental and subscription services in partnership with third-party solution providers to include menswear and childrenswear is broadening consumer access. In-store and online repair services, offered by brands and retailers in-house such as Nudie Jeans and Neiman Marcus, or with the support of specialists such as Sojo, are also on the rise, increasing the longevity of garments.

As for consumer engagement, there's been an increase of 54% in survey respondents claiming to have set targets to increase their consumer marketing of circular models, though only 49% are measuring progress.[136] This shift is crucial for driving consumer adoption, as circular business models also rely on active participation from consumers to succeed. With changing consumer purchasing behaviours, there is also a growing demand for transparency and accountability regarding sustainability claims. Initiatives like the EU's Unfair Commercial Practices Directive and directives on consumer empowerment and green claims reflect this need, requiring businesses to communicate potential benefits clearly and credibly, although challenges in practical implementation prevail.

3 Textile-to-textile Recycling

By engaging in pre-competitive collaboration and joint investment to scale, textile-to-textile recycling can alleviate significant resource strain, address waste volumes, improve profitability and create jobs in waste handling and logistics.

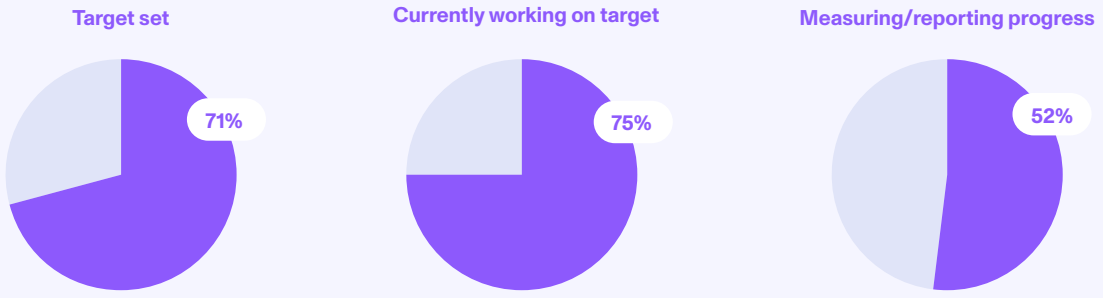
Increasing commitments from both public and private sectors alongside new policies in the European Union and United States are expected to significantly improve the infrastructure for collecting, sorting and recycling textiles in the coming years. Key initiatives include the EU's Waste Framework Directive and California's recent law for an extended EPR framework, aiming to boost textile recycling. This year saw a 59% increase in survey respondents setting targets for textile-to-textile recycling, with 71% aiming to recycle post-industrial and post-use textiles by 2030.[137] Of those, 52% are already measuring their progress.[138]

Successful initiatives such as Accelerating Circularity, the Circular Fashion Partnership and Sorting for Circularity are key facilitators of collection action driving industry progress. To date, the Reverse Resources platform has tracked 5, 251, 651 kg of post-industrial textile waste of which 4, 156, 282 kg was sent to recyclers since initiation of the Circular Fashion Partnership in Bangladesh in 2020.[139] GIZ has registered 2,000 kg of post-industrial textile waste as part of an initial pilot for Circular Fashion Partnership in Cambodia, and the programme is currently in the process of being established in Vietnam, Indonesia and Turkey. Key manufacturing regions are increasingly encouraged to embrace textile recycling, as Bangladesh alone could potentially unlock USD 4 to 5 billion annually through the export of recycled textile products. However, current recycling capacities are still limited, underscoring a critical gap in industrial waste management.[140]

Post-industrial textile waste is perceived as a 'low hanging fruit' for textile-to-textile recycling due to the large quantities of standardised feedstock available. That said, infrastructure and traceability systems still need to deliver the waste to recycling facilities equipped with suitable technologies. The implementation of waste mapping SaaS platforms, such as Reverse Resources and Satma, can increase digital visibility of waste feedstock across various geolocations, allowing for the optimal pairing of material compositions with appropriate recyclers. In the context of post-use recycling, understanding consumer disposal behaviour is crucial. Collection, sorting, deconstruction and/or pre-processing are additional steps necessary for high value recycling.

This year saw the market entry of several exciting innovations. For instance, RE&UP launched a recycling

Fig. 10 – Post-industrial textile waste and post-use textile waste are recycled through textile-to-textile recycling by 2030



Source: Fashion Industry Target Consultation 2024

See the annex for the methodology and limitations when interpreting these results.

process for poly cotton blends that permits a significant reduction in water and carbon emission. The company has obtained significant funding to build a new recycling facility in Turkey. Further new funding is being allocated for textile recycling projects in the United States, Europe and Asia, with recycling start-ups like Syre securing brand multi-year offtake agreements to support long-term recycled content goals. Syre plans to establish 12 manufacturing plants worldwide, producing over 3 million metric tonnes of recycled polyester and cutting carbon emissions by 85% compared to traditional methods. Such investments are promising for future scaling of textile-to-textile recycling. However, there are important lessons to learn from Renewcell's bankruptcy filing earlier this year. Fortunately, the company was able to restart operations under its Circulose after being acquired by an investor.

4 Just Transition

Ensuring a just transition to circular practices can create dignified, inclusive jobs across the fashion value chain by enhancing traceability, equitable value distribution and decent work in new business models.

The full impact of circular business model strategies on job quality and availability remains unclear, with scant research in this field so far. Available assessments on the circular economy's impact on jobs vary widely, with some projecting significant job growth, while others anticipating disruptions to job growth and declines in wages for low-skill roles, putting marginalised groups at risk.[141] This year, 46% of survey respondents reported having set targets to assess the impact of circular business models on job quality and availability, up 46%. Of those, 41% are actively measuring progress.[142] Encouragingly, 83% of respondents are committed to industry-wide alignment and collective progress on these targets.[143]

As the circular economy evolves, it demands new skills and job roles. A just transition requires systems for upskilling workers to prepare them for new roles. The Oporajita is one initiative skilling female garment workers in Bangladesh. It prepares workforces for circular economy roles with training support from iDE, CAIF, Shimmy, C-CAB, UNCDF and Swisscontact.

While there is as yet no specific regulation on this topic, this year, over 80 organisations published an open letter in March 2024 urging EU policymakers to acknowledge the role of social economy enterprises in textile recycling and reuse.[144] They note that their role is an environmental imperative as well as a catalyst for inclusive economic and social development. Furthermore, attention is increasingly turning to improving the working conditions for waste sorters and people active in the second-hand clothing market, ensuring their work environments are dignified and sustainable while bolstering economic resilience in local communities.

Annex

Fashion Industry Target Consultation: Methodology & Disclaimer

Methodology

This GFA Monitor Update includes insights captured from the Fashion Industry Target Consultation, a multi-stakeholder project led by GFA and the UN Environment Programme (UNEP). The aim of the consultation is to assess industry stakeholders' sentiment on progress and to identify industry actions across the five sustainability priorities of the Fashion CEO Agenda: Respectful and Secure Work Environments, Better Wage Systems, Resource Stewardship, Smart Material Choices and Circular Systems. The consultation also gauges what tools and support are needed by a diverse range of actors to overcome existing barriers and take action.

This year, 100 stakeholders from 43 countries across 6 continents shared their insights on identified performance indicators and milestones through an online survey. This diverse set of participants included: brands, retailers, producers/manufacturers, intergovernmental organisations, governmental organisations, non-profit/non-government organisations, technical organisations/ consultancies, educational institutions, media agencies, image makers and financial actors. While results were not disaggregated by respondents' gender identity, the questions asked did provide insight into company or organisation size with respondents representing micro, small, medium and large actors. In the interest of accessibility and inclusivity, the survey was made available in multiple languages and could be completed both online and offline.

Insights captured through the consultation were presented as 29 topical action areas across the 5 sustainability priorities in the 2023 Fashion CEO Agenda.

Disclaimer

The data collection and analysis were conducted in good faith, with no guarantees of absolute accuracy. The data included is intended to gauge industry stakeholders' sentiment on progress across a holistic set of sustainability actions.

The main limitations of the data include:

- **Self-declaration:** The consultation consists of responses voluntarily disclosed by stakeholders, without verification or validation by GFA and UNEP. Discrepancies with other credible primary data sources may exist.
- **Action vs. intent:** The questions developed in the Fashion Industry Target Consultation were aimed at understanding the level of target setting and measurement of progress among stakeholders in the industry. Positive responses therefore do not guarantee action; rather, they indicate target setting and measurement.
- **Representation challenges:** Despite a diverse respondent group, ensuring comprehensive representation of the global fashion value chain remains challenging. Future consultations will continue to explore strategies to broaden stakeholder inclusion.
- **Varied sample size:** Participation was lower in 2024 compared to 2023, and the sample size differs in terms of stakeholder types and geographic representation, impacting the comparability of the progress data. Statements and comparisons of performance from year to year should therefore be interpreted with care due to the variations in respondents.

GFA and UNEP remain committed to advancing sustainability in the fashion industry, recognising the need for evolving methodologies and enhancing representation.

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Circular Business Models
Business models that keep products at their highest value, including resale, repair, rental and remaking, and result in the decoupling of economic development from finite resource consumption.

Durability
The ability of a physical product to remain functional and relevant over time when faced with the challenges of normal operation. (EMF)

Digital Tracking Systems
Systems that digitally track the movement of materials and/or products across different actors in the fashion value chain, including consumers.

Man-Made Cellulosic Fibres (MMCFs)
Regenerated fibres produced from natural sources such as wood pulp or 'cellulose' of trees, through a chemical process that dissolves cellulose and regenerates it into fibrous form. (Textile Exchange)

Post-Industrial Waste
Any textile waste coming from an industrial process such as milling, spinning, printing and garmenting processes. (GFA)

Post-Use Textile Waste
Textile waste after consumer use, e.g. disposed garments or household textiles such as sheets and towels. (GFA)

Regenerative Agriculture
A view of agriculture that works in alignment with natural systems, recognizing the value and resilience of interconnected and mutually beneficial ecosystems vs. extractive agricultural systems. (Textile Exchange)

Renewable Feedstocks
Material that is composed of biomass from a living source and that can be continually replenished. When claims of renewability are made for virgin materials, those materials shall come from sources that are replenished at a rate equal to or greater than the rate of depletion. Renewable material refers to organic material (including crops, trees, algae and animals), as well as to waste and by-products of biological origin (including agricultural and food waste). (EMF)

Textile-to-Textile Recycling
Textile-to-textile recycling, most commonly referred to as 'textile recycling', is the process of creating new products from salvaged and reclaimed textile waste (textile waste could include, among others: pre- and post-industrial textile waste, post-consumer waste). (Recover)

Tier 4 producers
Raw material producers and processors of primary or secondary raw materials. (Textile Exchange)

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