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## To achieve global climate goals, the fashion industry will have to cut carbon emissions in half by 2030

***Fashion on Climate* report sheds light on the critical role the fashion industry has to play in combatting the most pressing issue of our time: Climate Change.**

August 27, 2020 marks the launch of the *Fashion on Climate* report, the result of a multi-year partnership between Global Fashion Agenda and McKinsey & Company. *Fashion on Climate* provides an analysis of the fashion industry's current carbon emissions, the potential to accelerate emissions reduction by 2030 and the costs associated with levers for emissions reduction across the industry value chain. It also outlines priority actions for fashion brands, manufacturers, and consumers to accelerate decarbonisation across the industry.

As the need to address climate change becomes more urgent, industry sectors across the global economy are working to reduce their carbon emissions and assess their progress toward the goals set out in the 2015 Paris Climate Agreement. Fashion makes a sizeable contribution to climate change. Despite efforts to reduce emissions, the industry is on a trajectory that will miss the 1.5-degree pathway to mitigate climate change set out by the Intergovernmental Panel on Climate Change (IPCC) by 50 percent.

### Status quo on fashion's carbon emission pathway and reduction potential

- Currently, the apparel and footwear industry is responsible for some 2.1 billion tonnes of CO<sub>2</sub> emissions in 2018, about 4 percent of the global total. To set that in context, the fashion industry emits about the same quantity of CO<sub>2</sub> per year as the economies of France, Germany, and the United Kingdom combined.
- If no further action is taken over the next decade beyond measures already in place, the industry's CO<sub>2</sub> emissions will likely rise to around 2.7 billion tonnes a year by 2030, reflecting an annual volume growth rate of 2.7 percent. This would more than double the maximum emissions required to align with the 1.5-degree pathway.
- To align with the 1.5-degree pathway over the next 10 years, the industry would need to reduce annual emissions to around 1.1 billion tonnes, around half of today's figure. We refer to this as "accelerated abatement".

### Collaboration in the value chain to accelerate change

Brands and retailers in collaboration with their value chain partners are the primary drivers of accelerated abatement. Together they can drive coordinated decarbonisation efforts and create opportunities for consumers to make sustainable consumption choices. GFA and McKinsey analysis identified three priority action areas for the industry:

1. **Reducing emissions from upstream operations.** 61 percent of the accelerated abatement could be delivered by decarbonising materials production and processing, minimising production and manufacturing waste, and decarbonising garment manufacturing. Improvements in energy efficiency and a transition from fossil fuels to renewable energy sources could deliver about 1 billion tonnes of emissions abatement in 2030.
2. **Reducing emissions from brands' own operations.** Improving material mix (for instance, through greater use of recycled fibre), increased use of sustainable transport, improvements in packaging (with recycled and lighter materials), decarbonising retail operations, minimising returns, and reducing



overproduction (only 60 percent of garments are currently sold without a markdown) are main drivers of emissions abatement within brands' operations. Following these measures could result in 308 million tonnes of CO<sub>2</sub> equivalent abatement in 2030.

3. **Encouraging sustainable consumer behaviours.** The adoption of a more conscious approach to fashion consumption, changes in consumer behaviour during use and reuse, and the introduction by brands of radically new business models could contribute 347 million tonnes of emissions abatement in 2030. The main levers in this effort are an increase in the uptake of circular business models promoting garment rental, resale, repair, and refurbishment, a reduction in washing and drying, and an increase in recycling and collection to reduce landfill and move the industry toward an operating model based on closed-loop recycling.

## The economics of lowering emissions

The report quantifies the economics of accelerated abatement, comparing necessary investments and resulting savings, based on a holistic fashion industry CO<sub>2</sub> emission abatement cost curve. The curve, which is already widely used in other industries, highlights potential abatement levers and quantifies their impacts and costs. In establishing the cost curve, the report aims to spark industry-level dialogue around powerful decarbonisation levers and support individual brands in defining their own abatement curves and roadmaps.

- Approximately 55 percent of the actions required for accelerated abatement can be delivered at net cost savings on an industry-wide basis. The remaining actions will require incentivisation in the form of consumer demand or regulations to deliver abatement.
- Additionally, around 60 percent of the abatement will require upfront capital, where brands and retailers will need to support and collaborate with value chain players to invest for the long-term benefit of society and the environment.
- Around 90 percent of the accelerated abatement can be delivered below a cost of around USD50 per tonne of CO<sub>2</sub> emissions.

*“The world has changed – consumers are looking for more sustainable companies and brands. Bold action is required if the fashion industry is to meet the ambitious target of aligning with a 1.5°C pathway in the next 10 years. The good news for the fashion industry is that many of the required actions can be delivered with beneficial economics.”* – says Karl-Hendrik Magnus, Senior Partner and Co-Leader of Apparel, Fashion & Luxury Group, McKinsey & Company

*“The time to act is now. The pandemic has shown us how interconnected we are and how we also possess the capacity to change. However, real long-lasting change hinges on the fashion industry's ability to come together, so we can rise to the occasion and play a leading role in combatting climate change. I appreciate that for many it is not an easy task and every company has limited resources, which is why I'm particularly proud to launch this Fashion on Climate report together with our Strategic Partner, McKinsey & Company. I am confident that this report will help industry leaders better understand where to focus their efforts and still reap the most impact of their investments.”* – says Eva Kruse, CEO of the Global Fashion Agenda

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Read the [Fashion on Climate](#) Report



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## **ABOUT GLOBAL FASHION AGENDA**

[Global Fashion Agenda](#) is the foremost thought leadership and advocacy forum for industry collaboration and public-private cooperation on sustainability in fashion. A non-profit organisation, Global Fashion Agenda is behind yearly guidelines, reports such as the *CEO Agenda* and the leading business event on sustainability in fashion, Copenhagen Fashion Summit, which has been spearheading the movement for over a decade.

## **ABOUT MCKINSEY & COMPANY**

[McKinsey & Company](#) is a global management consulting firm committed to helping organizations create Change that Matters. McKinsey & Company supports clients in fashion and beyond on a wide range of sustainability related themes with a strong impact orientation. This ranges from executing broader sustainability transformation programmes to more targeted efforts on decarbonisation, circular business models and sustainable packaging. McKinsey & Company is a Strategic Knowledge Partner to Global Fashion Agenda, with the joint aim to accelerate the pace and impact of the fashion industry's transformation towards sustainability.

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