

VOGUE INSTITUTE OF ART AND DESIGN

Bangalore

Dept of Fashion and Apparel Design

and

TEXTILE ASSOCIATION (INDIA), KARNATAKA UNIT

Jointly celebrating

UNESCO 75 yrs on the theme

Sustainability and Environmental Responsibility

**National Seminar for Students and Faculty
Members**

On

“CAN FASHION EVER BE SUSTAINABLE”

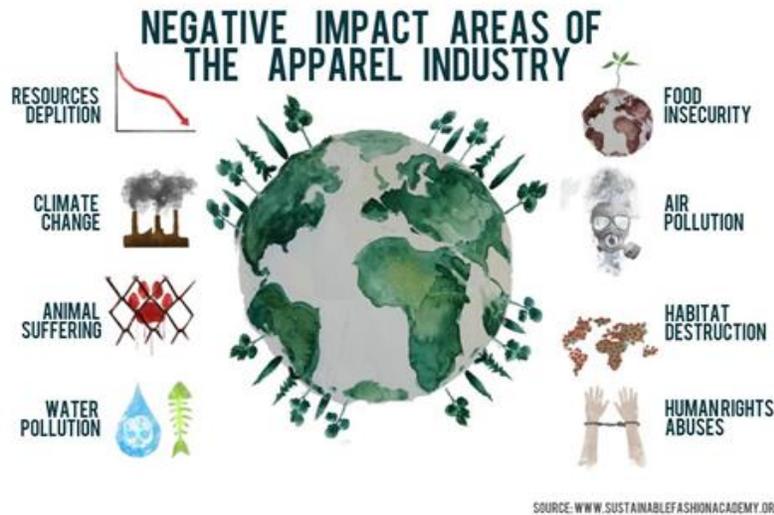
**ROLE & RESPONSIBILITIES OF STAKE HOLDERS TO MINIMISE THE
IMPACT ON ENVIRONMENT FROM FASHION INDUSTRY**

Introduction

Fashion accounts for around 10% of greenhouse gas emissions from human activity, but there are ways to reduce the impact your wardrobe has on the climate. The fashion industry accounts for about **8-10% of global carbon emissions**, and nearly 20% of wastewater.

And while the **environmental impact of flying** is now well known, fashion sucks up more energy than **both aviation and shipping combined**. Clothing in general has complex supply chains that make it difficult to account for all of the emissions that come from producing a pair of trousers or new coat.

Then there is how the clothing is transported and disposed of when the consumer no longer wants it anymore. While most consumer goods suffer from similar issues, what makes the fashion industry particularly problematic is the frenetic pace of change it not only undergoes, but encourages. With each passing season (or microseason), consumers are pushed into buying the latest items to stay on trend.



It's hard to visualise all of the inputs that go into producing garments, but let's take denim as an example. **The UN estimates** that a single pair of jeans requires a kilogram of cotton. And because cotton tends to be grown in dry environments, producing this kilo requires about 7,500–10,000 litres of water. That's about 10 years' worth of drinking water for one person.

Some research has suggested that online shopping can have a **lower carbon footprint** than **travelling to traditional shops** to buy products, particularly if consumers live far away. But the rise of online shopping has also driven changes in consumer behaviour, contributing to a fast fashion culture where consumers buy more than they need, have it delivered to their door and then **return a large proportion of their purchases** after trying them on.

Returning items can effectively double the **emissions from transporting your goods**, and if you factor in failed collections and deliveries, that number can grow further.

It can also be **cheaper for internet retailers and fashion brands to dump or burn returned goods**, rather than attempting to find another home for them. This not only means the greenhouse gas emissions produced in manufacturing the clothing are wasted, but further emissions are released as it rots or burns. The US Environmental Protection Agency estimates that in 2017 **10.2m tonnes of textiles** ended up in landfills while another 2.9m tonnes were incinerated.

In the UK an estimated **350,000 tonnes of clothes end up in landfill** every year. A simple way to reduce the footprint from online shopping then is to only order what we really want and intend to keep. According to the World Bank, **40% of clothing purchased** in some countries is never used.

CLOTHING INDUSTRY ENVIRONMENTAL IMPACT

<p>20 % OF INDUSTRIAL WATER POLLUTION Comes from treating and dyeing textiles</p>	<p>It takes ABOUT 2800 LT OF WATER to produce one cotton T Shirt Enough for one person for 2.5 yrs to drink</p>
<p>Clothing industry is the SECOND MOST POLLUTER of clean water</p>	<p>Now more than 90% OF COTTON IS GENETICALLY modified</p>
<p>Production of fibre is responsible for 18% PESTICIDE used world wide</p>	<p>Production of fibre is responsible for 25% INSECTICIDE used world wide</p>

What to Achieve by 2030

One of the challenges fashion faces in reducing its GHG footprint is the likelihood that shifting population and consumption patterns will drive continuing industry growth. A predicted rise in volumes could push carbon emissions to around 2.7 billion metric tons a year by 2030 if no abatement actions are taken. However, if the industry continues to embrace decarbonization initiatives at its current pace, it will cap emissions at around 2.1 billion metric tons a year by 2030, roughly the same as they are today. Yet even with these efforts, emissions would reach almost twice the maximum level that would allow the fashion industry to follow the 1.5-degree pathway.

ENVIRONMENTAL IMPACT

<p>15% OF OUR CLOTHING are only recycled or donated</p>	<p>5.2% OF LANDFILLS are Textiles</p>
<p>3 YEARS IS THE AVERAGE LIFE of garment today</p>	<p>3.0 LAKH TONS of clothing is discarded in UK during 2018</p>
<p>NEARLY 100% OF TEXTILES AND CLOTHING are recyclable</p>	<p>15+ MILLION TONS OF USED TEXTILES is generated in US per year</p>

To reach the 1.5-degree pathway, the industry would need to intensify its abatement actions and scale up existing decarbonization efforts to reduce annual emissions to around 1.1 billion metric tons in 2030, roughly half of today's figure. Some 60 percent of the additional emission reduction under this accelerated abatement scenario could be achieved in upstream operations, through initiatives such as energy-efficiency improvements and a transition to renewable energy, with support from brands and retailers. Another 18 percent of emissions could be saved through operational improvements by fashion brands, and a further 21 percent through changes in consumer behavior. Together, these efforts could reshape the fashion landscape.

The Seminar Aims and Objectives

This seminar is dedicated to bringing together a significant number of diverse scholarly events for presentation within the seminar program. Event is conducted virtually With its high quality, it provides an exceptional value for students, academics and industry researchers.

The main aims to bring together leading institute students on a common platform to exchange and share their experiences on all aspects of Sustainable Fashion Design and Manufacturing. It also provides a premier interdisciplinary platform for students to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Sustainable Fashion Design and Manufacturing

ENVIRONMENTAL IMPACT

90% OF WASTE WATER is discharged to river without treatment in developing countries	2.0 LAKH TONS OF DYES are left to Effluent every year
Apparel Industry alone accounts for 6.7% OF WORLD'S GREENHOUSE GAS EMISSIONS	
FASHION & MICROFIBERS IN OUR OCEANS <u>Every time we wash a synthetic garment</u> (polyester, nylon, etc), about 1,900 individual microfibers are released into the water, making their way into our oceans. Small aquatic organisms ingest those microfibers. <u>introducing plastic in our food chain.</u>	

HOW MUCH CLOTHING DO WE WASTE?



1 GARBAGE TRUCK of clothes are burned or landfilled every **SECOND**



Enough to fill **1.5 EMPIRE STATE BUILDINGS** every **DAY**



Enough to fill **2019 SYDNEY HARBOR** every **YEAR**



2,625 kilograms of clothing



82,782,000,000 kilograms of clothing

Source: Ellen MacArthur Foundation.

