

# Fashion Impact '20 from Otrium

A report into Otrium's environmental  
impact on the fashion industry

## Otrium

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# Our philosophy

Clothing is worn not only to insulate our bodies but also as an outlet for creative expression, a source of joy and to provide a sense of belonging.

Right now, fashion is trapped in a broken cycle. Trends come and go at breakneck speed, creating stress and waste for brands, people and natural resources.

Because fashion is such an important part of our lives and is also a significant contributor to the climate crisis, we must build a smarter fashion industry.

A fashion item that is produced with materials from the earth and sourced as a creative passion for humans, should not collect dust in a warehouse or end up in landfill. Instead, at Otrium, we see a future where every clothing item produced is worn.



**Dear reader,**

Welcome to the first report into our environmental impact on the fashion industry: Fashion Impact '20 from Otrium.

The goal of this pilot research is to understand if, and to what extent, Otrium's business model has an environmental impact on the fashion industry. We also seek to quantify that impact.

Our purpose is All Clothing Should Be Worn. We're developing technology and using data to match supply and demand within the fashion industry, and to reduce waste.

We want to change the way fashion is created and sold.

This pilot research is the first step in measuring how we perform against this purpose and what our impact is on the fashion industry.

The research is based on existing data and performed with the help of an independent and reputable external agency specialising in sustainability, Sustainalize.

The report is based on the year 2020 and functions as a baseline which will help us understand our impact and set ambitious goals as we progress.

**Max Klijnstra**

Co-founder and CEO

**Milan Daniels**

Co-founder and CEO

**Zuhairah Washington**

President in Board

**Marlot Kiveron**

Sustainability Lead

# Quantifying our impact on the fashion industry

Thank you for being part of our purpose. Let's create a smarter fashion industry together.



# The problem

Fashion's cycle of supply and demand, where quantity is valued over quality is fuelled by the industry's addiction to newness. Lots of fashion items are increasingly seen as 'throwaway', meaning the amount of wear per garment is decreasing and the pace of buying brand new items has increased enormously.

Every year, billions of items are produced globally but never sold. They go unworn. This is a huge waste of creative energy, labor, natural resources and investment. This leads to a fast-growing negative impact on the environment, measured in variables such as carbon emissions emitted, litres of water consumed and waste.

Because fashion is such an important part of our lives and is also a significant contributor to the climate crisis, we must work together to build a smarter fashion industry.

**“Every year, billions of items are produced globally but are never sold.”**





# All clothing should be worn

## Our purpose

Currently waste and excess inventory is built into the fashion industry’s model. We are working to create a future where all clothing is worn - by eradicating unsold inventory and moving towards a demand-based fashion industry.

We’re developing technology and using data to match supply and demand within the fashion industry to reduce waste. We want to change the way fashion is created and sold through technology and data.

The heart of our business is finding ways to sell great fashion that would otherwise would never be sold.

01

Receive and polish unsold items to regain their value

02

Smartly match unsold inventory items

03

Create ‘data made’ fashion that doesn’t end up unsold

04

Repair and refurbish returned items



“We want to change the way fashion is **created** and **sold** through technology and data”.





# What we do

**Smarter** for the  
**industry**

01

Receive and polish unsold items to regain their value

Ensure every aspect of every item we receive is brand new from photography and descriptions to packaging and pressing, in our state-of-the-art warehouses.

02

Smartly match unsold inventory items

Find an owner for every item for the best possible price on our platform. For the small proportion of items that cannot be sold on our platform we supply to stock buyers.

03

Create ‘data made’ fashion that doesn’t end up unsold

Reduce future waste by data-enabling brands to take a demand-based approach to clothing creation.

From using excess fabrics for future items to whole collections, ‘data made’ fashion ensures certainty in sell through.

04

Repair and refurbish returned items

Extending the life cycle of slightly imperfect returns by refurbishing them by hand to as good as new condition and offering them a second chance to find a new owner on our platform.



# The research

The goal of this research is to understand and quantify the impact Otrium’s business model has on the environmental footprint of the fashion industry.

In order to understand the impact of Otrium, it is important to understand the size of the problem of excess inventory within the fashion industry. We have also considered the alternatives to excess inventory – namely, if these items are not sold via Otrium, what happens to them?

Moreover, it is important to understand the behaviour of fashion brands and customers in relation to our core business model.

We continue to ask ourselves the question - do we incentivise more production by helping fashion brands sell their excess inventory or do we help fashion brands become more efficient thanks to our technology-driven solutions?

Research, understand  
and quantify  
**the impact**







# Our members

Another key question we aimed to answer with this research is whether our members purchase more items because of the discount given, or are the items purchased at Otrium a *replacement buy* for new items?



We're committed to understanding the problem so we can build the right solution. Based on the research we are able to draw the initial conclusion that Otrium has a **positive impact** on the fashion industry.

# The outcomes

The outcomes of the research, based on existing data and performed with the help of Sustainalize show that we have a positive impact on the fashion industry. We'll be conducting further research to validate the outcomes.

## I

**Selling excess inventory has a positive impact on the environment when the purchase is a replacement buy.**

Due to the fact that there is no current research on this topic, we conducted a survey amongst our own members. In total, 36% of the respondents said they fully agree with the statement "buying an item at Otrium prevents me from buying a new (similar) item", and 21% said they somewhat agree. Research around the behaviour of fashion brands is still needed.

## II

**We are able to estimate the environmental impact of selling an unsold item based on existing research measuring the carbon emissions saved, water consumption in litres saved and waste diverted from landfill saved in kilograms.**

However, more research is needed to validate these numbers. See impact calculations P10.



# Impact calculations

The outcomes of the research, based on existing data and performed with the help of Sustainalize are insightful and a good starting point as we seek to understand and reduce the fashion industry’s environmental impact.

The data supports the conclusion that we have a positive impact on the fashion industry, although additional research is needed to further validate the outcomes.



**1.76 kg**  
of CO2e savings



**545.97 L**  
of water savings



**3.65 kg**  
of waste diverted  
from landfill



**7.57 kg**  
of CO2e savings



**2.606,72 L**  
of water savings



**18,42 kg**  
of waste diverted  
from landfill





## The outcomes

### III

Although seemingly obvious, repairing and refurbishing returned items and creating ‘data made’ fashion reduces emissions. We still need to conduct research in order to validate these assumptions.

#### **Repair and refurbish returned items**

Extending the life cycle of slightly imperfect returns by refurbishing them by hand to an as-new-condition and offering them a second chance to find a new owner on our platform.

#### **Creating ‘data made’ fashion**

Reducing future waste by data-enabling brands to take a demand-based approach to clothing creation.

### IV

Excess inventory is a problem in the fashion industry but the size of this problem is difficult to quantify, due to:

Unclear definitions of unsold inventory (taking post-consumer items or off-cuts in the production process into account) .

Fashion brands not reporting consistently on unsold inventory.



## The outcomes

We researched this and found a broad range of percentages coming from different sources, ranging from 6.5%\* through to 30%\* of the total fashion industry. At Otrium, we use an average of 12% of all sales. We'll continue to research this.

Interestingly, diving into the numbers, we found different definitions of unsold inventory.

We use the following: Unsold inventory is the clothing that a fashion brand has produced with the intent to sell but has been unable to do so via the regular full-price retail channels, due to mismanagement of stock. Cut-off fabrics in the production process and production samples are not included.

Otrium is determined to drive further research into unsold inventory in order to **improve transparency** in the fashion industry.

\*6.5% [Referenced here](#) \*30% [Referenced here](#)





# Next steps

Otrium is determined to drive this research forward to improve transparency in the fashion industry as a whole and to validate and quantify the impact of our business model.

The first step is to find the best partners and institutions to collaborate with on this research. The next page are the topics we plan to explore.

We expect to publish the results in 2022 and we will actively communicate our progress and findings via the Conscious page on our platform.

## Impact of our business model on the fashion industry

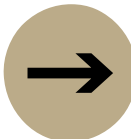
### The size of excess inventory within the fashion industry

Conduct our own research with the right knowledge partners.



### Customer behaviour

Conduct further research based on literature and with fashion consumers from other brands to understand buying behaviour in fashion (with regards to prices, sustainability information etc.)



### Fashion brands' behaviour

Conduct further research with key fashion brands and other upstream supply chain partners to understand whether Otrium's business model has a positive impact on production efficiency.







# Impact calculations

## Material data

The composition of a fashion item is widely diverse, so more specific information is needed about the materials.

## Order process data

The CO<sub>2</sub> emissions, resulting waste and water consumption from activities in the order process need to be incorporated in the impact calculations (e.g., packaging, outbound transportation).

## Life cycle assessment data of the fashion brands

When the composition of a fashion item is known, ideally life cycle assessment data from fashion brands will also be requested (e.g. how much energy does it take to produce a fashion item?). This will make the results tailored, reliable and controllable.



## Our sustainability partners and accreditations





# Otrium

Amsterdam | New York | London | Paris

HQ in the cloud

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