White Paper No. 1

# WHAT YOU ALWAYS WANTED TO KNOW

# **ABOUT TEXTILE RECYCLING**

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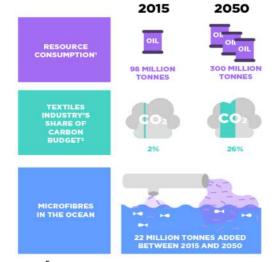
# A. Textile (Recycling) in General

### Valuable Resources are Lost

Despite of several efforts by textile collectors, the majority of clothing is going to landfill and incineration instead of being reused or recycled.

About 73% of clothing are landfilled or incinerated, globally. In many European countries, less than 30% of unwanted garments and textiles are collected<sup>1</sup>. Around 50% of them are reused as second hand. The remaining part is cut into wiping rags or recycled into insulating material or mattress stuffing<sup>2</sup>.





Source <sup>5</sup>

Do you know that the production of one single cotton t-shirt needs about 3.000 litres of water? This is about 4 years of drinking water per person.

Furthermore, Cotton production requires approx. 11% of the total use of pesticides and 25% of the total use of insecticides worldwide<sup>3</sup>. Today, over 60% of textiles are made out of fossil resources. Plastic microfibres from textiles is recognized as a big environmental issue; it's estimated that accumulated 22 Million tons entering the ocean between 2015 and 2050<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> Watson et al (2018): Used Textile Collection in European Cities. Study commissioned by Rijkwaaterstaat under the European Clothin Action Plan (ECAP)

<sup>&</sup>lt;sup>2</sup> Kösegi N., Balayan V.(2018): Notwendigkeit der Förderung des Textilrecyclings – Fachtagung Gemeinschaft für textile Zukunft am 21.11.2018

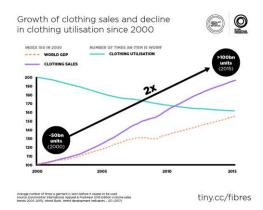
<sup>&</sup>lt;sup>3</sup> Kooistra, K.; Termorshuizen A. (2006): The Sustainability of cotton, 2006

<sup>&</sup>lt;sup>4</sup> Ellen MacArthur Foundation (2017): A NEW TEXTILES ECONOMY: REDESIGNING THE FASHION'S FUTURE

## **Increasing Consumption Aggravates the Environmental Problem**

Since 2000, the clothing production has approximately doubled. Besides the growth of middle-class population, the increase is mainly due to the fast fashion concept. The average time a clothing is worn has decreased by 36% compared to 2000<sup>5</sup>.

GFA and BCG project that the global clothing consumption will rise by 63%. This means from 62 million tons today to 102 million tons in 2030, an equivalent of more than 500 billionT-shirts<sup>6</sup>.



Source <sup>5</sup>



Source 7

Buying clothes has various reasons. In the past, one bought a new pair of trousers because the old one was broken. Today, buying clothing has turned into a shopping event that brings happiness and sense of a common bond.

Sales promotions, following friends on social media or being inspired by celebrities are additionally drivers besides the business model of the fast fashion industry to buy and buy more than afford<sup>7</sup>.

Urgent need for radical change of the system. Everybody can contribute to sustainable consumption; industry must take over responsibility for their business that includes the end-of life of a garment.

<sup>&</sup>lt;sup>5</sup> https://www.ellenmacarthurfoundation.org/news/a-new-textiles-economy-redesigning-fashions-future-download-the-reportinfographics

<sup>&</sup>lt;sup>6</sup> Global Fashion Agenda & The Boston Consulting Group (2017): Pulse of the Fashion Industry

<sup>&</sup>lt;sup>7</sup> Greenpeace e.V. (2017): After the Binge, the Hangover

## **B.** European Legislation

#### Adjustment at a Glance

The European Commission's Circular Economy package stresses the need for more recycling of municipal waste. With the entry into force of the revised waste framework directive, recycling targets for municipal waste are improved to 60% by 2025 and 65% by 2030.

In addition, separate collection for municipal waste is extended among others for textiles (by the end of 2024). Rules for reuse and repair of products are additional measurement to strengthen the waste hierarchy<sup>8</sup>.

Looking into the political guidelines for the next European Commission written by the new president, Ursula von der Leyen, she says, "I will propose a New Circular Economy Action Plan focusing on sustainable resource use, especially in resource-intensive and high impact sectors such as textiles and construction."<sup>9</sup>.

According to this, textile is in the focus and the EU Commission will work on initiatives specific to textile. There are many ways and policy tools, which can steer the business model of textile industry including ecolabelling and design for circularity or extended producer responsibility schemes. However, all of these measurements will have a direct or indirect impact on various stakeholder.

#### For Whom the Rules Apply?

Everybody who deals with textiles as a product or waste will effected by these rules: Municipalities, charity organisations, commercial collectors, textile sorters and recyclers, fashion manufacturers, brands and consumers.

First, Member states has to transfer new requirements into its waste law. However, how to implement a separate collection of textiles?

In European countries exists different collecting models depending on carrier of the collection. Even knowing good practise examples, for a model to be effective, it should be embedded in the existing waste management system of each single country and be accepted by the population.



E U R O P E A N COMMISSION

<sup>&</sup>lt;sup>8</sup> https://ec.europa.eu/environment/circular-economy/index\_en.htm

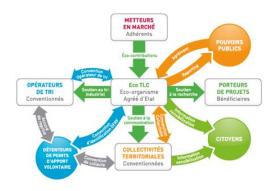
<sup>&</sup>lt;sup>9</sup> https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission\_en.pdf

## **C. Extended Producer Responsibility**

#### **Mandatory Schemes**

So far, only in France exists a legal framework on extended producer responsibility (EPR) for clothing, linen and footwear<sup>10</sup>.

However, due to the increasing negative environmental impact of post-consumer textiles some other countries within the EU have started to investigate the implementation of EPR schemes. Even the EU promotes those waste management concepts as a suitable instrument to influence the environmental impact of products<sup>11</sup>.







Source<sup>13</sup>:

In order to introduce an EPR system, the individual possibilities and measures must first be evaluated. These can be very different in the countries regarding the existing collection and recycling structures. In any case, there is a need for legal regulation in which objectives, organisation, financing, infrastructure, control, etc. are defined.

In particular, various areas can be regulated which also affect the production process, such as the design of a recyclable product, the use of recycled fibres and beyond concrete quotas for reuse and recycling, requirements for collection and sorting.

<sup>&</sup>lt;sup>10</sup> https://www.ecotlc.fr

<sup>&</sup>lt;sup>11</sup> https://ec.europa.eu/environment/circular-economy/index\_en.htm

<sup>&</sup>lt;sup>12</sup> https://www.ecotlc.fr/page-41-a-propos-d-eco-tlc.html

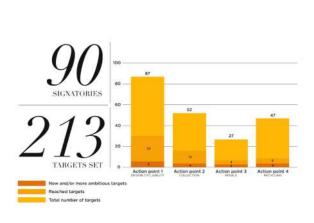
<sup>&</sup>lt;sup>13</sup> https://circular.uni.lu/2017/10/04/breaking-the-take-make-dispose-model-investigating-the-circular-economy/

## **Voluntary Commitments on Producer Responsibility**

In the meantime, many fashion brands and retailers take various actions with the aim to transform their business model from a linear to a circular system. The industry manifesto signed in May 2019. It shall foster the collaboration between industry and policymakers to set the infrastructure to support circular system within the fashion and textile industry<sup>14</sup>.

Besides changes in the use of materials and in the production process, many retailers have started to take over responsibility for the end of life of their products and offer taking back systems for unwanted clothing and textiles.





Source 17

Global Fashion Agenda has created a commitment called the 2020 Circular Fashion System Commitment<sup>15</sup>. Four immediate action points were set:

- 1. Implementing design strategies for cyclability
- 2. Increasing the volume of used garments and footwear collected
- 3. Increasing the volume of used garments and footwear resold
- Increasing the share of garments and footwear made from recycled postconsumer textile fibres

Especially offering a new service to collect garments arise fundamental questions. Both, internal questions such as how to fit a textile collection into the company strategy or which collection system fits the company's orientation, as well as questions of licensing law and operational issues such as cooperation with sorting and recycling partners must be clarified before the implementation.

**Release October 2019** 

<sup>&</sup>lt;sup>14</sup> https://euratex.eu/circular-economy-manifesto/

<sup>&</sup>lt;sup>15</sup> https://www.globalfashionagenda.com/commitment