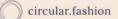


#### **circular.fashion system** Unlocking the huge potential of the circular economy





#### **Global Change Award**

AN INNOVATION CHALLENGE BY H&M FOUNDATION

A software platform enabling circular design and closed loop recycling









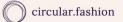


## **Textile Reverse Supply Chain** Challenges

#### **Production** Globally 100 bn pieces per year

#### **Collection** Globally ~ 25% Europe ~ 30% Germany ~ 75%





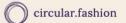
#### 87% INCINERATED OR LANDFILLED

worldwide

87%

Circular fibre initiative analysis (2017)





### <1% FIBRE TO FIBRE RECYCLING

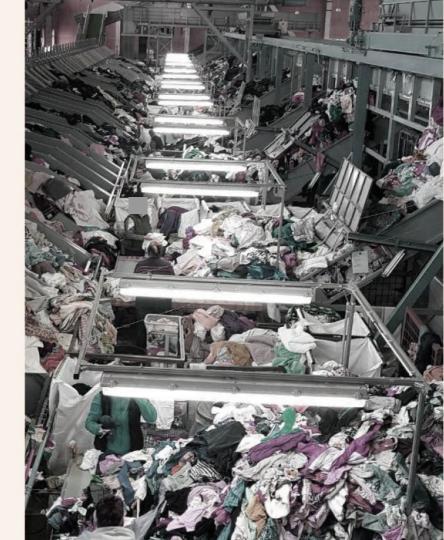
regenerated to new textiles





Reverse Supply Chain Infrastucture

> Use phase Collection Sorting Recycling Reuse



# Collection & Sorting Legacy

Maximize collection amount

Sort textiles for different second hand markets

Second-hand cross-finances the recycling and incineration fractions



## Current Markets for Used Textiles

Second-hand shops

Export to other countries & continents

Downcycling to other products

Incineration



# Challenges Sorters

Quality of textiles decreasing

Second hand markets saturated

Share of second hand shrinking

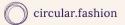
Recyclers cannot cover costs of collection and sorting

Incineration costs



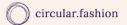


### **Textile Reverse Supply Chain** Solutions



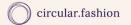
### 1. FASHION MUST BE DESIGNED FOR CIRCULARITY





### 2. CUSTOMERS NEED TO RETURN INTO THE RIGHT CHANNELS





## **3. REVERSE SUPPLY** CHAIN NEEDS PRODUCT **INFORMATION TO** ALLOCATE TO SUITABLE ACTORS



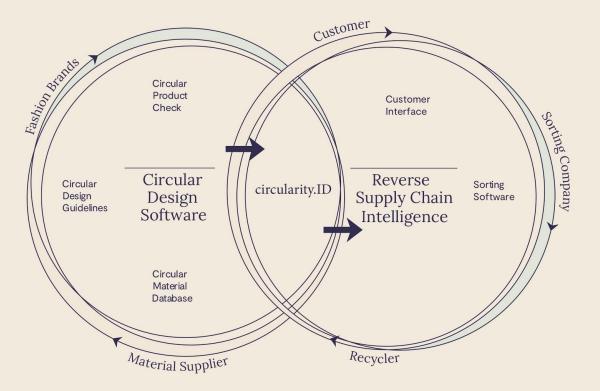






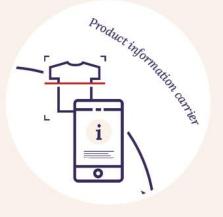


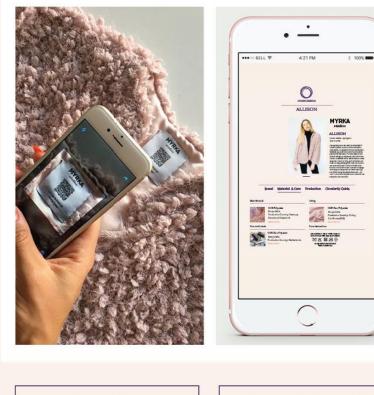
#### The circular.fashion system



## 2

#### circularity.ID Consumer Interface







circularity.ID

Customer Interface

**Collection Channels** 

#### **Open Data Standard for Circularity**

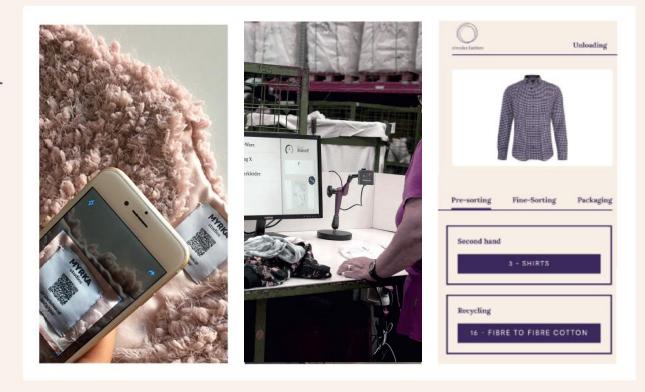


3

circularity.ID Intelligent Sorting Station



Reverse supply chain



circularity.ID

Sorting Station

Sorting Software

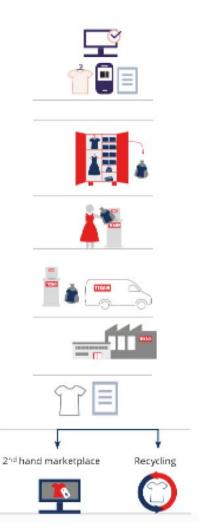
# Levers for Sorting

Improvement of sorting quality

Open up new valuable fractions
New second hand channels
Update / Repair / Upcycling
Fibre to fibre recycling

Lean sorting processes





#### Partnerships for Sorting **Recommerce & Recycling**







#### Re-Use Berlin

Inform users about local return options through circularity.ID / Digital Product Sites

Find suitable pieces for repair, upcycling and reuse in sorting centres

Give non-wearables to suitable recyclers





## Let's join forces!

#### Winner 2019

**Global Change Award** 





