

TAKING  
**COOPERATION**  
FORWARD



Sustainable textile and leather forum  
Budapest, 03-Dec-2018



## ENTeR project - Mid-Term Review



INNOVATEXT Zrt. - **Tamás Krain** project manager

# STRATEGIC AGENDA

1. Strategic  
Agenda

2. Hungarian  
textile industry



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# ENTER “IN A GLANCE”

ENTeR works in five central European countries that are involved in the textile business, to promote innovative solutions for waste management that will result in a circular economy approach to making textiles.



ENTeR will help to accelerate collaboration among the involved textile territories, promoting a joint offer of innovative services by the main local research centres and business associations (“virtual centre”), involving also public stakeholders in defining a strategic agenda and related action plan, in order to link and drive the circular economy consideration and strategic actions.



## Strategic Agenda **ENTeR**

The strategy has been jointly defined on the basis of problems which are relevant for the participating regions, providing a common vision and setting objectives and priorities in a mid- to long-term perspective, with involvement of relevant stakeholders.

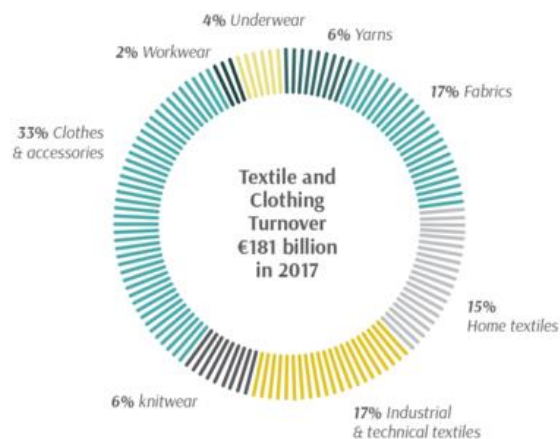


# EU TEXTILE AND CLOTHING INDUSTRY

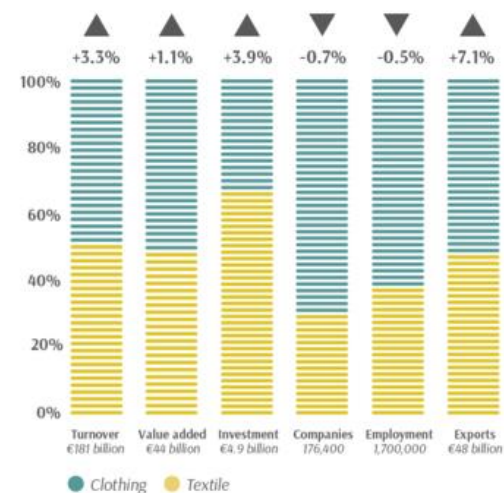
1.7 million workers  
 176.400 companies  
 181 billion €

## INDUSTRY AT A GLANCE

Breakdown of EU production by sub-sectors



The EU Textile and Clothing sector in 2017



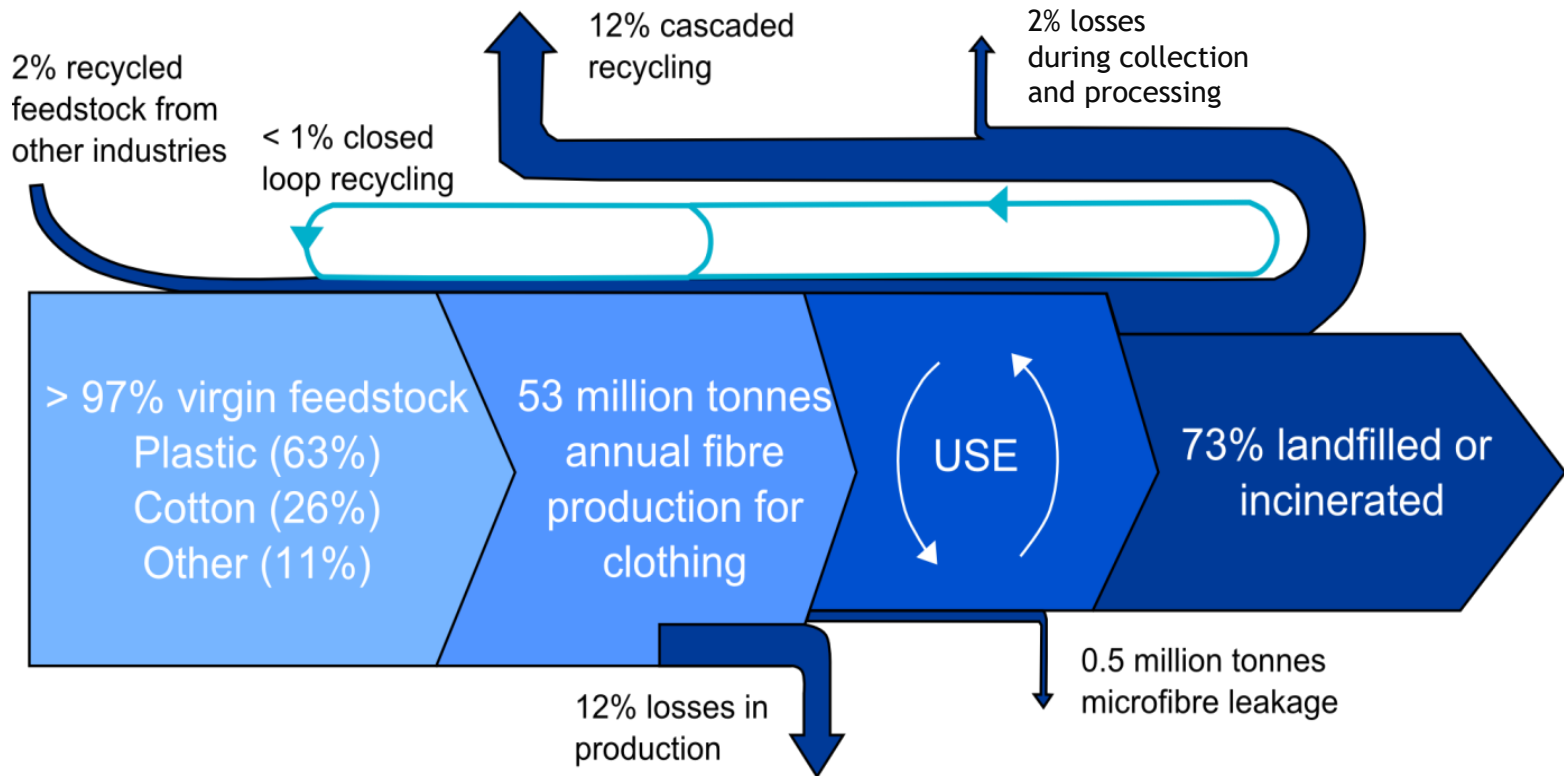
SOURCE: EURATEX BASED ON EUROSTAT

EURATEX: European Textiles and Fashion: Facts & Figures



TAKING COOPERATION FORWARD

# CLOTHING: GLOBAL MATERIAL FLOWS



J. Conca. Making climate change fashionable - The garment industry takes on global warming



## Methodology

The elaboration of the SA was done in two phases, the desk phase and the field phase.

### Desk Phase:

State of the art review of textile waste management and recycling in each partner region.

### Field Phase:

Stakeholders (companies, public authority) were interviewed in the individual regions.



Legal and Policies



Waste management



Research trends and technologies



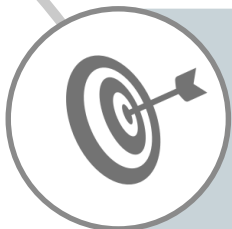
Communication



Education







- Monitoring both local and EU policies in order to constantly direct the Strategic Agenda.
- Establishing active interactions with stakeholders (companies, local administrations, governments).

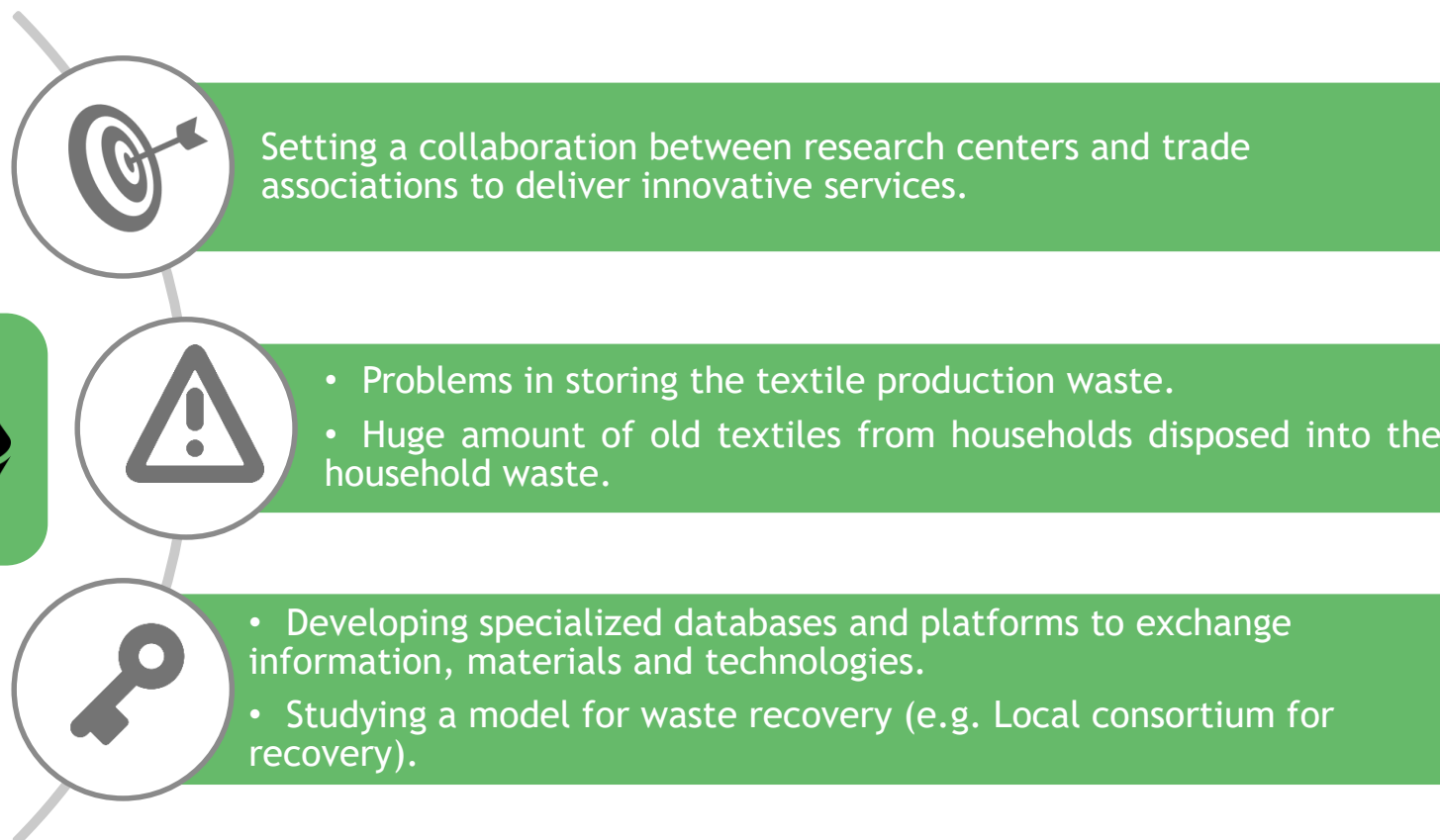


- No specific target for waste prevention and reuse.
- No instruments for the economic valorization of waste resources.

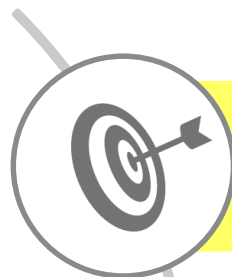


- Breaking down administrative obstacles and reporting to decision-making bodies: legal rules / guidelines (e.g. REACH or special certificates).
- Encouraging investments through financing (e.g. purchasing of technologies and machines).









- Adoption of sustainable lifestyles, therefore an investment in awareness actions for citizens.
- Experimenting a “second life” market of recovered waste.

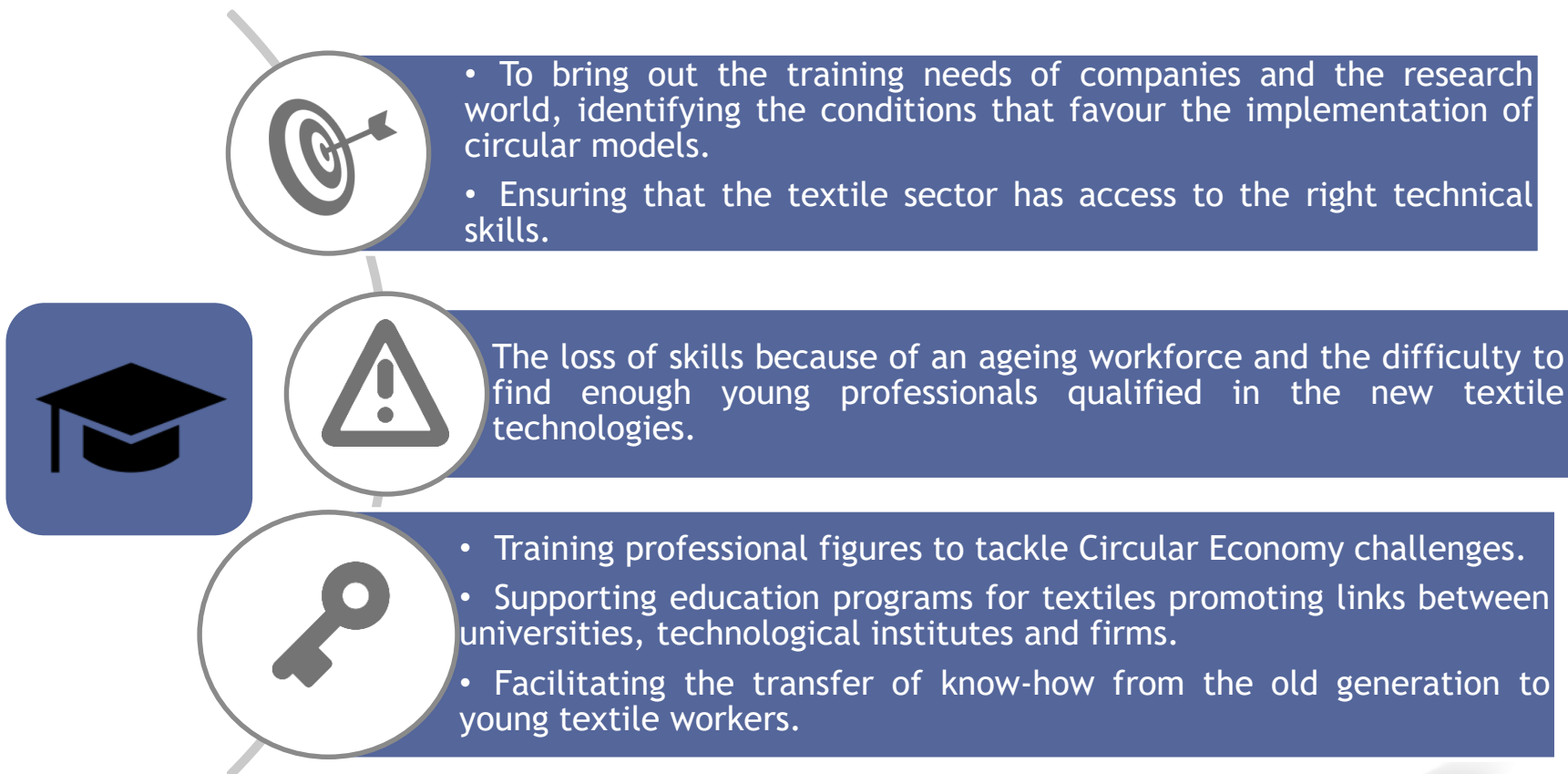


Consumers make consumption choices in an efficient way: trying to balance prices, personal gratification and the latest trends.

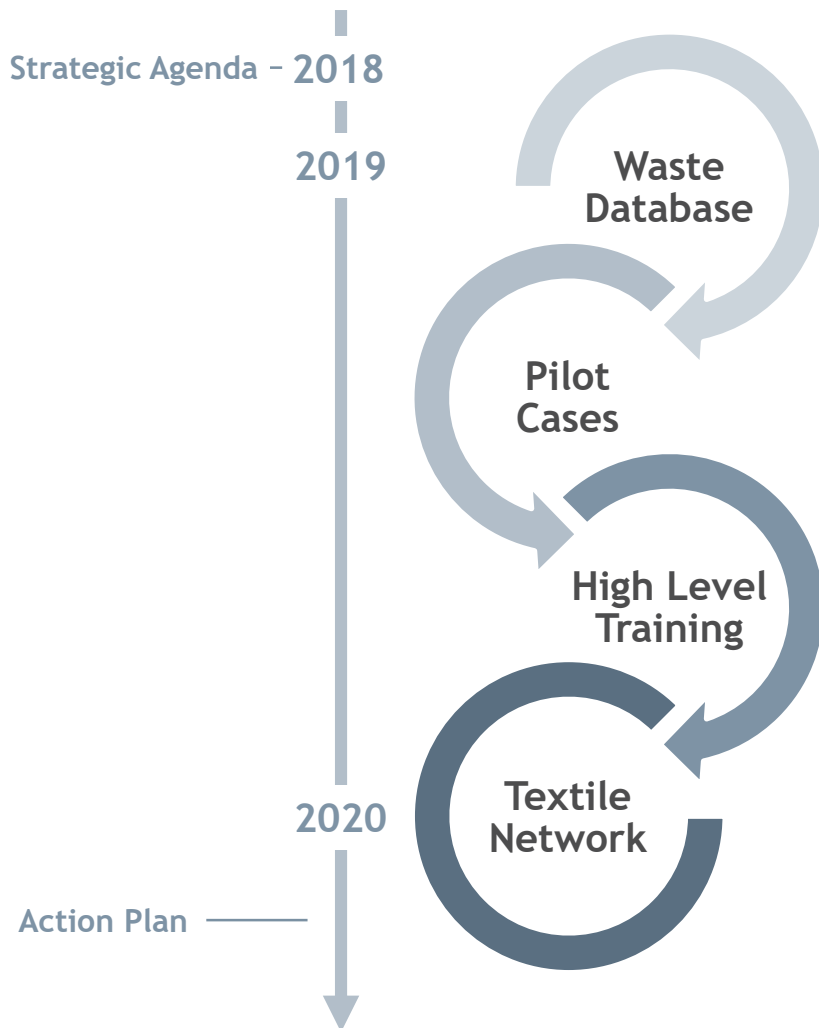


- Sensitizing market demand and consumers for recycled products and increase environmental awareness.
- Increasing environmental awareness through educational campaigns.





# CONCLUSIONS



An online platform connecting companies offering waste and those requesting raw materials.

Five pilot cases to demonstrate that a collaboration among companies, associations, and technological centers could support innovation and competitiveness of the textile sector.

Five courses to provide highly qualified skills in order to face innovation challenges coming from a sustainable production process.

A *Virtual Center* among the project technology partners to offer wider services and solutions to resource efficiency and to strengthen regional innovation capacity.



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# OVERVIEW OF HUNGARIAN TEXTILE INDUSTRY

- The sector is largely made up of small- and medium-size enterprises (SME).
- The number of registered enterprises approaches 6300\*, although it is true to say that the number of functioning businesses is somewhat smaller than this.
- The sector currently employs around 32 000\* people (companies with more than 10 employees), the vast majority being female labour.



\*sources: <http://www.mksz.org/hu/textil-ruhaipar>





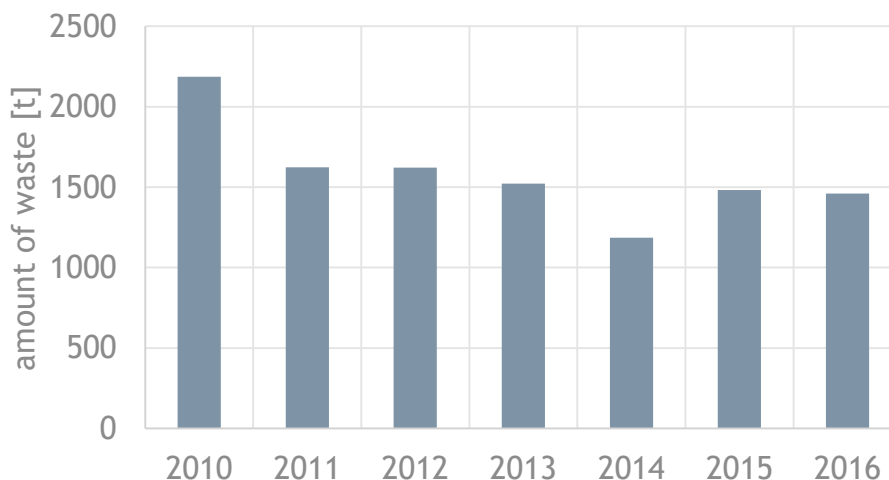
# WASTE FROM T/C INDUSTRY IN HUNGARY

- No company from T/C industry in the top 100 waste producer
- NACE 13 Waste from manufacture of textile in 2016: **6625 t**
- NACE 14 Waste from manufacture of wearing apparel in 2016: **1460 t**

## C13 Manufacture of textiles



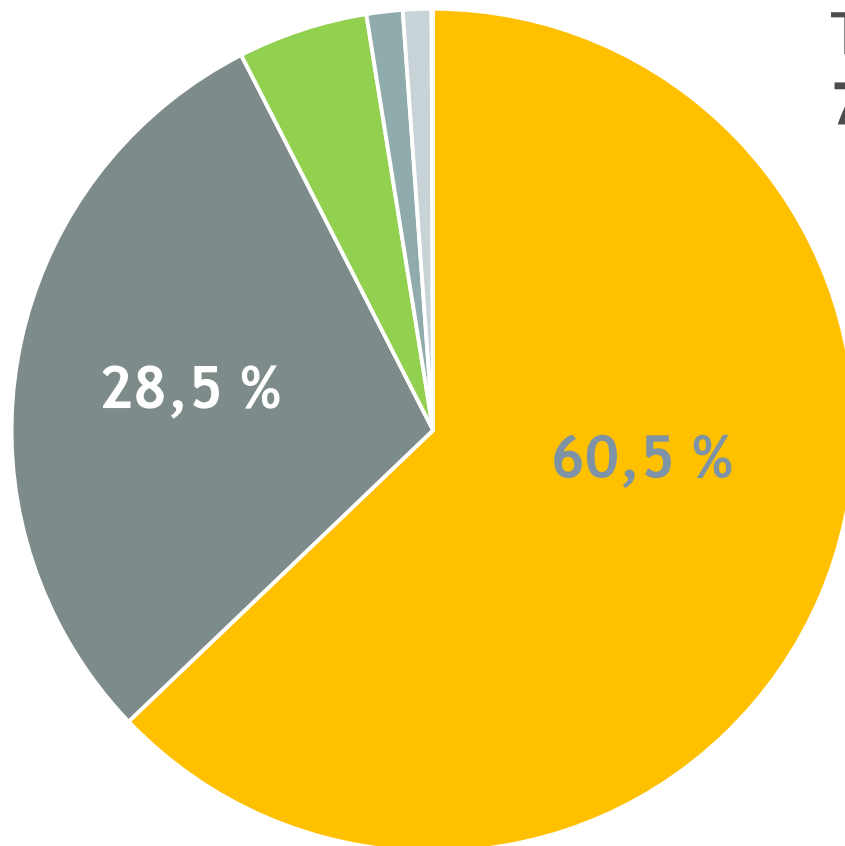
## C14 Manufacture of wearing apparel



\*source [web.okir.hu/en/tart/index/86/Queries](http://web.okir.hu/en/tart/index/86/Queries)



- 60,5 % from wastes from processed textile fibres (040222)



Total amount of textile waste:  
**7661 t**

- wastes from:
- 040222: processed textile fiber
  - 040209: composite materials
  - 040219: sludge
  - 040220: other sludge
  - 040221: unprocessed textile fiber
  - 040299: wastes not otherwise specified
  - 040210: organic matter from natural products

\*source [web.okir.hu/en/tart/index/86/Queries](http://web.okir.hu/en/tart/index/86/Queries)



Companies processing/ recycling / reusing and selling recycled products from textile waste:

- TEMAFORG Zrt.
- TESA Kft., around 3000 t/year

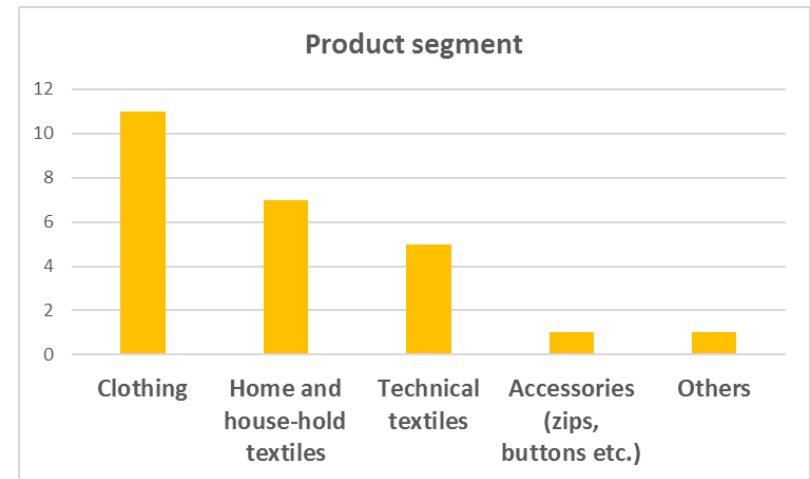
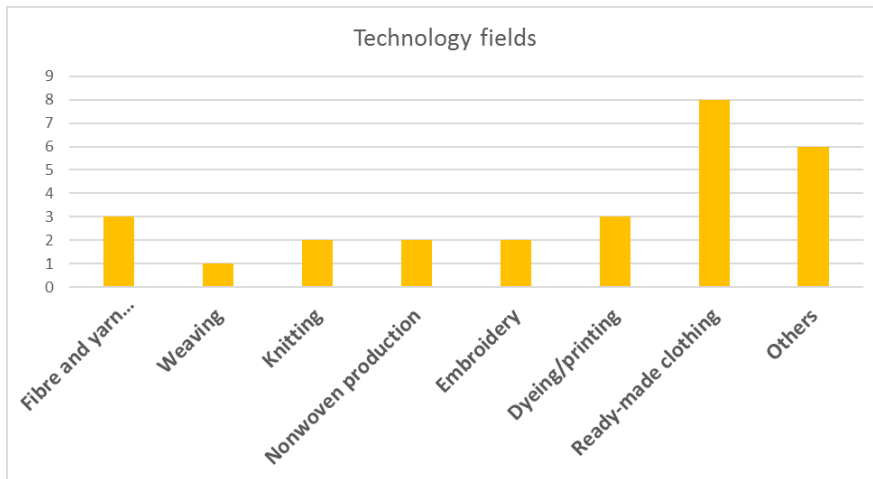
Companies operating containers for sorted collecting of worn-clothes and textiles:

- Textrade Kft. retail company: around 40000 t/year
- ReFoMix Nonprofit Közhasznú Kft.
- Easyget Kft. (importing and selling used clothes from UK)
- Rakoczi Kft importing and selling used cloth from UK



# SURVEY ON STATE OF ART ON TEXTILE WASTE MANAGEMENT IN HUNGARIAN COMPANIES

- face-to-face interviews and site visits, questionnaire survey
- questionnaire sent to 40 companies
- results - feedback from 16 companies (SME)
  - textile / technical textile producers
  - clothing producers
  - textile waste processors/users



## SWOT analysis - results of the survey

- leading position in HU textile industry sector - **ready made clothing**
- bigger companies from this sector reported strong interest in **finding the solution** for their waste
- recycling and reuse of coated, laminated, composites etc., **small quantities** very difficult
- many opportunities for innovations but also many risks (reuse may be difficult with respect to technical character of this waste)



- companies reported:
  - usually high interest to find **recycling possibilities** for their textile waste
  - technological / technical solution for recovery not available or **too much efforts** needed = reason for not recovering
  - no technological / technical **solution** available
  - regular waste generation
  - offering waste via a recycling **exchange platform**
  - need for **information and education** in the field of textile recycling high or very high



# THANK YOU FOR YOUR ATTENTION!



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