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The partners

Keypartners
- Creative City Lab – Ellen Mensink - initiator
- Texperium – Anton Luiken

Partners Recycled Lab Circular Fashion
The objectives of the lab (fase 1)

• Stimulate the transition to a circular fashion chain – starting with wool
• Stimulate the production high value fashion items out of post consumer waste
• Stimulate the ‘local production’ for sustainable fashion
• Find out if there is a need for a recycle factory lab (RFL) in the MRA; what is the business model and involved partners

Approach

• Do technical research on development high value yarns out post consumer waste
• Find new business models for closing the fashion supply chain
• Work specifically on wool fiber for recycled fashion
• Do research on existing yarn and circular fashion business models
• Develop high value recycled fashion items (out of post consumer textile) and get the market to know | buy it.
• Find interested parties who will sign a letter of intend to set up the RFL
The market

• World fiber production for wool is relatively small
• Prices of textile fibres
  • Raw cotton: 1.10 €/kg
  • Polyester: 0.80 €/kg
  • Wool: 7.50 €/kg
• In absolute numbers and value a big market
  • Price level December 2014; prices haven’t been so low since 2011

Why wool

• Wool is high quality and natural product
• Sustainable biologic wool is very expensive
• Relatively valuable compared to other products
• In Europe professional companies in the supply chain
• Recycleability is high (f 2 to 3 times versus 1 time cotton)
  high quality products from recycled fibres
The Netherlands has a huge waste mountain and recycling post consumer waste into high value yarn and fashion items is classified as very sustainable

- 226 kt textile waste per year
- 159 kt is not collected and burned
- 67 kt is collected, of which 34 kt is re-used, 33 kt downcycled or burned
- 30% of all new fashion items never get to the market
- The revenues of the fashion market is 8 billion in the Netherlands (CBS 2010)
The fashion supply chain is long, intransparent, with a lot of stakeholders.

A circular fashion chain means new knowledge on techniques and potential business models.
Sustainable fashion, closing the loop of the supply chain; new steps need to be taken or existing steps need to change, by finding new business models

- Technical research
- Market research
- Business research
Important steps in the project

**Management & organisation**
- Project plan, planning, finance
- Management core team, partners, students
- Creative Team & Business technical team

**Research & development**
- Technical research
- Market Research
- Business research
- Creation & development

**Communication**
- Project start, progress, endresults
- Crowdfunding project
Research & development activities of the lab

1. Select: fibers, materials, colors
2. Controlled unravelling
3. Spin-preparation & blending (colors)
4. Spinning

- Technical research
- Market research
- Business research
- Creation & development

- Market research recycled yarns
- Organising carding and spinning in EU | searching cooperation partners
- Reverse logistics | sorting retourstromen optimaliseren
- Business model research
- Design
- Knitting tests
- Develop prototype & salesmensamples
- Confectioning & finishing
**Stakeholders of the project | lab:**
- Core team: organisation team of CCL en Texperium, students and partners;
- Creative team: sustainable creative professionals and designers
- Business Technical team: partners with specific fashion chain expertise, knowledge
- Ambassadeurs: growing group of parties that want to support the lab and work with the lab results
- The market: consumers that want to buy the recycled fashion items
Planning of the lab

**START**
LAB (fase 1)

2/2   Feb  March  April  May  Juni  July

**END**
LAB (fase 1)

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**Research**
- Technical research phase 1
- Technical research phase 2 (further optimization)
- Market Research
- Business research

**Design & development**
- Creation & development

**Communication**
- Project start
- progress
- endresults
- Crowdfunding project

- = communication on intermediate results via media
- = communication on intermediate results via media and event for all network.
- = communication on final results via media and event for highly interested parties