

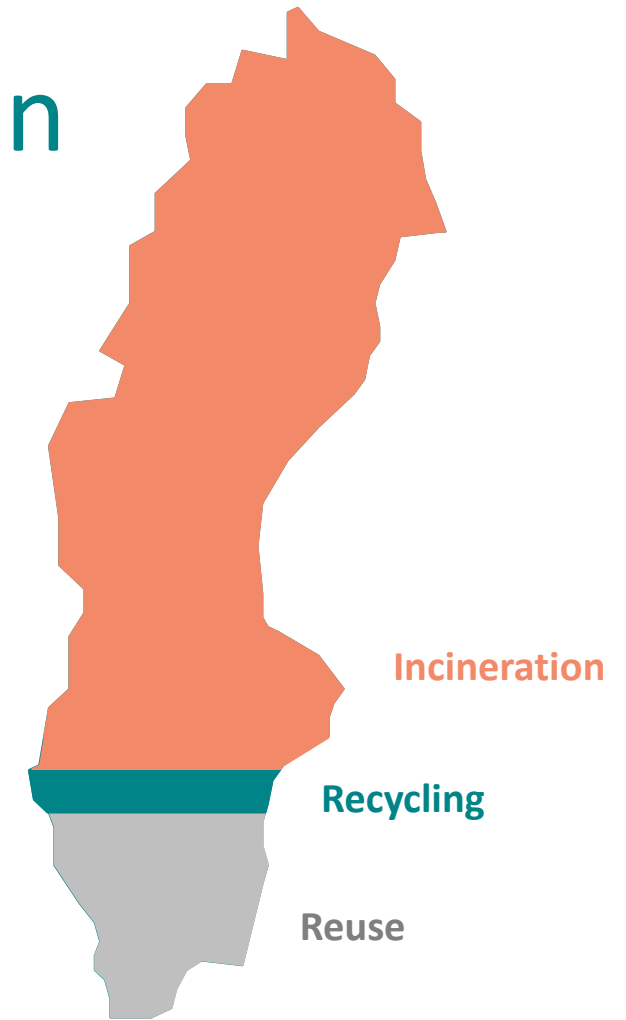


SIPTex: Automated textile sorting in the Öresund region

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We need a new textile value chain

- About 25% of used textiles in Sweden are collected separately
- Less than 4% are recycled
- Only a very small proportion of the textiles are recycled into new textiles

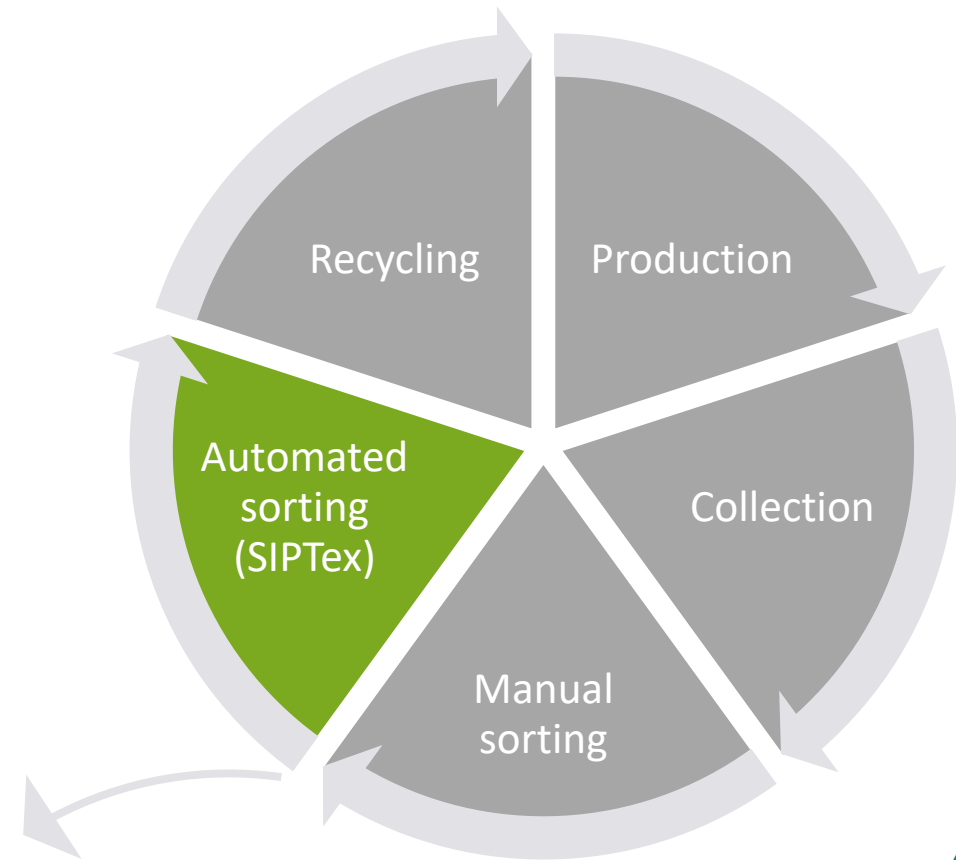
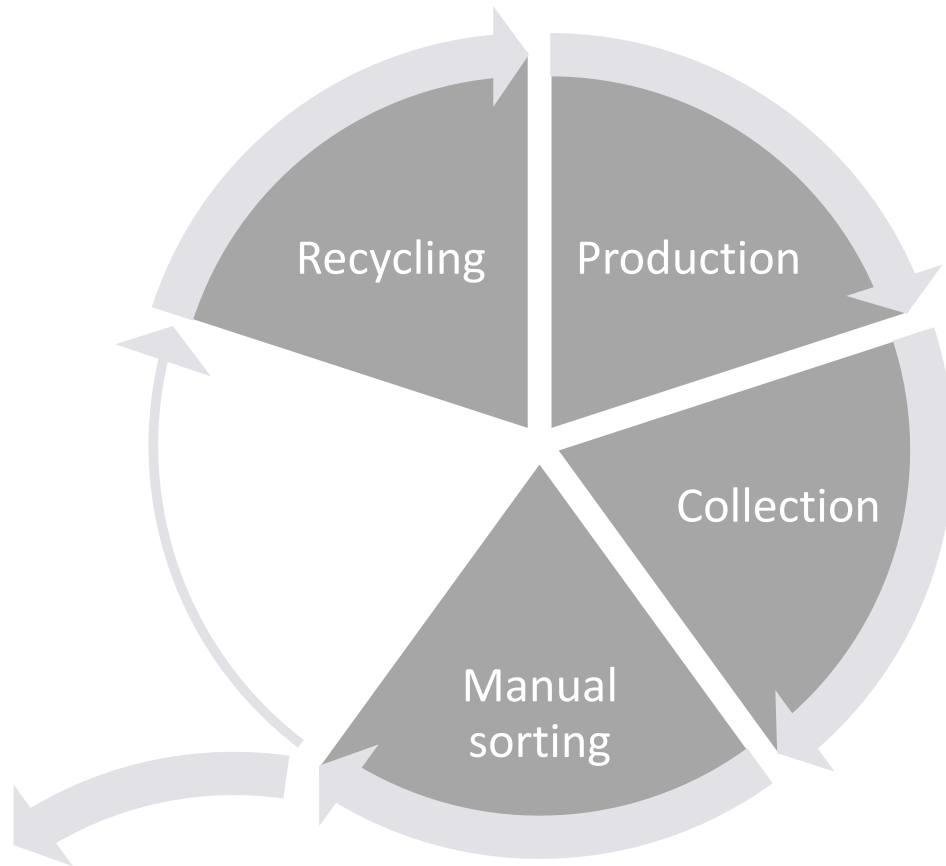


The pressure for creating a circular textile value chain is increasing

- EU requirement on separate textile collection by 2025
- China import ban for several types of textile waste
- (Voluntary) goals of producers for increase use of recycled fibers:
 - HM:
Only use of sustainably sourced fibers (including recycled fibers) for production of textiles by 2030
 - IKEA:
Shift to circular business model by 2030



SIPTex introduces a new step in the textile value chain



SIPTex 3: From pilot to industrial scale

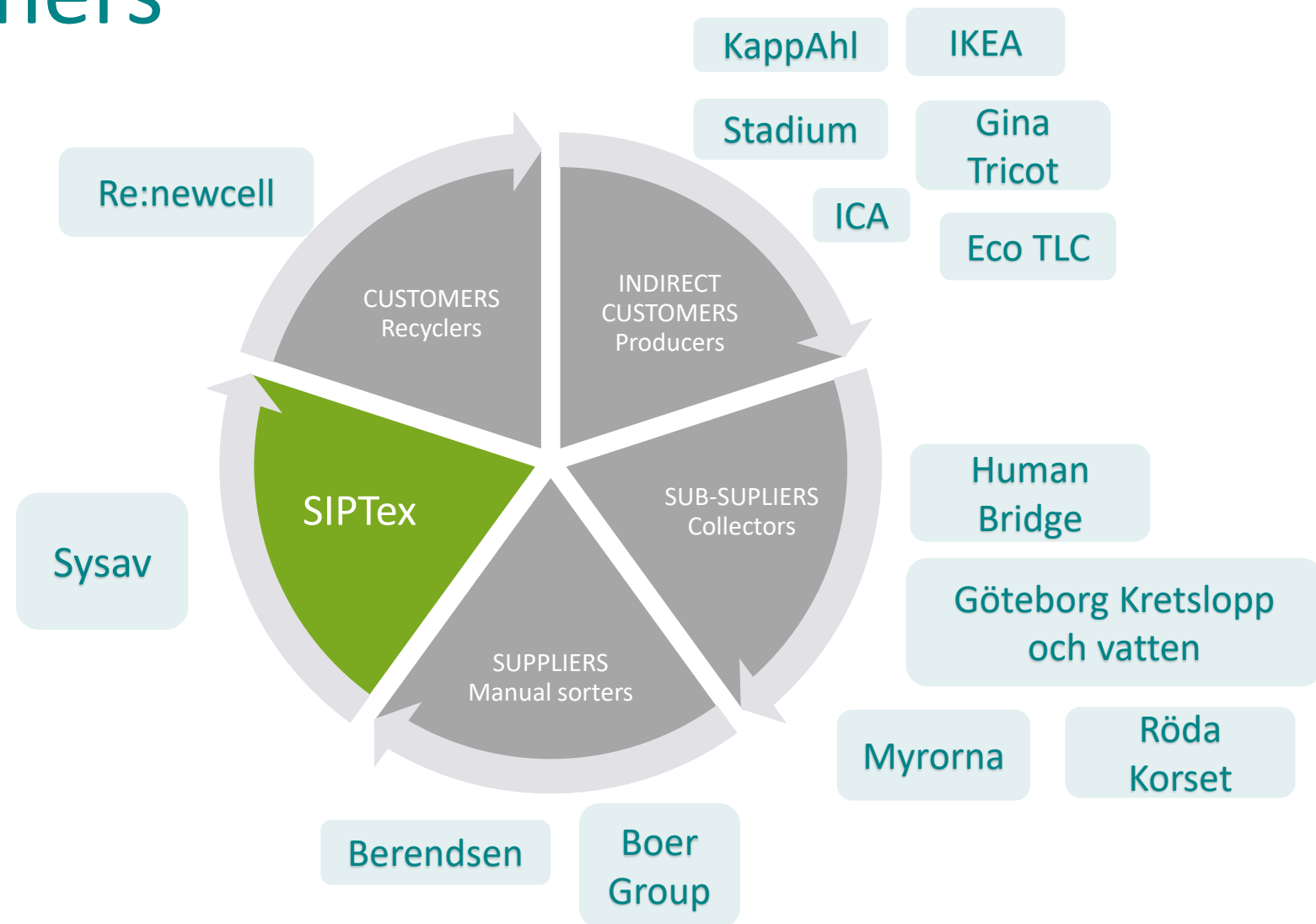
- 22 MSEK support from Vinnova (Swedish Innovation Agency)
- 31 months' support
- Sysav will be building and operating an automated textile sorting facility in Malmö
- Operation is planned to continue after end of Vinnova support
- Gradually increasing production to 100% in two shifts 2025 (annual sorting capacity: 16 000 tons)
- Procurement procedure: Started
- Planned start of operation: Summer 2020

SIPTex 3 partners

RESEARCH INSTITUTES:



AUTHORITIES:



Inbound material

- Collected textiles from recycling centers
 - Collected for recycling
 - Collected for reuse and recycling (with manual pre-sorting for reuse)
- Pre-sorted textiles from manual textile sorters
- Industrial textile waste
 - Pre-consumer waste (clippings, scraps etc.)
 - Post-consumer waste (e.g. from laundries)

Outbound material

- Quality assured recycling products
 - Sorted according to fiber type
 - Suitable for fiber-to-fiber recycling
 - Initial focus on mechanical recycling shifting towards chemical recycling as processes develop
 - Initial focus on products with high shares of cotton, wool and acrylics
- Sorting rests
 - Initially small shares of incineration
 - Mechanical recycling (downcycling)

Next steps (some of them 😊)

- Finding collaboration partners for inbound materials
 - Municipalities and municipal recycling companies
 - European (manual) textile sorters
 - Companies producing pre- and post-consumer textile waste
- Finding a regional collaboration partner/solution for manual pre-sorting of reusable textiles
- Defining and promoting markets for quality assured recycling products
- Finding collaboration partners and establishing customer relationships for
 - Quality assured recycling products
 - Sorting rests

Regional handling of textile waste

- Annual textile consumption
 - Sweden: 14 kg/capita
 - Denmark: ca 16 kg/capita
- Collection rates today
 - Sweden: 25%
 - Denmark: 40-45%
- Population of Öresund region: ca 3 million
- SIPTex enables transparent, regional handling of textile waste flows



Interest in collaboration with SIPTex?

- Partnership for handling of collected textiles
- Re-circuling (selling) reusable textiles
- Creating a network for further refinement of SIPTex-sorted textiles (pre-treatment before recycling)
- Using SIPTex-sorted textile waste for production of new products (pilot scale to full scale)
- ...New ideas?!