The background of the slide is a teal-tinted photograph of a forest. The image shows numerous tall, thin tree trunks standing vertically, creating a sense of depth and texture. The ground is covered with fallen leaves and some low-lying vegetation. The overall color palette is a monochromatic teal, which provides a natural and serene backdrop for the text.

Telaketju webinar 1: NordicBio – Circular bio-based nonwoven products in medtech applications

Maria Ström

Wargön Innovation, March 16, 2020

Agenda

- Wargön Innovation – a test and demo facility for new bio-based and/or resource-efficient materials
- NordicBio – a Swedish-Finnish cooperation in circular and bio-based medtech products

Wargön Innovation enables production of tomorrow's materials

- Part of Science Park Innovatum (ISP)
- Focus to decrease carbon dioxide emissions by offering a test- and demo facility for material innovations (**biomaterials and textiles**)
- Financed by Västra Götalandsregionen, Vänersborg municipality, EU funding (Tillväxtverket), and Fyrbodals kommunalförbund
- Focus on small- and medium-sized enterprises
- **Parallel business- and technology development**
- **Cooperation with institutes, academy, businesses, public organisations and NGOs**
- Ten employees (ISP about 100)

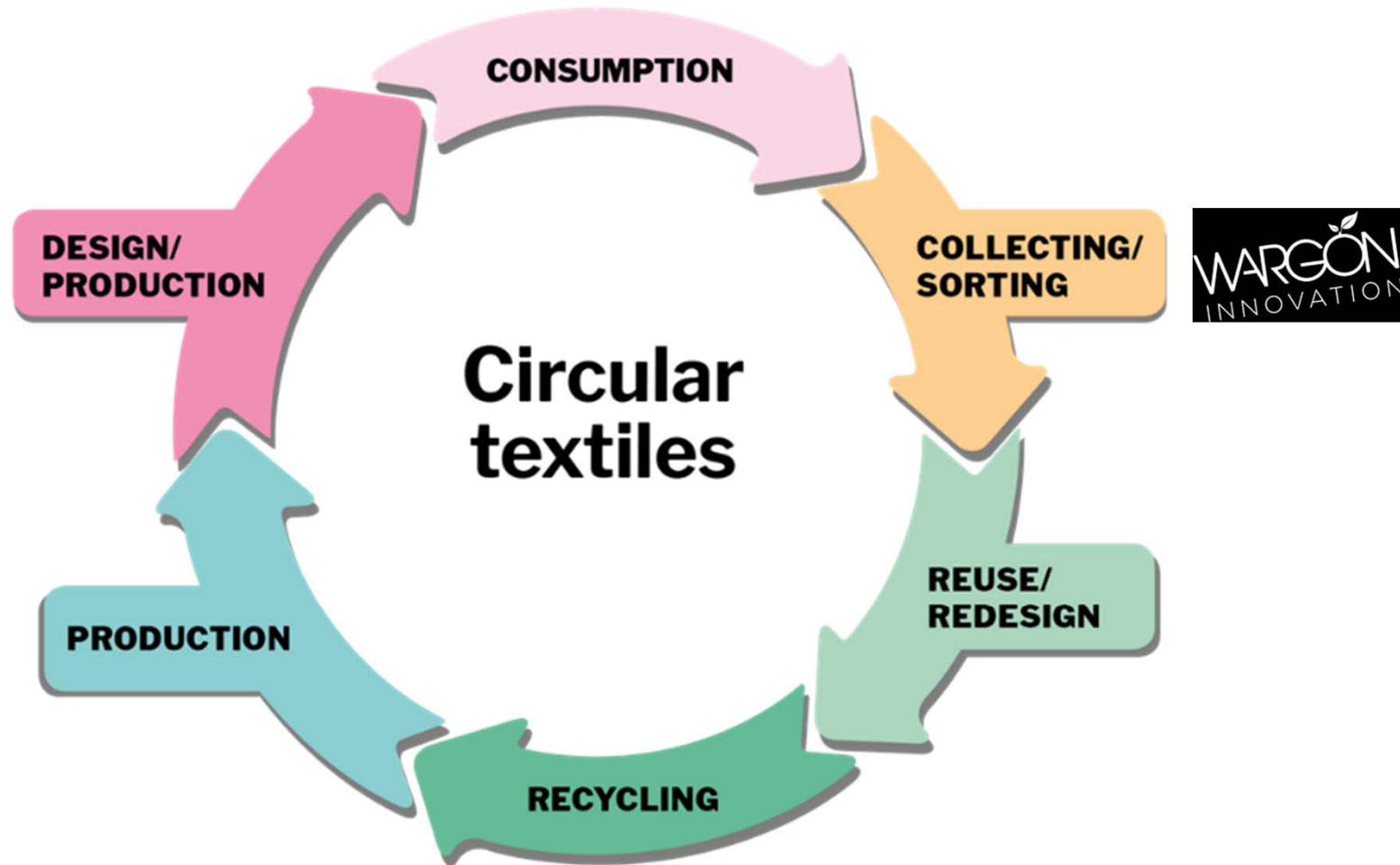
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Wargön Innovation focus on textile collecting and sorting

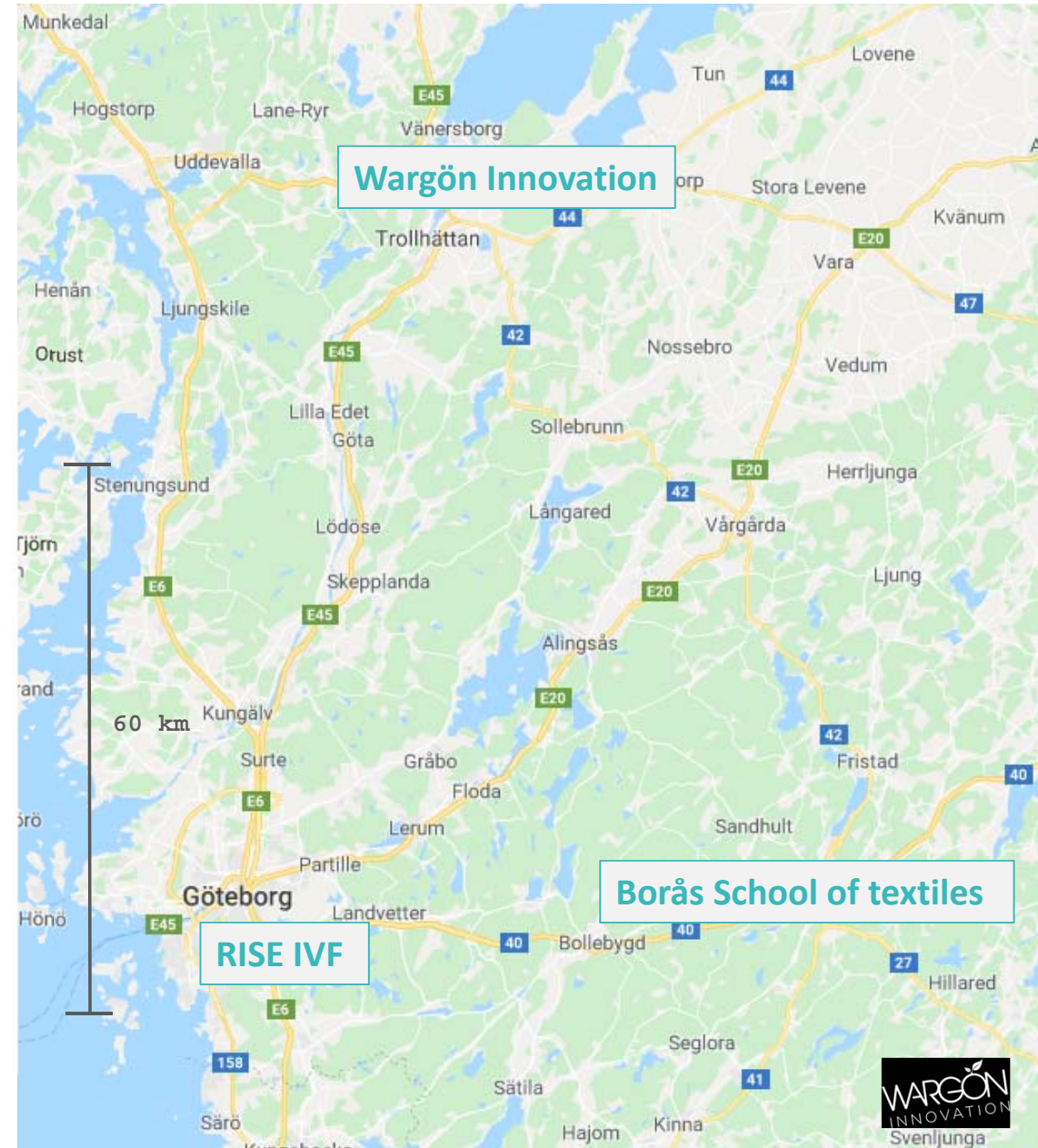
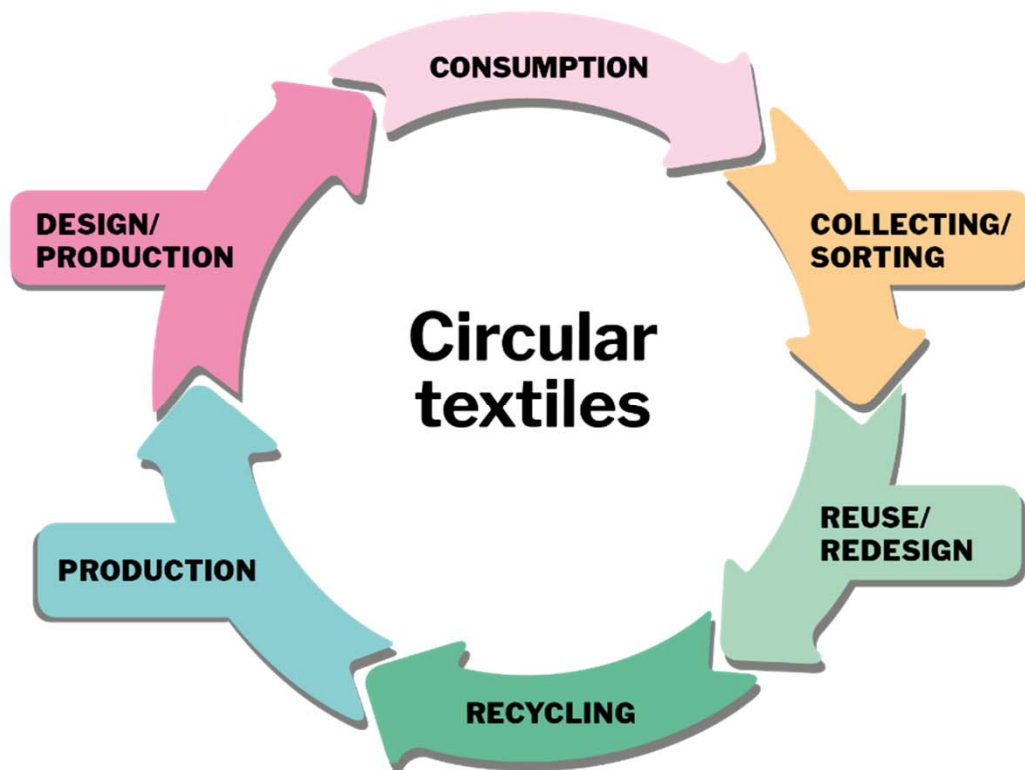


Post consumer textile sorting at Wargön Innovation

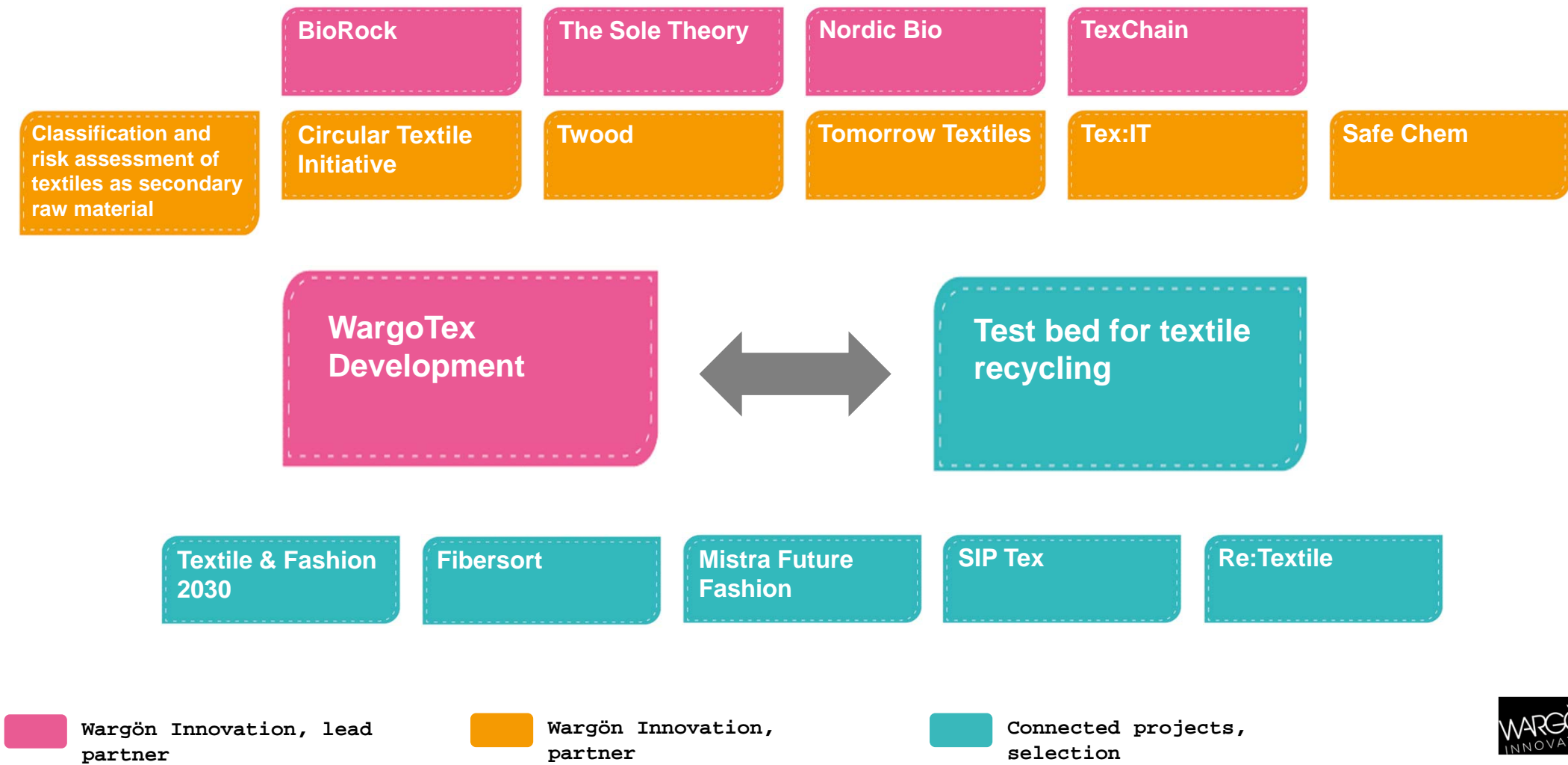
- ❖ Has been leading or taken part in 14 textile projects connected to textile sorting since 2016
- ❖ Textile sorting pilot facility with capacity 500-1 000 tonnes per year (WargoTex project, 25 partners)
- ❖ Both slow and fast sorting, i.e. for reuse/redesign or for material recycling
- ❖ Fibersort™ will be installed in a continuous pilot plant line in May 2020.
- ❖ Reuse sorting in cooperation with NGOs and University West (WargoTex)
- ❖ Redesign sorting in cooperation with Borås and SMF
- ❖ Close cooperation with RISE IVF and Borås



Swedish regional cooperation: Three nodes closes the textile demo loop



Projects and initiatives connected to west Sweden on circular textiles



Agenda

- Wargön Innovation – a test and demo facility for new bio-based and/or resource-efficient materials
- NordicBio – a Swedish-Finnish cooperation in circular and bio-based medtech products

NordicBio project – purpose and aim

- Demonstrate bio- and circular material flows in nonwoven-based medtech applications
- Develop yarn and garment production using plant-based textile fibres and shredded post consumer textile waste
- Develop prerequisites to scale and commercialize the above using Finnish and Swedish key technologies

NordicBio project – team

Project management

Wargön Innovation
(Sweden)

Pure Waste Textiles
(Finland)

Technical development

VTT, RISE IVF and Fiber-
X

Industrial partners

Cellcomb, Sporda nonwoven
and Pure Waste Textile

Customer/user perspective

Stockholms Läns Landsting,
Södersjukhuset

RE:

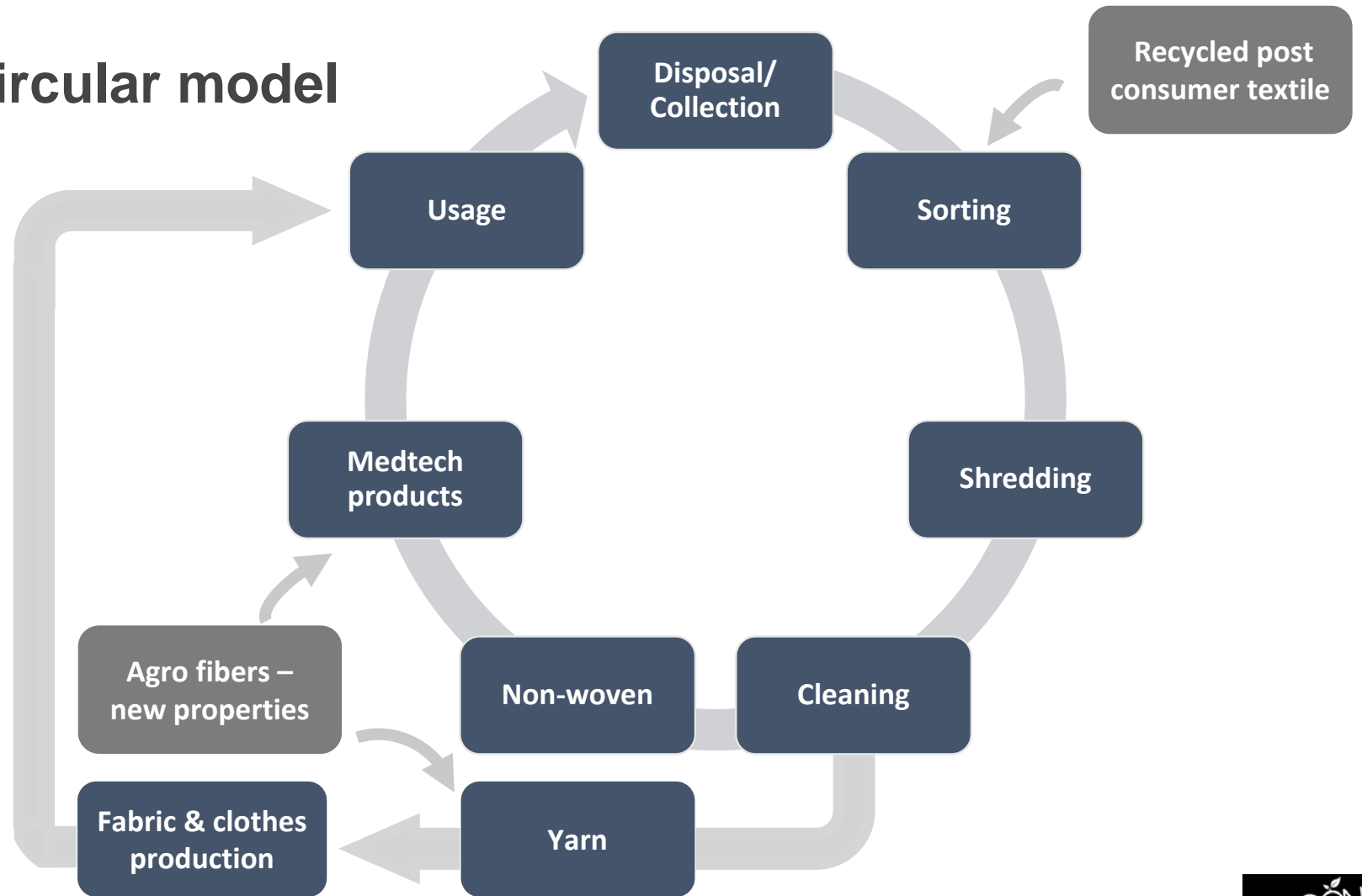
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NordicBio project – challenges

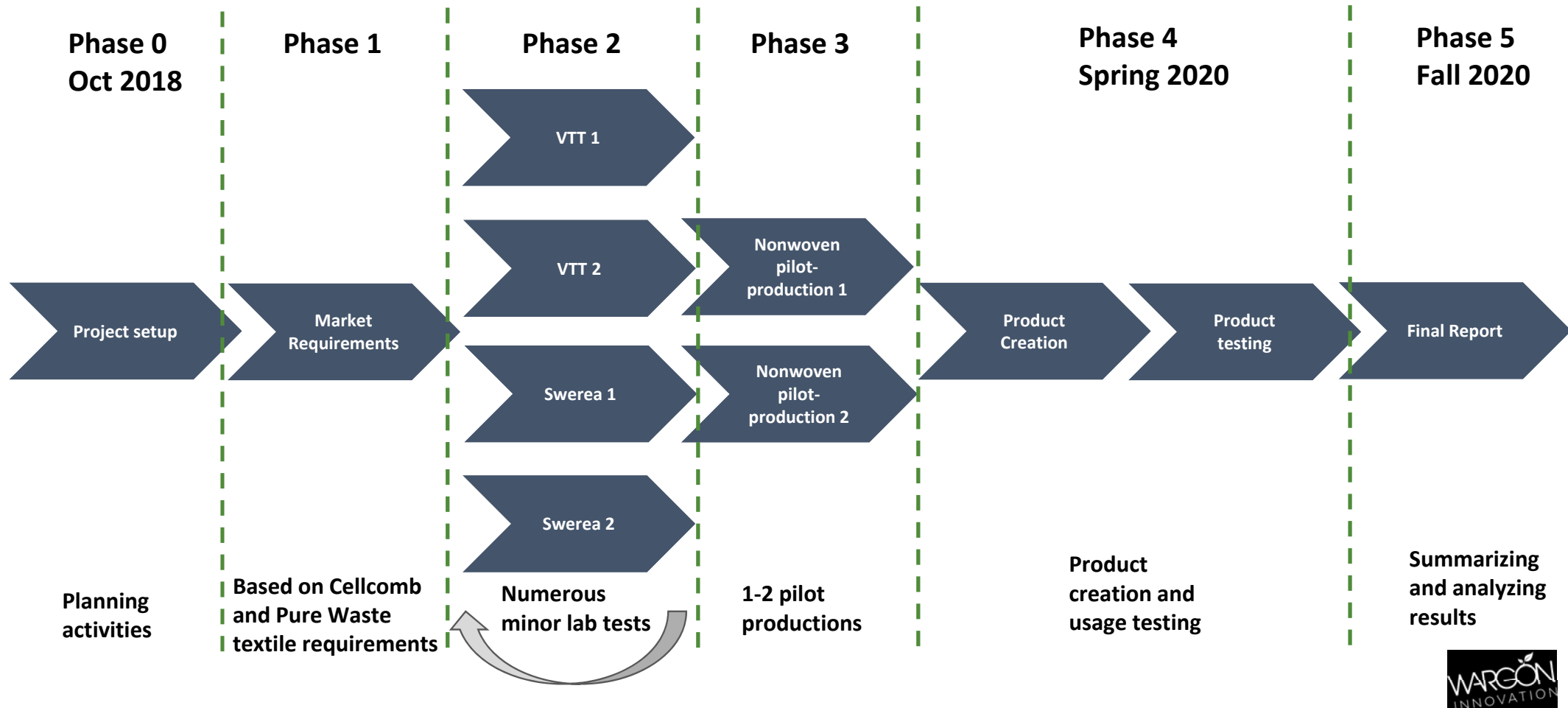
- Huge amounts of fossil-based disposable* nonwoven medtech products on the market
- Huge amounts of post-consumer and post-industrial textile waste to incineration
- Fossil-based textile fibres are predominant globally with a market share of about 65%

** Disposables may sometimes be the best option in medtech applications, but material choice is important.*

NordicBio circular model



NordicBio project workflow





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VÄSTRA
GÖTALANDSREGIONEN



Vänersborgs kommun

Fyrbodal



Thanks!



@wargoninnovation

maria.strom@wargoninnovation.se

+46 728 02 11 33