



Telaketju

Future steps of postconsumer textile refining in Finland

18/09/2018
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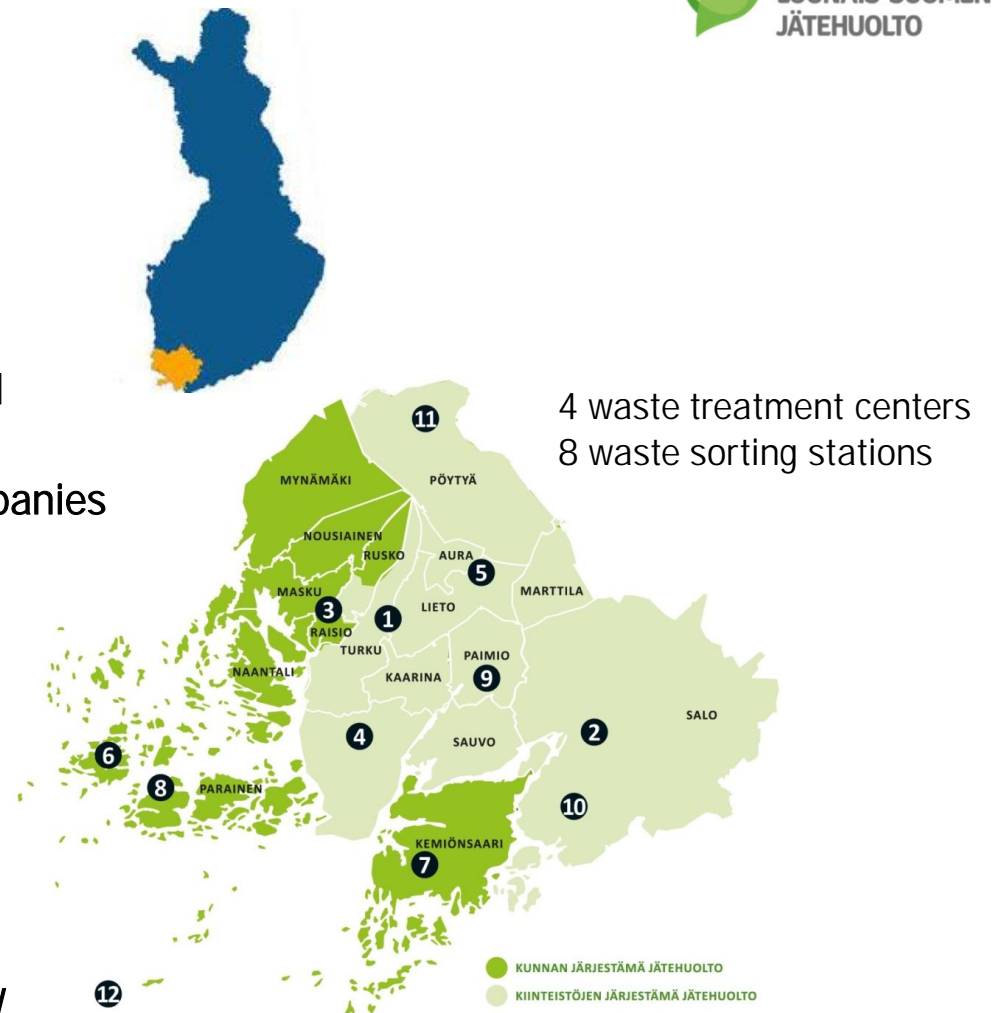


Southwest Finland Waste Management Lounais-Suomen Jätehuolto Oy (LSJH)



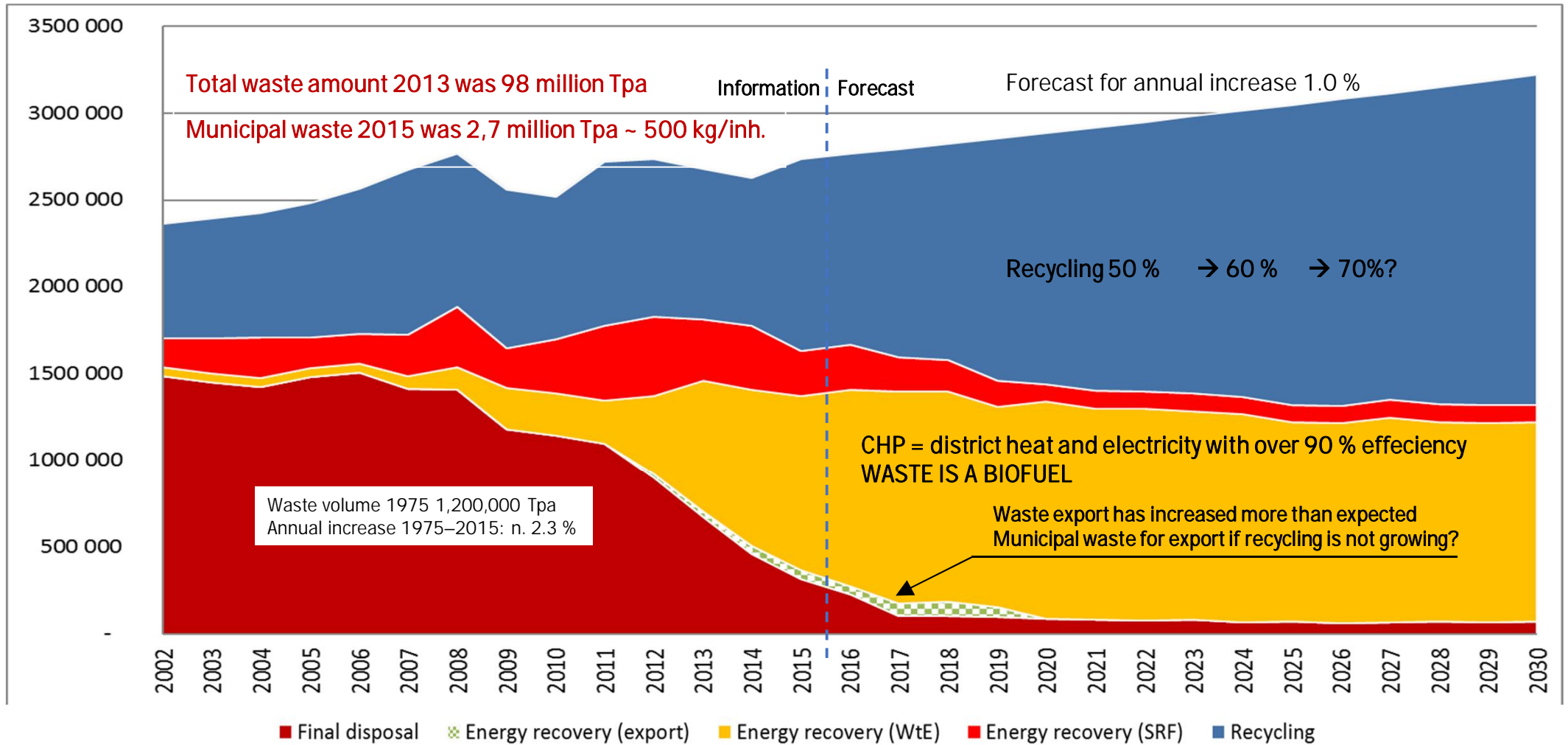
17 owner municipalities, 417,000 inhabitants

- Turnover € 26 million, personnel 85
 - Fees decided by joined Board → no tax money used
 - Purchased external services ~ 60%
 - Services provided in cooperation with over 700 companies
- Main tasks:
 - Waste management for residential and public sector
 - Waste reception, utilisation and treatment
 - Hazardous waste from households and agriculture
 - Waste transport arranged by the municipality
 - Advice on waste
- Subsidiarie companies Lounavoima Oy and Kiertomaa Oy
- Associate company Ekopartnerit



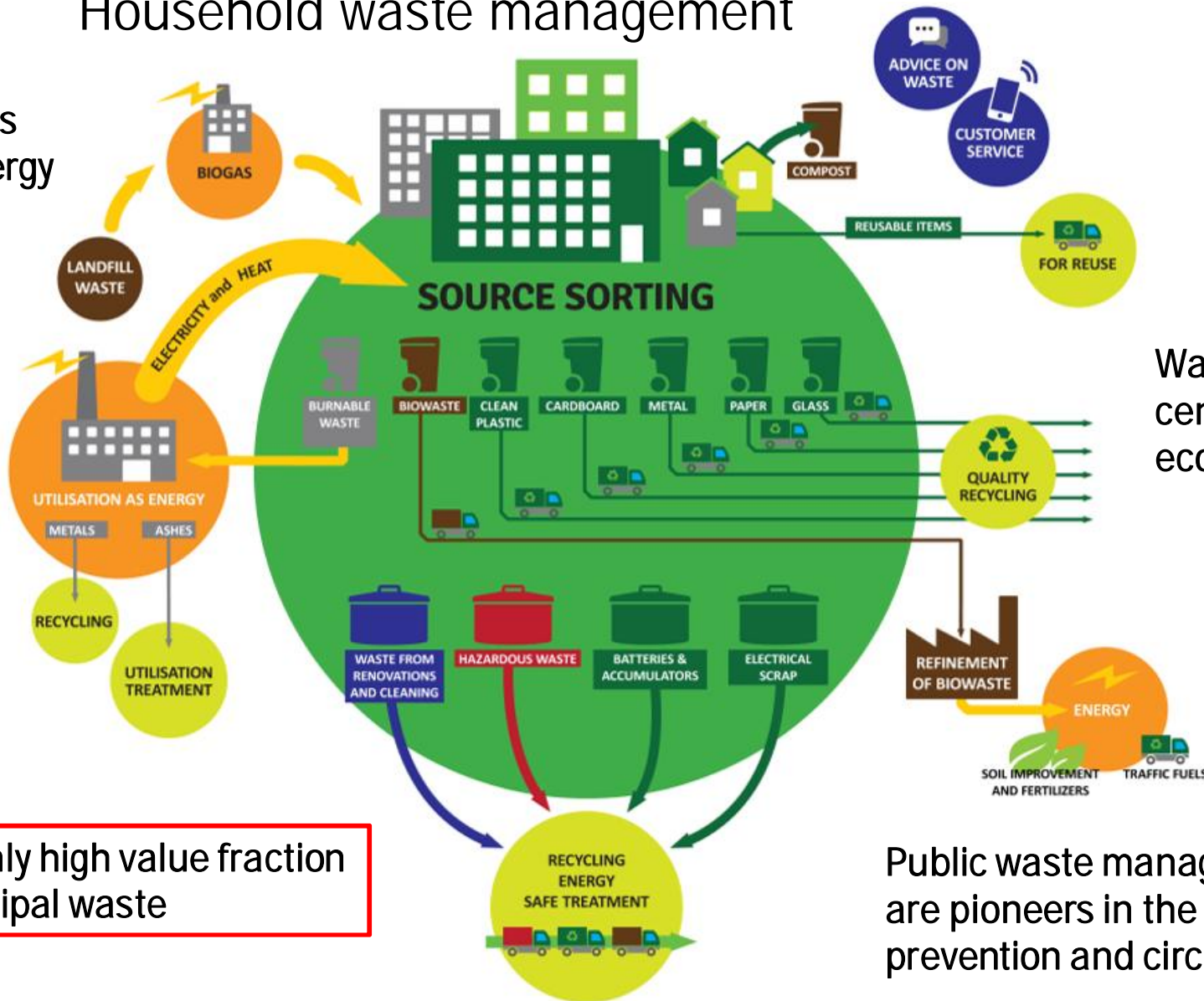
Municipal solid waste in Finland 2002-2030 (Tpa)

Source: Information 1975–2013 (Statistics Finland), Forecast 2015–2030 (FSWA)



Household waste management

98% of municipal waste is utilised as materials and energy



Waste treatment centers are circular economy platforms

Textile is the only high value fraction in mixed municipal waste

Public waste management companies are pioneers in the climate change prevention and circular economy

Background for textile recycling projects



- Studies
 - [Finnish Environment Institute SYKE-TEXJÄTE](#) project
 - [Topinpuisto \(Topi UrbanMine\)](#) - LSJH's Circular Economy park in Turku area
 - ["Textile 2.0" textile recycling pilot](#) -Learning by doing
 - [Download Green growth in Nordic regions: 50 ways to make it happen](#) – Nordregio
- A common aim to get rid of uncontrolled exports of textile waste to third countries
- Public waste management companies interest for joined textile recycling
- 70,000 Tpa of (2,6% of MSW) textile waste in Finland and 350,000 Tpa of textile waste in the Nordic countries
- Collection \neq recycling, recycling system is missing in Finland → Telaketju cooperation
- Finland is the leading country globally on forest industry and cellulose chemistry

Public waste management a forerunner– WHY?



PUBLIC WASTE MANAGEMENT COMPANIES

- Are responsible for residual waste – also textile waste
- Are socially responsible
- Accomplish waste hierarchy and waste prevention
- Are innovative partners, pioneers and circular economy platforms

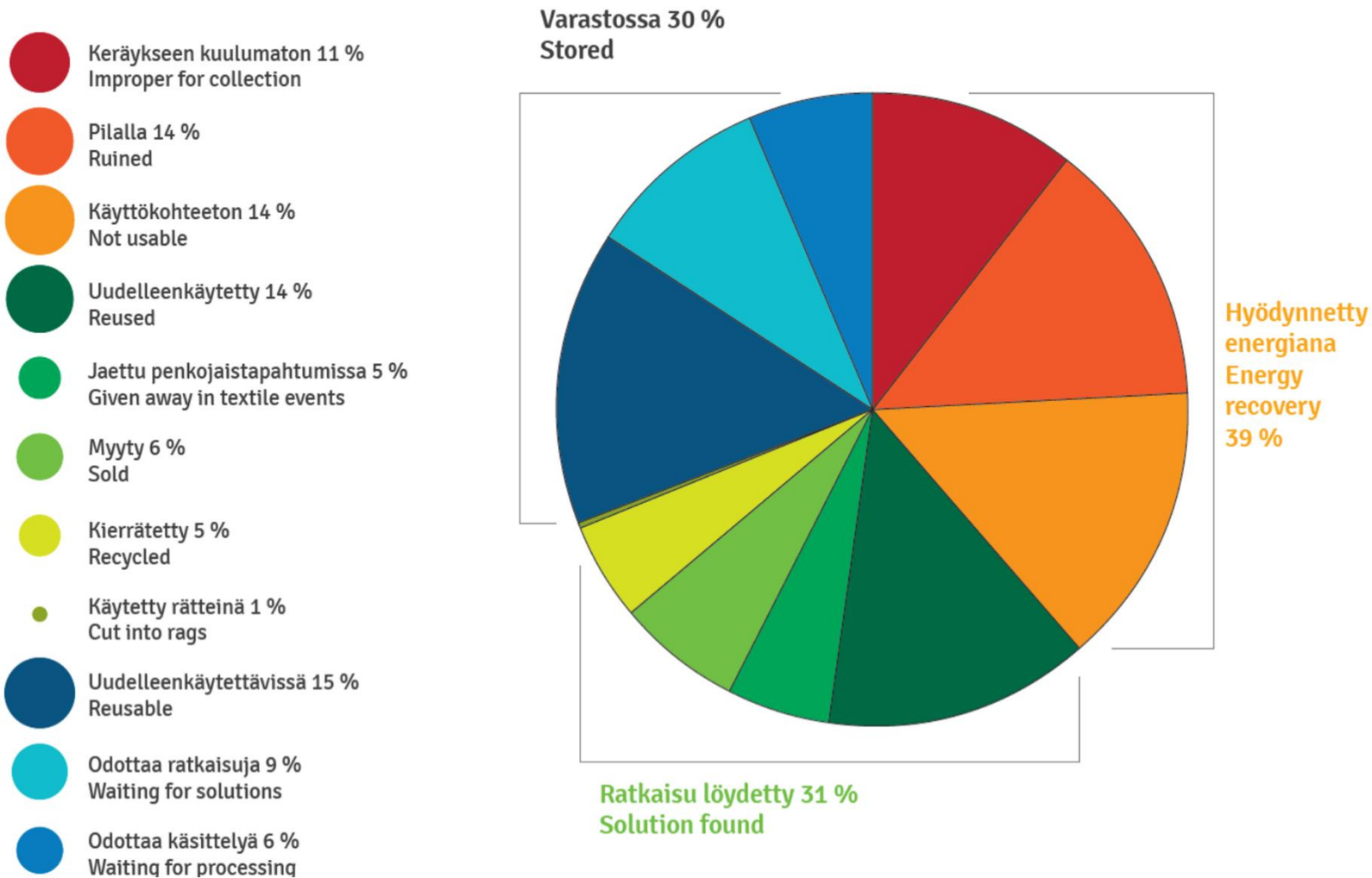
KEY THOUGHTS

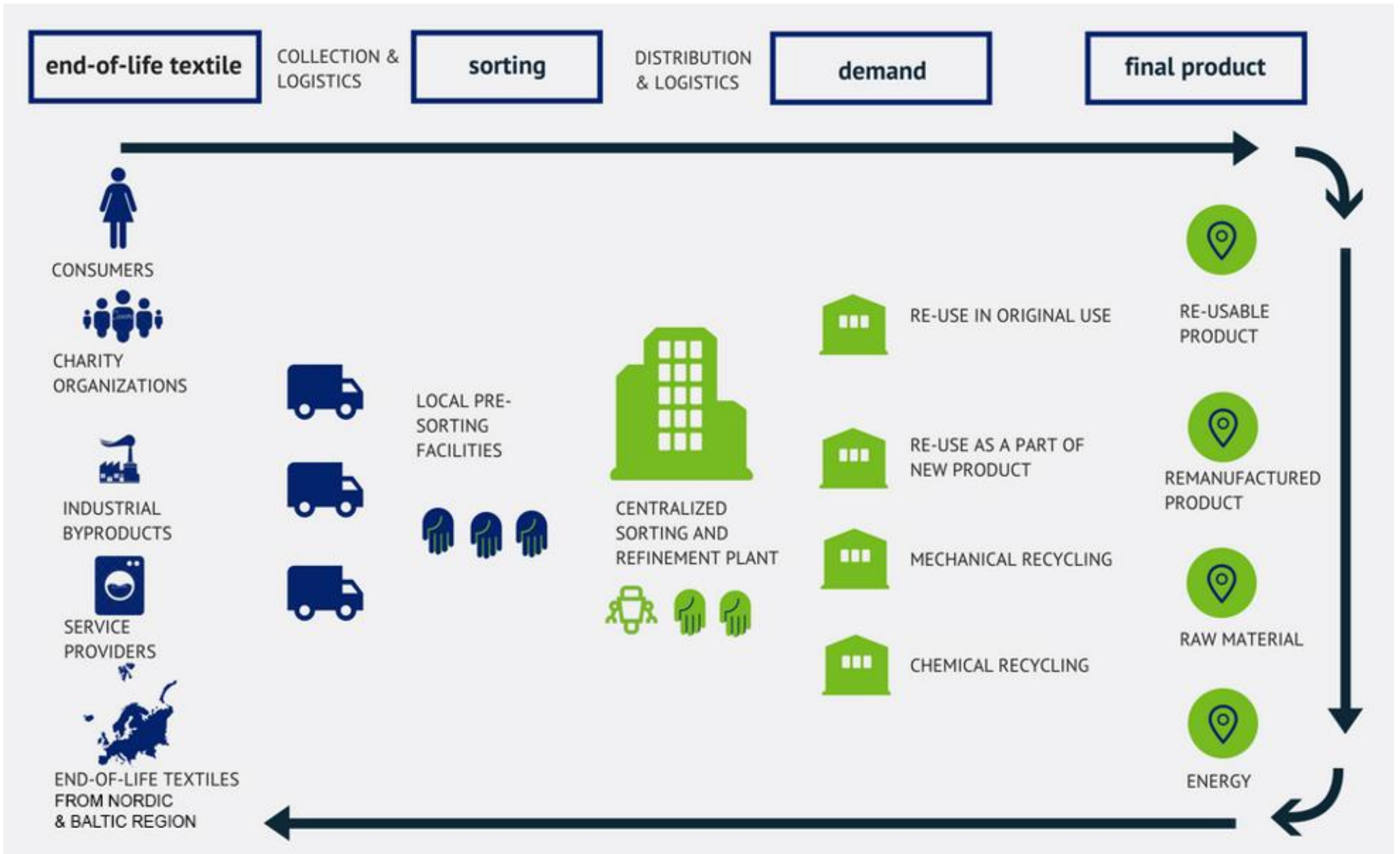
- Waste stream management
 - Requirement for separate collection of textile waste in 2025
- Quality recycling and contaminants in control – less pseudo-recycling
- New reuse and recycling solutions for textiles are of interest to consumers -REPUTATION
- National and international cooperation
 - between public waste management / research / industries



Poistotekstiili lounaisessa Suomessa 2017

Post-consumer textiles in Southwest Finland 2017





New investments in textile processing and technology

LSJH got two noticeable financial funding agreements at May 2018

- 1) Ministry of Economic Affairs and Employment of Finland supports the first pilotfactory to process end-of-life textile
 - 27 Finnish public waste management companies are co-funding the project
- 2) Regional Council of Southwest Finland supports the market analysis and piloting IR identification on end-of-life textiles

New projects will be done in close co-operation with Finnish Telaketju-network

First stage of Processing plant pilot



2018- Preliminary study and background preparations

2019-2020 Pilot plant and extension for LSJH pilot projects in Telaketju

- Extension of the collection area in Finland → 2 000 Tpa
- Reuse and recycling target 30-50% - the rest to energy
- Buildings for rent in Turku region / new hall in Topinpuisto / other place?
- Development of treatment line and processing plant
- Increase of quantities → 5 000 Tpa?
- Solutions for the next stages

**we are looking for a business expert
to plan textile waste processing plant
[avoin-tyopaikka-liiketoimintaosaaja](#)**

Next possible stages for Processing plant pilot



STAGE 2 in 2021-2023?

A “full-scale” processing plant for waste management and domestic needs

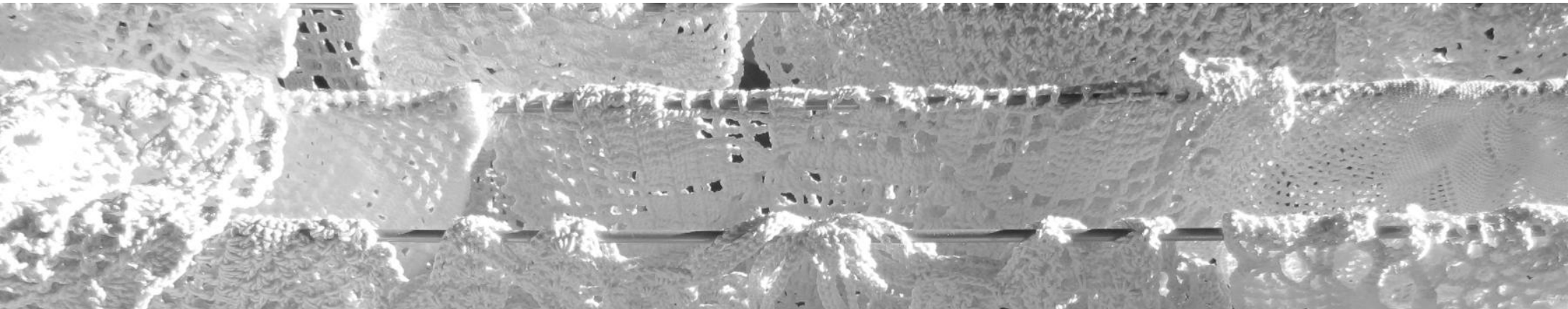
- reuse and recycling targets more than 50% - the rest to energy
- choice of location and implementation model - port connections?
- Involvement of a private partner (Innovation Partnership?)
- 5,000 to 20,000 Tpa →?

STAGE 3 2023 →

- Provision of Services to Sweden (Stockholm) and the Baltic Sea Region
- In Scandinavia, only 1-2 industrial scale refining textile processing plants are needed
- 20 000 to 100 000 Tpa →? INDUSTRIAL SCALE







Thank you!

www.lsjh.fi/en/

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