

# Discussions on an EPR system for textiles in Sweden – some critical issues

POLICY MEASURES FOR TEXTILE CIRCULARITY, RIGA, 9 SEPTEMBER 2019

NAOKO TOJO, ASSOC. PROF. IIIIEE, LUND UNIVERSITY



# Why EPR for textile?

- No major impacts from end-of-life phase

But

- Various impacts at production + use phase
- Rapid increase of consumption
  - Global: 3.7 kg (1950) to 11.1 kg (2007)
  - Sweden: More than 50% (2000-2015)

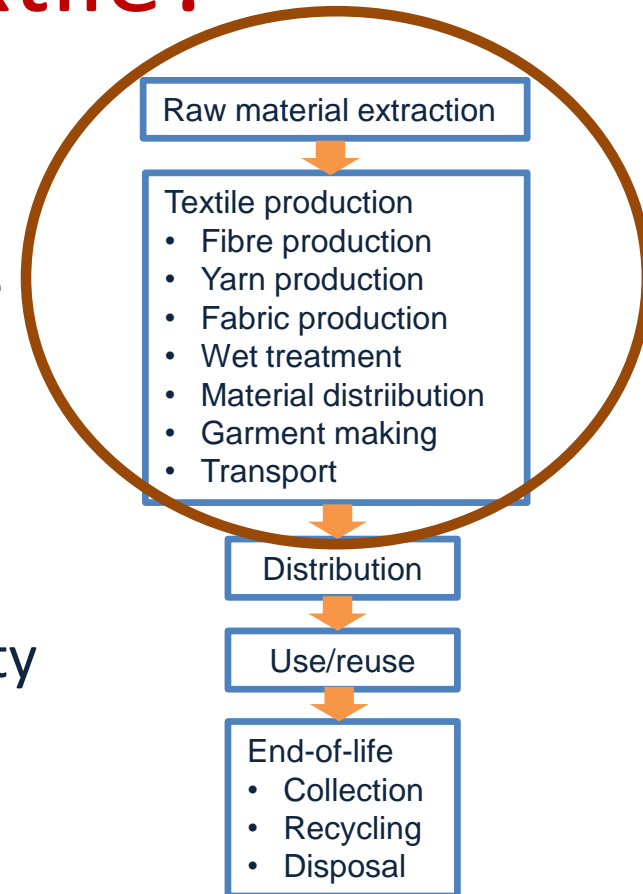
→ More impacts upstream, resource security

→ Reuse & recycling as potential measures?

Overall policy development

- Revised EU Waste Framework Directive (2008) source: adapted from Roos (2017)
- EU Circular economy package (2015 -)

...

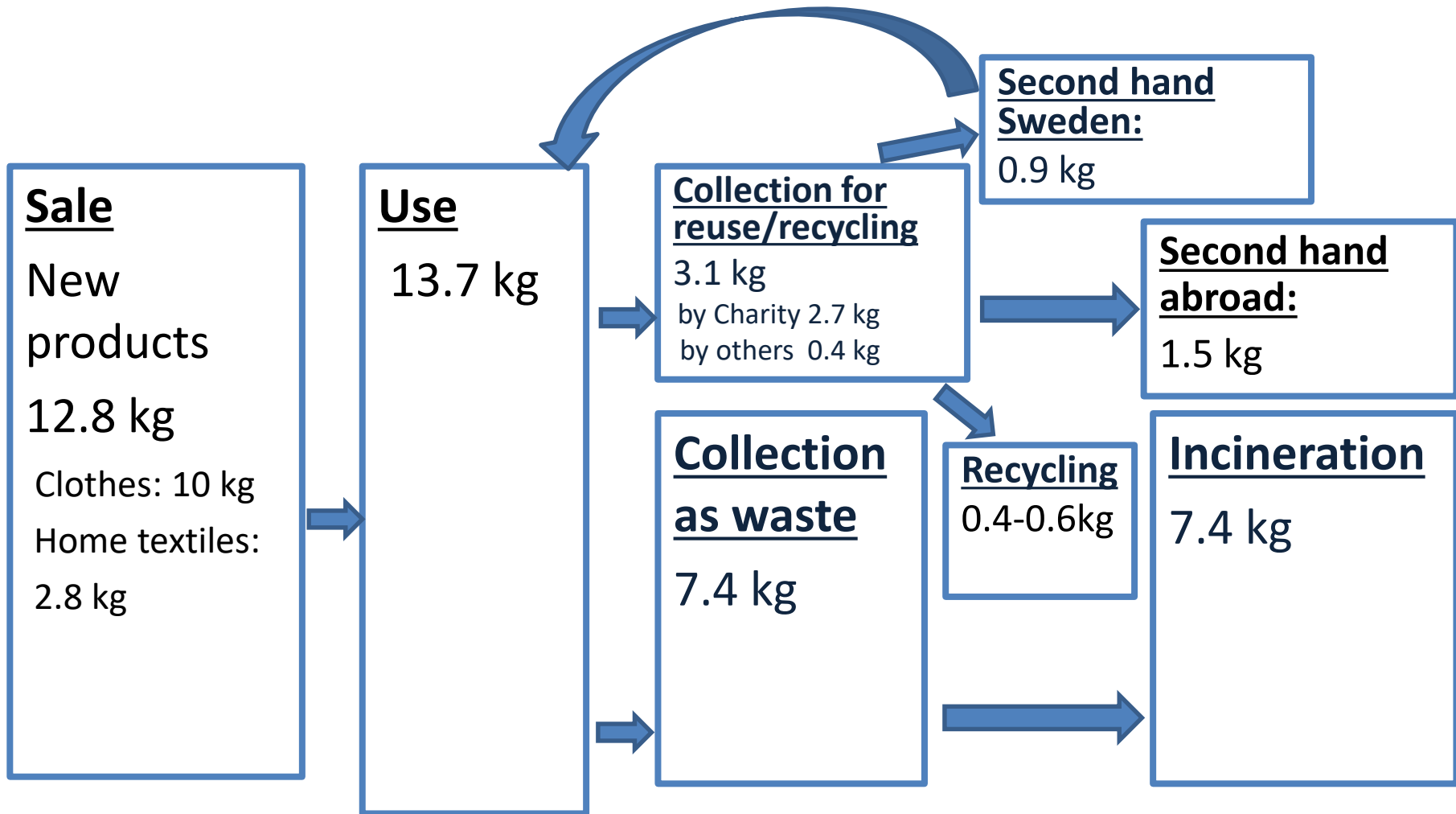


# Flow of textile products in three Nordic countries (2010-11)

	Per capita (Kg)				Total (DK, FI, SW, tonne)
	DK	FI	SW	Average	
Overall in-flow	16.0	13.1	14.2	14.4	291074
Domestic second-hand purchase	0.5	1.3	0.3	0.6	12600
<b>Total use</b>	<b>16.5</b>	<b>14.4</b>	<b>14.6</b>	<b>15.0</b>	<b>303674</b>
Collection by second-hand actors	6.3	4.7	2.8	4.3	86000
Export of second-hand products	4.7	1.2	2.1	2.5	51230
<b>Total textile waste</b>	<b>5.6</b>	<b>11.5</b>	<b>8.0</b>	<b>8.3</b>	<b>166920</b>
Textile waste recycled	NA	1.9	NA	0.5	10070

Source: Karlsson et al. (2011), Tojo et al. (2012)

# Flow of textile products in Sweden per capita



Source: calculated by Tojo based on Elander et al. (2014), Palm et al. (2014), Palm et al. (2015), Hultén et al. (2016), SCB (2016) and SCB (2017)



LUND  
UNIVERSITY

iiiee  
THE INTERNATIONAL INSTITUTE FOR  
INDUSTRIAL ENVIRONMENTAL ECONOMICS

# Policy discussions in Sweden

- Nordic Minister of Councils (2011- ), initiated in conjunction with EU waste prevention programme
- Sweden
  - Discussion on EPR in mid 1990s
  - Textiles: a focus in gov't works on waste prevention and on chemicals in products
  - Ministry's assignment to Swedish EPA on policy measures to enhance sustainability of textiles (2015)
  - EPA's proposal (Sept. 2016)
  - Agreement between political parties to introduce EPR (Jan. 2019)

# Swedish EPA's proposal

- Two targets – by 2025
  - Textile waste diversion by 60% (compared to 2015)
  - Preparation for reuse/recycling of 90% of separately collected textile waste
- Sustainable production & consumption
  - Dialogue with the textile industry
  - Support for sustainable business models
  - Green public procurement
  - Consumer information
- Textile waste management
  - Requirements for separate collection of waste, or
  - Mandatory extended producer responsibility (EPR) system

# Extended Producer Responsibility

- Two policy goals
  - Upstream improvements
  - Downstream improvements
- EPR and waste prevention
  - Individual producer responsibility (IPR) and implementation challenges
  - Lacks empirical testing ground
- Various policy instruments
- Various implementation mechanisms

# Examples of EPR-based policy instruments

<p>Administrative instruments</p>	<ul style="list-style-type: none"> <li>• Collection and/or take-back of discarded products</li> <li>• Substance and landfill restrictions</li> <li>• Collection, reuse (refill) and recycling targets</li> <li>• Environmentally sound treatment standards</li> <li>• Minimum recycled material content standards</li> <li>• Product standards</li> </ul>
<p>Economic instruments</p>	<ul style="list-style-type: none"> <li>• Material/product taxes, subsidies</li> <li>• Advance disposal fee systems</li> <li>• Deposit-refund systems</li> <li>• Upstream combined tax/subsidies</li> <li>• Tradable recycling credits</li> </ul>
<p>Informative instruments</p>	<ul style="list-style-type: none"> <li>• Reporting to authorities</li> <li>• Marking/labelling of products and components</li> <li>• Consultation with local governments re. collection networks</li> <li>• Information to consumers re. EPR /source separation,</li> <li>• Information to recyclers re. structure &amp; substances</li> </ul>





# EPR systems - issues to consider

- Scope of products  
characteristics, historic and orphan products
- Target setting
- Allocation of responsibility esp. collection
- Funding mechanisms
- Power relation/interests of (existing) actors
- Consumers' convenience, incentives, information, sanction
- Free riders, monitoring, export....
- Mandatory or voluntary

etc.

... Implication to design change?



LUND  
UNIVERSITY

iiiee  
THE INTERNATIONAL INSTITUTE FOR  
INDUSTRIAL ENVIRONMENTAL ECONOMICS

# Potential EPR system for textiles in Sweden - critical discussion points

- Parties responsible for collection
  - Existing interests and infrastructure under development
  - Experiences with other EPR programmes
  - Clothes for reuse or recycle, legal uncertainties
- Development of fibre-to-fibre recycling technologies
- Enhancement of upstream changes
  - Fee structure in a collective system (also, new requirements under EU WFD)

# Revised WFD (EU) 2018/851 – minimum requirements for EPR systems

... Member States shall take the necessary measures to ensure that the financial contributions paid by the producer of the product to comply with its extended producer responsibility obligations:

.... (b) in the case of collective fulfilment of extended producer responsibility obligations, are **modulated** where possible, for individual products or groups of similar products, notably by taking into account their durability, reparability, re-usability and recyclability and the presence of hazardous substances, thereby taking a life-cycle approach and aligned with the requirements set by relevant Union law, and where available, based on harmonised criteria in order to ensure a smooth functioning of the internal market... (Art. 1 (9) 4 (b))



# Revised WFD (EU) 2018/851

## other new requirements related to textiles

- Encouragement of re-use the setting up of systems promoting repair and re-use activities for textiles as minimum waste prevention measure (Art. 1 (10))
- Separate collection of textile waste by 2025 (Art. 1 (12) (b))
- Commission should consider setting of preparing for re-use and recycling targets for textile waste by 2024 (Article 1(12) (e))



LUND  
UNIVERSITY

iiiee  
THE INTERNATIONAL INSTITUTE FOR  
INDUSTRIAL ENVIRONMENTAL ECONOMICS

# Examples of local policy initiatives

- Source separation by municipalities
  - Many collaborate with charity organisations
- Establish reuse centre close to recycling stations
- Organise repair centres/workshops
- Online platform for rent, share, swap, borrow, lend, give away or receive products ([Smarta kartan](#))



**ReTuna mall with various second hand shops, Eskilstuna**

**Fixa Till (Fix It) worksops in Lund**

# Fixa Till

– en del av framtidens återbruk

The collage consists of six small photographs arranged in a 2x3 grid. The top-left photo shows a workbench with a sink and a white cabinet. The top-right photo shows a wall covered in various tools like hammers, wrenches, and screwdrivers. The middle-left photo shows shelves filled with spools of thread in various colors. The middle-right photo shows a workbench with a yellow storage cabinet and a green chalkboard. The bottom-left photo shows a table with a plant and some items. The bottom-right photo shows a workbench with a yellow storage cabinet and a green chalkboard.

Thank you!  
Any questions?

Contact:  
[naoko.tojo@iiiee.lu.se](mailto:naoko.tojo@iiiee.lu.se)

